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## Lexicograp An Introduction

## Howard Jackson

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title : Lexicography : An Introduction
author : Jackson, Howard.
publisher : Taylor \& Francis Routledge
isbn10 | asin :
print isbn13 : 9780203467282
ebook isbn13 : 9780585462134
language : English
subject Lexicography.
publication date : 2002 lce : P327.J33 2002eb
ddc: 413/.028
subject : Lexicography.
Page i

## Lexicography

This book is an accessible introduction to lexicography - the study of dictionaries.
We rely on dictionaries to provide us with definitions of words, and to tell us how to spell them. They are used at home and at school, cited in law courts, sermons and parliament, and referred to by crossword addicts and scrabble players alike. But why are dictionaries structured as they are? What types of dictionary exist, and what purposes do they serve? Who uses a dictionary, and for what?

Lexicography: An Introduction provides a detailed overview of the history, types and content of these essential reference works. Howard Jackson analyses a wide range of dictionaries, from those for native speakers to thematic dictionaries and learners’ dictionaries, including those on CD-ROM, to reveal the ways in which dictionaries fulfil their dual function of describing the vocabulary of English and providing a useful and accessible reference resource.

Beginning with an introduction to the terms used in lexicology to describe words and vocabulary, and offering summaries and suggestions for further reading, Lexicography: An Introduction is concise and student-friendly. It is ideal for anyone with an interest in the development and use of dictionaries.

Howard Jackson is Professor of English Language and Linguistics at the University of Central England. His publications include Grammar and Vocabulary (Routledge, 2002), Words and their Meaning (Longman, 1988), and Words, Meaning and Vocabulary (Cassell, 2000).

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## Lexicography

An introduction

## Howard Jackson



London and New York
Page iv
First published 2002
by Routledge
11 New Fetter Lane, London EC4P 4EE
Simultaneously published in the USA and Canada by Routledge 29 West 35th Street, New York, NY 10001

Routledge is an imprint of the Taylor \& Francis Group
This edition published in the Taylor \& Francis e-Library, 2003.

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
A catalog record has been requested
ISBN 0-203-46728-0 Master e-book ISBN
ISBN 0-203-24660-8 (OEB Format)
ISBN 0-415-23172-8 (hbk)
ISBN 0-415-23173-6 (pbk)
Page v

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## Preface

Much has happened, both in respect of the making of dictionaries and in respect of their academic study, in the twelve or so years since my previous book on dictionaries (Words and Their Meaning, Longman, 1988). Then, the 'corpus revolution' (Rundell and Stock 1992) had only just begun - Words and Their Meaning just managed to catch the first (1987) edition of the Collins COBUILD English Dictionary. Now virtually all dictionaries published in the UK make some claim to have used a computer corpus in their compilation. Not only have learners' dictionaries developed by leaps and bounds the Oxford Advanced Learner's Dictionary was in its third edition then, now in its sixth, and the Cambridge International Dictionary of English was still a long way off - but native speaker dictionaries have also seen significant developments - the publication of the New Oxford Dictionary of English in 1998, as well as three editions of the Concise Oxford, not to mention the second edition of the great OED in 1989 and the beginning of the massive revision that will result in the third edition, planned for 2010.

Dictionaries have also appeared during the period in electronic format, notably as CDROMs, opening up new possibilities, not only in how dictionaries can be used and exploited, but also in how dictionary material can be organised and presented. Dictionaries are also accessible online, through the internet, including the OED, enabling subscribers to view the revisions that will constitute the third edition, as they are posted quarterly.

The study of lexicography has also developed and flourished during the last dozen years. They saw the launch of the highly successful International Journal of Lexicography in 1988, for the first ten years under the editorship of Robert Ilson, and latterly that of Tony Cowie. The mighty three-volume Encyclopedia of Lexicography (Hausmann et al. 198991) delineated the state of the art, and the Dictionary of Lexicography (Hartmann and James 1998) mapped the territory. More recently, Reinhard Hartmann's Teaching and

Researching Lexicography (2001) has set the agenda for the business of academic lexicography. And Sidney Landau has updated his readable Dictionaries: The Art and Craft of Lexicography (second edition, 2001) with its transatlantic perspective.

It is time for a new treatment of the subject in the UK. I am grateful to Louisa Semlyen and to Routledge for taking this on. The book is dedicated to all the

Page viii
final-year students who have enabled me to develop the material by taking my 'Lexicography' module on the English degree at the University of Central England in Birmingham over more years than I care to recall.

Howard Jackson
Birmingham
August 2001
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## Dictionaries cited

The following dictionaries are mentioned in the course of this book. (Note: a superscript number, e.g. $1988^{2}$, refers to the edition; in this case, the second edition published in 1988.)

## Native speaker dictionaries

Chambers English Dictionary, (19887) edited by Catherine Schwarz, George Davidson, Anne Seaton and Virginia Tebbit.

Chambers 21st Century Dictionary (1996) edited by Mairi Robinson.
Collins Concise Dictionary (1982; 1988²; 1992³; 19994, edited by Diana Treffry).
Collins English Dictionary (1979 edited by Patrick Hanks, $1986^{2}$ edited by Patrick Hanks, 1991/94³ edited by Marian Makins, $1998^{4}$ edited by Diana Treffry).

Concise Oxford Dictionary (1911 edited by H.G. and F.W. Fowler, 1929², 1934³, 19514, $1964^{5}, 1976^{6}, 1982^{7}, 1990^{8}, 1995^{9}, 1999{ }^{10}$ edited by Judy Pearsall).

Encarta Concise English Dictionary (2001) edited by Kathy Rooney, Bloomsbury.
Longman Dictionary of the English Language (1984, $1991^{2}$ edited by Brian O'Kill).
A New English Dictionary on Historical Principles (1888-1928) edited by James Murray, Henry Bradley, W.A. Craigie and C.T. Onions.

New Oxford Dictionary of English (1998) edited by Judy Pearsall.

Oxford English Dictionary (1933 edited by James Murray et al., $1989^{2}$ edited by John Simpson and Edmund Weiner).

The New Shorter Oxford English Dictionary on Historical Principles (1993) edited by Lesley Brown.

Webster's Third New International Dictionary of the English Language (1961) edited by Philip Gove.

## Monolingual learners' dictionaries

Cambridge Dictionary of American English (2000) edited by Sidney Landau.
Cambridge International Dictionary of English (1995) edited by Paul Proctor.
Collins COBUILD English Dictionary (1987, 1995², 2001³) edited by John Sinclair.
Longman Dictionary of Contemporary English (1978 edited by Paul Proctor, 1987² edited by Della Summers and M. Rundell, $1995^{3}$ edited by Della Summers).

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Longman Language Activator (1993) edited by Della Summers.
Longman Lexicon of Contemporary English (1981) compiled by Tom McArthur.
Oxford Advanced Learner's Dictionary of Current English (1948 edited by A.S. Hornby, E.V. Gatenby and H. Wakefield; $1963^{2}$ edited by A.S. Hornby, E.V. Gatenby and H. Wakefield; $1974^{3}$ edited by A.S. Hornby, with A.P. Cowie and J. Windsor Lewis; $1989^{4}$ edited by A.P. Cowie, $1995^{5}$ edited by Jonathan Crowther; $2000^{6}$ edited by Sally Wehmeier).

## Thematic dictionaries

A Thesaurus of Old English (1995) compiled by Jane Roberts and Christian Kay, with Lynne Grundy.

Longman Dictionary of Scientific Usage (1979) compiled by A. Godman and E.M.F. Payne.

Longman Language Activator (1993) edited by Della Summers.
Longman Lexicon of Contemporary English (1981) compiled by Tom McArthur.
Roget's Thesaurus of English Words and Phrases (1852), Longmans, Green and Co.
The Scots Thesaurus (1990), edited by Iseabail McLeod.

## Abbreviations

In order to save space, dictionaries regularly cited will usually be referred to in the course of the book by the following abbreviations:

CCD - Collins Concise Dictionary
CED - Collins English Dictionary
Chambers - Chambers English Dictionary
CIDE - Cambridge International Dictionary of English
COBUILD - Collins COBUILD English Dictionary
COD - Concise Oxford Dictionary
ECED - Encarta Concise English Dictionary
LDEL - Longman Dictionary of the English Language
LDOCE - Longman Dictionary of Contemporary English
NODE - New Oxford Dictionary of English
OALD - Oxford Advanced Learner's Dictionary
OED - Oxford English Dictionary
SOED - Shorter Oxford English Dictionary
W3 - Webster's Third New International Dictionary.
Where the abbreviation is followed by a number, e.g. COD8, the number refers to the edition, i.e. Concise Oxford Dictionary, eighth edition.

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## 1 <br> Words

### 1.1 What is a word?

You take a dictionary off the shelf, or access a dictionary on your computer, and open it because you want to look up a 'word'. Dictionaries are the repositories of words. Words are arranged in dictionaries in alphabetical order, and as you look down the column in a print dictionary or the list in an electronic dictionary, you are reading a list of words. Or are you? Here is the list of the 25 'headwords' between want and wardrobe in COD10 (i.e. Concise Oxford Dictionary, tenth edition: see 'Dictionaries cited', p. ix):
want, wanting, wanton, wapentake, wapiti, War., war, waratah, war baby, warble ${ }^{1}$, warble ${ }^{2}$, warble fly, warbler, warby, war chest, war crime, war cry, ward, -ward, war dance, warden, warder, ward heeler, ward of court, wardrobe.

A number of items in this list do not quite match our usual concept of what constitutes a
word, which is - I suggest - 'a sequence of letters bounded by spaces'. Indeed, only 15 of the 25 items could be described in this way. Two of the remaining items are less than a full word: the abbreviation War. (for Warwickshire), and the suffix - ward (used to form words like backward, skyward - see Chapter 2). The other eight items all consist of more than one 'word': seven of them have just two words, and one has three (ward of court). You will also have noticed that one word (warble) is entered twice. So, just what is a 'word'?

The word before want in the COD10 list is wannabe. Is that a word, or is it three (want to be)? In our usual concept of a word, it is one, because it is a sequence of letters bounded by spaces. This conception of words comes, of course, from writing, the medium in which we are most conscious of words; and dictionaries are based on the written form of the language. In speech, though, words are composed of sounds and syllables, and they follow one another in the flow of speech without spaces or pauses. We make no more pause in saying war baby than we do with wardrobe, even though the first consists of two words in writing and the second of only one.

## Page 2

There is, clearly, a measure of confusion here that needs some sorting out in a book about words and dictionaries. Let us make the following distinction of terms:
orthographic word a word in writing, a sequence of letters bounded by spaces
phonological word a word in speech, a sequence of sounds (the boundaries of phonological words are determined by rules of syllable structure, stress, and the like)
lexeme a word in the vocabulary of a language; it may occur as a headword in a dictionary.

A lexeme may, therefore, consist of more than one orthographic word, as warble fly, war chest, ward of court. Even though they are listed as headwords, we should exclude abbreviations and affixes (see 1.6 below) from the category of lexeme.

### 1.2 Same sound, same spelling, different word

We noticed that warble is entered twice in COD10. The compilers of this dictionary are following common practice and recognising two different lexemes with the same spelling (and, as it happens, the same pronunciation). The first warble is the verb that refers to birdsong; the second is a noun denoting 'a swelling or abscess beneath the skin on the back of cattle ... caused by the presence of the larva of a warble fly'. However, the fact that the meanings of the two lexemes are completely unrelated is not the primary criterion for distinguishing them. Dictionaries usually operate with the criterion of etymology (see Chapter 10) for deciding that a single orthographic word represents more than one lexeme. If a single spelling can be shown to have more than one origin, then it constitutes more than one lexeme. In the case of warble, the 'birdsong' lexeme has its origin, according to COD10, in the Old Northern French word werble, which came into English during the Middle English period (1066-1500). The 'abscess' lexeme also originates in the Middle English period, but it has a different, according to COD10 'uncertain',
provenance.
Lexemes that share the same spelling and pronunciation, but have a different etymology, are termed homonyms (a Greek word, meaning 'same (homo) name (nym)').

Another orthographic word with a double entry in the dictionary is tear. The first tear lexeme relates to 'pulling or ripping apart', the second denotes the drop of salty liquid that comes from the eyes when someone weeps. In this case, however, the same spelling has different pronunciations, i.e. phonological words. Since the dictionary is based on spelling, tear is entered twice. As might be expected, tear (rip) and tear (weep) also have different origins, both from Old English, the first from teran and the second from téar. Lexemes that share the same spelling, but not the same pronunciation, are called homographs (from Greek, 'same' + 'writing'). There are not very many homographs in English, by

## Page 3

comparison with the number of homonyms. Here are some further examples for you to figure out (or look up):
bow, curate, denier, irony, prayer, refuse, reserve, sow, supply, wind.
Much more common in English are the counterparts to homographs: lexemes that are pronounced the same, but spelled differently, e.g. pale/pail. These present no problem to a dictionary, since it is the spelling that takes priority; and each is entered as a headword at the appropriate place in the alphabetical sequence. Lexemes that share the same pronunciation, but not the same spelling, are called homophones (from Greek, 'same' + 'sound'). Here are some further homophone pairs in English:
bare/bear, gait/gate, haul/hall, leak/leek, miner/minor, paw/poor/pore/ pour, sew/sow, stake/steak, taught/taut

You will notice that most homophones arise because vowel sounds that used to be pronounced differently, as represented by the spelling, have in the course of historical sound changes come to be pronounced the same.

### 1.3 Lexemes and variants

If you look up sung in a dictionary, you will find a very brief entry along the lines of 'past participle of sing', which is a cross-reference to the entry for sing. If you look up the word talked, which is the past participle of talk, you will not find an entry. For both these words, the dictionary gives their description under a single entry: sing for sung, and talk for talked. You do not need a separate treatment of sung or talked, because what is said about sing or talk is equally applicable to them. They are merely 'variants' of the entry word; in effect they are the 'same word'.

The lexeme sing, for example, has the following variants: sing, sings, sang, singing, sung. The lexeme talk has one variant fewer: talk, talks, talked, talking. What we are looking at are the inflections of verbs in English:

| base/present tense | sing | talk |
| :--- | :--- | :--- |
| third person singular/present tense | sings | talks |
| past tense | sang | talked |
| present participle | singing | talking |
| past participle | sung | talked |

The verb talk represents the 'regular' paradigm, where the past tense and the past participle have the same form, with the -(e)d suffix. The verb sing is one of a number with 'irregular' inflections.

There is a sense in which sing, sings, sang, singing and sung are all the 'same word'; they are different manifestations of the same lexeme, variants chosen

## Page 4

according to the grammatical context of the lexeme. For example, if the subject of a sentence is a 'third person singular' (equivalent to he, she or $i t$ ) and the speaker/writer has chosen present tense, then the form of the verb will be sings or talks, with the 's' suffix marking the 'third person singular present tense' (e.g. 'until the fat lady/she sings') We need a further term to distinguish this type of 'word':
word-form an inflectional variant of a lexeme
To illustrate word-forms we have chosen verbs, because verb lexemes have more inflections than any other type of lexeme in English. Two other types of lexeme regularly have inflectional variants and so more than one word-form: nouns and adjectives though not every member of these classes, as is the case with verbs. Countable nouns (biscuit, coin), but not uncountable nouns (dough, salt), have a 'plural' inflection. Some nouns, mainly referring to animate beings, have a 'possessive' inflection. The wordforms for plural nouns have a-(e)s suffix as the regular inflection (bananas, oranges, mangoes). A small number of countable nouns form the plural irregularly, e.g. feet, geese, mice, teeth; children; knives, loaves; nuclei, millennia, formulae, hypotheses, criteria. The possessive inflection is normally marked in the singular noun by an apostrophe $+s$ (e.g. cat's, girl's, nephew's), and in the plural noun by an apostrophe only, placed after the plural suffix (e.g. cats', girls' nephews '). This, of course, applies to writing: in speech, the possessive singular adds $-(e) s$, and so is no different from the plural; and the plural possessive is the same as the normal plural, except where the plural is formed irregularly (e.g. mice's, children's, women's). Summarising, the word-forms of (some) noun lexemes are:

| base/singular | girl | child |
| :--- | :--- | :--- |
| plural | girls | children |
| possessive singular | girl's | child's |

Note that the three inflected forms of girl (the 'regular' paradigm) have the same pronunciation.

Some adjective lexemes in English have a 'comparative' and a 'superlative' form. The adjectives concerned are 'gradable' (e.g. long, quick, small), rather than 'ungradable' (daily, mortal, sterile). Most gradable adjectives that are one-syllable in length can have these forms, as may most two-syllable gradable adjectives. The regular inflection for the comparative is $-e r$, and for the superlative -est (e.g. longer/longest, quicker/quickest, smaller/smallest). There is a very small number of irregular forms: good, better, best; bad, worse, worst. An alternative way of expressing comparison, applied to some twosyllable adjectives and to nearly all gradable adjectives of three syllables or more, is with the adverbs more and most (e.g. more/most skilful, more/most treacherous). Summarising, the word-forms of (some) adjective lexemes are:

Page 5

| base | slow | good |
| :--- | :--- | :--- |
| comparative | slower | better |
| superlative | slowest | best |

When one-syllable adjectives do not permit word-forms with -er/-est, it is usually because their pronunciation is somehow awkward (e.g. sourer, wronger).

### 1.4 War chests and wards of court

In the list from the COD10 in 1.1 we noted several lexemes composed of more than one orthographic word. A number of them have war as their first element: war chest, war crime, war cry, war dance. Two independent lexemes have come together to form a new lexeme with a specialised meaning, to denote some entity that is considered worth having its own 'name'. We call such lexemes compounds (see further Chapter 2). Sometimes compounds are written, as in the examples with war, with a space between the two elements. Other compounds are written as a single orthographic word (e.g. warhead, warlord, warpath, warship), while others have a hyphen joining the two elements (e.g. war-torn, window-shop, world-class). The current tendency is away from 'hyphenated compounds' towards either 'solid compounds' (one orthographic word) or 'open compounds' (two or more orthographic words).

The other multi-word lexeme in the list is ward of court, which is a phrase rather than a compound. Phrasal lexemes have a number of common structures, of which the 'noun + preposition + noun' of ward of court is one. Here are some further examples of this structure:
age of consent, cash on delivery, chapel of rest, home from home, hostage to fortune, man about town, meals on wheels, place in the sun, rite of passage, skeleton in the cupboard.

A second phrasal structure consists of a noun in the possessive followed by another noun, e.g.
athlete's foot, banker's card, collector's item, fool's paradise, hair's breadth, lady's finger, ploughman's lunch, potter's wheel, saint's day, smoker's cough, traveller's cheque, writer's block.

A third phrasal structure consists of two words of the same type (noun, verb, adjective) joined by the conjunction and. These are sometimes called 'binomials'. Here are some examples:
bells and whistles, black and white, bow and scrape, down and out, fast and furious, hammer and tongs, nip and tuck, pins and needles, rock and roll, sweet and sour, ups and downs, you and yours.

## Page 6

There are also a few cases of 'trinomials', e.g. hop, skip and jump; hook, line and sinker. You will notice that a number of these items are used metaphorically: hammer and tongs has nothing to do with the literal instruments used by the blacksmith, but refers to the intensity or vigour with which something is done.

A fourth kind of phrasal lexeme consists of a verb + adverb (sometimes called a 'particle'), to form what are called 'phrasal verbs'. Here are some examples:
break up, calm down, find out, give in, look over, pass out, show up, take off, waste away, wear out.

Some of these phrasal verbs have a literal or near-literal meaning, others are more-or-less figurative in meaning. In one of its meanings, take off is literal (e.g. referring to aircraft leaving the runway), in another it is figurative (in the sense of 'imitate').

A fifth kind of phrasal lexeme, if indeed we can count them as lexemes, are typically metaphorical or figurative in meaning. They are idioms, which have a range of structures from phrase up to whole sentence. An idiom has two essential characteristics: its meaning is more than the meaning of the sum of its parts, and usually figurative; and it has a relatively fixed structure. The idiom a storm in a teacup (American English equivalent $a$ tempest in a teapot) has the figurative meaning of a 'fuss about nothing', and there is no possibility of substituting or adding anything to its structure. In pull the wool over someone's eyes, the meaning is figurative (i.e. 'deceive'), and the only substitution possibilities are appropriate inflections for the verb pull and an appropriate possessive noun or pronoun in the place of someone's. Idioms are all pervasive in language and show a diversity of form and meaning (see Fernando and Flavell (1981) for a fuller treatment). Here are a few more examples from English:
know which side one's bread is buttered, at the drop of a hat, go against the grain, come to a pretty pass, take someone for a ride, spill the beans, throw the baby out with the bathwater, walk on eggshells.

You will notice that in some cases (e.g. take someone for a ride) a literal interpretation is also possible. Only the context will reveal whether the literal or the metaphorical (idiomatic) meaning is the intended one.

### 1.5 Classifying words

In talking about words, we often, as already in this chapter, need to refer to them by the conventional broad classification into 'parts of speech', or 'word classes' as the preferred term now is. Rather than assume that this is general knowledge, as most dictionaries do, we will devote a little discussion to it.

Although we have school-based definitions in our minds, such as 'a verb is a doing word', words are classified more rigorously largely on the basis of the roles they play in the structure of sentences. English has four large classes, into

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which most new words go, and four smaller, fairly static classes. The four large classes are:
nouns are the largest class by far; they represent the animate and inanimate objects that are the participants in sentences as subjects, objects, etc. (beauty, cat, leaf, niece, nonsense, water) verbs represent the action, event or state that the sentence is about, and hold the pivotal - position in the sentence, determining which other elements need to be present (break, decide, fall, have, keep, love)

- adjectives occur in front of nouns as descriptive words, as well as after verbs like be with a similar function (feeble, gigantic, lazy, new, rough, vain)
adverbs are a diverse class, in part representing circumstantial information such as time
. (again, always, sometimes, soon) and manner (clearly, efficiently, quickly, tentatively), in part acting as modifiers of adjectives or other adverbs (quite, somewhat, very), in part forming connections between sentences (however, moreover, therefore).

The four smaller word classes, whose major function is to link the members of the larger classes together in sentence structure, are:
pronouns stand for nouns and their accompanying words (noun phrases) to avoid unnecessary repetition, including personal pronouns (I, you, he, she, it, we, they), possessive pronouns
(mine, yours, hers), reflexive pronouns (myself, yourself, themselves), relative pronouns (who, whose, which), indefinite pronouns (someone, nobody, anything)
determiners accompany nouns and are subdivided into 'identifiers' and 'quantifiers'; identifiers include the articles ( $a$, the), demonstratives (this, that) and possessives ( $m y$, your, her, our, their); quantifiers include the numerals (two, five; second, fifth) and indefinite quantifiers (few, many, several)
. prepositions combine with nouns or noun phrases primarily to form prepositional phrases (at, for, from, in, of, on, over, through, with)
conjunctions are used to connect clauses or sentences, but also phrases and words; they

- include the co-ordinating conjunctions (and, but, or) and a larger number of subordinating conjunctions (although, because, if, until, when, while).

You should consult a grammar book if you need a more extensive explanation of the word classes.

### 1.6 Taking words to pieces

In the course of this chapter, we have mentioned terms like 'affix' and 'suffix', which are parts of words. This section looks at the analysis of words into their constituent elements and suggests some terms that will be useful in talking about word structure. First of all, we need a term to denote an element of a word: it

## Page 8

is morpheme. Words are composed of morphemes. Many words, sometimes called 'simple' words, consist of only one morpheme:
bed, dream, go, in, over, please, shallow, treat, usual, vote, whole, yellow.
Here are some words composed of more than one morpheme:
bedroom, dreamy, going, live-in, overland, displease, shallowest, mistreatment, usually, voters, wholemeal, yellowish.

Each of these words has, as one of its morphemes, a 'simple' word from the earlier list, which forms the 'root', or in the case of compounds like bedroom one of the roots, of the word. The root morpheme is the kernel of the word, with the main meaning, which is modified by other morphemes in various ways.

Compounds are composed of two or more root morphemes: bedroom, live-in, overland, wholemeal. These compounds have a variety of structures in terms of the word class membership of the roots: noun + noun, verb + preposition, preposition + noun, adjective + noun. Many compounds are like bedroom, where the first part modifies the second and the word class of the compound is that of the second part, in this case a noun: a 'bedroom' is a kind of 'room'. The other three compounds are different: live-in, with a preposition as second part, is an adjective (as in a live-in nanny); overland, with a noun as second part is either an adjective (an overland journey) or an adverb (we're travelling overland); and wholemeal, again with a noun as second part, is an adjective (wholemeal bread).

The other words in the list are all composed of root + affix. 'Affix' is the general term for morphemes that cannot be used by themselves as simple words; they only occur 'bound' to another morpheme. If they occur before the root, and so are bound to the right, they are called 'prefixes' (e.g. dis- in displease). If they occur after the root, and so are bound to the left, they are 'suffixes' (e.g. -ish in yellowish). Note that, when writing affixes, the convention is to put a hyphen on the side where the affix is bound, i.e. to the right of prefixes and to the left of suffixes.

Some of the suffixes mark 'inflections' (see 1.3 above): go-ing (present participle), shallow-est (superlative), voter-s (plural). There are no inflectional prefixes in English. The resulting words are 'word-forms' (inflectional variants) of the root lexeme.

The other affixes represent 'derivations'. The addition of the affix creates a new, derived lexeme. We would expect it to be entered in a dictionary somewhere, though, as we shall see (Chapter 8), dictionaries vary in how they treat derivations. The addition of a suffix usually changes the word class of the root, though a prefix rarely does:

```
dream (noun) + -y dreamy (adjective)
dis- + please (verb) displease (verb)
mis + treat (verb) mistreat (verb)
```


## Page 9

mistreat + -ment
usual (adjective) + -ly
vote (verb) + -er voter (noun)
yellow (adjective) + -ish yellowish (adjective)
Note that an inflectional suffix, e.g. the plural ' $s$ ' on voters, is always the final suffix in a word.

We might conclude from our discussion of morphemes so far that roots are always 'free' (i.e. can occur as simple lexemes), and affixes are always 'bound' (i.e. they need a root to attach to). However, there is a certain set of words in English, mostly compounds, that have bound roots. Here are some examples:
anthropomorphic, astronaut, bibliography, biology, neuralgia, synchrony, telepathy, xenophobia.

These lexemes are formed from (bound) roots that are taken from the classical languages (Greek and Latin) and put together to form, for the most part, new words that were unknown in classical Greek and Latin. They are known as 'neo-classical compounds', and their parts are called 'combining forms'. Our examples are formed as follows:

- anthropo- (human) + -morphic (in the form of)
- astro- (star) + -naut (sailor)
- biblio- (book) + -graphy (writing)
- bio- (life) + -ology (study)
- neuro- (nerve) + -algia (pain)
- syn- (same) + -chrony (time)
- tele- (distant) + -pathy (feeling)
- xeno- (foreigner) + -phobia (fear).

Some roots from the classical languages occur in derivations, when they are also bound, e.g. chron-ic, graph-ical, naut-ical, neur-al, path-etic.

To summarise:
a word is composed of one or more morphemes
a morpheme may function as a root or as an affix (prefix or suffix)
a root morpheme is usually free, an affix is always bound
bound roots are usually combining forms from Greek or Latin.

### 1.7 Further reading

You can find a fuller treatment of words and word structure in Jackson and Zé Amvela's Words, Meaning and Vocabulary: An Introduction to Modern English Lexicology (2000) and in Francis Katamba’s English Words (1994).

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## 2

## Facts about words

In Chapter 1, we examined the ambiguity of the term 'word' and suggested a set of terms for resolving the ambiguity. We also outlined the morphology of the word in English and proposed terms for talking about the structure of words. This chapter makes a further contribution to the lexicology (study of words) of English, before we move on to the study of dictionaries (lexicography) in the next chapter.

### 2.1 Where English words came from

The vocabulary of English contains words from more sources than the vocabulary of any other language, as a consequence of its history and the contacts between its speakers and those of other languages. As far as its basic components are concerned, it is useful to view the vocabulary of English as being composed of a number of strata, rather like a rock formation in geology. The substratum of English is Anglo-Saxon, the collection of dialects that developed after the invading Germanic tribes, the Angles, Saxons and Jutes, colonised England following the departure of the Roman legions in the fifth century AD,
driving the Celtic inhabitants to the fringes of the country in Wales and Cornwall. The language became known during this time as 'English', and we refer to the language during the period up to the mid-eleventh century as 'Old English'. The only significant influence on the language from outside during this period was from across the North Sea, the Viking invaders, who also spoke a Germanic language, Old Norse. For a time the country was divided, with 'Danelaw' on the eastern side of a line from Chester to the Wash. Old English and Old Norse were to a great extent mutually intelligible, and the influence of Old Norse on Old English was limited. The greatest linguistic legacy of the Vikings was in place names, e.g. ending in -by or -thorpe; but also many words beginning with $s k$ - come from Old Norse, as do the third person plural pronouns (they, them, their). Even with these additions, the vocabulary of Old English was essentially Germanic, with a handful of words from Celtic, and a number of ecclesiastical terms taken from Latin following the introduction of Roman Christianity as a result of Augustine's mission in 597. (See Roberts et al. 1995 for a description of Old English vocabulary.)

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The next stratum of vocabulary began to be laid with the Norman conquest in 1066. The influence of this event, and its political and social consequences, on English vocabulary was monumental, though it took a couple of centuries for its full effects to be worked out. The language of government, administration and the law became (Norman) French; English was not used for any official written purposes; in due course many people, especially in the rising merchant class, became bilingual in English and French. It is estimated that in excess of 10,000 words entered English from French between the twelfth and fourteenth centuries. French is a Romance language, with its origins in Latin; so a Latinate stratum was being overlaid on the Ango-Saxon substratum. Indeed, the substratum suffered considerable erosion, with a large proportion of the Old English vocabulary being replaced by words from the Latinate superstratum.

A further Latinate stratum was laid during the latter half of the sixteenth century and into the seventeenth, during the period that is called the 'Renaissance'. It was a period in which the classical civilisations of Greece and Rome were rediscovered, admired and celebrated; their literatures republished and extensively studied, translated and imitated. While words had been coming into English directly from Latin, as well as via French, for some centuries, the trickle now became a flood, and many thousands of Latin words were added to English, as well as Greek words, though these often came via Latin. The Renaissance also saw the beginnings of exploration, which developed in the eighteenth and nineteenth centuries into colonisation and empire; the contact with many different cultures and languages has enriched the vocabulary of English from a multitude of sources.

The substratum of English vocabulary is Anglo-Saxon, and the one hundred most frequently occurring words in both writing and speech are of Anglo-Saxon origin. Overlaid on this substratum is a stratum of Latinate vocabulary, mainly of French origin, from the medieval period: we do not recognise the vast majority of these words as foreign imports any more; they have become quite naturalised. Overlaid on this is a further Latinate stratum, taken directly from Latin during and after the Renaissance; many of
these words still betray their origin, and they belong for the most part to the vocabulary of academic discourse and specialist jargon. Additionally, English has imported words from countless languages around the world, and continues to do so (see Crystal 1995:126f.).

### 2.2 Making new words

There are two basic methods by which a language may increase its vocabulary. The first is to use the material (morphemes) available in the language already (see 1.6) and to recombine it in new ways. The other is to import a word from another language (mentioned in 2.1 above), a process called, rather curiously, 'borrowing' - there is, after all, no intention to return the borrowed item, which is termed a 'loanword'. Nearly all new words are added to the larger word classes (1.5), especially nouns, verbs and adjectives, with the majority being nouns.

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### 2.2.1 Compounds

Compounds are formed by joining two or more root morphemes or (classical) combining forms (see 1.6) into a single lexeme. A new discovery, product, sensation or process is often suitably named by a compound, whose status as a lexeme is reinforced by usage and confirmed by inclusion in a dictionary. Compounds are often idiomatic in meaning, or at least not entirely transparent. For example, the meaning of seat belt - as a safety restraint in vehicles or aircraft - is not immediately obvious from the two parts of the compound. If you were unfamiliar with the object, you would need some explanation of the word. This is even more so in the case of neo-classical compounds, where a knowledge of Greek and Latin would be required for their interpretation; e.g. calligraphy ('beautiful' + 'writing'); mastectomy ('breast' + 'cut out'); pachyderm ('thick’ + 'skin'), denoting a large mammal with a thick skin, such as an elephant; stenothermal ('narrow' + 'heat'), i.e. tolerant of only small changes in temperature.

Where a compound is composed of more than two roots, a structure is usually evident among the parts, which is sometimes reflected in how the compound is written. For example, four-wheel drive indicates that four and wheel belong together and relate as a unit to drive; whereas golden handshake indicates that hand and shake belong together and golden is then added to form the three-part compound.

An interesting compound is formed by the combination of two roots and the addition of the $-e d$ suffix, to form an adjective. The $-e d$ suffix looks like the past participle inflection of verbs (1.3), but there is no verb involved in this word formation. Here are some examples: dark-haired, empty-handed, hard-nosed, jet-lagged, muddle-headed, openminded, quick-witted, round-shouldered, sharp-tongued, warm-hearted. They are mostly, but not exclusively, composed of 'adjective + noun-ed'.

A special type of compound is formed by blending two roots; the first root loses letters/sounds from the end and the second from the beginning, e.g. breakfast + lunch $>$ brunch, smoke + fog $>$ smog, transfer + resistor $>$ transistor. Sometimes, one of the
elements does not lose any material, e.g. car + hijack $>$ carjack, cheese + hamburger $>$ cheeseburger; or there are shared letters, e.g. circle + clip $>$ circlip, floppy + optical $>$ floptical, twig + igloo $>$ twigloo.

### 2.2.2 Derivatives

The addition of a derivational prefix or suffix to a lexeme forms a derivative. The lexeme may be 'simple' (i.e. a single morpheme), or it may be a compound, or it may be a derivative already; e.g. care-ful, landscape-(e)r, national-ity. Some derivational affixes have their origin in Anglo-Saxon (e.g. -ful, -er), others have come from French or Latin (e.g. -al, -ity); and while there is a tendency to use Anglo-Saxon affixes with AngloSaxon roots and Latinate affixes with Latinate roots, some mixing does occur, e.g. beauti-ful, preach-er (Latin root + Anglo-Saxon suffix), fals(e)-ity, ship-ment (AngloSaxon root + Latin suffix).

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Prefixes, of which usually not more than one is added to a root, do not normally change the word class of the item to which they are added. Common prefixes include those with a 'negative' or 'opposite' meaning, such as dis-, in-(and its variants il-, im-, ir-), un-, the 'again' prefix re-, the 'attitude' prefixes pro-and anti-, and the self- prefix. Here is an example of each: dis-please, in-decision, il-legible, im-patient, ir-reversible, un-certain, re-read, pro-life, anti-freeze, self-addressed.

Suffixes are numerous and usually change the word class of the item they are added to. Changing verbs to nouns are: -er (the 'doer'/'agent' suffix), -(t)ion, -ment, -ance; e.g. bak(e)-er, educat(e)-ion, enjoy-ment, perform-ance. Changing adjectives to nouns are: -ity, -ness; e.g. sincer(e)-ity, smooth-ness. Changing adjectives to verbs are: -en, -ify, -ise; e.g. thick-en, solid-ify, internal-ise. Changing verbs to adjectives are: -ablel-ible; e.g. avoid-able, collaps(e)-ible. Changing nouns to adjectives are: -al, -ful, -ly; e.g. cultur(e)al, hope-ful, friend-ly. And changing adjectives to adverbs is: -ly; e.g. quick-ly, smooth-ly. More than one derivational suffix may be added to a root, e.g. friend-li-ness, recover-abil-ity, care-ful-ly, nation-al-is(e)-ation.

A special type of derivation occurs which changes the word class of a lexeme but does not add a suffix. It is called 'conversion'. For example, bottle is primarily a noun, but it is used as a verb, with the sense 'put into a bottle', by conversion. A contrary conversion would be catch, where the verb can also be used as a noun. There are many cases of conversion (e.g. dirty (adjective to verb), skin (noun to verb), spill (verb to noun), spoon (noun to verb)) and it is still a productive process, especially from nouns to verbs, e.g. doorstep, handbag, progress, showcase, text-message.

A minor type of derivation is 'backformation', a kind of derivation in reverse, in which a supposed affix is removed from a word. This is how the verb edit was derived from the noun editor, by removing the supposed 'doer' suffix -or (compare actor, advisor). A similar backformation derived babysit from babysitter, commentate from commentator, malinger from malingerer, scavenge from scavenger. Automate was derived by backformation from automation, destruct from destruction, enthuse from enthusiasm,
greed from greedy, sedate from sedation, televise from television.

### 2.2.3 Acronyms

A minor, but nevertheless much used word formation process takes the initial letters of a phrase and creates a word, called an acronym. Either the acronym is pronounced as a normal word (e.g. AIDS (Acquired Immune Deficiency Syndrome), UNESCO (United Nations Educational, Scientific and Cultural Organisation)), or the letters are spelled out (e.g. ATM (Automated Teller Machine), HIV (Human Immunodeficiency Virus)). Sometimes the two forms are combined, e.g. CD-ROM (Compact Disc - Read Only Memory). The acronym is usually spelt with capital letters, but a few acronyms no longer betray their origin in this way, e.g. laser ('light amplification by stimulated emission of radiation'). Here are some further examples, first of 'said' acronyms:

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DAT (Digital Audio Tape), DWEM (Dead White European Male), MIDI (Musical Instrument Digital Interface), SIMM (Single In-line Memory Module); then of 'spelled out' acronyms (also called 'initialisms'): BSE (Bovine Spongiform Encephalopathy), CSA (Child Support Agency), FAQ (Frequently Asked Question), HTML (HyperText Markup Language), LMS (Local Management of Schools).

A further type of acronym is formed by taking the first syllable of the words of a phrase, e.g. biopic (biographical picture), infotech (information technology), Ofsted (Office of Standards in Education), pixel (picture element). In the case of Ofsted, the second element (st) does not consist of the full syllable, and an $x$ has been added to pixel to join the two syllables. These 'syllabic acronyms' are a relatively rare formation.

### 2.2.4 Loanwords

When a word is 'borrowed' from another language and added to the vocabulary, it is a 'loanword'. Some loanwords continue to betray their origins, either in their spelling or their pronunciation, or both (e.g. blitzkrieg (German), kibbutz (Hebrew), spaghetti (Italian)); while others have become naturalised (e.g. coach (Hungarian), gong (Malay), tycoon (Japanese)).

Words have been borrowed into English for a number of reasons. After the Norman conquest, a new language was imposed on top of the English, and so, for example, beef, mutton and pork appeared alongside cow, sheep and pig. During the Renaissance, excessive admiration for Roman and Greek cultures and languages led to the borrowing of words from Latin and Greek to remedy what was felt to be a lack in English of erudite vocabulary; and so abscond was borrowed alongside hide, calculate for count, emporium for shop, manuscript for book, protect for ward, transgress for sin, valediction for farewell.

When the explorers and colonists went to new countries, experienced different foods, and came into contact with plants and animals they had never encountered before, they often took the words for these things from the local languages. So, we have chipmunk from Algonquian (in North America), kookaburra from Wiradhuri (in Australia), kiwi from

Maori (in New Zealand), chutney from Hindi, poppadom from Tamil, lychee from Chinese, sushi from Japanese, impala from Zulu, sherbet from Turkish, and so on. Through the centuries, when a culture has been admired for its prowess in a particular area, English has borrowed its words for that topic; e.g. musical terms from Italian (concerto, opera, soprano, tempo), culinary terms from French (casserole, fricassee, au gratin, purée, sauté).

When a profession has sought an erudite vocabulary to mark off its supposed area of competence, it has usually looked to the classical languages for its jargon. The law, for example, has taken many terms from Latin, such as: ad litem ('in a lawsuit'), bona fide ('with good faith'), corpus delicti ('body of offence'), ejusdem generis ('of the same kind'), in personam ('against the person'), lis pendens ('a lawsuit pending'), obiter dictum ('a passing remark' - by a judge), prima facie ('at

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first impression'), subpoena ('under penalty' - i.e. to attend court), ultra vires ('beyond (one's legal) power'). Medicine, on the other hand, has tended to look more to Greek for its jargon: an inflammatory disease ends in -itis (bronchitis, peritonitis), a surgical removal ends in -ectomy (hysterectomy, vasectomy), the medical care of particular groups ends in -iatrics (geriatrics, paediatrics).

English continues to enhance its vocabulary by taking in loanwords from languages around the world. Some recent borrowing includes: balti (Urdu), ciabatta (Italian), gite (French), intifada (Arabic), juggernaut (Hindi), karaoke (Japanese), nouvelle cuisine (French), ombudsman (Swedish), paparrazi (Italian), perestroika (Russian), salsa (Spanish), tikka (Punjabi).

### 2.3 Word meaning

One of the most important tasks of a lexicographer is to capture the 'meaning' of a word in a 'definition' (see Chapter 8). We need to determine first of all what constitutes the 'meaning' of a word, which is the purpose of this section of the chapter. The suggestion is that the meaning of a word is composed of a number of features: its relation with the real world, the associations that it carries with it, its relations with other words in the vocabulary, and the regular company that it keeps with other words in sentence and text structure.

Many words have more than one meaning; they manifest 'polysemy'. Ascertaining how many meanings, or 'senses', a lexeme has, and in what order to arrange them are difficult decisions for a lexicographer to make, and dictionaries may differ quite markedly in their analysis. Our immediate discussion, however, is concerned with the general factors that may apply to any lexeme or sense of a lexeme.

### 2.3.1 Reference

The primary feature of meaning is the relation of reference between a lexeme and the entity - person, object, feeling, action, idea, quality, etc. - in the real world that the lexeme denotes. The exact nature of the reference relation has exercised the minds of
linguists and philosophers over many centuries (Lyons 1977). We use words to talk about and make reference to the world we live in, our experience of that world, our speculation about what might have been or could be, our imagination of other possible worlds and possible scenarios. Our worlds are inhabited by humans and other creatures, by natural objects and artefacts, by our ideas, opinions and beliefs, which possess characteristics that we describe, and which interact in a myriad ways. We can talk about all these things and communicate about them with other people who speak the same language, because we have a shared vocabulary and grammar. In particular, we agree about which word refers to which aspect of reality or our experience of it.

The reference of some words is both more obvious and more easily described. This is the case especially for tangible objects (bicycle, trumpet) and for physical actions ( jump, spill). For words that denote more abstract entities, the

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reference relation is less clearly discernible. This is the case for many abstract nouns (deference, solitude), for verbs expressing mental and emotional states and processes (think, worry), and for adjectives generally, especially where they are gradable (long, warm) or evaluative (ridiculous, superb). For some words, belonging to the smaller, grammatical classes (1.5), a relation of reference may be scarcely discernible (about, this).

What we are often interested in, including lexicographically, is how words that have a similar reference differ from each other. For example, how do happen, occur, befall, transpire and, perhaps, materialise differ? They all denote 'come about' or 'take place' (LDEL2:718). The differences are subtle and may have little to do with reference as such, and more to do with context: occur would be found in a more formal context than happen; befall has an old-fashioned ring to it; transpire and materialise are, perhaps, particular kinds of 'come about'. We cannot isolate a word either from the typical contexts in which it occurs or from its relationships with other words.

### 2.3.2 Connotation

A distinction is often drawn between the 'denotation' of a word and its 'connotation'. While the denotation is the straightforward, neutral relation between a word and its referent, the connotation brings in the, often emotive, associations that a word may have for a speaker or a community of speakers. For many English speakers, the word champagne, while denoting a sparkling wine from a particular region of France, has the connotation of celebration or expensive living.

Some words spread particular negative or positive connotations (semantic prosodies) across the phrases or sentences in which they occur. For example, fundamentalist or fundamentalism, which denote 'adherent/adherence to the fundamental teachings of a movement or religion', are usually used in a negative context and with a connotation of a fanaticism that should be disapproved of. On the other hand, inspire, denoting 'creating the desire to do or feel something', usually has a positive connotation and spreads a positive semantic prosody, occurring typically with nouns like confidence, enthusiasm or

## loyalty.

Such connotations are widely shared and may be or become intrinsic to the contexts in which the users of a language generally situate the words. Connotations may be more restricted in scope, to a particular generation (e.g. blitz to those who lived through World War II), or to a particular group (e.g. safe to those who have hazardous occupations), or even to an individual. A connotation that is shared by a large proportion of speakers can be considered as a contributory feature to the meaning of a lexeme.

### 2.3.3 Sense relations

A third contributory factor to the meaning of a lexeme or a sense of a lexeme is the semantic relations it contracts with other lexemes in the vocabulary, often

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termed 'sense relations'. They include: sameness or similarity of meaning (synonymy), oppositeness of meaning (antonymy), the 'kind of' relation (hyponymy), and the 'part of' relation (meronymy).

Synonymy is a widespread relation in English, in large part because there are words with similar meaning from more than one of the strata that make up the vocabulary (2.1). For example, begin has an Anglo-Saxon origin, while its synonym commence entered English from French during the medieval period; similarly with keep and retain, leave and depart, tell and inform, live and reside, share and portion, and so on. Equally, synonym pairs exist that derive, on the one hand, from French in the medieval period, and on the other, from Latin during the Renaissance: complete and plenary, join and connect, sign and portent, taste and gustation, vote and plebiscite. There are, even, synonym triplets from each of the three strata of vocabulary; e.g. end, finish, terminate; hatred, enmity, animosity; kingly, royal, regal; sin, trespass, transgression. In general, as the examples cited confirm, the synonym from the Latinate strata tends to be used in more formal contexts than the one from the Anglo-Saxon substratum.

The other major source of synonym pairs is dialect difference, either between national varieties (e.g. British and American English) or between dialects within a national variety. The major differences between British and American English are in vocabulary, rather than in grammar, e.g. (BrE word followed by AmE word) biscuit, cookie; car park, parking lot; drawing pin, thumbtack; flannel, washcloth; lorry, truck; single (ticket), oneway; waistcoat, vest; and many more. Here are some synonym pairs for Scottish English and English English: birl, whirl; dree, endure; fankle, entangle; kirk, church; lum, chimney; neep, turnip; outwith, outside; vennel, alley.

Antonymy is a less frequently occurring sense relation than synonymy. It is most prevalent among gradable adjectives, where the antonyms represent the opposite ends of a scale, e.g. big, small; wide, narrow; beautiful, ugly; quick, slow. Other word classes also show antonymy: verbs begin and end, nouns bottom and top, prepositions into and out of, adverbs above and below. Not all antonymy is of the same type. In the case of gradable antonyms, the words are in a 'more/less' relation: wide and narrow cover overlapping parts of a spectrum, and an object is wide or narrow in relation to some norm. In contrast
some antonyms have an 'either/or' relation: win and lose are mutually exclusive, you do either one or the other. A third type of antonym shows a 'converse' relation: buy and sell are the converse of each other; if X sells some goods to Y , then Y buys them from X .

Hyponymy relates words hierarchically, with a superordinate word (hypernym) having a more general meaning than the subordinate word (hyponym). The hyponyms are in a 'kind of' relation to the hypernym. For example, knife, fork and spoon are kinds of cutlery; so, cutlery is the superordinate word, with general meaning, and knife, fork and spoon are its hyponyms, with more specific meaning. These is turn may be superordinate words to their hyponyms; spoon, for example, has the hyponyms teaspoon, tablespoon, dessertspoon, ladle. A large part of vocabulary can be viewed as being related by hyponymy, but, as with language generally, there is no neat system of hyponymy relations organising the whole vocabulary of English.

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Meronymy is like hyponymy in that it relates words hierarchically, but the relation is a 'part of' relation. The meronyms of a superordinate word represent the parts of that word. For example, ball, heel and instep are meronyms of foot; hub, rim and spoke are meronyms of wheel; flower, root and stalk are meronyms of plant. Together, hyponymy and meronymy serve to group words into semantic sets, known as 'lexical fields', in which the lexemes all refer to the same area of meaning (see further Chapter 12).

### 2.3.4 Collocation

The sense relations between words are 'paradigmatic' relations: a synonym, antonym, hyponym or meronym would substitute for its counterpart in some slot in the structure of sentences. The meaning of a word is also determined by its 'syntagmatic' relations, specifically by its collocation, the other words that typically accompany it in the structure of sentences and discourses. For example, the noun ban is typically modified by the adjective total or complete, is associated with the verbs impose and lift, and is followed by the preposition on. In a sentence with the verb spend, the Object would typically consist of either an amount of money (two hundred pounds) or a period of time (last weekend). The adjective flippant typically associates either with a noun referring to something said (remark, answer, comment) or with the noun attitude.

The word 'typically' occurs in all these statements about collocation, because collocation is a matter of the statistical probability or likelihood that two words will co-occur. One of a pair may exercise a stronger attraction than the other; for example, wine is more likely to co-occur with red than red is with wine, because red can co-occur with many nouns, while wine occurs with only a small number of adjectives. Description of collocation is most reliably based on the analysis of large computer corpora of texts, which can yield appropriate statistical data.

To summarise, the components of (the sense of ) a lexeme's meaning are: its relations with the 'real world' in the form of its denotation and connotation; its relations with other (senses of ) lexemes in the vocabulary; its relations with the other lexemes that typically accompany it in the structure of sentences.

### 2.4 Describing words

In this concluding section of the chapter, we shall examine what constitutes the description of a lexeme; in other words, what information about words a lexicographer needs to take account of in framing a dictionary entry. Following Hudson (1988), 'lexical facts' include: the form of a word, its structure, its meaning, its grammar, its usage, and its origin.

By the 'form' of a word is meant its pronunciation (phonology) and spelling (orthography). The description of pronunciation specifies what sounds (phonemes) a word has, if it has more than one syllable how they are each stressed, and if the pronunciation is subject to any variation in connected speech (e.g.

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vowel reduction or change in stress). The description of spelling specifies the letters that make up the word, any variant spelling, and possibly where the word may be broken at the end of a line.

The structure of a word refers to its composition in terms of morphemes (1.6), how the roots relate to each other in a compound word, what prefixes and suffixes the word has and how they modify the meaning of the root. The description of structure also needs to indicate if there are any pronunciation or spelling changes, either in the root or in an affix, as a result of joining morphemes together to form the word. For example, clear changes pronunciation and spelling when the suffix -ify is added (clarify), as does discreet with the suffix -ion (discretion); bake loses an 'e' when -er is added to form baker, as does debate with suffix -able (debatable). The suffix -able alternates with -ible (discernible), with no difference in pronunciation, depending on which Latin root it is added to.

The meaning of a word was discussed quite fully in 2.3 . Both the reference relation and any other relevant semantic relations (sense relations, collocation) need to be described for an adequate account of meaning.

The description of grammar has two aspects: the inflections that a word has, and how a word fits into the syntax of sentences. For inflections, the description specifies which inflections the word may have (1.3), how they are pronounced and spelled, and any changes to the form of the root that result from their addition. For example, the addition of plural suffix -(e)s changes hoof to hoov-es, city to citi-es, the addition of the past tense/ past participle suffix -(e)d changes cry to cri-ed, slap to slapp-ed. If a word has an irregular form (e.g. of plural or past tense), this too will be specified, e.g. foot-feet, appendix - appendices, criterion - criteria, buy - bought, tell - told, see - saw.

The description of the syntactic operation of words begins with their assignment to a word class (1.5), which is an initial specification of where the word may be used in the structure of sentences. Any deviation from the normal expectation needs to be specified, e.g. if an adjective is restricted to one of the three possible positions for adjectives (i.e. 'attributive' - before nouns (the brown suit), 'postpositive' - after nouns (time enough),
and 'predicative' - after a verb like be (the suit is brown)). For example, awake occurs as predicative (the baby is awake) but not as attributive, and chief occurs as attributive (our chief concern) but not as predicative; galore, emeritus and extraordinaire occur only in postpositive position. For verbs, the specification of syntactic operation is even more complex, including not only whether a verb may take an Object, Complement, etc., but also what type of Object (e.g. noun phrase, nominal clause) and so on.

The description of usage specifies whether a word, or any of its senses, is restricted to particular contexts. The restriction could be geographical (a national variety or a dialect), it could be time-bound (an obsolete or archaic meaning), it could be the formality of the situation or the word's status in the language (e.g. slang or taboo). The restriction could be linked with the expression of the speaker's or writer's attitude, to indicate disapproval or an insult, or to be appreciative. Or a word may be restricted in its usage because to use it would be offensive to a particular group of people.

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Finally, the description of a word includes a specification of its origin, if it belonged to Anglo-Saxon or if it has been 'borrowed', from which language and when. 'Origin' is sometimes taken to mean the 'ultimate' origin, as far as this can be ascertained; for example, a word taken from French during the medieval period may have its origin traced back through older French to Latin. This part of the description may also chart the history of changes in the form (spelling and pronunciation) and in the meaning of the word.

These are the features of words, their lexical description, that lexicographers must grapple with and from among which they must choose what to include in their lexicographical descriptions, which are published in dictionaries.

### 2.5 Further reading

For many of the topics of this chapter, see: Jackson and Zé Amvela's Words, Meaning and Vocabulary (2000) and David Crystal's The Cambridge Encyclopedia of the English Language (1995), especially Part II.

On new words, see: John Ayto's Twentieth Century Words (1999) and Elizabeth Knowles and Julia Elliott's The Oxford Dictionary of New Words (1997).

Sense relations are discussed fully by D.A. Cruse in his Lexical Semantics (1996).
See Dick Hudson's article in IJL (1988) for a 'Checklist of Lexical Facts'.

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## 3

## The dictionary

How many times have you heard someone say, or have you said yourself, 'I'll look it up in the dictionary'? The assumption behind such a comment is that 'the dictionary' is a single text, perhaps in different versions, rather like the Bible. Every household is
assumed to have one; children are taught how to consult the dictionary in school; there is one in every office. Lawyers quote the dictionary in court, teachers and lecturers appeal to it, politicians and preachers argue from its definitions. The dictionary is part of the cultural fabric of our society; each major new edition warrants a review in the daily press. And we all take what the dictionary says as authoritative: if the dictionary says so, then it is so. Life would be impossible if the dictionary was not the final arbiter in our linguistic disputes.

Yet, walk into any bookshop and cast your eye over the shelf where the dictionaries are, pick a few up and examine them, read the blurb on the dust jacket, and you will soon notice that they are all different. They are all recognisably dictionaries, with a more or less alphabetical list of words and information about them, but they have different formats, highly variable numbers of pages, a variety of page layouts, and so on. Compare some of the entries, and you soon realise that the notion of 'the dictionary' as a single text is wide of the mark. What distinguishes them is more notable than what they have in common.

### 3.1 What is a dictionary?

A dictionary is a reference book about words. It is a book about language. Its nearest cousin is the encyclopedia, but this is a book about things, people, places and ideas, a book about the 'real world', not about language. The distinction between dictionary and encyclopedia is not always easy to draw, and there are often elements of one in the other. But they do not share the same headword list - you would be unlikely to find resemble in an encyclopedia - and they do not provide the same information for the headwords that they do have in common. Compare the following entries for toad:
toad Any of the more terrestrial warty-skinned members of the tailless amphibians (order Anura). The name commonly refers to members of the

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genus Bufo, family Bufonidae, which are found worldwide, except for the Australian and polar regions.

Toads may grow up to $25 \mathrm{~cm} / 10 \mathrm{in}$. long. They live in cool, moist places and lay their eggs in water. The eggs are laid not in a mass as with frogs, but in long strings. The common toad B. bufo of Europe and Asia has a rough, usually dark-brown skin in which there are glands secreting a poisonous fluid which makes it unattractive as food for other animals; it needs this protection because its usual progress is a slow, ungainly crawl.

## (Hutchinson New Century Encyclopedia)

toad $/ \mathrm{Z} \mathbf{U d}_{\mathrm{gd} / n .1}$ any froglike amphibian of the family Bufonidae, esp. of the genus Bufo, breeding in water but living chiefly on land. 2 any of various similar tailless amphibians. 3 a repulsive or detestable person. toadish adj. [Old English tadige, tadde, tada, of unknown origin]

Dictionaries are usually arranged in alphabetical order of the headwords. Indeed the expression 'dictionary order' is synonymous with 'alphabetical order'. But there are word books that are arranged by topic or theme, rather than by alphabet (see Chapter 12), and they have a long history (Hüllen 1999; McArthur 1986).

Dictionaries are reference books. People consult them to find out information about words. We must assume that compilers of dictionaries - lexicographers - include information that they know or expect people will want to look up. What we cannot assume, however, is that lexicographers will exclude information that they might expect users will not want to look up. A dictionary is more than just a reference book; it is also a (partial) record of the vocabulary of a language. Any dictionary contains entries and information that few, if any, users will want to access, either because they know it already, or because it is of no interest to them. It would be the rare user who would consult a dictionary for information on the word the, and yet no dictionary would be without an entry for the. However, anyone serious about discovering the subtleties of the definite article in English would be more likely to consult a grammar book than a dictionary.

If the dictionary is distinguished, as a reference book, from the encyclopedia on the one hand, it is distinguished, as a linguistic description, from the grammar book on the other. A grammar book, as the description of the grammatical system of a language, deals with the general rules and conventions for the structure of sentences and tends to deal with words as classes or subclasses. A dictionary describes the operation of individual lexical items, including, where relevant, how they fit into the general patterns of grammar. Grammar and dictionary are complementary parts of the description of a language, and a dictionary will use terms that are defined by the grammar. The point at which grammar and dictionary converge in their treatment of words concerns primarily the so-called 'grammatical' words, like the definite article, which play a crucial and often complex role in grammar.

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Who, then, are the users of dictionaries, and for what purposes do they use them? We readily think of students and learners, academics, word game and crossword puzzle buffs as regular, if not frequent, users of dictionaries. Most people probably have occasion to consult a dictionary from time to time, and many of us have a fascination with words and dictionaries, as the long-running television series Call My Bluff and Countdown demonstrate. Sometimes we just want to establish the existence of a word, perhaps a derivation that we're not sure of. Or we want to check the spelling of a word. Or we look up a word that we have met and with which we are not familiar, and whose meaning we need to ascertain. These, surveys have shown, are the main uses that people make of dictionaries. Occasionally, someone may wish to find out the pronunciation of a word that they have encountered only in writing, or for the sake of general interest look up a word's etymology.

The upshot of this is that any dictionary contains a vast amount of information that is unlikely to be consulted by any of its users. It is there because of the dictionary's recording function, its description of the lexical resources of the language. The fulfilment
of its recording function may, though, be in conflict with the dictionary's reference function, to provide useful information in an easily accessible manner. We shall explore some of these issues further in Chapter 7.

### 3.2 Dictionaries, not 'the dictionary'

If there is no such publication as 'the dictionary', what is the range of publications that are called 'dictionary'? First, we should distinguish between those dictionaries that treat a single language from those that treat more than one, usually two languages: the former are 'monolingual' dictionaries and the latter are 'bilingual' dictionaries. Although, as we shall see in Chapter 4, bilingual dictionaries have the longer pedigree and they contain in part similar information to monolingual dictionaries, they are performing a quite different function and have a number of crucial distinctives. In particular, bilingual dictionaries have two sections, an A-language to B-language section (e.g. English-German), and a Blanguage to A-language section (e.g. German-English); and in bilingual dictionaries the definitions of words are the translation equivalents in the other language. This book is concerned only with monolingual dictionaries.

Second, we should distinguish among monolingual dictionaries between those whose purpose is primarily historical and those that seek to describe the vocabulary at a particular point or period of time. The primary historical dictionary for English is the multi-volume Oxford English Dictionary, and its abbreviated two-volume offshoot, the Shorter Oxford English Dictionary, which aim to chart the birth, death, and developments in form and meaning of words that have constituted the vocabulary of English since 1150 for the OED and since 1700 for the SOED. The 'synchronic' dictionary, by contrast, takes a snapshot of the vocabulary at some point in time. Such a dictionary might chart the vocabulary of Old English (Roberts et al. 1995) or of Middle English (e.g. Kurath and Kuhn

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Table 3.1 Comparison of the Collins range
CED4

Page size
No. of pages
'References'
'Definitions'
Price (2001)
1954), or, most usually, of the contemporary language. While we devote a chapter (5) to the OED, because of its importance in the development of lexicography, we are mostly concerned in this book with dictionaries charting the contemporary vocabulary.

Even among dictionaries of the contemporary language there is a bewildering variety.

Dictionaries vary according to size, from desk-size, through concise, to pocket and smaller, with varying dimensions, numbers of pages, and coverage. All dictionaries present a selection from contemporary vocabulary, but it is very difficult to make comparisons, because of the confusingly different methods of counting the contents (Jackson 1998). Table 3.1 provides a rough estimate of the relative sizes.

Dictionaries also vary according to their intended audience or user group. Some dictionaries are aimed at young users at various stages in their growth and educational development; they are characterised by an appropriate selection of vocabulary, limited amounts of information for each entry, and often the use of pictures and colour. There is a range of monolingual English dictionaries that is aimed at learners of English as a second or foreign language, which take into account the particular needs of this group of users. The 'monolingual learners' dictionaries' (MLDs) are an interesting set of reference works, and they have been associated with some of the most exciting lexicographical innovations. They are discussed in more detail in Chapter 11. The dictionaries aimed at the native speaker adult user might be termed the 'general-purpose' dictionary (Béjoint 2000:40). They are the dictionary that most people own, and they are the focus of much of the discussion in this book.

Besides the general-purpose dictionary, a wide variety of 'specialist' dictionaries is published. Some specialist dictionaries focus on an aspect of lexical description: there are dictionaries of pronunciation (e.g. Jones 1997; Wells 2000), dictionaries of spelling (e.g. West 1964), and dictionaries of etymology (e.g. Weekley 1967). Other specialist dictionaries focus on the vocabulary of a topic or subject-matter, e.g. Dictionary of Economics (Pearce 1992), Dictionary of Lexicography (Hartmann and James 1998). Such dictionaries define the terminology that is crucial for talking about the subject; they exclude some lexical information (e.g. pronunciation, grammar, etymology); and they tend towards the encyclopedic, both in the extent of their definitions or explanations, and in their inclusion of entries for people who have made a significant contribution to the development of the subject.

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The term 'dictionary' is thus applied to a diverse range of reference publications. Our focus will be on the general-purpose dictionary of desk and concise size, with some consideration of historical dictionaries and those for learners.

### 3.3 What is in a dictionary?

From the perspective of its 'macro-structure', there are potentially three parts to a dictionary: the front matter, the body, and the appendices. Some dictionaries do without appendices, but most have front matter, however brief. The front matter usually includes an introduction or preface, explaining the innovations and characteristics of the edition concerned, together with a guide to using the dictionary, which may consist of a singlepage diagram or some lengthier account. Other front matter might be an explanation of the transcription system used for indicating pronunciation, a list of abbreviations used in the dictionary, and an essay on some relevant topic, such as the history of the language or varieties of English around the world. Appendices may be various and even non-lexical;
here is a selection: abbreviations, foreign words and phrases, ranks in the armed forces, counties of the UK and states of the US, weights and measures, musical notation, Greek and Cyrillic alphabets, punctuation, works of Shakespeare.

The body of a dictionary contains an alphabetical list of 'headwords'. Each headword is accompanied by a number of pieces of information, which together with the headword constitute the 'entry'. The headword is usually printed in bold type and hangs one or two spaces to the left of the other lines. Entries are presented in two columns on each page, though there may be three columns in some, usually larger dictionaries (e.g. NODE, W3, but also ECED).

The headwords represent the particular selection of vocabulary and other items that the editors have decided merit inclusion, given the size and purpose of the dictionary. General-purpose dictionaries will all tend to share a headword list that encompasses the core vocabulary; where they differ will be in the amount of technical and specialist, as well as colloquial, slang and dialect vocabulary they include. Editors will be concerned to be up-to-date, especially in socially and culturally significant areas such as computing, medicine, the environment, fashion, and so on. The inclusion of the latest vocabulary in such areas is often used as a selling point for a new edition.

If you examine the headwords in a general-purpose dictionary, you will find that it includes more than just lexemes. In terms of lexemes, it will include: 'simple' lexemes (1.6); compounds, possibly all, but at least those written solid (without a hyphen); and derivatives whose meanings are considered to need a separate definition from their roots. Other derivatives are contained within the entry for the root, as 'run-ons', usually in bold type but without a definition. The headword list will usually include inflected forms where these are 'irregularly' formed (1.3) and are alphabetically some distance from the citation form (e.g. bought in relation to buy): the entry will contain just a cross-reference to the citation form. The list may also include items that are not lexemes, especially derivational affixes and combining forms (1.6), and abbreviations. In some

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dictionaries (e.g. CED, NODE) the headword list includes names of places and people, introducing geographical and biographical entries, e.g.

Birmingham/'buhming(h)em/2nd largest British city, in the W Midlands of England; a major industrial, service, and transport centre with growing high-tech and light industries; home of two universities, a symphony orchestra, and the National Exhibition Centre; est. pop. 998,200 (1987)
(LDEL2)

## Angelou/'anctsolu

:/, Maya (b.1928), American novelist and poet, acclaimed for the first volume of her autobiography, I Know Why the Caged Bird Sings (1970), which recounts her harrowing experiences as a black child in the American South.

## (NODE)

Some headwords will be entered more than once. This applies to homonyms (1.2), e.g. spell, with four entries in COD9, and to homographs, e.g. bow, with one entry pronounced $/ \mathrm{b} \boldsymbol{\mathrm { D }} /$ and two entries pronounced / baU/. In some dictionaries (e.g. LDEL) each word class that a headword belongs to will occasion a separate entry; for example, rear has four entries in LDEL2, one each for the verb, noun, adjective and adverb uses of the headword.

The 'micro-structure' of a dictionary refers to the arrangement of the information within the entries. The range and type of information within an entry will vary according to the kind of headword, but will typically include some or all of the following (compare 2.4):

Spelling: the headword indicates the normal spelling, but any variations will follow.

Pronunciation: within rounded ( ) or slash // brackets, together with any variations.

Inflections: if these are formed irregularly or occasion some spelling adjustment such as doubling of consonants, dropping of 'e' or changing ' $y$ ' to ' $i$ '.
-
Word class: usually indicated by conventional abbreviations, 'n' for noun, 'adj' for adjective, etc.; verbs are also marked for 'transitive' (vt) or 'intransitive' (vi).
-
Senses: where a lexeme has more than one meaning, each sense is usually numbered; where a sense, or group of senses belong to a different word class or subclass, this is indicated before the sense(s) concerned.

Definition: each sense is given a definition, which is an explanation of its meaning.
-
Examples: where the elucidation of a sense benefits from an illustrative phrase or sentence, usually given in italic type.

Usage: where a sense is restricted in its contexts of use, an appropriate label precedes the sense concerned; if the restriction applies to all the senses of a lexeme, the label precedes any of the senses.

Run-ons: undefined derivatives (with a word class label), idioms, phrasal verbs (if they are not included as headwords), usually in bold type.

- Etymology: conventionally in square brackets as the final item in the entry.

Some dictionaries include additional information, for example on collocation or the syntactic operation of words. Learners' dictionaries, especially (see Chapter 11), contain detailed information on these topics, as well as other additional material. By way of illustration, here is the entry for drink from COD9:
drink/drıŋk/ v. \& n. v. (past drank/dræŋk/; past part. drunk/dr
A. yk /) 1 a $t r$. swallow (a liquid). b $t r$. swallow the liquid contents of (a container). c intr. swallow liquid, take draughts (drank from the stream). $\mathbf{2}$ intr. take alcohol, esp. to excess (I have heard that he drinks). $\mathbf{3}$ tr. (of a plant, porous material, etc.) absorb (moisture). 4 refl. bring (oneself etc.) to a specified condition by drinking (drank himself into a stupor). 5 tr. (usu. foll. by away) spend (wages etc.) on drink (drank away the money). $\mathbf{6}$ tr. wish (a person's good health, luck, etc.) by drinking (drank his health). n. $\mathbf{1}$ a a liquid for drinking (milk is a sustaining drink). $\mathbf{b}$ a draught or specified amount of this (had a drink of milk). $\mathbf{2} \mathbf{a}$ alcoholic liquor (got the drink in for Christmas). $\mathbf{b}$ a portion, glass, etc. of this (have a drink). $\mathbf{c}$ excessive indulgence in alcohol (drink is his vice). $\mathbf{3}$ (as the drink) colloq. the sea. drink deep take a large draught or draughts. drink in listen to closely or eagerly (drank in his every word). drink off drink the whole (contents) of at once. drink to toast; wish success to. drink a person under the table remain sober longer than one's drinking companion. drink up drink the whole of; empty. in drink drunk. drinkable $\operatorname{adj}$. [Old English drincan (v.), drinc(a) (n.), from Germanic]

We examine the micro-structure and the information contained in dictionary entries in more detail in Chapters 8, 9 and 10.

### 3.4 Compiling a dictionary

No lexicographer of English starts with a blank sheet of paper, but rather stands in a tradition of dictionary making that reaches back more than six centuries (Green 1996:39), a history that we shall begin to trace in the next chapter. While some lexicographers find themselves revising and updating an existing dictionary to produce a new edition, others take on the challenge of innovation and hack a fresh path for lexicography. Even then, they build on the work of previous generations of lexicographers, both in determining the headword list and in deciding what kinds of information to provide.

Briefly, we may identify three aspects to dictionary compilation: the selection of headwords, the sources of data, and the writing of the entries. Any dictionary contains a selection from the total vocabulary of English, which is difficult to estimate but probably lies between one and two million words (Crystal 1995). Dictionaries do not usually reveal
their headword count, which would be

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Table 3.2

CED4
gl.
glabella
glabrescent
glabrous
glacé
glacial
glacial acetic acid
glacialist
glacial period
glaciate
glacier
glacier cream
glacier milk
glacier table
glaciology
glacis
glacis plate
glad
Gladbeck
gladden
gladdon
glade
glad eye

NODE
GLA
glabella
glabrous
glacé
glacé icing
glacial
glacial period
glaciated
glaciation
glacier
Glacier Bay National Park
glaciology
glacis
glad ${ }^{1}$
glad ${ }^{2}$
gladden
gladdon
glade
glad eye
glad-hand
gladiator
gladiolus
glad rags

| glad hand | Gladstone |
| :--- | :--- |
| gladiate | Gladstone bag |
| gladiator |  |
| gladiatorial |  |
| gladiolus |  |
| glad rags |  |
| gladsome |  |
| Gladstone |  |
| Gladstone bag |  |
| Glagolitic |  |

unreliable in any case, as it depends on what items are included as headwords (e.g. affixes and abbreviations) and how compounds and derivatives are treated. A desk-size dictionary probably contains no more than 100,000 headwords; the CD-ROM version of COD10 gives the headword count as 64,679 . Headword lists in similar size dictionaries differ only at the margins: the core vocabulary is standard, judgements are made about specialist and non-standard (slang, dialect) lexemes. Compare the brief lists of headwords between gl- and glag- in CED4 and NODE, both published in 1998 shown in Table 3.2.

The lexicographers' data comes from a number of sources. First of all, they have access to previous dictionaries, which can be mined both for the headword list and for lexical information. It is not unusual to find the same definition reproduced in successive editions of a dictionary. Second, dictionary publishers

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keep a 'citation file', which records the results of the publisher's reading programme in identifying new words together with examples of their contexts of use, usually in the form of complete sentences. Some citation files go back a long way, Oxford's, for example, to the mid-nineteenth century, when citations began to be collected for what became the OED (see Chapter 5). Third, and of increasing importance, lexicographers have access to computer corpora, large collections of texts in electronic form. Oxford and Longman lexicographers use the British National Corpus, a 100 million-word corpus of both spoken and written English; Collins lexicographers use the Bank of English, a growing corpus, developed at the University of Birmingham, now of more than 400 million words, originally put together for the pioneering COBUILD learners' dictionary (see Chapter 11).

A computer corpus can be searched rapidly and efficiently. It can be used for checking information, or for seeking answers to specific queries. But, more significantly, it can provide the raw data for the construction of dictionary entries. Using a 'concordance'
program, a lexicographer can perform a KWIC (Key Word in Context) search and obtain a list of all the occurrences of a lexeme in a corpus, together with a specified amount of context for each. The results of the search suggest to the lexicographer how many senses to identify for the lexeme and provide examples of use.

The third aspect of compiling a dictionary, identified earlier, was writing the entries. It is rare that a dictionary is the work of a single lexicographer. A team is more usual, with some members specialising in particular aspects of lexical description. Many dictionaries have a pronunciation specialist, for example, or an etymology specialist, as well as consultants for technical areas of vocabulary or for other varieties of English.
Lexicographers write the definitions, and editorial staff coordinate the input of all the contributors. Dictionaries are nowadays compiled on computer, so that all members of a team can have simultaneous access to the developing dictionary text. This makes rigorous editorial checking, always a necessity, even more important, before a dictionary is released for publication. We pursue the topic of dictionary compilation in Chapter 13.

### 3.5 Evaluating a dictionary

Dictionaries are commercial publications; publishers invest considerable sums of money in their development; and they are tailored to perceived market needs. Like any other book publication, they are subjected to review in newspapers, magazines and professional journals. Newspaper reviews of dictionaries tend towards the trivial, focusing on 'newsworthy', often idiosyncratic features, such as who has been included and excluded from the biographical entries, or supposed modish, usually slang, lexical items. However, dictionaries are not just commercial publications; they are also linguistic descriptions and so they are of interest to language and linguistics scholars, who subject them to academic scrutiny and criticism. Indeed, a specialist branch of linguistic studies has developed whose concern is specifically lexicography: it has its scholarly associations

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(e.g. EURALEX - the European Association for Lexicography), its own journals (e.g. International Journal of Lexicography), a three-volume encyclopedia devoted to it (Hausmann et al. 1989), and its own courses and research projects.

Academic lexicography, or 'metalexicography' (Béjoint 2000:8n), is concerned, among other things, with the business of 'dictionary criticism' (Osselton 1989), which proposes methods and criteria for reviewing and evaluating dictionaries. The reviewing of dictionaries is not like that of other books. It would, for example, be impossible for a reviewer to read the whole text of a dictionary: CED4 claims to have 3.6 million words of text, and NODE 4 million. Dictionary reviewers must find other methods, such as sampling, or having a carefully selected checklist of items and features to investigate.

One approach is to take the claims that a dictionary makes about itself, in the blurb on the cover or book-jacket or in the front matter, and check these against the practice of the dictionary as reflected in its content, as well as against the accumulated insights and judgements of the scholarly community. An alternative approach establishes a set of criteria that arise from the academic study of lexicography and applies these to the
dictionary under review. It is often useful to have a team of reviewers, each of whom takes a separate aspect for critical scrutiny, e.g. the treatment of pronunciation, of grammar, of meaning, of etymology (compare Higashi et al. 1992).

A further consideration in dictionary criticism is the perspective from which the review is conducted. The academic metalexicographer's primary focus is probably on the adequacy of a dictionary as a lexical description. An alternative focus might be that of the user, particularly where accessibility and comprehensibility of the information could be an issue, as with a learners' dictionary, or where a specific set of users is being targeted, as with a children's dictionary.

Dictionary criticism is an important activity. It not only provides informed reviews of dictionaries for potential users, it also contributes to advances in lexicography and to improvements in dictionaries. We explore it further in Chapter 14.

Summarising, this chapter has sought to distinguish dictionaries from encyclopedias and grammars, to show that dictionaries are the products of a tradition of lexicography, to suggest some of the range of reference works with the 'dictionary' title, to survey the content of general-purpose dictionaries, to raise some of the issues in dictionary compilation, and to introduce the business of dictionary criticism. We have set the agenda for the remainder of the book, beginning with an account of the history of dictionary making in English.

### 3.6 Further reading

A good overview is Sidney Landau's Dictionaries: The Art and Craft of Lexicography (originally 1989, now in a second edition, 2001). Also recommended is Henri Béjoint's (1994) Tradition and Innovation in Modern English Dictionaries, Clarendon Press Oxford, republished in paperback, with only minor updating, in 2000 as Modern Lexicography: An Introduction, Oxford University Press.

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## 4

## The beginnings

This chapter and the next two trace the history of dictionary making in English up to the present time. This chapter takes us up to Samuel Johnson's dictionary in the mideighteenth century, the next is devoted to the Oxford English Dictionary, and Chapter 6 first recaps on the American practice and then brings the story up to date.

### 4.1 Bilingual beginnings

The beginnings of English lexicography go back to the Old English period (2.1), specifically to the introduction (from 597) of the Roman form of Christianity and the development of monasteries. The language of the Roman Church was Latin; its priests and monks needed to be competent in Latin in order to conduct services, and to read the Bible (Jerome's 'Vulgate' version) and other theological texts. The monasteries were the
institutions of education for the clergy in the language of the church, as well as in the doctrines and practices of the faith. Many monasteries also developed extensive libraries of theological and other manuscripts (printing was still 750 years in the future), which would have been written in Latin, and which became objects of study and commentary. As English monks studied these Latin manuscripts, they would sometimes write the English translation above (or below) a Latin word in the text, to help their own learning, and as a guide to subsequent readers. These one-word translations, written between the lines of a manuscript, are called 'interlinear glosses'; they are seen as the beginnings of (bilingual) lexicography (Hüllen 1989).

In due course, and to aid in the teaching and learning of Latin, these glosses were collected together into a separate manuscript, as a glossary, which may be regarded as a prototype dictionary. The words in the glossary were then ordered, either alphabetically, in early glossaries only by the first letter, then by second and subsequent letters, or topically (Chapter 12). One of the best known topical glossaries was compiled by Ælfric, who was the Abbot of the monastery at Eynsham, near Oxford, during the first decade of the eleventh century. Ælfric was well known as an educator: he wrote a grammar of Latin, as well as a number of other instructional works. His glossary, known as 'The London Vocabulary', is found appended to a number of extant copies of his Grammar.

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The glossary is a list of Latin words, arranged by topic, together with an Old English equivalent for each of them. Ælfric's topics encompassed a wide range of vocabulary, from 'God, heaven, angels, sun, moon, earth, sea' to 'herbs' and 'trees', to 'weapons' and 'metals and precious stones' (for full, but slightly differing lists, see McArthur 1986:75, Hüllen 1999:64 - reproduced in 12.2).

Latin continued as the language not only of the church but also of education and learning generally throughout the medieval period. It was the language of instruction for all subjects in the medieval universities (Oxford dates from 1167, Cambridge from 1230), and scholarly publication was in Latin, the European lingua franca of education. Academics were expected to be able to both speak and write fluently in Latin. When schools were founded in order to prepare students for entry to the universities, they concentrated on teaching Latin - the origin of the 'grammar' school. There thus developed a considerable demand for instructional material for the teaching and learning of Latin grammar and vocabulary. Dictionaries were compiled to meet this demand, both Latin- English (e.g. the Hortus Vocabulorum, 'garden of words', of around 1430) and English-Latin (e.g. the Promptorium Parvulorum, 'storeroom for young scholars', of 1440). Both of these dictionaries appeared in due course in printed form, the Hortus in 1500, and the Promptorium in 1499.

Latin took on a new significance during the period of the Renaissance (2.1), as scholars rediscovered the literature of Roman authors and made their works known, both through publication in the original language and through translations into English. It is the latter that are of particular significance. When translators came across a Latin word for which they could not find a ready equivalent in English, a common solution would be to 'borrow' the Latin word into English. Since Latin had been for so long the common
language of academic discourse, this practice seemed the most convenient to many translators. However, since many readers would not be as familiar with Latin, some translators appended a glossary of such 'borrowed' words to their translations. Philemon Holland, for example, who published a translation of Plutarch's Moralia in 1603, appended 'An explanation of sundry tearmes somewhat obscure, in this translation of Plutarch, in favour of the unlearned Reader; after the order of the Alphabet'. The 'unlearned' reader was one who did not know Latin. As it happens, Holland's translation was the last to contain such a glossary, because of a significant development in lexicography.

Before we come to that, let us note that the Renaissance period saw not only the revival of the classical languages of Rome and Greece, but also a burgeoning interest in the vernacular languages of Europe. This interest, prompted by increasing travel, resulted in a number of bilingual dictionaries: for French and English, John Palsgrave's
Esclarcissement de la langue francoyse (1530) and Randle Cotgrave's A Dictionarie of the French and English Tongues (1611); for Italian and English, John Florio's A Worlde of Wordes (1598); for Spanish, English and Latin, Richard Percyvall's Bibliotheca Hispanica (1591). Dictionaries for English and Latin also continued to be published, e.g. Richard Huloet, Abecedarium Anglo-Latinum (1552), Thomas Thomas, Dictionarium Linguae Latinae et Anglicanae (1587).

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## 4.2 'Hard' words

The first monolingual English dictionary is considered to be Robert Cawdrey's A Table Alphabeticall of 1604, which contained in fuller book form the kind of list that Philemon Holland had appended to his translation of Plutarch. The title page of Cawdrey's dictionary proclaims it to be:

A Table Alphabeticall, conteyning and teaching the true writing, and understanding of hard, usuall English wordes, borrowed from the Hebrew, Greeke, Latine, or French, \&c.

With the interpretation thereof by plaine English words, gathered for the benefit \& helpe of Ladies, Gentlewomen, or any other unskilfull persons.

Whereby they may the more easilie and better understand many hard English wordes, which they shall heare or read in Scriptures, Sermons, or elsewhere, and also be made able to use the same aptly themselves.
'Unskilful' persons, like Holland's 'unlearned reader', would be those without a knowledge of the classical languages, especially Latin; and since girls and young women did not enjoy the same educational opportunities as boys and young men - the 'public' schools and the universities were exclusively male preserves - this applied to all women, apart from those with parents enlightened and wealthy enough to have provided them with private tutoring.

Cawdrey's A Table Alphabeticall begins a tradition of 'hard word' dictionaries. You will have noticed that Cawdrey uses the word 'hard' twice on his title page. A 'hard' word
was a loanword, usually of recent borrowing, whose use was not yet widespread and which was not readily comprehensible to 'uneducated' readers. Despite his inclusion of Hebrew in his list of languages of origin and the '\&c' (i.e. etc.) after 'French', Cawdrey marks only words of Greek origin (with ' $g$ ' or ' gr ') and words of French origin (with ' $\S$ '), the unmarked ones being assumed to have a Latin origin. Cawdrey’s book, despite its recognition as the first monolingual dictionary, is not entirely original; in 1596 The English Schoole Master by Edmund Coote had appeared, which contained a grammar, the catechism, prayers, and a vocabulary, and it is this last that Cawdrey mined for his work - even the title pages have similar wording. Cawdrey, though, has twice as many words as Coote, and he used other sources as well.

Cawdrey's first edition contained around 2500 'hard' words, and it went through four editions, the last published in 1617, but there was little augmentation of the word list. Each word in the dictionary is provided with a synonym or explanatory phrase in 'plaine English words'. Here are the first few words of Cawdrey's A Table Alphabeticall:
§ ABandon, cast away, or yeelde up, to leave, or forsake
Abash, blush
abba, father
§ abbesse, abbatesse, Mistris of a Nunnerie, comforters of others

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§ abbettors, counsellors
aberration, a going a stray, or wandering
abbreviat, ) to shorten, or make short
§ abbridge, )
$\S$ abbut, to lie unto, or border upon, as one lands end meets with another
abecedarie, the order of the Letters, or hee that useth them ...
Apocrypha (g), not of authoritie, a thing hidden, whose originall is not knowne
Cawdrey's pioneering work was followed in 1616 by John Bullokar's An English Expositor, whose title page proclaimed:

An English Expositor: Teaching the Interpretation of the hardest words used in our Language.

With Sundry Explications, Descriptions, and Discourses.
By I.B. Doctor of Physicke.
Besides having more entries than Cawdrey - it contained 'sundry olde words now
growne out of use, and divers termes of art, proper to the learned' - Bullokar also provides more expansive explanations, e.g.

Heretike. He that maketh his owne choice, what points of religion he will beleeve, and what he will not beleeve.

Hereditarie. That which commeth to one by inheritance.
Heriot. The best living beast which a Tenant hath at his death, which in some Mannors is due to the lord of whom the land is holden.

Hermaphrodite. Of both natures: which is both man and woman.
Hermite. One dwelling solitarie in the wildernesse attending onely to devotion.
By his death in 1641, the Expositor had reached its third edition with little revision. A radical revision and expansion of the Expositor in 1663 by someone who styled themself 'A Lover of the Arts' greatly increased its popularity and it continued to be republished until 1731.

Part of the expansion of Bullokar's English Expositor in 1663 involved extensive borrowing from a third hard-word dictionary, which had been first published in 1623, Henry Cockeram's The English Dictionarie, and the first to use 'dictionary' in its title. On the title page of one of the first editions, though not subsequently repeated, Cockeram acknowledged his debt to Cawdrey and Bullokar:

The English Dictionarie: or, An Interpreter of hard English Words.
Enabling as well Ladies and Gentlewomen, young Schollers, Clarkes, Merchants, as also Strangers of any Nation, to the understanding of the

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more difficult authors already printed in our Language, and the more speedy attaining of an elegant perfection of the English tongue, both in reading, speaking and writing.

Being a Collection of the choicest words contained in the Table Alphabeticall and English Expositor, and of some thousand of words never published by any heretofore.

Cockeram's target audience is wider than Cawdrey's, even extending to the foreign learner of English ('Strangers of any Nation'). Moreover, Cockeram's Dictionarie has three parts: the first is the list of hard words, together with their glosses and explanations (more in the style of Cawdrey than of Bullokar); the second is a list of 'vulgar' words together with their 'refined or elegant' equivalents, as an aid to writing with good style; and the third, following the practice of some Latin-English dictionaries, is a list of 'Gods \& Goddesses'. The 1663 revision of Bullokar's Expositor included the second and third parts of Cockeram's Dictionarie. Cockeram's work went through twelve editions, the last, a substantially revised one, in 1670.

The scope of the hard-word dictionary had already widened since the publication of $A$

Table Alphabeticall. It was widened further with the publication in 1656 of Thomas Blount's Glossographia, whose title page declared:

Glossographia: or a Dictionary, Interpreting all such Hard Words, Whether Hebrew, Greek, Latin, Italian, Spanish, French, Teutonick, Belgick, British or Saxon; as are now used in our refined English Tongue.

Also the Terms of Divinity, Law, Physick, Mathematicks, Heraldry, Anatomy, War, Musick, Architecture; and of several other Arts and Sciences Explicated.

With Etymologies, Definitions, and Historical Observations on the same.
Very useful for all such as desire to understand what they read.
Blount, lawyer by profession, borrowed extensively from other dictionaries, both monolingual and bilingual, but he also included words that he had come across in his reading or that he had heard spoken around him in London. Blount's definitions vary in length, from single words to extensive explanations, but his singular innovation was the introduction of etymologies and 'historical observations'. The etymology consists of the word in the original language in brackets after the headword, e.g.

Deprehend (deprehendo) to take at unawares, to take in the very act.
Depression (depressio) a pressing or weighing down.
The 'historical observations' are included in the explanation and are sometimes rather fanciful, e.g.

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Hony-Moon, applyed to those marryed persons that love well at first, and decline in affection afterwards; it is hony now, but it will change as the moon.

Blount is also notable for giving his sources, or citing his authorities, an issue that would become increasingly important. For example:

Depredable (depredabilis) that may be robbed or spoiled. Bac.
The 'Bac.' refers to Francis Bacon (1561-1626), the philosopher and scientist, Blount's source for this word. Blount is more comprehensive than any of his predecessors, but the focus is still on the 'hard' words, with the addition of the technical terms of 'arts and sciences'.

Hard word dictionaries continued to expand: Edward Phillips' The New World of English Words of 1658 contained around 11,000 entries, which had increased to 17,000 by the fifth edition in 1696, the year of Phillips' death. Elisha Coles’ An English Dictionary of 1676 expanded his headword list to 25,000 , largely by adding dialect words, old words from Chaucer and Gower, and canting terms. The canting terms were thieves' slang words, and Coles justifies their inclusion as follows:
'Tis no Disparagement to understand the Canting Terms: It may chance to save your

Throat from being cut, or (at least) your Pocket from being pick'd.
Coles' dictionary represented the state of the art in lexicography at the end of the seventeenth century. However, it still did not contain the everyday vocabulary of English. A truly comprehensive dictionary was still to come.

### 4.3 Completeness

The monolingual English dictionary had started life at the beginning of the seventeenth century as a modest list of loanwords. As the century progressed the word list expanded, mostly in the direction of the more unusual type of lexeme. Etymology began to be attended to, and before the century ended two etymological dictionaries had appeared: Stephen Skinner's Etymologicon Linguae Anglicanae, published four years after the author's death in 1671; and the anonymous Gazophylacium Anglicanum in 1689, which took much of its material from Skinner.

The beginning of the eighteenth century brought a new focus to the monolingual English dictionary, with the publication in 1702 of A New English Dictionary, whose author is identified only by the initials 'J.K.' It is widely supposed that the author is John Kersey, who revised Edward Phillips' New World of English Words in 1706 and who published a dictionary under his full name in 1708, the Dictionarium Anglo-Britannicum. J.K.'s dictionary proclaims itself to be:

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A New English Dictionary: Or, a Compleat Collection Of the Most Proper and Significant Words, Commonly used in the Language; With a Short and Clear Exposition of Difficult Words and Terms of Art.

The whole digested into Alphabetical Order; and chiefly designed for the benefit of Young Scholars, Tradesmen, Artificers, and the Female Sex, who would learn to spell truely; being so fitted to every Capacity, that it may be a continual help to all that want an Instructor.

Most of J.K.'s 28,000 headwords had never before appeared in a dictionary. Its aim is to be 'compleat' and to identify the 'proper' words of the language; its target audience includes the increasingly literate tradesmen and craftsmen; and its primary purpose is to aid its users in correct spelling. Many of the current school textbooks contained spelling lists; J.K. incorporates this feature into his dictionary and thus brings into the dictionary the words of everyday vocabulary. Many of the headwords in A New English Dictionary have only the scantiest of definitions or explanations, e.g.

An Apron, for a Woman, \&c.
An Arm of a man's body, of a tree, or of the sea.
An Elephant, a beast.
May, the most pleasant Month of the Year.

Little serious attention was paid to etymology; at best, the language from which a loanword was borrowed is indicated.

The two principles, of completeness and etymology, came together in Nathaniel Bailey's An Universal Etymological English Dictionary of 1721, which promised both a larger scope and a wider group of users than its predecessors:

An Universal Etymological English Dictionary: Comprehending The Derivations of the Generality of Words in the English Tongue, either Antient or Modern, from the Antient British, Saxon, Danish, Norman and Modern French, Teutonic, Dutch, Spanish, Italian, Latin, Greek, and Hebrew Languages, each in their proper Characters.

And Also A Brief and clear Explication of all difficult Words ... and Terms of Art ...
Together with A Large Collection and Explication of Words and Phrases us'd in our Antient Statutes ... and the Etymology and Interpretation of the Proper Names of Men, Women, and Remarkable Places in Great Britain; Also the Dialects of our Different Counties.

To which is Added a Collection of our most Common Proverbs, with their Explication and Illustration.

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The whole work compil'd and Methodically digested, as well as for the Entertainment of the Curious, as the Information of the Ignorant, and for the Benefit of young Students, Artificers, Tradesmen and Foreigners.

Bailey's 40,000 words were culled from a wide variety of sources and encompass both the everyday and the less usual. For the first time proverbs were included (some ninety in all), and serious attention was paid to etymology, e.g.

Emerald, (Esmeraude, F. Esmeralda, Span. Smaragdus, L. of $\sum \mu \propto p \propto \gamma$ SOG incorrect spelling of preparation

It also includes notes entitled 'SPELLCHECK' after words that are pronounced the same (i.e. homophones), e.g. here and hear, as well as 'usage' notes for pairs that are frequently confused, e.g. complement and compliment.

The dictionary in the electronic medium (see 6.7) offers the possibility of allowing the user to choose which types of information about headwords will be displayed on any lookup occasion. The OED2 on CD-ROM has built in a number of options of this kind. The user can choose whether to have the quotations displayed or not, and there are 'switches' to activate the display of 'pronunciation', 'spellings' (i.e. form history), and 'etymology'. If all the options are turned off, the display offers only the definitions and usage labels for the numbered senses of a lexeme. The Oxford Talking Dictionary has a more limited set of switches: the quotations can be excluded, and the thesaurus facility is activated by a switch. Electronic dictionaries generally divide their display into a headword list window and a dictionary entry window, and each can be scrolled
separately. The headword list window operates in part like a spelling dictionary, except that derivatives, compounds and so on that are nested in dictionary entries may not be included in the list. The electronic medium does, though, open up possibilities for selective display of dictionary information that have not yet been fully exploited.

### 7.5 Learners

There are two sets of users whose needs have been carefully considered and for whom dictionaries have been specifically tailored: children, and learners. Children's dictionaries range from the large-format work with pictures and an imaginative use of colour, aimed at those just beginning to learn to read, to school dictionaries that look like the adult version, except with a more selective headword list, the omission of some word senses and of information such as etymology, and definitions written in a simpler language. We could examine more closely the range of children's dictionaries, but our focus here will be on dictionaries aimed at learners of English as a foreign or second language. We discuss these dictionaries in detail in Chapter 11; in the context of the present chapter, we look just at the reference needs of this group.

A learner, or indeed a native speaker, may consult a dictionary when engaged in one of two broad types of language task. On the one hand, a learner may be

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engaged in the task of reading or listening, and they encounter a word or phrase that makes no sense to them and whose meaning they cannot deduce from the context: the dictionary is used as an aid to 'decoding' the item read or heard. On the other hand, a learner may be engaged in the task of writing or preparing to speak, and they do not necessarily need to find an unknown word, but rather to discover how a known word may be used in the appropriate context: the dictionary is used as an aid to 'encoding' acceptable sentences and texts. For a native speaker, spelling is the main encoding purpose that they might consult a dictionary for; whereas learners may need to find out about spelling, pronunciation, inflections, how a word fits into grammatical structure, what other words can appropriately accompany it (its collocations), and whether there are any social or cultural restrictions on its usage.

Dictionaries for learners, therefore, need to consider not only their decoding needs, which are not vastly different from those of native speakers, but more particularly their encoding needs. This means that learners' dictionaries need to contain more explicit, more comprehensive and more systematic information about the syntactic and lexical operation of words than a dictionary for native speakers. Arguably, this information should be contained in any dictionary that purports to be an accurate and comprehensive lexical description (Hudson 1988), but in practice it is precisely in these areas that in native speaker dictionaries the information is scantiest and least systematic (see Chapter 9). Besides, as we noted earlier, it is not just a matter of containing the information, it is also a matter of presenting the information in such a way that it is readily accessible and takes account of users' prior knowledge and reference skills (Jackson 1995).

The early learners' dictionaries, such as H.E. Palmer's A Grammar of English Words
(1938) or the precursor to the OALD, A.S. Hornby et al.'s Idiomatic and Syntactic English Dictionary (1942), concentrated, as their titles suggest, on providing accurate and systematic information about the grammatical operation of words. The subsequent history of learners' dictionaries (Cowie 1999) shows the development and elaboration of that purpose, not only in grammar but also in phraseology and collocation, with an increasing attention more recently on making the information more readily accessible and usable.
This has been achieved in a number of ways. For example, the early editions of OALD presented information about the grammatical operation of verbs by means of a set of codes based on a system of 'verb patterns' developed by Hornby. Each sense of a verb was coded (e.g. 'VP6, VP15, VP21'). The regular user of the dictionary would learn which patterns were represented by the commonly occurring codes, and could look the less familiar ones up in the guide to the dictionary in the front matter. The coded information was usually supported by illustrative examples, so that the user could see a typical context for the word in the given sense. It became clear over time that, while language teachers may have made good use of the grammatical codes, many student users of the dictionary did not make the effort to learn the system and relied largely on the examples. In later editions of OALD the coding system has been abandoned; the grammatical information is presented in a more accessible form, e.g. by means of formulae such as ${ }^{*} \sim$ sth (to

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sb)'; and more attention is paid to ensuring that the examples provide a suitable model.
As we shall see in Chapter 11, learners' dictionaries have developed in more varied ways than just in the presentation of grammatical information. Entry structure has in some cases been substantially revised, information and advice on usage is incorporated, various types of additional material is included. Much of the innovation has been in response to the perceived needs of this particular user group, so that the learner's dictionary has in many respects moved away from the conventions of the native speaker dictionary (Rundell 1998).

### 7.6 Further reading

It is useful to read the prefaces and other front matter to a number of dictionaries, as well as the blurb on their dust jackets, to gain an idea of how dictionaries are presenting themselves to their potential users. Chapters 4 and 5 of Henri Béjoint's Modern Lexicography (2000) discuss the aims of dictionaries, their functions in society, and the reference needs of their users. A 'user perspective' is also provided by Chapter 6 of Reinhard Hartmann's Teaching and Researching Lexicography (2001). Bo Svensén discusses dictionary users in relation to types of dictionary in Chapter 2 of his Practical Lexicography (1993).

## 8

## Meaning in dictionaries

In Chapter 7, we identified checking spelling and finding out about meaning as the two principal reasons why someone would consult a dictionary. Because dictionaries are based on the written form of the language and their word lists are arranged in alphabetical order, they coincidentally and inevitably provide information about spelling. It is, thus, in explaining, describing and defining the meaning of words that the major function of dictionaries is considered to lie, and on which they are judged. We discussed some of the components of word meaning in Chapter 2, and in this chapter we explore how and with what success dictionaries describe the various aspects of lexical meaning. First, though, we need to determine exactly what the objects are whose meaning dictionaries are attempting to characterise.

### 8.1 The objects of definition

Dictionaries present us with a list of headwords as the objects to be defined, though some items within the entry under a headword may also be subject to definition. The headword list may contain a variety of types of item. Consider the two following short lists from CED4:
hook, hookah, hook and eye, hooked, hooker ${ }^{1}$, hooker ${ }^{2}$, Hooke's law, hooknose, hook-tip, hook-up, hookworm, hookworm disease;
its, it's, itself, itsy-bitsy, ITU, ITV, -ity, i-type semiconductor, IU, IU(C)D, Iulus, -ium
The headword list in CED4 (personal and geographical names are excluded) contains 'simple' words like hook and hookah, but it also contains a range of other items:

- derived words - hooked, hooker ${ }^{2}$ compound words, including those written solid (hooknose, hookworm, itself), those
- hyphenated (hook-tip, hook-up, itsy-bitsy), and open compounds (Hooke's law), as well as combinations of these (hookworm disease, i-type semiconductor)
- binomials (hook and eye)

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. abbreviations (ITU, ITV,IU,IU(C)D), whose 'definition' consists only in spelling out the words whose initial letters make up the acronym or initialism

- affixes (-ity, -ium), which have similar definitions to those for words
- contractions (it's), for which only the full forms are given.

Some headwords - abbreviations, contractions - are not included for definition as such,
just for explanation; similarly, word forms manifesting irregular inflections are often entered with a cross-reference to the base form (or lemma), e.g.
felt the past tense and past participle of feel
Some of the items that CED4 includes in its headword list would feature as nested or runon items in other dictionaries, including derivatives and some compounds. The practice varies, with, for example, some dictionaries listing solid compounds as headwords, but not hyphenated or open compounds. CED4 itself includes some items within entries that are further defined. Under hook, for example, it defines: by hook or (by) crook; get the hook; hook, line, and sinker; off the hook; on the hook; sling one's hook; hook it. These are various kinds of phrase, including idioms (by hook or crook, sling one's hook), trinomials (hook, line, and sinker), and slang expressions (get the hook, hook it).

One item in the list is entered twice: hooker, with the same pronunciation, and with the following main meanings:
hooker ${ }^{1}$ a commercial fishing boat using hooks and lines instead of nets
hooker ${ }^{2}$ a person or thing that hooks
At first glance, you would think that the meaning of hooker ${ }^{l}$ would be included in the more general meaning of hooker ${ }^{2}$. Why then does hooker have two homographs (in fact, homonyms), which are entered as separate headwords, especially as the meanings seem so close? The basic criterion that dictionaries use to identify homographs is etymology: if two or more different origins can be identified for the same spelling, then the orthographic word is entered as many times as there are different etymologies. In the case of hooker, the first homograph is identified as a loanword from Dutch hoeker in the seventeenth century, and the second is the derivation by means of the suffix -er from the verb hook, which has its origin in the Old English hoc.

With hooker, the homographs have not too dissimilar meanings. The opposite case can also be found. Consider the following meanings for the word table (definitions from CED4):
a flat horizontal slab or board, usually supported by one or more legs, on which objects may be placed
an arrangement of words, numbers, or signs, usually in parallel columns, to display data or relations.

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Intuitively, you might think that these meanings must be associated with words of different origin, but that is not the case. There is a single entry for table in CED4, since both meanings are associated with the word that came into English from Old French in the twelfth century, with its origin in Latin tabula, 'a writing tablet'.

Another criterion that may be used to trigger multiple headwords for the same spelling is word class membership. This criterion operates in LDEL, where table has three entries,
one each for the noun, adjective (e.g. table manners), and verb. The criterion operates alongside the etymological one, so that a homograph identified by etymology may also have multiple entries on the basis of word class membership. For example, line is entered four times in LDEL2: ${ }^{1}$ line (put a lining in, for example, a garment) is distinguished from the others on the basis of etymology: it has its origin in Middle English linen, derived from lin, the Old English for 'flax', which developed into modern English linen. The other entries for line also have a Middle English origin, but from Old French ligne, though this word, interestingly, goes back to a Latin word meaning 'made of flax'. This line has three homographs based on word class membership, one each for the noun, verb and adjective.

Many words are polysemous; they have more than one meaning, as table cited earlier. For any spelling (orthographic word), therefore, for which a lexicographer identifies multiple meanings, a decision must be made whether the different meanings arise from polysemy or because there are homographs. The lexicographer applies the criterion of etymology, and, according to dictionary policy, that of word class membership. If the criteria are satisfied, then multiple headwords are entered in the dictionary. If not, then a single headword is entered with multiple meanings or senses. We shall see (Chapter 11) that these criteria do not necessarily apply in learners' dictionaries, because they may be regarded as not serving the reference needs of this user group.

### 8.2 Lumping and splitting

If polysemy is identified, how does a lexicographer decide how many meanings or senses of a word to recognise? The lexicographer collects the evidence, such as citations and concordance lines (Chapter 13), which indicate the different contexts of use. What is then done with the evidence depends on whether the lexicographer is a 'lumper' or a 'splitter' (Allen 1999:61):

The 'lumpers' like to lump meanings together and leave the user to extract the nuance of meaning that corresponds to a particular context, whereas the 'splitters' prefer to enumerate differences of meaning in more detail; the distinction corresponds to that between summarizing and analysing.

Here are the entries for the noun horse from NODE and from CED4: one of these is a 'splitting' and the other a 'lumping' dictionary.

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horse noun 1 a solid-hoofed plant-eating domesticated mammal with a flowing mane and tail, used for riding, racing, and to carry and pull loads.

- Equus caballus, family Equidae (the horse family), descended from the wild Przewalski's horse. The horse family also includes the asses and zebras.

■ an adult male horse; a stallion or gelding. ■ a wild mammal of the horse family. [treated as sing. or pl.] cavalry: forty horse and sixty foot.

2 a frame or structure on which something is mounted or supported, especially a
sawhorse.
v Nautical a horizontal bar, rail, or rope in the rigging of a sailing ship for supporting something. v short for VAULTING HORSE

3 [mass noun] informal heroin.
4 informal a unit of horsepower: the huge 63-horse 701-cc engine.
5 Mining an obstruction in a vein.
(NODE)
horse $n 1$ a domesticated perissodactyl mammal, Equus caballus, used for draught work and riding: family Equidae. $\mathbf{2}$ the adult male of this species; stallion. $\mathbf{3}$ wild horse. 3a a horse (Equus caballus) that has become feral. 3b another name for Przewalski's horse. 4a any other member of the family Equidae, such as the zebra or ass. $\mathbf{4 b}$ (as modifier): the horse family. 5 ( functioning as pl) horsemen, esp. cavalry: a regiment of horse. $\mathbf{6}$ Also called: buck. Gymnastics. a padded apparatus on legs, used for vaulting, etc. 7 a narrow board supported by a pair of legs at each end, used as a frame for sawing or as a trestle, barrier, etc. 8 a contrivance on which a person may ride and exercise. 9 a slang word for heroin. 10 Mining. a mass of rock within a vein or ore. 11 Nautical. a rod, rope, or cable, fixed at the ends, along which something may slide by means of a thimble, shackle, or other fitting; traveller. 12 Chess. an informal name for knight. 13 Informal. short for horsepower. 14 (modifier) drawn by a horse or horses: a horse cart.

## (CED4)

NODE has five numbered senses, by comparison with CED4's fourteen. The first sense in NODE encompasses the first five senses in CED4; NODE's second sense encompasses senses six, seven and eleven in CED4; NODE's 3 corresponds to CED4's 9, NODE's 4 to CED4's 13, and NODE's 5 to CED4's 10. CED4 has some senses not covered by NODE: $8,12,14$. Some of CED4's senses are 'subsenses' (introduced by the symbol ■) to the 'core' senses in NODE. The arrangement of NODE suggests that it is essentially a 'lumping' dictionary, whereas CED4 falls more obviously into the 'splitting' category. Most dictionaries tend to be of the 'splitting' type, though different dictionaries do not necessarily agree on where to make the splits between senses. Compare the following entries for the noun length in COD9 and CCD4:

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length $\mathbf{n} .1$ measurement or extent from end to end; the greater of two or the greatest of three dimensions of a body. 2 extent in, of, or with regard to, time (a stay of some length; the length of a speech). $\mathbf{3}$ the distance a thing extends (at arm's length; ships a cable's length apart). 4 the length of a swimming pool as a measure of the distance swum. 5 the length of a horse, boat, etc., as a measure of the lead in a race. $\mathbf{6}$ a long stretch or extent (a length of hair). 7 a degree of thoroughness in action (went to great lengths; prepared to go to any length). 8 a piece of material of a certain length (a length of cloth). 9 Prosody the quantity of a vowel or syllable. 10 Cricket a the distance from the batsman at
which the ball pitches (the bowler keeps a good length). $\mathbf{b}$ the proper amount of this. 11 the extent of a garment in a vertical direction when worn. $\mathbf{1 2}$ the full extent of one's body.
(COD9)
length $n \mathbf{1}$ the linear extent or measurement of something from end to end, usually being the longest dimension. 2 the extent of something from beginning to end, measured in more or less regular units or intervals: the book was 600 pages in length. $\mathbf{3}$ a specified distance, esp. between two positions: the length of a race. 4 a period of time, as between specified limits or moments. 5 a piece or section of something narrow and long: a length of tubing. 6 the quality, state, or fact of being long rather than short. 7 (usually $p l$ ) the amount of trouble taken in pursuing or achieving something (esp. in to great lengths). $\mathbf{8}$ (often pl ) the extreme or limit of action (esp. in to any length (s)). 9 Prosody, phonetics. the metrical quantity or temporal duration of a vowel or syllable. $\mathbf{1 0}$ the distance from one end of a rectangular swimming bath to the other. 11 NZ inf. the general idea; the main purpose.
(CCD4)
Table 8.1 shows how the senses match in these two concise dictionaries.
COD9 has only half of its twelve meanings directly matched in CCD4, while CCD4 has seven of its eleven senses matched in COD9; the disparity arises from the fact that Sense 7 in COD9 is matched to two senses ( 7 and 8) in CCD4. There is one sense that looks closely related but is not a direct match: Sense 6 in COD9 and Sense 5 in CCD4. The two dictionaries have not carved up the meaning of length in the same way, and there are senses in each that do not have counterparts in the other (the gaps in Table 8.1).

Are there any criteria, or rules of thumb, that lexicographers use in deciding what senses to recognise in analysing the meaning of a lexeme? Context, clearly, plays a part, but context can be analysed more or less finely. For example, the first four senses of the noun interest in CED4 are given the following definitions:

1 the sense of curiosity about or concern with something or someone
2 the power of stimulating such a sense
3 the quality of such stimulation
4 something in which one is interested; a hobby or pursuit.

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Table 8.1

| 2 | 4 | 2 |  |
| ---: | ---: | :---: | :---: |
| 3 | 3 | 3 | 3 |
| 4 | 10 | 4 | 2 |
| 5 |  | 5 |  |
| 6 | 7,8 | 6 | 7 |
| 7 |  | 7 | 7 |
| 8 | 9 | 8 | 9 |
| 10 |  | 10 | 4 |
| 11 |  | 11 |  |
| 12 |  |  |  |

12
LDEL2 encapsulates these meanings under one numbered sense with two parts:
5a readiness to be concerned with, moved by, or have one's attention attracted by something; curiosity $\mathbf{5 b}$ the quality in a thing that arouses interest ... also something one finds interesting

Clearly, in the end, it comes down to the lexicographer exercising their informed judgement in the face of the evidence that they have to work with.

There are, however, two factors that a lexicographer can take into account when distinguishing the senses of words: grammar, and collocation (Clear 1996). It is possible that the use of length 'usually plural' as against 'often plural' led the CCD4 lexicographer to distinguish senses 7 and 8 (see above). The fact that reply can be used intransitively, as against transitively with a clause as object, distinguishes the first two senses in CED4:

1 to make an answer (to) in words or writing or by an action; respond: he replied with an unexpected move. 2 (tr; takes a clause as object) to say (something) in answer: he replied that he didn't want to come.

Some senses have a specialised or restricted use, and are labelled as such, e.g. the Gymnastics, Mining, Nautical, Chess and Informal uses of horse in the CED4 entry given earlier. Some senses enter into particular collocations; as indicated by the words in brackets in these senses for isometric from CED4:
(of a crystal or system of crystallization) having three mutually perpendicular equal axes (of a method of projecting a drawing in three dimensions) having the three axes equally
inclined and all lines drawn to scale.
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However, collocation has not been exploited as much as it could be by lexicographers for this purpose (Clear 1996).

Having decided what senses to recognise for a polysemous lexeme, the lexicographer must then decide how to order them in the dictionary entry. In an historical dictionary OED or SOED - the order is given: from earliest sense to latest sense, according to the citational evidence. However, even in historical dictionaries, things are not always as simple: some words have a complicated 'sense history', with more than one 'branch' (see Berg 1993 for a description of the entry structure in OED2). In general-purpose dictionaries, the practice varies. Chambers follows the historical order:

There are at least two possible ways of ordering ... definitions. One way is to give the most modern meaning first and the oldest last. The other is the way selected for this dictionary, historical order. In this method the original or oldest meaning of the word is given first and the most modern or up-to-date last. Both methods are equally easy to use but historical order is perhaps more logical since it shows at a glance the historical development of the word, each entry providing a potted history of the word.
(p. vi)

This is a matter of opinion, and whether anyone would consult a general-purpose dictionary for a 'potted history' of a word is debatable. The alternative argument would focus on likely user needs, which would privilege the more modern senses. In fact, dictionaries that follow the 'modern meaning first' principle are usually rather more subtle in their arrangement of senses, e.g. CED4:

As a general rule, where a headword has more than one sense, the first sense given is the one most common in current usage. Where the editors consider that a current sense is the 'core meaning' in that it illuminates the meaning of other senses, the core meaning may be placed first. Subsequent senses are arranged so as to give a coherent account of the meaning of a headword ... closely related senses are grouped together; technical senses usually follow general senses; archaic and obsolete senses follow technical senses; idioms and fixed phrases are usually placed last.

LDEL2 attempts a synthesis of the historical and contemporary approaches:
Meanings are ordered according to a system which aims both to show the main historical development of the word and to give a coherent overview of the relationship between its meanings. Meanings that are current throughout the English-speaking world are shown first; they appear in the order in which they are first recorded in English, except that closely related senses may be grouped together regardless of strict historical order. They are followed by words [sic - presumably for 'meanings'] whose usage is restricted,
such as those current only in informal use or in American English. Senses which have become archaic or obsolete are shown last.
(p. xvi)

Compare the order of senses in the entries for the noun mate from CED4 and LDEL2:
mate 1 the sexual partner of an animal. 2 a marriage partner. 3a Informal, chiefly Brit., Austral., and N.Z. a friend, usually of the same sex: often used between males in direct address. 3b (in combination) an associate, colleague, fellow sharer, etc.: a classmate, a flatmate. 4 one of a pair of matching items. 5 Nautical. 5a short for first mate. 5b any officer below the master on a commercial ship. $\mathbf{5 c}$ a warrant officer's assistant on a ship. 6 (in some trades) an assistant: a plumber's mate. 7 Archaic. a suitable associate.
(CED4)
mate 1a an associate, companion - often in combination <flatmate> <playmate> 1b an assistant to a more skilled workman <plumber's $\sim>\mathbf{1 c}$ chiefly $\mathrm{Br} \&$ Austr a friend, chum - used esp as a familiar form of address between men $\mathbf{2}$ an officer on a merchant ship ranking below the captain 3 either member of a breeding pair of animals $<a$ sparrow and his $\sim>\mathbf{3 c}$ either of two matched objects $<a \sim$ to this glove $>4$ archaic a match, peer
(LDEL2)
Mate entered the language during the Middle English period, with the general 'companion' meaning. The LDEL2 entry reflects the later (sixteenth-century) addition of the 'sexual partner' meaning, though this comes first in CED4 because it is considered the more common and central meaning in modern English.

### 8.3 Definitions

Once identified, each sense needs a definition. The definition is a characterisation of the meaning of the (sense of the) lexeme; it is not an exhaustive explanation of the possible referents (Zgusta 1971:252ff.). Like other linguistic statements, definitions in monolingual dictionaries consist of 'language turned back on itself', using the same language to describe as is being described. Much of the art of lexicography (compare the title of Landau 1989, 2001) consists in finding apt wording for constructing telling definitions. A number of general principles can be identified:
a word should be defined in terms simpler than itself (Zgusta 1971:257), which is not always possible with the 'simple' words

- circularity of definition should be avoided, i.e. defining two or more lexemes in terms of each other (Svensén 1993:126)
a definition should be substitutable for the item being defined; so the head of the definition
- phrase should belong to the same word class as the defined lexeme (Zgusta 1971:258; Svensén 1993:127)
- different forms of definition are appropriate to different types of word (Zgusta 1971:258).

The most common form of definition is the 'endocentric phrase' (Zgusta 1971:258), the 'completely analytical one-phrase definition' (Preface to W3), which consists of 'stating the superordinate concept next to the definiendum (genus proximum) together with at least one distinctive feature typical of the definiendum (differentia specifica)' (Svensén 1993:122). A good example of such a definition is that given for the first sense of horse in NODE, cited earlier:
a solid-hoofed plant-eating domesticated mammal with a flowing mane and tail, used for riding, racing, and to carry and pull loads.

The 'definiendum' (horse) is related to its 'genus' (mammal), i.e. its 'superordinate concept', and given a number of 'differentiae' (solid-hoofed, plant-eating, domesticated, with a flowing mane and tail, used for riding, etc.), which are 'typical features' serving to distinguish this mammal from other mammals.

The 'genus + differentiae' style of definition, as it is sometimes called, is used for a great many words from most of the word classes, with 'differentiae' appropriate to whether the meaning is concrete or abstract, referring to a thing, event, quality, and so on. Here are some further examples from a range of types of word, taken from a number of dictionaries (the 'genus' is in each case in italics):
beat (verb) to strike with or as if with a series of violent blows [CED4]
clean (adjective) free from dirt, stain, or whatever defiles [Chambers]
glamour (noun) a romantic, exciting, and often illusory attractiveness [LDEL2]
humble (adjective) of low social or political rank [COD9]
somewhat (adverb) to a moderate extent or by a moderate amount [NODE]
see (verb) perceive with the eyes [COD10]
variety (noun) the quality or condition of being diversified or various [CED4]
A second major type of definition consists of a synonym, a collection of synonyms, or a synonymous phrase. Many, especially abstract, words are not easily defined analytically by the 'genus + differentiae' style; and lexicographers resort to the use of synonyms. It is this type of definition that is most likely to create circularity, where a set of synonyms is used to define each other. Smaller dictionaries, where space is more limited, use synonymy as a defining method more extensively. Compare these entries from the Collins Pocket English Dictionary (2000):

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miserable 1 very unhappy, wretched. $\mathbf{2}$ causing misery. $\mathbf{3}$ squalid. $\mathbf{4}$ mean
unhappy 1 sad or depressed. 2 unfortunate or wretched
wretched 1 miserable or unhappy. 2 worthless
The larger Collins Concise (1999) is already an improvement; although it still relies largely on synonymy for defining, its more extensive treatment creates less circularity:
miserable 1 unhappy or depressed; wretched. $\mathbf{2}$ causing misery, discomfort, etc. 3 contemptible. $\mathbf{4}$ sordid or squalid. $\mathbf{5}$ mean; stingy.
unhappy $\mathbf{1}$ not joyful; sad or depressed. $\mathbf{2}$ unfortunate or wretched. $\mathbf{3}$ tactless or inappropriate.
wretched $\mathbf{1}$ in poor or pitiful circumstances. 2 characterised by or causing misery. $\mathbf{3}$ despicable; base. 4 poor, inferior, or paltry.

Interestingly, the parent, desk-size CED4 adds almost nothing to the definitions of the Concise for these words.

A third style of definition specifies what is 'typical' of the referent. This style is normally used in combination with one of the others, usually the analytical style, and is introduced by the adverb typically. Here are some examples from COD10:
day of rest a day set aside from normal activity, typically Sunday on religious grounds gingham lightweight plain-woven cotton cloth, typically checked
measles an infectious viral disease causing fever and a red rash, typically occurring in childhood
scramble move or make one's way quickly and awkwardly, typically by using one's hands as well as one's feet
ululate howl or wail, typically to express grief
The last example adds a typifying definition to a synonym one, while the others add it to an analytical definition.

A fourth type of definition explains the 'use' to which a word or sense of word is put, usually in the grammar of the language. This type is typically employed for defining 'grammatical' or 'function' words (determiners, pronouns, conjunctions, prepositions, auxiliary verbs - see Chapter 1), especially where these have no reference outside of language. Here are some examples from COD10:
and (conjunction) used to connect words of the same part of speech, clauses, or sentences Page 96
do (auxiliary verb) used before a verb in questions and negative statements
ever (adverb) used for emphasis in questions expressing astonishment or outrage
herself (pronoun) used as the object of a verb or preposition to refer to a female person or animal previously mentioned as the subject of the clause
that (pronoun/determiner) used to identify a specific person or thing observed or heard by the speaker
us (pronoun) used by a speaker to refer to himself or herself and one or more others as the object of a verb or preposition

All these definitions are introduced by used, and they are mostly framed in terms of how the word operates in the grammatical structure of the language. In the case of the adverb ever, though, the 'use' relates to its function in discourse, i.e. for emphasis.

Definitions aim to describe the reference relations (Chapter 2) of a lexeme, specifically their denotations. They do not usually comment on the connotative or associative meaning of a lexeme, though this may occasionally find mention, as in the definitions of champagne and youth in NODE:
champagne a white sparkling wine from Champagne, regarded as a symbol of luxury and associated with celebration
youth the state or quality of being young, especially as associated with vigour, freshness, or immaturity.

More often, connotation is indicated by appropriate labelling (see Chapter 9), as for the following words in COD9:
crony (often derog[atory] ) a close friend or companion
ethnic cleansing (euphem [istic]) the mass expulsion or extermination of people from opposing ethnic or religious groups within a certain area
ladyship (iron[ical] ) a form of reference or address to a woman thought to be giving herself airs
missive (joc[ular] ) a letter, esp. a long and serious one
wrinkly (slang offens[ive] ) an old or middle-aged person.

### 8.4 Sense relations

In Chapter 2, we identified the 'sense relations' that may hold between lexemes within the vocabulary as: synonymy, antonymy, hyponymy, and meronymy. In

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this section, we shall explore how these meaning relations are represented in dictionaries.

We have noted already (8.3) that (loose) synonymy is used as a defining style for some words. A somewhat tighter synonymy is sometimes indicated by the phrase 'also called', when an alternative term is given for the headword under consideration. For example, both CED4 and NODE give 'also called: viper' under adder, and 'also called:
hydrophobia' under rabies. But there is no consistency of treatment. For example, in CED4 hookah is given the following alternatives: hubble-bubble, kalian, narghile, water pipe; and their definitions all contain the phrase 'another name for hookah'. NODE, however, does not give these alternatives in its entry for hookah, though hubble-bubble is defined simply as 'a hookah', narghile has 'a hookah' included in its definition, and water pipe has a similar definition to that for hookah but without making the connection. Kalian is not entered in NODE. CED4 is perhaps particularly commendable for making these synonym connections, as the following examples from a single column in the dictionary show:
love apple an archaic name for tomato
lovebird another name for budgerigar
love feast Also called: agape
love-in-a-mist See also fennelflower
love-in-idleness another name for the wild pansy
love knot Also called: lover's knot
lovemaking an archaic word for courtship
lovey Brit. informal. another word for love (sense 11).
Another way of treating synonyms in dictionaries is to draw together near-synonyms under one of the items and discuss them. This procedure is used by LDEL2 and by ECED. The latter has the following account of 'generous' words:

## SYNONYMS generous, magnanimous, munificent, bountiful, liberal

CORE MEANING: giving readily to others
generous willing to give money, help, or time freely; magnanimous very generous, kind, or forgiving; munificent very generous, especially on a grand scale; bountiful (literary) generous, particularly to less fortunate people; liberal free with money, time, or other assets.

The sense relation of antonymy is sometimes used in definitions, when the opposite of the (sense of the) lexeme being defined is preceded by not, e.g. (from COD9)

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artificial not real
conventional not spontaneous or sincere or original

## long-standing not recent

vacant not filled or occupied
Sometimes, an antonym may be indicated more explicitly. NODE, for example, introduces antonyms with the phrase 'the opposite of', but this is for a limited number of mostly quite technical terms, e.g. anode - cathode, holism - atomism, sinistral - dextral, zenith - nadir. CED4 uses the phrase 'compare' to fulfil a similar function, but again with a small number of fairly technical terms. Antonymy is not a well-represented sense relation in the text of dictionaries.

Hyponymy is better represented, largely because the analytical definition (8.3) is formed using the hyponymy relation. The 'genus' term is, or should be, the superordinate of the lexeme being defined, the 'definiendum'. Consider the following definition from CED4:
serge a twill-weave woollen or worsted fabric used for clothing
Serge is a hyponym of fabric, the 'genus' term in this definition, and it can be related as a co-hyponym to other words that have fabric as their 'genus', such as corduroy, lace, velvet, worsted and so on. What you cannot find out from a conventional dictionary is the set of all the co-hyponyms of a particular superordinate term (see Chapter 12). If a dictionary is consistent, though, co-hyponyms should be related to the same genus term. But dictionaries are not noted for their consistency in such matters. For example, NODE relates fork and spoon to the genus term implement, but knife is related to instrument. NODE defines handwritten as 'written with a pen, pencil, or other hand-held implement', but pen and pencil both have instrument as their genus term.

Meronymy, the 'part-of' relation, is a less well recognised as well as a less pervasive sense relation. It is, though, used in the definitions of some lexemes, e.g. (from COD10):
algebra the part of mathematics in which ...
coast the part of the land adjoining or near the sea
loin the part of the body on both sides of the spine between the lowest ribs and the hip bones
vamp the upper front part of a boot or shoe
Again, we should not look for consistency in conventional dictionaries. While upper is defined in COD10 as 'the part of a boot or shoe above the sole', sole has a quite different type of definition: 'the section forming the underside of a piece of footwear'.

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The dictionary that has most consistently treated sense relations is the learners' dictionary COBUILD1, where synonyms, antonyms and superordinate terms are indicated in the dictionary's 'extra column' (further in Chapter 11).

### 8.5 Phraseology

The other major component of meaning that we identified in Chapter 2 was collocation, the regular or particular company that a word keeps. We noted in 8.2 that collocation may offer a method for distinguishing the senses of a lexeme (cf. Clear 1996). Collocation is, in the end, a matter of statistical frequency of co-occurrence, and lexicologists have not yet collected full data on the collocational behaviour of words. Where dictionaries note collocation, it is in cases either of a known restriction to the range of a word or where a collocation appears in a particular context. The possible collocates or the restrictions are usually contained within brackets before the definition and introduced by 'of' or 'especially of'. Here are some examples from NODE:
bijou (especially of a house or flat) small and elegant
bifacial Botany (of a leaf ) having upper and lower surfaces that are structurally different. Archaeology (of a flint or other artefact) worked on both surfaces
convoluted (especially of an argument, story, or sentence) extremely complex and difficult to follow
meander (of a river or road) follow a winding course. (of a person) wander at random. (of a speaker or text) proceed aimlessly or with little purpose
teem (of water, especially rain) pour down; fall heavily
terrigenous Geology (of a marine deposit) made of material eroded from the land.
Most of the lexemes for which collocates are indicated belong to the adjective word class: the collocates specify the nouns or types of noun they typically accompany. Some verbs (e.g. meander, teem) may have their typical Subject or Object noun collocates specified. Collocation is the subject of considerable research currently, especially following the development of extensive computer corpora that promise to yield interesting and reliable data on this topic. Lexicographers of learners' dictionaries have begun to include some of this information in their works, since it is an area of particular interest and difficulty for learners of English as a second or foreign language (see Chapter 11).

Another area of interest to learners is that of idioms and other fixed expressions, especially where the meaning of the expression cannot be deduced from the meanings of its individual words. Some dictionaries, as we saw in 8.1, list binomials, and perhaps trinomials, as headwords. COD9, for example, has some

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120 such items as headwords, e.g. bells and whistles, flotsam and jetsam, sweet and sour, waifs and strays. More difficult to locate are idioms proper, which are normally entered under one of the 'main' words of the idiom. Many dictionaries are not very explicit about the rules for finding an idiom, though the rule of thumb is that it will be under the first 'main' word. For example, a storm in a teacup will be under storm, shoot one's mouth off will be under shoot, but take a bull by the horns will be under bull, because take does
not count as a 'main' word. Sometimes the rules are more complicated; LDEL2, for example, follows an older tradition:

An idiom is entered at the first noun it contains; hence on the ball appears at ball and in spite of at spite. If it contains no noun, it is entered at the first adjective; hence give as good as one gets is shown at good. If it contains no adjective, it is entered under the first adverb; if no adverb, under the first verb; if no verb, under the first word. In any case, cross-references to the entry where the idiom appears are given at the entries for other major words in it: hand ... - see also take the LAW into one's own hands. The entry where the idiom appears is shown in SMALL CAPITAL letters.
(p. xiv)

Not all dictionaries are as good about cross-referencing, and locating an idiom can turn into something of a hunt at times, especially as they are usually nested towards the end of an entry. Some of the more modern layouts do make the hunt easier, e.g. in COD10, which has a separate paragraph marked 'PHRASES' where this is relevant in an entry. Under shoot, for example, the following phrases are listed:
shoot the breeze (or the bull), shoot one's cuffs, shoot oneself in the foot, shoot a line, shoot one's mouth off, the whole shooting match, shoot through.

Each phrase is then given a definition, and any appropriate restrictive label.
Summarising, the treatment of meaning in dictionaries goes beyond simply the definition; it includes the distinction of homographs, the identification of senses and their ordering, the contribution of the sense relations, the incorporation of collocational information, and the consideration of idioms and other phrasal expressions.

### 8.6 Further reading

Sidney Landau deals with 'definition' in Chapter 4 of Dictionaries: The Art and Craft of Lexicography (1989), as does Bo Svensén in Chapter 10 of his Practical Lexicography (1993). The section on defining styles owes something to Barbara Kipfer's treatment in Chapter 6 of Workbook on Lexicography (1984), where she also discusses the ordering of senses.

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## 9

## Beyond definition

In the previous chapter we discussed the treatment of what is often considered the main function of dictionaries: the description of word meaning. In this chapter, we investigate some of the other information about words that dictionaries may contain, some of the 'facts about words' that we outlined in Chapter 2. While we shall look at topics such as spelling, pronunciation, inflections, word classes, and usage, we shall leave etymology until the next chapter.

### 9.1 Spelling

As we have noted before, dictionaries cannot help but give information about spelling, since as alphabetically organised word books they are founded on the written form of words. Consulting the dictionary to check the spelling of words we also found to be one of the major occasions of their use (Chapter 7). While headwords, or nested derivatives, supply information about the usual spellings of words, there is additional information, about variations in spelling, that dictionaries also give. The variation can be of various kinds.

Some words simply have alternative spellings, where the choice of one rather than the other is purely a matter of personal preference. Both spellings are equally acceptable. Here are some examples (from COD9):
absorption - absorbtion, baptistery - baptistry, caddie - caddy, diffuser - diffusor, extrovert - extravert, filigree - filagree, gizmo - gismo, horsy - horsey, judgement judgment, movable - moveable, neurone - neuron, pendent - pendant, regime - régime, smidgen - smidgeon - smidgin, tranquillity - tranquility, yogurt - yoghurt.

A surprisingly large number of words have alternative spellings, and from this list we can observe some possible patterns: final -ie or $-y$, suffix -er or -or, $z$ or $s$, possible loss of $e$ after $d g$ or $v$ plus suffix, loss of accent from vowels of words borrowed from French, and so on.

Many British dictionaries take account of the differences between British and American spelling. CED4, for example, enters the American spelling of words like center and pediatrics at the appropriate place in the headword list, and then

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gives a cross-reference to the British spelling. For words like savior and theater, which would occur close to the British spelling, the American alternative is simply given under the British spelling. There are two further spelling variations that are often seen as differences between British and American English: the $a e-e$ alternation in aesthetics esthetics, and the $s-z$ alternation in -ise/-ize (e.g. marginalise/-ize). The -ise/-ize alternation is no longer regarded as a British/ American difference; British dictionaries merely note these as alternative spellings. The $a e-e$ alternation is not yet fully accepted in British spelling. In most dictionaries, with the exception of Chambers, encyclopedia is entered as the main spelling, with encyclopaedia as the alternative; similarly with medieval and mediaeval. However, archaeology is the main spelling (or sole spelling Chambers, LDEL); archeology is given as an alternative in CED4, and is marked as American in NODE and other Oxford dictionaries. And in the case of aesthetics, paediatrics, etc. the alternative is usually marked as American.

One other area where dictionaries pay attention to spelling is where alterations occur as a consequence of adding an inflectional suffix, such as cry - cried, big - bigger. We will consider this in 9.3 , where we discuss dictionary information about inflections.

### 9.2 Pronunciation

How a word is pronounced is one of its idiosyncractic facts; it is the phonological counterpart of spelling (orthography), its shape in the medium of sound as against its shape in the medium of writing. We would expect, therefore, that dictionaries would indicate at least the sounds that constitute the pronunciation of the word, and for words of more than one syllable the stress pattern. There are two issues in relation to pronunciation in dictionaries: first, how pronunciation is represented in the written medium that the dictionary uses, i.e. the transcription system; and second, the model that is used for pronunciation, and how much variation is indicated.

In most modern British dictionaries, the transcription system used to represent pronunciation is the International Phonetic Alphabet (IPA), developed in the late nineteenth century as a system, based on the Roman alphabet, that could be used for transcribing the speech of any language, and as an aid in learning the pronunciation of a foreign language. The alternative transcription to the IPA is a 'respelling' system. When James Murray was devising a transcription system for the OED in the mid-nineteenth century, the IPA had not yet been invented, and he developed a respelling system. However, when the second edition of the OED was put together, the only wholesale revision was to replace Murray's respellings with IPA transcriptions. Other Oxford dictionaries followed suit: COD7 (1982) had respelling, COD8 (1990) changed to the IPA. LDEL uses respelling; so does ECED and Chambers, but Chambers 21 st Century Dictionary uses IPA, as do the Collins dictionaries. American dictionaries, however, usually use a respelling system.

Both transcription systems have the aim of a one-to-one correspondence between sound and symbol, and unique representation of each sound. In the

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Table 9.1

|  | Chambers | LDEL2 | CED4 | COD9 |
| :---: | :---: | :---: | :---: | :---: |
| binary | bī'nər-i | 'bienəri | 'bamner | 'basnərı |
| creation | krē-a'-shən | kri'aysh(ə)n | krı:'elfon | kri:'elf(ə)n |
| genuflect | jen'ū-flekt | 'jenyoo,flekt | 'dbenju,flekt | '¢¢Enjuflekt |
| orphan | ör'fon | 'awf(o)n | 'offon | 'off(e)n |
| Thursday | thûrz'di | 'thuhzdi | ' $\theta$ a:zdı | ' $\theta$ azzdi |

case of the IPA, because it uses symbols additional to those in the Roman alphabet, it mostly uses a single symbol to represent each sound. A respelling system, restricting itself to the symbols of the Roman alphabet, perhaps with the addition of the 'schwa' symbol ə needs to use digraphs and even trigraphs in order to achieve a unique one-to-one correspondence. Table 9.1 shows some examples of transcription from a variety of dictionaries.

The argument used in favour of respelling is that it uses mostly familiar symbols (Paikeday 1993), whereas the IPA employs a considerable number of symbols that are not contained in the

Roman alphabet. On the other hand, a respelling system either has to use diacritics, as in the Chambers version, or a large number of digraphs, as in the LDEL system (e.g. oo, aw, uh). Arguably, any transcription system will constitute a learning task for the user who needs to consult it, or at least the ability to interpret the table where the transcription is described and illustrated. Some dictionaries provide reminders of the symbols at the bottom of each page, e.g. COD9, with vowels on one double-page and consonants on the next. Some CD-ROM versions of dictionaries provide a recorded pronunciation of each transcription contained in the dictionary (e.g. COD9).

Pronunciation is not information that native speakers regularly consult a dictionary for. If they do, it is likely to be in order to check the pronunciation of a word that they have met only in writing. Perhaps in recognition of this, NODE and subsequently COD10 do not give a transcription of the pronunciation of 'ordinary, everyday words', rather:

In the New Oxford Dictionary of English, the principle followed is that pronunciations are given where they are likely to cause problems for the native speaker of English, in particular for foreign words, foreign names, scientific and other specialist terms, rare words, words with unusual stress patterns, and words where there are alternative pronunciations or where there is a dispute about the standard pronunciation.
(Introduction, p. xvii)
What counts as an ordinary word must be a matter of judgement. By way of comparison, here are lists of words from one page of COD10 distinguishing those that have been provided with a transcription and those that have not:

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With transcription: traipse, trait, trajectory, Trakehner, Traminer, trammel, tramontana, tramontane, trampoline, trance, tranche, trans-

Without transcription: training college, training shoe, train mile, train oil, train shed, trainspotter, traitor, tra la, tram, tramlines, tramp, trample, tram road, tram silk, tramway, trank, tranny, tranquil, tranquillize, transaction, transactional analysis.

The exclusion of pronunciation information for many words in NODE and COD10 represents a move, albeit small, away from subservience to the 'recording' function of general-purpose dictionaries towards consideration of what the user might or might not need.

The second issue concerns the model of pronunciation that is offered, and the degree of variation that is recorded. COD9 says that its IPA transcriptions are 'based on the pronunciation associated especially with southern England (sometimes called 'Received Pronunciation")'. In CED4, the 'pronunciations of words ... represent those that are common in educated speech'. In LDEL2,
the pronunciation represented ... is what may be called a 'standard' or 'neutral' British-English accent: the type of speech characteristic of those people often described as having 'no accent', or, more accurately, having an accent that betrays little or nothing of the region to which the
speaker belongs.
NODE represents 'the standard accent of English as spoken in the south of England (sometimes called Received Pronunciation or RP)'. Some of these dictionaries acknowledge the existence of other accents, both in other English-speaking countries and regionally within Britain, but argue that it is impossible to do them all justice. Chambers, which describes some of the ways in which pronunciation differs in other national varieties of English, claims that its respelling system of transcription 'allows for more than one interpretation so that each user of the dictionary may choose a pronunciation in keeping with his speech'.

However it is described, it is the 'educated' accent of southern England, with its /b
t/ pronunciation of but, and /gra:s/ rather than /græs/ for grass, that is the model represented in British dictionaries. At one time, it was argued that this accent was the one most widely understood, the one used predominantly in public discourse, the one taught to foreign learners of English, and so on. This is presumably the sense in which it might be considered a 'standard accent' (NODE), though NODE acknowledges that it is not a static accent:

The transcriptions reflect pronunciation as it actually is in modern English, unlike some longerestablished systems, which reflect the standard pronunciation of broadcasters and public schools in the 1930s.
(p. xvii)

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The status of this accent as the prestige accent for British English has been constantly challenged by phoneticians of English, and there is a much greater diversity of accents heard now in public life. It is perhaps becoming an anachronism to continue to record this accent in modern dictionaries, but the debate on which pronunciation should be recorded has hardly begun.

Dictionaries do record some variation in pronunciation. Learners' dictionaries, which have a worldwide market, now routinely include American pronunciation as well as British (Chapter 11). Native speaker dictionaries, on the other hand, record variation within the chosen accent, for example the /i:k../ and / \&k../ beginnings to economics. Here are some further examples, drawn from COD9:

- coastguard /'kəus(t)ga:d/
- distribute /dı'stribju:t/ - /'distribju:t/
- February /'februəri/ - /'febjuəri/
- oceanic /əu厅ı'anık/ - /əusı'anık/
- sedentary /'sed(ə)nt(ə)ri/
- vin rosé /van rəu'zeı/ - /vẽroze/

They show a number of types of variation in pronunciation, even in the chosen accent: omission of sounds in more rapid or 'less careful' enunciation (the sounds in brackets in coastguard and sedentary); variation in stress placement, as in distribute; one or more alternative sounds, as in February and oceanic; and for loanwords, the anglicised and the original, 'foreign', pronunciation, as for vin rosé.

### 9.3 Inflection

For most words that can be inflected in English - nouns, verbs, adjectives (see Chapter 1) - the inflection follows from the general rules of morphology, is not idiosyncratic to the individual lexeme, and is therefore not appropriate to the lexical information contained in dictionaries. However, there are some exceptions to this generalisation, which dictionaries do record. A small number of adjectives, some nouns, and a larger number of verbs inflect 'irregularly', not according to the general pattern, and these are given for each lexeme concerned, e.g.

- adjective bad - worse - worst
- noun foot - feet, mouse - mice, ox - oxen, sheep - sheep
- verb bring - brought - brought, feel - felt - felt, give - gave - given, hit - hit - hit, see - saw seen, wear - wore - worn, etc.

These basic irregularities do not exhaust the possible idiosyncracies, and dictionaries tend to give any inflection that is likely to cause a difficulty for writers, including predictable spelling variations.

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For the plural inflection of nouns, the following may well be noted:

- loanwords that retain their original, 'foreign' plural, e.g. cactus - cacti, criterion - criteria, kibbutz - kibbutzim, phylum - phyla, vertex - vertices. More and more of these plurals are becoming regularised, including cactuses and vertexes.
- nouns that end in -o or $-i$, where there is often confusion about whether the inflection is $-s$ or -es, e.g. curio-s, domino-es, etui-s, halo-es or $-s$, piccallili-es or $-s$.
- nouns ending in $-y$, which may change the $y$ to $i$ and add $-e s$, or may simply add $-s$, e.g. abbey$s$, academy - academies, monkey -s, mystery - mysteries, odyssey-s, symmetry - symmetries.
- nouns that change either the spelling or pronunciation of their final sound (voicing of $/ \theta / \mathrm{g}, \mathrm{f} /$ or /s/) when the plural suffix is added, e.g. bath-s, hoof - hooves, house-s, mouth-s, shelfshelves, truth-s, wolf - wolves.

For the inflections of verbs, the following may well be noted:

- where the final consonant of the root is doubled in spelling with the addition of a suffix: flip flipping - flipped, lag - lagging - lagged, prod - prodding - prodded, refer - referring referred, shovel - shovelling - shovelled, sin - sinning - sinned.
- where the final consonant might be expected to double, but does not, e.g. benefit - benefiting benefited, galop - galoping - galoped, gossip - gossiping - gossiped, market - marketing marketed, pilgrim - pilgriming - pilgrimed.
- where the final consonant is $-c$ and a $k$ is added before the inflectional suffix, e.g. bivouac bivouacking - bivouacked, magic - magicking - magicked, picnic - picnicking - picnicked.
- where the final consonant is $-y$, which may change to $i$ before an inflectional suffix, e.g. cry cries - cried (but crying), shy - shies - shied, supply - supplies - supplied, weary - wearies wearied.

For adjective inflections, the following usually apply:

- the consonant doubling rule, as for verbs, e.g. big - bigger - biggest, hip - hipper - hippest, sad - sadder - saddest.
- the $y$ to $i$ rule, as for verbs, e.g. dry - drier - driest, fluffy - fluffier - fluffiest, lively - livelier liveliest, rosy - rosier - rosiest, wacky - wackier - wackiest (but not sly -er, -est).

Additionally, two-syllable adjectives that form their comparative and superlative by means of inflectional suffixes, rather than the periphrastic more/most construction, may be marked as such in the dictionary (e.g. NODE), such as common -er/-est, narrow -er/-est, thirsty -er/-est. However, while NODE notes the

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-er/-est suffixes for narrow - and sallow - it does not indicate them for mellow or shallow.
One other point is worth mentioning here, though strictly speaking it belongs to derivational morphology rather than to inflectional. English has a number of nouns that survive from Old English which have a related adjective that has been borrowed into English usually from Latin, e.g. church - ecclesiastical. Some dictionaries usefully indicate these connections, e.g. CED4. Further examples are: lung - pneumonic, pulmonary, pulmonic; mind - mental, noetic, phrenic; wall - mural.

### 9.4 Word class

It is one of the traditions of lexicography to identify the word class(es) or part(s) of speech that each lexeme in a dictionary belongs to. The traditional terms, usually abbreviated, are: noun (n), verb ( v , vb), adjective (adj), adverb (adv), pronoun (pron), preposition (prep), conjunction (conj), and interjection (interj). Under the influence of modern descriptive linguistics the adjective class in some dictionaries (e.g. CED, NODE) is divided into adjectives proper and 'determiners' (see Chapter 1). CED in addition recognises a class of 'sentence connectors' (e.g. however, therefore) and a class of 'sentence substitutes' (e.g. no, maybe), both of which are traditionally assigned to the adverb class. In COD10, the interjection class is renamed 'exclamation' (exclam) and it includes yes and no.

So far, most dictionaries follow the tradition. Practice begins to vary in the information provided over and above the basic word class label. COD10 provides none. Its predecessor, the COD9,
followed another tradition in respect of verbs and marked verbs or senses of verbs as 'transitive' (tr) or 'intransitive' (intr), or indeed 'reflexive' (refl). For example, kick is marked 'tr' for the 'strike or propel forcibly with the foot or hoof etc.' sense, 'intr' for the 'strike out with the foot' sense, and 'refl' for the 'kick oneself' sense. COD10 perhaps excludes these terms in recognition of the fact that they are not familiar to most modern dictionary users; its larger parent, NODE, also eschews them, using 'with obj', i.e. 'object', and 'no obj' instead.

Indeed, NODE goes further than most general-purpose native speaker dictionaries in the ways in which it subclassifies words. For nouns, it indicates when a noun is used as a 'mass noun', e.g. legislation, which cannot be made plural or be preceded by the indefinite article (a/an). It also uses the term 'count noun' for a sense of a mass noun that can be made plural and countable, e.g. observance in the sense of 'religious or ceremonial observances'. Otherwise nouns are assumed to be countable. NODE recognises a subclass of 'sentence adverb', with 159 adverbs or senses of adverbs so marked, including coincidentally, fortunately, paradoxically, regrettably, thankfully. It also marks a subclass of 'submodifier' adverbs, which are used to modify adjectives and other adverbs, some 277 of them, including altogether, decidedly, hideously, predictably, simply, utterly.

The word class label, and any subclassification, represents grammatical information about words, where they can operate in the syntax of sentences, what

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their combinatorial possibilities are. Some dictionaries provide grammatical information over and above word class labelling, though it is difficult to draw a clear distinction between word (sub-)class information proper and other syntactic labelling. Indeed, NODE in its discussion of these matters in the 'Guide to the Use of the Dictionary' makes no such distinction.

### 9.5 Other grammatical information

The distinction between 'mass' and 'count' noun, for example, is not simply a word class subdivision; it is also an indication of the determiners that may combine with a noun, e.g. numerals with count nouns, but not with mass nouns. Similarly, the 'transitive'/'intransitive' subclassification of verbs relates to whether, in the specified sense, the verb takes an object or not, and additionally whether the sentence in which the verb occurs can be made passive.

For nouns, NODE also specifies when they can be used 'as modifier', before another noun, with an adjectival function, e.g. keynote as in keynote address or shadow as in shadow minister of ... CED likewise notes such uses of some nouns, but dictionaries may differ in their categorisations. One way of treating such uses of nouns would be to recognise the derivation of an adjective by the word formation process of 'conversion' (see Chapter 2): CED4 marks key, as in a key person, as 'modifier', while NODE recognises an adjective key to cover this usage. The other peculiarity of nouns that dictionaries often mark is when there may be a mismatch between the form of a noun (singular or plural) and its use syntactically. For example, darts and economics have a plural form but are usually 'treated as sing(ular)'. On the other hand, singular so-called 'collective' nouns, such as government or team may be 'treated as sing or pl(ural)'. In NODE also, 'in sing' is used to mark (the sense of ) a count noun that can only be used in the singular (e.g. riot as in the garden was a riot of colour) or the sense of a mass noun where an indefinite
article may be used (e.g. wealth in a wealth of information).
For adjectives, NODE specifies three possible syntactic positions that they may be restricted to: before the noun ('attrib(utive)'), after a verb like be, become or seem ('predic(ative)'), and immediately after the noun ('postpositive'). CED4's equivalent terms are: 'prenominal', 'postpositive' and 'immediately postpositive'. Here are some examples:

- attributive bridal, custom, geriatric, innermost, mere, opening, teenage, zero-sum
- predicative aglow (and many others with prefix $a-$ ), catching, disinclined, legion, privy, tantamount, well (i.e. 'not ill')
- postpositive aplenty, designate, enough, galore, incarnate, par excellence, as well as a number of adjectives connected with cooking and heraldry.

The case of verb syntax is more complicated. If a dictionary is to record the peculiarities of each lexical item, then the crude transitive/intransitive distinction does not do justice to the syntactic operation of many verbs. Nor does the

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threefold distinction of NODE: 'with obj', 'no obj', and 'with adverbial' (e.g. behave, clamber). Unlike learners’ dictionaries (Chapter 11), native speaker dictionaries generally do not systematically and comprehensively record the possible syntactic patterning of verbs. Few go beyond 'transitive' and 'intransitive'. However, compare the following entries for argue from CED4 and NODE:
argue 1 (intr) to quarrel; wrangle: they were always arguing until I arrived. 2 (intr; often foll. by for or against) to present supporting or opposing reasons or cases in a dispute; reason. $\mathbf{3}$ (tr; may take a clause as object) to try to prove by presenting reasons; maintain. 4 (tr; often passive) to debate or discuss: the case was fully argued before agreement was reached. $\mathbf{5}(\mathrm{tr})$ to persuade: he argued me into going. $\mathbf{6}$ (tr) to give evidence of; suggest: her looks argue despair.
[CED4]
argue 1 (reporting verb) give reasons or cite evidence in support of an idea, action, or theory; typically with the aim of persuading others to share one's view: [with clause] sociologists argue that inequalities in industrial societies are being reduced $\mid$ [with direct speech] 'It stands to reason,' she argued. • [with obj.] (argue someone into/out of ) persuade someone to do or not to do (something) by giving reasons: I tried to argue him out of it. 2 [no obj.] exchange or express diverging or opposite views, typically in a heated or angry way: don't argue with me figurative I wasn't going to argue with a gun | [with obj.] she was too tired to argue the point.

## [NODE]

These two dictionaries give considerably more syntactic information for verbs, both by way of labels and in examples, than has been customary in general-purpose dictionaries, even of desk size, until recently. NODE justifies this approach both by pointing to the role of grammar in distinguishing the meanings or senses of lexemes and with the following argument:
the aim is to present information in such a way that it helps to explain the structure of the language itself, not just the meanings of the individual senses. For this reason, special attention has been paid to the grammar of each word, and grammatical structures are given explicitly.
(p. xi)

### 9.6 Usage

All dictionaries have a set of labels to mark words or senses of words that are restricted in some way in the contexts in which they may occur. The contextual restrictions may be geographical (i.e. dialectal), historical (e.g. archaic), stylistic (e.g. informal), according to topic (e.g. Botany), and so on. In this section, we review the types and range of usage labels used in general-purpose dictionaries.

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### 9.6.1 Dialect

Dialect labels refer to geographical restriction, and we can take this to include both national varieties and regional dialects within a national variety. Most British dictionaries nowadays claim an international perspective and include words peculiar to the vocabulary of other Englishspeaking countries, but still largely confined to North America, Australia and New Zealand, and South Africa. The newer Englishes of, say, the Indian subcontinent, or West Africa, or the Caribbean, or Singapore tend to receive lesser attention. However, COD10, for example, contains around fifty words marked 'W. Indian', and a rather larger number labelled 'Indian', e.g.

- West Indian braata, dotish, fingle, higgler, mamguy, nancy story, spraddle, tafia
- Indian babu, charpoy, durzi, haveli, lakh, nullah, sadhu, zamindar.

NODE claims around 14,000 geographical labels spread through the dictionary, but these are mainly 'regionalisms encountered in standard contexts in the different English-speaking areas of the world' (p. xvi). The largest number, inevitably, belong to the vocabularies of English spoken in North America, for which NODE has three labels: 'N. Amer.' (i.e. North American), 'US' (i.e. United States), and 'Canadian'. The last two are presumably for cases where the restriction is more limited, e.g. in the case of blue box:

1. chiefly $U S$ an electronic device used to access long-distance telephone lines illegally.
2. chiefly Canadian a blue plastic box for the collection of recyclable household materials.

A similar labelling is used for words specific to Australian and New Zealand Englishes, where the majority are marked 'Austral./NZ' (e.g. mullock 'rubbish, nonsense'), because they are shared by both varieties, and some are marked separately, rather more 'Austral' (e.g. gunyah 'bush hut') than 'NZ' (e.g. kumara, 'sweet potato'). There is no such confusion about South African English words (e.g. koppie 'small hill'), though some are shared with other varieties, e.g. dingus (shared with 'N. Amer') 'a thing one cannot or does not wish to name specifically', dropper (shared with 'Austral./NZ') 'a light vertical stave in a fence'. Words or senses that are
exclusive to the British English variety are also appropriately marked (over 4,000 in NODE), e.g. fly-past, gobstopper, knacker, linctus, nearside, peckish, scrapyard.

When it comes to dialects within Britain, NODE/COD10 are less specific. While they have a label 'Scottish' and 'N(orthern) English' (often occurring together for a word), all other dialect words are marked simply as 'dialect', except that one word (scally) is noted as N(orth) W(est) English, and a handful are labelled 'black English'. LDEL and, more especially, CED have both a greater

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representation of British English dialect words and a more differentiated labelling. CED4 notes in its Guide:

Regional dialects (Scot. and northern English dialect, Midland dialect, etc.) have been specified as precisely as possible, even at the risk of overrestriction, in order to give the reader an indication of the appropriate regional flavour.
(CED4, p. xxi)
So, chine, in the sense of 'a deep fissure in the wall of a cliff', is labelled 'Southern English dialect'; flash meaning 'a pond, esp. as produced as a consequence of subsidence' is marked 'Yorkshire and Lancashire dialect'; maungy '(esp. of a child) sulky, bad-tempered or peevish' is labelled 'West Yorkshire dialect'; snicket 'a passageway between walls or fences' has the label 'Northern English dialect'; and tump 'a small mound or clump' is marked 'Western English dialect'.

### 9.6.2 Formality

A number of words or senses are marked as 'formal' or 'informal', though the latter label usually greatly outnumbers the former: in COD10, for example, the 'informal' label occurs over seven times more frequently than the 'formal' label. These terms relate to the formality of the context in which a word is deemed to be appropriate. They are defined in the LDEL2 Guide as follows:

The label informal is used for words or meanings characteristic of conversation and casual writing (e.g. between friends and contemporaries) rather than of official or formal speech or writing.

The label formal is used for words or meanings which are characteristic of writing rather than speech (except for formal speech situations, such as a lecture), and particularly of official, academic, literary, or self-important writing. In other contexts, such words may seem overelaborate or pompous.
(LDEL2, p. xviii)
The term 'colloquial' is sometimes used instead of 'informal' (e.g. in Chambers). Many dictionaries identify 'slang' as a point further down the formality scale, but we shall deal with slang under 9.6.3.

Here are some examples of words marked as 'formal' and 'informal' in COD10 (you may need
to look them up, if they are new to you):

- formal abnegate, circumambulate, emolument, gustation, jocose, lucubration, normative, pinguid, sapient, theretofore, wheresoever
- informal baby boom, beanfeast, dekko, expat, gasbag, haywire, junkie, lashings, manky, nittygritty, once-over, prang, rozzer, shambolic, townie, vapourware, wannabe, yonks, zilch.

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Informal terms, since they are the staple of ordinary conversation, have a tendency to date; and you may consider that some of the terms listed might belong to your parents' or grandparents' speech, but not to yours.

### 9.6.3 Status

By 'status' we mean the propriety of the use of a word, even in ordinary conversation. Under 'status' we would include the term 'taboo'. A taboo is defined in COD10 as 'a social or religious custom placing prohibition or restriction on a particular thing or person', while COD9 also includes as a second sense 'a prohibition or restriction imposed on certain behaviour, word usage, etc., by social custom'. A taboo word, therefore, is one that you would not use in ordinary conversation, unless you wanted to shock. Such taboo words would include: those connected with sexual and excretory functions, blasphemies, and other 'swear' words. However, there is little left in our society that is taboo, and so modern dictionaries no longer use the label; CED4 is an exception. Not even COD9, which mentions the connection with 'word usage' in its definition of taboo uses it as a label, preferring 'coarse slang' instead. In NODE and COD10, this has become 'vulgar slang'; LDEL2 and Chambers use simply 'vulgar'.

In the Oxford dictionaries, then, the connection is made with 'slang', the other term under this heading, and glossed by CED4 as follows:

Slang This refers to words or senses that are racy or extremely informal. The appropriate contexts in which slang is used are restricted, for example, to members of a particular social group or those engaged in a particular activity. Slang words are inappropriate informal speech or writing.
'Slang' is, therefore, not just 'very informal'; it implies a restriction beyond simply the formality of the context of use, to defined social groups, and it includes a consideration of appropriacy. It belongs with 'taboo'. Even more so than with informal words, the slang status of words may change over a relatively short period of time and quickly become dated. Not only that, but people's tolerance of slang varies considerably, and it is no surprise that dictionaries differ in their labelling of such words. In fact, COD10 does not use the label 'slang' on its own, unlike COD9, but only in conjunction with a preceding defining adjective, such as 'nautical', 'military', 'theatrical', 'black', as well as 'vulgar'. A number of the words marked as 'slang' in COD9 have become 'informal' in COD10, e.g. acid (= LSD), aggro, awesome (= excellent), banger (= sausage, old car), dough (= money). However, those that are marked 'coarse slang' in COD9 generally have the label 'vulgar slang' in COD10, e.g. arse, crap, piss, turd, not to mention the
many words for the male and female genitalia. Incidentally, though, fart is labelled 'coarse slang' in COD9, but only 'informal' in COD10.

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### 9.6.4 Effect

There is a set of usage labels used in dictionaries that relate to the effect that a word or sense is intended by the speaker or writer to produce in the hearer or reader. Any dictionary usually makes a selection from these labels. One set reflects the attitude of the speaker and includes: 'derogatory' (intending to be disrespectful), 'pejorative’ (intending to show contempt), 'appreciative' (intending to show a positive attitude), 'humorous' or 'jocular' (conveying a lighthearted attitude). Closely related is the term 'offensive', which may have intent on the part of the speaker or may be unconscious, but which could be taken by a hearer as offensive, either racially or in some other way. Other kinds of 'effect' label include: 'euphemistic', i.e. using an oblique word to refer to an unpleasant topic; 'literary' and 'poetic', i.e. words that tend to be confined to literary texts or poetry and have a 'literary' effect when they are used elsewhere. Here are some examples:

- derogatory banana republic, bimbo, cronyism, fat cat, lowbrow, newfangled, psychobabble, slaphead, woodentop (from COD10)
- jocular argy-bargy, bounder, doughty, funniosity, industrial-strength, leaderene, osculate, purloin, square-eyed, walkies (from COD9)
- offensive bogtrotter (= Irish person), cripple (= disabled person), mongrel (= person of mixed parentage), $\operatorname{wog}$ (= foreigner, especially non-white) (from COD10)
- euphemistic cloakroom (for 'toilet'), ethnic cleansing (for 'forced mass expulsion of a group of people from an area'), interfere with (for 'sexually molest'), passing (for 'death') (from COD9)
- literary apace, bestrew, connubial, fulgent, incarnadine, nevermore, plenteous, slumber, vainglory, wonted (from COD10).

Even more than with formality and status labels, we would expect effect labels to vary between dictionaries, since they require a greater exercise of judgement on the part of the lexicographer and are more likely to be variously perceived.

### 9.6.5 History

Most dictionaries include labels for words or senses that are either no longer in current use or whose currency is questionable or suspect. The term 'obsolete' refers to words or senses that have definitely ceased to be used. It is, of course, an important term in the OED, but in dictionaries that purport to contain current vocabulary, it is not often used. LDEL2 includes it, however, with the gloss:

The label obs (obsolete) means there is no evidence of use of a word or meaning since 1755 (the date of publication of Samuel Johnson's A Dictionary of the English Language). This label is a comment on the word being defined, not on the thing it designates.
(p. xvii)

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For example, fay, meaning 'faith' is marked 'obs' in LDEL2; in SOED4 it is marked as 'long archaic, rare'. CED4 also claims to use the 'obsolete' label and notes that 'in specialist or technical fields the label often implies that the term has been superseded' (p. xx); it also uses the label 'old fashioned' (e.g. of the 'illegitimate' sense of bastard), which it does not discuss in the 'Guide'.

NODE and COD10 use the labels 'dated', 'archaic', and 'historical' to mark words or senses no longer current; and to these we might add the label 'rare'. These labels are defined as follows:
'dated': no longer used by the majority of English speakers, but still encountered, especially among the older generation.
'archaic': old-fashioned language, not in ordinary use today, though sometimes used to give a deliberately old-fashioned effect and also encountered in the literature of the past.
'historical': still used today, but in reference to some practice or artefact that is no longer part of the modern world.
'rare': not in normal use.
The 'historical' label marks not words as such but the things that they denote as being no longer current. It is not clear how 'rare' might differ from 'archaic'. Perhaps some examples (from COD10) will help to distinguish them:

- dated aeronaut, cobble (= repair, e.g. shoes), gamp (= umbrella), jerry (= chamber pot), necktie, picture palace (= cinema), spiffing, wireless (= radio)
- archaic asunder, chapman, fandangle, guidepost, mayhap, poltroon, therewithal, vizard
- historical approved school, dolly tub, footpad, jongleur, margrave, pocket borough, safety lamp, tumbril, velocipede
- rare argute (= shrewd), comminatory (= threatening, vengeful), lustrate (= purify, e.g. by sacrifice), toxophilite (= archer), vaticinate (= foretell future).


### 9.6.6 Topic or field

Where a word or sense is restricted to a, usually specialised or technical, field of study or activity, dictionaries generally add an appropriate label. Topics may range from the sciences, technologies and medicine, through the professions such as law or business, to sports and leisure pursuits. The label marks a word or sense as belonging to the technical vocabulary of the topic. Here are a few examples to illustrate the point, taken from NODE:

- handshaking computing
- periventricular anatomy and medicine
- quiddity philosophy
- sopranino music
- top edge cricket

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- weather helm nautical
- white hole astronomy.


### 9.6.7 Disputed usage

Dictionaries regard one of their functions as being to draw attention to words whose usage is a matter of controversy, and perhaps to offer an opinion for the linguistically insecure. The word or sense that is the subject of dispute may be labelled as such, e.g. 'disp' in COD9, as for decimate in the sense of 'kill or remove a large proportion of'. More often, a dictionary will append a 'usage note' to explain the nature of the dispute and proffer advice, e.g. in NODE, for disinterested:

Nowhere are the battle lines more deeply drawn in usage questions than over the difference between disinterested and uninterested. According to traditional guidelines, disinterested should never be used to mean 'not interested' (i.e. it is not a synonym for uninterested) but only to mean 'impartial', as in the judgements of disinterested outsiders are likely to be more useful. Ironically, the earliest recorded sense of disinterested is for the disputed sense. Today, the 'incorrect' use of disinterested is widespread: around 20 per cent of citations on the British National Corpus for disinterested are for this sense.

Besides usage notes, CED4 also has a label 'not standard' to apply to appropriate items, such as ain't or worser. LDEL2 has the labels 'nonstandard' and 'substandard' and distinguishes them as follows:

The label nonstandard is used for words or meanings that are quite commonly used but considered incorrect by most educated users of the language:
lay ... vi ... 5 nonstandard LIE
The label substandard is used for words or meanings used by some speakers but not generally considered to be part of standard English:
learn ... vb ... 2 substandard to teach. (p. xviii)
This is about as prescriptive as it gets. CED4 labels this sense of learn as 'not standard', and it provides a usage note to discuss the differences between lay and lie. By comparison, we might note that Chambers labels ain't as 'coll(oquial)' and the disputed usages of learn and lay as 'illit(erate)'.

### 9.7 Further reading

For information on how an individual dictionary or edition deals with the topics discussed in this chapter the 'Guide to the Dictionary' is the place to start.

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Dick Hudson's article on 'The linguistic foundations for lexical research and dictionary design' in the International Journal of Lexicography (1988) surveys the lexical information that dictionaries should take account of. Bo Svensén's Practical Lexicography (1993) has chapters on most of the concerns of this chapter.

Sidney Landau has a chapter on usage (Chapter 5) in Dictionaries: the Art and Craft of Lexicography (1989, 2001). Juhani Norri has two articles in IJL on labelling: 'Regional labels in some British and American dictionaries' (vol. 9, 1996), and 'Labelling of derogatory words in dictionaries' (vol. 13, 2000).

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## 10

## Etymology

Since the late seventeenth century general-purpose native speaker dictionaries have included information about the etymology of words (see 4.3). Indeed, common words were included in dictionaries initially merely for the sake of recording their etymologies. The etymology section of a dictionary entry aims to trace the history of a word (see 2.1) to its ultimate source. Where a word has come into existence as the result of a word formation process, e.g. derivation or compounding, then it is not usually given an etymology, unless it is unclear what the elements of the new word are and how they have been combined. In general, therefore, it is base (root) forms that are given etymologies.

The 'Introduction' to NODE likens the tracing of etymologies to archaeology:
the evidence is often partial or not there at all, and etymologists must make informed decisions using the evidence available, however inadequate it may be. From time to time new evidence becomes available, and the known history of a word may need to be reconsidered.
(p. xiv)

We now consider many of the etymologies proposed by eighteenth-century dictionaries to be rather fanciful, particularly in the light of nineteenth- and twentieth-century scholarship. Most larger dictionaries have an etymology consultant, and the OED continues to add to etymological scholarship by its ongoing research into the histories of words. It is to the OED that most dictionaries look as the primary source for their etymological information.

To understand the discussion in this chapter, it will be useful to keep in mind the outline history of English, as expressed in the basic periods of the language (Jackson and Zé Amvela 2000:23ff.):

- Old English 450 (settlement by Angles, Saxons and Jutes) to 1066 (Norman conquest)
etymological dictionary:
OED: ME. carre, a. ONF. carre:-late L. carra, a parallel form to carrus, carrum (whence It., Sp. carro, Pr. car, char, ONF. car, F. char, ME. CHAR), a kind of 2-wheeled wagon for transporting burdens. The L. was a. OCelt. *karr-os, *karr-om, whence OIr. (also mod.Ir. and Gael.) carr masc. 'wagon, chariot,' OWelsh carr, Welsh càr, Manx carr, Bret. kar. (Late L. carra also gave WGer. carra fem., in OHG. charra, Ger. karre, MDu. carre, Du. kar fem., Sw. karra, Da. karre.)
(Note: $\mathrm{ME}=$ 'Middle English', $\mathrm{ONF}=$ 'Old Northern French', late L = 'late Latin', $\mathrm{Pr}=$ 'Provençal', OCelt = 'Old Celtic', OIr = 'Old Irish', mod.Ir = 'modern Irish', Gael = 'Gaelic', Bret $=$ 'Breton', WGer $=$ 'West Germanic', $\mathrm{OHG}=$ 'Old High German', $\mathrm{MDu}=$ 'Middle Dutch', $\mathrm{Sw}=$ 'Swedish', $\mathrm{Da}=$ 'Danish'.)

SOED: lme. [AN, ONFr. carre f. Proto-Romance var. of L carrum neut., carrus masc., f. Celt. base repr. by (O)Ir. carr, Welsh car]
(Note: LME = 'Late Middle English', AN = 'Anglo-Norman', f. = 'from', var. = 'variant', repr. = 'represented'.)

CED: C14: from Anglo-French carre, ultimately related to Latin carra, carrum two-wheeled wagon, probably of Celtic origin; compare Old Irish carr

NODE: late Middle English (in the general sense 'wheeled vehicle'): from Old Northern French carre, based on Latin carrum, carrus, of Celtic origin

SKEAT: (F. - C.) M.E. carre. - O.NorthF. carre, a car (Ducange, s.v. Marcellum). - Late L. carra, f.; allied to L. carrus, a car; of Gaulish origin. - Bret. karr, a chariot; W. car, O.Gael. cár, Irish carr. Allied to L. currus, a chariot; Brugm. i. § 516.

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(Note: $\mathrm{F}=$ 'French', $\mathrm{C}=$ 'Celtic', s.v. $=$ sub verbo 'under the word' (Ducange refers to 'Ducange Anglicus', Vulgar Tongue, 1857), W = 'Welsh', Brugm = 'Brugmann, Grundriss der vergleichenden Grammatik (Outline of Comparative Grammar), 1897.)

From these examples, you can see how the etymology varies according to the type of dictionary and its intended user group. By and large, the historical dictionaries are aimed at scholars and students of the language, as indeed is the specialist etymological dictionary (Skeat). The assumption of the general-purpose dictionaries is that, within their compass, a basic set of information about etymology is of interest to the ordinary dictionary user. It is this assumption that we will now examine.

### 10.6 Why etymology?

It could be argued that etymology has no place in a general-purpose dictionary, and it should be left to historical or specialist dictionaries. Learners' dictionaries (Chapter 11) do not contain etymological information, though its exclusion from these dictionaries has been challenged (Ellegård 1978; Ilson 1983). Of the three Collins dictionaries we looked at in Chapter 3 (3.2), the
smallest, the Pocket, does not contain etymologies, but the two larger ones do. It was only half a century or so after the first monolingual English dictionary that etymologies began to be included in dictionaries (see Chapter 4); so they have a long pedigree. Hudson (1988) - see Chapter 2 (2.4) - includes etymology among the 'lexical facts' about words that dictionaries should pay attention to. But there is little evidence (Chapter 7) that users routinely resort to a dictionary for this information. So, is there any justification for the inclusion of etymological information in general-purpose dictionaries aimed at the ordinary user?

We have noted before (7.4) that dictionaries have a double function: as a record of the vocabulary of the language, i.e. a lexical description, and as a reference work to meet the needs of users for information about words and their usage. On neither count is the inclusion of etymology uncontroversially obvious. As a record, a dictionary describes the contemporary vocabulary; it omits obsolete words and meanings and marks as 'archaic' those whose currency is beginning to wane. As a reference work, a dictionary does not have the space to give a full account of the etymology of words, such as might be found in an historical dictionary, as we have seen in 10.5 . Moreover, the etymological information is probably the hardest of all the parts of a dictionary entry to decode, needing as it does some background knowledge in history, and specifically in the history of languages. Otherwise, what sense can anyone make of terms like 'Old High German'?

Sidney Landau expresses the opinion that 'of all the elements included in modern dictionaries, etymology has the least to do with the essential purpose of a synchronic dictionary' (2001:127). Etymology does not make a contribution to the description of the contemporary meaning and usage of words; it may help to illuminate how things have got to where they are now, but it is as likely to be

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misleading as helpful (as with the 'etymological fallacy'). Etymology offers no advice to one who consults a dictionary on the appropriate use of a word in the context of a written text or spoken discourse. It merely provides some passing insight for the interested dictionary browser with the requisite background knowledge and interpretative skills. On this perspective, Landau is right: etymology does not have the same status as other elements of lexical description in a dictionary.

Etymology could be said to be part of dictionary information by historical accident. The 'hard words' tradition (4.2), which started monolingual dictionaries in English, included only words that had been borrowed, mostly from the classical languages. It was only a short step to indicate systematically their language of origin, as indeed dictionaries had done to an extent from the beginning. Combined with the increasing interest in cultural and linguistic history that flourished during the eighteenth century, etymology became firmly established in the tradition of monolingual dictionaries. Dictionary making does have its own tradition, its own set of principles and conventions, which are to a large extent independent of those associated with other branches of linguistic scholarship. It is only recently, in the last quarter of the twentieth century, that the discipline of linguistics has exercised any major influence on the processes of dictionary making. On this perspective, it is not surprising that etymology continues to be an element of the information given for words, at least in the larger general-purpose dictionaries.

Radical departures from the expected content and format of dictionaries are undertaken reluctantly by publishers: purchaser expectations have to be met.

There is, perhaps, one further and sounder reason for the inclusion of etymological information in monolingual dictionaries of English at least. It arises from the nature of the English vocabulary, which we have commented on in Chapter 2 and explored in the earlier part of the present chapter. The sources of English words are so diverse, with such a small proportion being 'original' Anglo-Saxon, and so many being 'borrowed' from a range of other languages, that there would seem to be some justification for providing information at least about the immediate origin of a word. In this way, the users of the language can see how their vocabulary has been constituted. It is a means of celebrating the diversity of the English lexicon, and it should guard against any temptation to linguistic xenophobia or notions of linguistic purity.

### 10.7 Further reading

The 'Guide to Using the Dictionary' in a dictionary's front matter will contain brief information on how to interpret the etymology in the work concerned. Donna Lee Berg's A Guide to the Oxford English Dictionary (1993) contains a section (pp. 22ff ) on the OED's etymology.

Barbara Kipfer's Workbook on Lexicography (1984) contains a chapter (12) on etymology, as does David Crystal's The Cambridge Encyclopedia of the English Language (1995), though much of it is about place and personal names. Landau

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(2001) offers a perspective on etymology in dictionaries (pp. 127-34), as does Svensén (1993), Chapter 15.

A specialist etymological dictionary is a further source for following up on the topic of this chapter.

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## 11

## Dictionaries for learners

We introduced the four major British learners' dictionaries in 6.6 and noted in 3.2 that such dictionaries have been at the forefront of lexicographical innovation in the last half-century. In this chapter, we examine this dictionary type in some detail and show how they have been developed to meet the perceived needs of learners of English as a second or foreign language. Such dictionaries are aimed at the intermediate to advanced learner. They are based on the observation that, as learners become more proficient, they need to move from a bilingual dictionary as their lexical reference source to a monolingual dictionary. Monolingual learners’ dictionaries (MLDs) have therefore attempted to fulfil this need by providing information about the meaning and use of English words that in many respects goes well beyond that offered in bilingual dictionaries.

### 11.1 Rise of the monolingual learners' dictionaries

The genesis of the learner's dictionary lies in the endeavours, during the interwar years, of three teachers of English as a foreign language, two of whom worked in Japan (H.E. Palmer and A.S. Hornby) and the other in India (Michael West). Not only did they attempt to improve the standard of language teaching in their respective areas, they also became involved in research projects that had a bearing on the task of teaching English. Michael West became a leading contributor to the 'vocabulary control' movement (McArthur 1998, Ch. 5), which sought to identify the essential vocabulary that would lead to a more rapid competence in the language (West 1953; West and Endicott 1935). Harold Palmer worked on the grammatical patterning of words, especially verbs (Palmer 1938), as later did Hornby (1954). Palmer and Hornby also investigated collocations and idioms, which fed into the first general-purpose learner's dictionary, the Idiomatic and Syntactic Dictionary of English (Hornby et al. 1942).

The Idiomatic and Syntactic Dictionary was published in Japan, from where Hornby was repatriated in 1941. After the war, Oxford University Press became interested in the dictionary and they republished it in 1948 with the title A Learner's Dictionary of Current English, changed in 1952 to The Advanced Learner's Dictionary of Current English. Oxford replaced The in the title from the third (1974) edition onwards, and it is now known by the initialism 'OALD'. Until

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its third edition, the OALD had the advanced learners' dictionary market to itself. It sold prolifically, the first two editions alone had sales of 7 million copies (Hebert 1974). To illustrate the aims of the OALD, peruse the following entries for the verb confide and the noun confidence:
con•fide/k
$\mathrm{ns} / n \mathbf{1}[\mathrm{U}]$ (act of ) confiding in or to. in
strict $\sim$, expecting sth to be kept secret: I'm telling you this in strict $\sim$. take a person into one's $\sim$, tell him one's secrets, etc. ' $\sim$ man/trickster, one who swindles people in this way. 2 [C] secret which is confided to sb: The two girls sat in a corner exchanging $\sim s$ about the young men they knew. 3 [U] belief in oneself or others or in what is said, reported, etc.; belief that one is right or that one is able to do sth: to have/lose $\sim$ in sb; to put little/complete/no $\sim$ in $\mathrm{sb} / \mathrm{sth}$; Don't put too much $\sim$ in what the newspapers say. There is a lack of $\sim$ in the government, People do not feel that its policies are wise. I hope he will justify my $\sim$ in him/my $\sim$ that he will do well. The prisoner answered the questions with $\sim$.

You will notice: information about grammatical patterning, both in formulae ( $\sim$ sth $/ \mathrm{sb}$ to $\mathrm{sb}-$ i.e. 'confide something/somebody to somebody') and in coding ( $\mathrm{VP}=$ 'verb pattern', $\mathrm{U}=$ 'uncountable', $\mathrm{C}=$ 'countable'); extensive use of examples, both to illustrate grammatical patterning and to indicate typical collocation (to put little/complete/no $\sim$ in ...); inclusion of set phrases (in strict $\sim$ ); fairly brief definitions, but explanation of examples where needed (The girl is of a confiding nature, ready to trust others ...). The examples are mostly invented for the
recognise at least the more common patterns, but the pattern numbers were not suggestive of the pattern itself. LDOCE introduced a coding that was uniform for verbs, adjectives and nouns, consisting of a letter plus a figure. The letter was mnemonic where this was possible: ' T ' stood for 'transitive', 'I' for 'intransitive'. The figure stood for different types of complement and the like: ' $\varnothing$ ' stood for 'zero' (so, 'IØ' indicated a genuinely intransitive pattern; ' 1 ' stood for 'noun (phrase) or pronoun', ' 6 ' for 'that-clause', and so on. A table of codes was included in the inside back cover for easy reference. The aim was to help the learner understand the coding by making it more suggestive and accessible. Research on user behaviour (e.g. Béjoint 1981) indicated, however, that few students made use of, or even understood, the coding schemes in their dictionaries, preferring to glean grammatical information from the examples.

As the second edition of LDOCE was published nine years later, in 1987, a third MLD appeared on the market, with many significant innovations: Collins COBUILD English Dictionary. The COBUILD project was instigated by John Sinclair, the Professor of English Language at the University of Birmingham, with the sponsorship of the Glasgow-based publisher William Collins and Sons Ltd. The aim was to compile a learners' dictionary on the basis of a computer corpus of texts - the Collins (CO)/Birmingham University (BU) International Language Database (ILD). The corpus available to the lexicographers of the first edition of COBUILD amounted to 7.3 million words of text, with an additional 13 million words in a 'reserve' corpus. Since renamed 'The Bank of English', the corpus now runs to over 400 million words. The use of a large corpus not only allowed the lexicographers to ascertain reliable information about the relative frequency of occurrence of words and senses, but more importantly to obtain data, in the form of concordances, for deciding on the senses and meanings of words. The use of a corpus was not only new, it was revolutionary: all MLDs and most NSDs now claim to make use of corpus techniques in the compilation of their dictionaries.

COBUILD was not just the first dictionary to be based on a computer corpus; it innovated in a number of other ways as well. First, all the definitions are complete sentences; they are intended to sound like the teacher explaining the meaning in the classroom, and they give some idea of typical contexts, e.g.
joyride If someone goes on a joyride, they steal a car and drive around in it at high speed.

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jukebox A jukebox is a record player in a place such as a pub or a bar. You put a coin in and choose the record you want to hear.
junk You can use junk to refer to old and second-hand goods that people buy and collect.
Second, all the examples are from the corpus - 'real English' - sometimes with minor adaptation or truncation. Third, the grammatical information is not included in the main entry, but provided in an 'extra column', to the right of the main column; this column also includes information about synonyms and antonyms. Fourth, there is only one entry per spelling, and senses are listed in frequency order; all inflections are given, whether regular or irregular. Each sense begins a new paragraph, and nearly all senses have at least one example.

The last MLD to enter the market did so in 1995, the 'year of the dictionaries', in which OALD
published its fifth edition, LDOCE its third and COBUILD its second. The new dictionary was the Cambridge International Dictionary of English, edited by Paul Proctor, who had been responsible for the first edition of LDOCE. CIDE took the opposite decision on headwords to COBUILD: each major sense has a separate entry, followed where appropriate by a 'guide word' to the meaning; for example $j o b$ has six entries: job employment, job piece of work, job duty, job problem, job example, job crime. Every grammatical pattern is illustrated by an example, and examples also show typical collocations. Indeed the dictionary pays a lot of attention to the phraseological potential of words, and it includes an extensive 'Phrase Index', in which phrases are entered under all of their constituents, each of which has a reference to the page, column and line number where it is treated in the dictionary. The 'International' in the title is justified on the one hand by its treatment of American and Australian, as well as British English, and on the other by its tables of 'false friends' for some sixteen languages, including Japanese, Korean and Thai. The latter derive from an analysis of the Cambridge Learner Corpus, a corpus of learners' English; the main dictionary is based on the 100 million-word Cambridge Language Survey corpus.

The EFL market is a lucrative one for publishers, and an advanced MLD is only one publication among many, including course books, grammars, readers and so on, which serve the needs of learners and their teachers. The competition has been an incentive to improve and innovate, and as successive editions have appeared, a clear development can be perceived. Moreover, MLD lexicography has been extensively debated both by practising lexicographers (e.g. Rundell 1998) and by academics (e.g. Herbst and Popp 1999), with increasing attention being paid to the needs of learners and the reference skills that they can be expected to possess.

### 11.2 Learners' decoding needs

One of the major differences between NSDs and MLDs is that the latter take into account users’ encoding needs (in writing and speaking) to an extent that

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NSDs do not (see 11.3). Users of MLDs have the same decoding needs that NSD users have looking up the meaning of unfamiliar words or senses - and may experience more difficulty in locating the information, as well as in understanding the definitions once the appropriate one has been found. We will discuss solutions to these two potential problems.

A dictionary look-up for decoding usually involves finding the appropriate sense of a word that has been encountered in writing and that cannot be interpreted from its context. In this case, the user knows the spelling of the word; but if a word has been heard but not seen, there may be a difficulty in relating sound to spelling and so locating the word in the dictionary. To address this particular need, LDOCE2 (1987) included a laminated card with a list of sound-spelling correspondences on one side (the other side contained a table of the grammar codes). In most cases, however, the user will have the orthographic form for looking up. The difficulty that is then likely to arise relates to identifying the appropriate sense of words with multiple senses; the more common the word, the larger the number of senses it may have. To facilitate the learner's look-up in such cases, a number of the MLDs have attempted to provide easier access to sense differentiation. We have noted already the CIDE innovation of multiple headwords for a lexeme, accompanied by a 'guideword'. LDOCE3 and OALD6 also offer similar solutions under the one
headword, e.g. for the lexeme stamp:
CIDE: stamp letter, stamp foot, stamp mark, stamp quality.
LDOCE3: $\boldsymbol{s t a m p}^{1} n 1$ MAIL, 2 TOOL, 3 the stamp of sth, 4 PAYMENT, 5 TAX, 6 IN A SHOP, 7 a man/woman of his/her stamp; stamp ${ }^{2} v 1$ FOOT, 2 stamp your foot, 3 stamp your feet, 4 MAKE A MARK, 5 stamp on $\mathrm{sb} /$ sth, 6 AFFECT SB/STH, 7 stamp sb as sth, 8 MAIL.

OALD6 : stamp noun ON LETTER/PACKAGE 1, PRINTING TOOL 2, PRINTED DESIGN/ WORDS 3, PROOF OF PAYMENT 4, CHARACTER/QUALITY 5, 6, OF FOOT 7; verb FOOT 1, WALK 2, PRINT DESIGN/WORDS 3, SHOW FEELING/QUALITY 4, 5, ON LETTER/PACKAGE 6, CUT OUT OBJECT 7.

The aim is that the user should be able to glance down the entry and quickly find the sense relevant to their look-up by relating the guideword to the context in which the word being looked up is situated.

The other problem identified in relation to decoding concerns understanding the definition that is encountered. We noted earlier that LDOCE innovated with a specified restricted defining vocabulary, though it must be said that the original OALD compilers were also aware of the need to define within the supposed vocabulary of the users. The current editions of LDOCE, OALD and CIDE all have a specified defining vocabulary, which is listed in an appendix to the dictionary. COBUILD's solution is to define using full sentences, a practice that is used in some instances by the other MLDs. Compare the definitions for the noun knuckle:

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OALD6: any of the joints in the fingers, especially those connecting the fingers with the rest of the hand - picture at BODY

LDOCE3: the joints in your fingers including the ones where your fingers join your hands
COBUILD3: Your knuckles are the rounded pieces of bone that form lumps on your hands where your fingers join your hands, and where your fingers bend.

CIDE: one of the joints of the fingers, esp. between the hand and the fingers ... PIC Body.
You will notice that two of the dictionaries refer the user to an illustration (picture); LDOCE also contains pictures, though COBUILD does not. The pictures are usually line drawings dispersed throughout the text, though LDOCE3 and OALD6 also contain full-page colour plates. Pictures supplement the verbal definitions, especially for nouns with a concrete reference, and they are often grouped (e.g. under 'body') so that the terms for a lexical field are displayed together.

Now consider the definitions for the verb smear:
OALD6: to spread an OILY or soft substance over a surface in a rough or careless way
LDOCE3: to spread a liquid or soft substance over a surface, especially carelessly or untidily

COBUILD3: If you smear a surface with an oily or sticky substance or smear the substance onto the surface, you spread a layer of the substance over the surface.

CIDE: to spread (a thick liquid or a soft sticky substance) over a surface.
All the definitions have the essential components of 'spread', 'liquid/soft substance' 'over surface'; OALD6 and LDOCE3 also include a component of 'carelessly'. Note the capital letters for oily in the OALD6 definition, because it is not in its defining vocabulary; COBUILD has no such restriction on using it. Note, too, the use of brackets in the CIDE definition, in the conventional manner, for indicating typical collocations, in this case as object of the verb. The COBUILD3 definition is rather cumbersome because it is also indicating the typical patterns for the verb (smear a surface with a substance/smear a substance on a surface), which are indicated separately in the other dictionaries, either in formulae ( $\sim$ sth on/over sth $\mid \sim$ sth with sth OALD6) or in examples (... smeared the walls of their cells with excrement - CIDE).

Let us now examine the definitions for the abstract adjective versatile:
OALD6: (approving) 1 (of a person) able to do many different things. 2 (of food, a building, etc.) having many different uses

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LDOCE3: approving 1 good at doing a lot of different things and able to learn new skills quickly and easily. 2 having many different uses

COBUILD3: 1 If you say that a person is versatile, you approve of them because they have many different skills. 2 A tool, machine, or material that is versatile can be used for many different purposes.

CIDE: able to change easily from one activity to another or able to be used for many different purposes.

All apart from CIDE separate out the use of versatile to refer to people as against things, though LDOCE is not as explicit as OALD and COBUILD. However, all four dictionaries contain examples that make the distinction clear, though the range of 'things' to which versatile may be applied is not clearly stated: OALD suggests 'food' and 'buildings', while COBUILD specifically mentions 'tool', 'machine' and 'material'. OALD and LDOCE have the attitudinal label 'approving', which is incorporated into the definition in COBUILD and not mentioned in CIDE. This, together with the preceding sets of definitions, gives some impression of how successful MLDs have been in making definitions understandable to their learner-users.

### 11.3 Learners' encoding needs

For decoding a learner is as likely to consult a bilingual dictionary, but for encoding the MLD will prove to be a more comprehensive and reliable source of information. MLDs have made it their business to provide extensively for their users' encoding requirements, especially in writing. There are two main ways in which they have done this, together with some more minor additional information.

The first way has been to provide comprehensive grammatical information (cf. Bogaards and van der Kloot 2001), so that users can construct syntactically natural sentences in English. For nouns, this essentially means recording the distinction between 'countable' and 'uncountable' uses; the abbreviations ' C ' and ' U ', used by Hornby et al. in OALD1, have become common symbols for this distinction. For adjectives, the inflectional possibilities need to be indicated (i.e. whether an adjective is gradable or not), as well as any restrictions on the syntactic positioning of adjectives (e.g. attributive only or predicative only). Compare the entries for mere:

OALD6: [only before noun] (superlative merest, no comparative)
LDOCE3: [only before noun, no comparative]
COBUILD3: merest Mere does not have a comparative form. The superlative form merest is used to emphasize how small something is, rather than in comparisons. ADJn

CIDE: [not gradable]
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COBUILD has the most extensive and explicit explanation; 'ADJn' (in the Extra Column) indicates that mere is restricted to attributive position, signalled by 'only before noun' in OALD and LDOCE. CIDE is the least informative; it does, however, have a separate entry for merest, and all its examples show attributive use only.

The most important grammatical information for encoding is given for verbs, since they are the pivotal element of sentences and to a large extent determine the syntax of the clause or sentence in which they occur (Jackson 2002). This is the area that Hornby and his colleagues paid particular attention to from the beginning of the development of the learner's dictionary. The crucial question is how to display this information. The initial solution (OALD1, OALD2) was by means of coding, supported by examples; these were in turn supplemented by formulae (OALD3) - compare the entries for propose from OALD2 and OALD3:

OALD2: v.t. \& i. 1. (VP 1, 2, 11, 17B) offer or put forward for consideration, as a suggestion, plan, or purpose: I ~an early start (to start early, that we should start early, starting early). We $\sim$ leaving at noon. The motion was $\sim d$ by $M r X$ and seconded by Mr Y. $\sim \mathbf{a}$ toast (sb.'s health), ask persons to drink sb.'s health or happiness. 2. (VP 1, 21) offer marriage (to sb.): Did he ~ (marriage) to you? 3. put forward (sb.'s name) (for an office, for membership of a club, etc.): $I$ $\sim$ Mr Smith for chairman. Will you please $\sim$ me for your club?

OALD3: vt, vi 1 [VP6A,D,7A,9] offer or put forward for consideration, as a suggestion, plan or purpose: I ~starting early/an early start/to start early/ that we should start early. We $\sim$ leaving at noon. The motion was $\sim d$ by $M r X$ and seconded by $M r Y . \sim$ a toast/sb's health, ask persons to drink sb's health or happiness. 2 [VP6A,2A] ~ (marriage) (to sb), offer marriage. 3 [VP14] ~ sb (for sth), put forward (sb's name) for an office/for membership of a club/etc: $I \sim$ Mr Smith for chairman. Will you please $\sim$ me for your club?

The Verb Patterns were dropped from OALD after the third edition. In the latest (sixth) edition, the formulae are linked to examples, so that coding and exemplification work together:

OALD6: verb
SUGGEST PLAN 1 (formal) to suggest a plan, an idea, etc. for people to think about and decide on: [VN] The government proposed changes to the voting system.
[Vthat] She proposed that the book be banned.
[VNthat] It was proposed that the president be
elected for a period of two years.
[VNtoinf] It was
proposed to pay the money from public funds. HELP This pattern is only used in the passive.
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INTEND 2 to intend to do sth: [Vtoinf ] What do you propose to do now? [V-ing] How do you propose getting home?

MARRIAGE $\mathbf{3} \sim(\mathbf{s t h})$ (to sb) to ask sb to marry you: [V] He was afraid that if he proposed she might refuse. She proposed to me! [VN] to propose marriage.

AT FORMAL MEETING $4[\mathrm{VN}] \sim \mathbf{s t h} \mid \sim$ sb (for/as sth) to suggest sth at a formal meeting and ask people to vote on it: I propose Tom Ellis for chairman. to propose a motion (= to be the main speaker in support of an idea at a formal debate) - compare OPPOSE, SECOND

SUGGEST EXPLANATION 5 [VN] (formal) to suggest an explanation of sth for people to consider SYN PROPOUND: She proposed a possible solution to the mystery.

IDM propose a toast (to sb) | propose sb's health to ask people to wish sb health, happiness and success by raising their glasses and drinking: I'd like to propose a toast to the bride and groom.

You can see the whole variety of means in this entry by which grammatical and other pattern information is being communicated: formulae ([Vthat], $\sim \mathbf{s b}$ (for/as sth)), examples (She proposed that the book be banned), and phrases (propose a motion). Coding and examples work together in an even more integrated manner in CIDE:
propose (obj) SUGGEST v to offer or state (a possible plan or action) for other people to consider • I propose that we wait until the budget has been announced before committing
ourselves to any expenditure. [+ that clause] He proposed dealing directly with the suppliers. $[+$ v -ing] She proposed a boycott of the meeting. [T] • He proposed a motion that the chairman resign. [T] • To propose someone is to suggest them for a position or for membership of an organization: To be nominated for union president you need one person to propose you and another to second you. [T] • If you propose (to a person) you ask someone to marry you: $I$ remember the night your father proposed to me. [I] o She felt sure he was going to propose. [I]

The coding formulae are contained in square brackets at the end of the examples, and the example sentences contain bold items that also indicate grammatical patterning. In COBUILD, as indicated earlier, the whole-sentence definitions contribute towards identifying the grammatical patterns in which the word typically occurs with the sense being defined. Additionally, the Extra Column contains more explicit coding for the syntactic operation of words, e.g. for propose, $\mathrm{V} \mathrm{n} /-\mathrm{ing}, \mathrm{V}$ that, V to-inf, V to $\mathrm{n}, \mathrm{V}, \mathrm{V} \mathrm{n}$ to $n$.

The second main way in which MLDs provide encoding information for learners is in respect of lexical patterning, specifically collocations, idioms, and other types of phraseology. In COBUILD, the definitions again have the task of

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indicating typical collocational patterns. Consider the following definitions for propose and proposition:

If you propose a theory or explanation, you state that it is possibly or probably true, because it fits in with the evidence that you have considered.

If you describe something such as a task or an activity as, for example, a difficult proposition or an attractive proposition, you mean that it is difficult or pleasant to do.

In the case of the propose definition, it indicates that the subject of propose is a person (by the use of $y o u$ ), and that the object is either the words theory or explanation, or something that counts as either of these. In the case of the proposition definition, the adjectives difficult and attractive are indicated as typical collocates for this sense of the noun. In CIDE, collocations can be indicated in the conventional way by means of brackets (see the entry for propose above), but more usually by using bold type in the examples, e.g. for malaise:

They claim it is a symptom of a deeper and more general malaise in society. • They spoke of the feeling of moral and spiritual malaise, the lack of will to do anything. • They were discussing the roots of the current economic malaise.

These examples show that typical adjectives accompanying malaise include deep, general, spiritual and economic, and that it enters into the phrase a symptom of ... malaise. OALD6 has a 'study page' on collocations; it, too, relies on the examples to indicate typical collocations. For malaise it has:
economic/financial/social malaise, a serious malaise among the staff
For sample, the examples are:

The interviews were given to a random sample of students. The survey covers a representative sample of schools. a sample survey. a blood sample. Samples of the water contained pesticide. 'I'd like to see a sample of your work,' said the manager. a free sample of shampoo. sample exam papers.

The items in bold type represent 'important collocations'. LDOCE shows collocations (and fixed phrases) in bold type within an entry, followed by an explanation or example, or both. In the entry for door, for example, the following are given:
open/close/shut/slam the door, knock on/at the door, kitchen/bathroom/ bedroom etc door, front/ back/side door, revolving/sliding/swing doors,

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at the door, answer the door, show/see sb to the door, two/three doors down etc, (from) door to door, out of doors, behind closed doors, show sb the door, lay sth at sb's door, be on the door, an open door policy, open doors for sb , open the door to, shut/close the door on, at death's door.

MLDs take both grammatical and lexical patterning seriously and they have come a long way in their treatment of these areas since Hornby and his colleagues identified them as the major encoding needs of learners of English.

Learners' encoding needs are taken account of by two further types of information provided by MLDs. The first of these is the explicit indication of sense relations (2.3.3) such as synonymy and antonymy. COBUILD has been especially prolific with this kind of information, though more so in the first edition than in the later ones; the first included information on hyponymy, not subsequently included. In COBUILD the information on sense relations is given in the Extra Column by means of the symbols ' $=$ ' (for synonyms) and ' $\neq$ ' (for antonyms). For example, heavy as in a heavy meal is marked in COBUILD3 with ' $=$ filling', ' $\neq$ light'; and as in the air is heavy, it is marked with ' $=$ oppressive', ' $\neq$ cool, fresh'. OALD6 marks synonyms with SYN and antonyms with OPP, e.g. impute has SYN ATTRIBUTE, and left-winger has OPP RIGHTWINGER; but OALD6 is more sparing with this information than COBUILD.

The second additional type of encoding information comes in the form of usage notes of various kinds. Some of this is in the form of labelling, as in NSDs, though sometimes with a little variation, e.g. OALD6 has the symbol of an exclamation mark in a triangle to warn users that the word or sense is slang or taboo. COBUILD2 has the term PRAGMATICS in the Extra Column to show that usage information is shown within the definition; in COBUILD3 the definition no longer contains this information and a specific label such as 'disapproval' or 'informal' has been substituted for PRAGMATICS in the Extra Column. The other dictionaries have 'usage notes' (LDOCE) of various kinds, as well as more extensive discussion on 'study pages' (OALD6) or in 'language portraits' (CIDE). OALD6, for example, has scattered through the dictionary boxed items entitled 'Vocabulary Building' (e.g. ways of saying approximately), 'Which Word?' (e.g. as/like), 'British/American' (e.g. already/just/yet), ‘Grammar Point' (e.g. avenge/revenge), 'Word Family' (e.g. clear - clarity - clarify), 'More About' (e.g. of course). There is a recognition that learners need a range of information about words - grammatical, semantic and pragmatic - in order to be able to construct accurate and appropriate sentences in the target language.

### 11.4 Additional information

Some of the information mentioned in the previous paragraph goes beyond that strictly required for encoding. It is serving to enhance the learner's knowledge and understanding of the vocabulary of English in a wider sense, not just for the specific task that may have occasioned the look-up. Some of the information of

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this kind is cultural, putting words into a context that enhances understanding of them. In CIDE, for example, there is a boxed article entitled 'WORK' in the appropriate part of the dictionary, which discusses 'some common words and expressions we use in everyday conversation to talk about the work we do, leaving work, being out of work and looking for a job’ (p. 1681), including differences between British and American English.

Some of the additional information is dispersed through the dictionary, near to relevant words. Other types are collected together, either in appendices or in groups of pages inserted at some point in the dictionary. OALD6 has a set of eight colour plates (between pages 372 and 373) of sets of objects (bread, cakes and desserts; fruit and vegetables; clothes and fabrics; the animal kingdom; games and toys); a set of sixteen 'study pages' (between 756 and 757), dealing in part with grammatical and lexical matters and in part with letter and CV writing; and an eight-page set of colour maps (between 1140 and 1141). Additionally, OALD6 contains appendices dealing with: irregular verbs; geographical names; numbers; punctuation; the language of literary criticism; an index to the usage notes; and the defining vocabulary.

The use of computer corpora has enabled lexicographers to obtain fairly reliable data on the frequency of occurrence of words and senses. This information has informed the design of MLDs since COBUILD1. From the beginning, COBUILD has included this information in the dictionary itself by marking words with a set of five diamonds. If all five diamonds are black, this indicates that the word belongs to the most frequent 700 in the language (e.g. main, paper); if four are filled in, the word belongs to the next 1200 most frequent (e.g. maker, management); if three are black, then it belongs to the next 1500 most frequent words (e.g. panel, panic); if two are black, then the word belongs to the next 3200 most frequent (e.g. loyalty, lounge); and if only one is black, then the word belongs to the next 8100 most frequent (e.g. malt, mandatory). So the diamond markings account for the 14,700 most frequent words according to the Bank of English corpus. The top two bands (1900 words), it is claimed, 'account for $75 \%$ of all English usage' (COBUILD2, p. xiii).

LDOCE3 also gives frequency information, but differentiates between occurrence in spoken English and in written English; and it accounts for only the 3000 most frequent words in each mode. The frequencies are indicated by the letters 'W' (for written) and 'S' (for spoken), followed by a numeral between ' 1 ' and ' 3 ': ' 1 ' indicates within the 1000 most frequent, ' 2 ' within the next 1000 most frequent, and ' 3 ' within the next 1000 most frequent. For example, common is marked $\mathrm{S} 1, \mathrm{~W} 1$; commitment S 2 , W 2 ; compete S 3 , W 3 ; committee S 3 , W 1 ; comment S1, W2; comparison S3, W2; compensation W3 only; complicated S2 only. This information is of interest to an advanced learner, and of particular use to teachers and course designers when considering how to sequence the introduction of vocabulary items. MLDs have developed far beyond their original conception in the 1930s and 1940s, not only in the range of information that they offer the learner, but also in the attention to the learner's needs and reference skills. The
extensive index, which includes all the headwords for the item, followed by open compounds containing it, followed by headwords whose definitions contain it. Clicking on any of these brings the appropriate dictionary entry into the Content Window. Both British and American pronunciation can be activated.

Every entry in CIDE on CD-ROM is supplied with a link labelled 'Related words'. Clicking on this link activates the highly innovative feature of this CD-ROM dictionary, a differentiated and categorised lexical field analysis of the vocabulary. For example, clicking on the 'Related words' link for support (BEAR) offers three lexical fields: 'Psychology, Psychiatry and Psychoanalysis', 'Allowing and permitting', and 'Tolerating and enduring'. Selecting the last of these activates in the Search Panel a list of other verbs with a similar meaning, followed by words from other parts of speech, as well as phrases and expressions (e.g. take it on the chin). The lexical field analysis can be viewed in the Search Panel, which allows for a field to be selected and all the words and expressions in the field to be listed. The vocabulary is analysed at the most general level into 17 broad categories:

1 art and entertainment
2 building and civil engineering
3 clothes, belongings and personal care
4 communication
5 education
6 finance and business
7 general/abstract
8 history
9 life, death and the living world
10 light and colour
11 movement and location
12 religion
13 science
14 society
15 sports, games and pastimes

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16 thinking and understanding

17 war and the military.
Each of these has further sub-divisions and sub-divisions of sub-divisions. With this facility, CIDE on CD-ROM not only provides an aid for a learner's vocabulary building, but, lexicographically, bridges the gap between alphabetical dictionary and thematic thesaurus (see Chapter 12).

CIDE on CD-ROM's Search Panel allows other differentiated searches to be undertaken: by 'Part of Speech', by 'Label' (including geographical and register), by 'Grammar', by 'Category’ (i.e. of text - Headword, Idiom, Definition text, Example text, Usage notes, etc.), and by 'Frequency'. The 'Grammar' search allows specification of grammatical features or structures indicated in the dictionary; for example, '+ object + that clause' finds all the verbs ( 42 in CIDE) that are followed by an Object and a that-clause, '+ two objects' all the ditransitive verbs (152 in CIDE), 'after verb' all the predicative only adjectives ( 322 in CIDE), and 'not gradable' all the non-gradable adjectives ( 3202 in CIDE). The 'Frequency' search has categories from 'Rare' to 'Very Common', along with 'Defining Vocabulary'; selecting 'Very Common' lists the 611 words so designated, and 'Common' the 3181 words with this frequency. Information of this kind is invaluable to the teacher and course writer, and certainly of interest to the advanced student.

All the MLDs on CD-ROM have in different ways begun to exploit the electronic medium for extending what they can offer to users of learners' dictionaries, CIDE more so than the others. But the medium has yet to be exploited to the full (Jehle 1999).

### 11.6 Further reading

The development of learners' dictionaries, up to the 'third generation' (OALD4, LDOCE2 and COBUILD1), is told in Tony Cowie's English Dictionaries for Foreign Learners: A History (1999). The process of compiling COBUILD1 is reported by some of those involved in Looking Up: An Account of the COBUILD Project (1987), edited by John Sinclair.

Articles on the 1995 generation of MLDs are contained in The Perfect Learners' Dictionary(?) (1999) edited by Thomas Herbst and Kerstin Popp. Reinhard Heuberger reviews both print and CD-ROM versions of MLDs in his doctoral thesis, published as Monolingual Dictionaries for Foreign Learners of English (2000).

The Hausmann et al. (1989-91) International Encyclopedia of Lexicography contains a number of articles on learners' dictionaries. A seminal contribution is Michael Rundell's (1998) article, 'Recent Trends in English Pedagogical Lexicography', in the International Journal of Lexicography.

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## 12

## Abandoning the alphabet

If you look up the word dictionary in a dictionary, you will find a definition along the lines of:
a book that consists of an alphabetical list of words, with their meanings, parts of speech, pronunciations, etymologies, etc.
(CCD4)
'Dictionary order' is synonymous with 'alphabetical order'. We expect dictionaries to use alphabetical ordering of their headwords, just as we expect other reference works to do so as well, such as telephone directories, encyclopedias, and indexes of all kinds. Because we have learnt the order of the letters in the alphabet, it is the most convenient system for locating an item in a written list. Our skill in using the alphabet for this purpose can be generalised to all manner of written lists.

As a reference manual, therefore, a dictionary's headword list is ideally arranged alphabetically, so that users can readily access the item that they are seeking. And it is usually a single item that is being looked up. However, we must ask, first, whether an alphabetical ordering is best for presenting a description of the vocabulary as a whole, and second, whether there are some users' needs that would be better served by an alternative arrangement of words in a dictionary.

### 12.1 Disadvantages of A-Z

One of the drawbacks of an alphabetical listing is that some words that belong together morphologically become separated. This applies, in particular, to two kinds of relation. First, words that are derived by prefixation (see 2.2.2) are entered separately from their root, and there is usually no indication at the entry for the root that it has a prefixed derivative. Derivatives by suffixation are entered either as separate headwords, but close to the root in the alphabetical sequence, or as run-ons under the root; so that the relation between root and derivative is clear. For example, courage and its derivative courageous come in close proximity in the alphabetical list, but discourage and encourage are distant

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and the connection is not made. The second kind of morphological link relates to words - mostly nouns of OE origin - that have a matching word - mostly adjectives of Latinate origin - in another word class. For example, lung (noun) has matching pulmonary (adjective), church has ecclesiastical, mind has mental, earthquake has seismic, horse has equine, and so on. CED notes at the noun the 'Related adj.', but dictionaries do not as a rule make the connection.

A more serious disadvantage of alphabetical ordering is the perspective that it presents on the vocabulary as a whole. It presents an atomistic view of the vocabulary, treating each word in isolation, the headword with its entry, and making few of the connections that exist between words. Just like other areas of language - phonology, grammar - the lexicon is a system, with paradigmatic (synonymy, antonymy, hyponymy, meronymy) and syntagmatic (collocation) relations (Jackson and Zé Amvela 2000, Ch. 5). In lexicology, an attempt is made to capture some of these relations in the notion of 'semantic/lexical fields' (Lehrer 1974; Jackson 1988:210-16). A lexical field is a set of lexemes that are used to talk about a defined area of experience; Lehrer (1974), for example, has an extensive discussion of the field of 'cooking' terms. A lexical field analysis will attempt to establish the lexemes that are available in the vocabulary for talking about the area under investigation and then propose how they differ from
each other in meaning and use. Such an analysis begins to show how the vocabulary as a whole is structured, and more so when individual lexical fields are brought into relationship with each other. There is no prescribed or agreed method for determining what constitutes a lexical field; each scholar must draw their own boundaries and establish their own criteria. Much work still needs to be undertaken in researching this approach to vocabulary. Lexical field analysis is reflected in dictionaries that take a 'topical' or 'thematic' approach to presenting and describing words.

The distinction is often drawn in terms of the dichotomy between a 'semasiological' and an 'onomasiological' approach to the description of vocabulary. The semasiological (from Greek semasia 'meaning') approach proceeds from forms (terms, words) to meanings or concepts, and it results in traditional, alphabetically ordered dictionaries. The onomasiological (from Greek onomasia 'term') approach (Kipfer 1986) proceeds from concepts to terms, and it results in works of the thesaurus type, organised by theme or topic. Some attempts have been made to combine the two approaches, most notably by dictionaries of French published by Dictionnaires Le Robert, where extensive cross-referencing to synonyms and antonyms is made within most entries, e.g.

IMMENSE adj. 1 vx Illimité, infini. 2 Dont l'étendu, les dimensions sont considérables. $\rightarrow$ grand, illimité, vaste. Perdu dans l'immense océan. $\mathbf{3}$ Qui est très considérable en son genre (par la force, l'importance, la quantité). $\rightarrow$ colossal, énorme. Une foule immense. Une immense fortune. contr. Infime, minuscule.
(Le Robert Collège 1997)
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The arrow points to synonyms, and the abbreviation 'contr.' (contraire) introduces antonyms. A similar, but less systematic attempt is reflected in the synonym essays provided by LDEL2 and ECED, e.g.
synonyms Huge, vast, immense, enormous, mammoth, elephantine, giant, gigantic, colossal, gargantuan, titanic: huge is a general term, expressing great size, bulk, or capacity $<a$ huge man $><$ huge piles of wheat $>$. Vast stresses extent or range <vast distances $>$. Immense and enormous suggest size or degree far in excess of what is usual, with immense sometimes implying almost infinite <immense vistas of blue sky> <enormous strength>. Mammoth and elephantine suggest the large size and unwieldy nature of the animals they recall. Used figuratively, mammoth can mean 'excessive' or 'extravagant' < a mammoth darts tournament>. Giant and gigantic suggest something abnormally large; gigantic is preferred for figurative use $<$ a giant doll $><$ a gigantic bill for repairs $>$. Colossal suggests something of awesomely large proportions, while titanic implies the colossal size and primitive strength of the Titans. The hugeness of gargantuan is like that of Rabelais' hero: larger than life, especially with regard to food and appetites. antonyms tiny, minute, minuscule.
(LDEL2)
But that is about as far as it goes in conventional general-purpose dictionaries for native speakers. Learners' dictionaries often provide more information, at least about synonyms and
antonyms, e.g. COBUILD in its 'Extra Column' (Chapter 11).

### 12.2 The thematic tradition in lexicography

The alphabetisation of word lists goes back to the Latin-English glossaries compiled by scholar monks during the Old English period, but so does the arrangement of vocabulary by topic (see 4.1). The most famous of the latter is Ælfric's Glossary, published as an appendix to his Grammar of Latin. Ælfric, who lived from around 955 to 1020, became Abbot of Eynsham, near Oxford, in 1005; his tasks included the teaching of Latin to English-speaking novices. The Glossary groups Latin words with their English glosses into sets, and Werner Hüllen, in his account of Ælfric's work (1999:62ff ), suggests that the sets might have the following titles and structure:

1 God, heaven, earth, mankind
2.1 Parts of the human body
2.2 church offices
2.3 family relationships
2.4 state offices, including crafts and instruments as well as tools
2.5 negative features of human character
2.6 intellectual work

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2.7 diseases, afflictions, merits
2.8 weather, universe

3 Birds
4 Fish
5 Wild animals
6 Herbs
7 Trees
8.1 Buildings (churches, monasteries), materials and objects used there
8.2 war, castles, arms, valuable materials
8.3 various

## 8.4 human vices.

Ælfric's hope was to encompass the whole vocabulary in his scheme, though he recognised that he had not done so. The topical organisation certainly betrays the concerns of an early medieval churchman.

As dictionary making, both bilingual and monolingual, developed, the alphabetical tradition dominated, but, especially under the influence of the Renaissance, thematic wordbooks were also compiled, most famously that by the Moravian Comenius (Johann Amos Komensky, 15921670) under the title Ianua linguarum reserata (The Gate of Tongues Unlocked), of which a Latin and a German version were published in 1631. In English, the most famous work of the time is that of John Wilkins, as part of his proposal for a 'universal language', with the title An Essay Towards a Real Character, And a Philosophical Language, published in 1668. As part of his proposal, Wilkins put forward a scheme for classifying the vocabulary of any language; at its most general level, it is described in eleven chapters in the Essay (Hüllen 1999:253):

I the transcendentals, the general notions which determine all the subsequent principles of order. They include 'discourse', that is 'words' as opposed to 'things'

II God, the creator, and the creation, that is the world observed collectively
III together with all the following chapters is devoted to the world observed distributively ... the inanimate elements under the 'predicament', that is, the category of substance

IV the vegetative species
V the sensitive species
VI the significant parts of vegetative and sensitive species
VII various phenomena belonging to 'quantity', a category which is subsumed under the category 'accident'. So are the following four chapters.

VIII various phenomena belonging to 'quality'
IX various phenomena belonging to 'action'
X various phenomena belonging to 'private relation'
XI various phenomena belonging to 'public relation'.
Each of these broad categories is further divided and subdivided, following a logical, philosophical scheme.

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The work by Wilkins was familiar to the author of the best-known thematic wordbook, Peter Mark Roget's Thesaurus of English Words and Phrases, first published in 1852 and still in print in a number of editions, the most genuine of which is Kirkpatrick (1995). Roget was by profession a medical physician, but with wide-ranging interests; he contributed to the Encyclopaedia Britannica and wrote treatises on electricity and magnetism (McArthur

1992:871). In 1849, at the age of 70, having retired after 22 years as Secretary of the Royal Society, Roget returned to an undertaking that had interested him for over forty years: to create a reference work containing words 'arranged ... according to the ideas which they express':

The object aimed at in the present undertaking is ... the idea being given, to find the word, or words, by which that idea may be most fitly and aptly expressed.
(Introduction)
While motivated by considerations of 'practical utility', Roget's classification scheme reaches back to the notions behind Wilkins' 'philosophical tables'. Roget has six broad 'Classes', which are initially subdivided into 'Sections' (see Table 12.1).

Table 12.1
Class Section
I ABSTRACT RELATIONS I Existence
II Relation
III Quantity
IV Order
V Number
VI Time
VII Change
VIII Causation
II SPACE I Generally
II Dimensions
III Form
IV Motion
III MATTER I Generally
II Inorganic
III Organic
IV INTELLECT I Formation of Ideas
II Communication of Ideas
V VOLITION I Individual

II Intersocial
VI AFFECTIONS I Generally
II Personal
III Sympathetic
IV Moral
V Religious

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Table 12.2
IV. ORDER

1. GENERAL 58 Order 59 Disorder

60 Arrangement 61 Derangement
2. CONSECUTIVE 62 Precedence 63 Sequence

64 Precursor 65 Sequel
66 Beginning 67 End
68 Middle
69 Continuity 70 Discontinuity
71 Term
3. COLLECTIVE 72 Assemblage 73 Non-assemblage. Dispersion

74 Focus
4. DISTRIBUTIVE 75 Class

76 Inclusion 77 Exclusion
78 Generality 79 Speciality
5. CATEGORICAL 80 Rule 81 Multiformity

82 Conformity 83 Unconformity
Each of the 'Sections' is further subdivided into the lowest level of sets of words arranged where applicable in pairs of opposites, e.g. under Class I, Section IV (see Table 12.2).

The sets of words and phrases are listed in the main body of the Thesaurus, on two-column pages, under word classes, with nouns first, followed by verbs, then adjectives and adverbs. No other information is given - no definitions, pronunciation, or etymology; it is intended as a 'storehouse' or 'treasure' (= Greek thesauros) of words, which a writer will plunder for the one that is apt for their purpose.

If you are familiar with Roget's Thesaurus, you will know that about the last third of the work is taken up with an alphabetical 'Index', and many users find this to be the most convenient route into the thesaurus. During his lifetime - he died in 1869 at the age of 90 - Peter Mark Roget did not include an index in any of the editions that he compiled and edited; that defeated the purpose of the work. It was his son, John Lewis Roget, who added the Index; he also undertook a major revision of the work in 1879 and continued to edit it until his death in 1908. The editorship then passed to his son, Samuel Romilly Roget, who undertook a major revision in 1936, and then sold the rights to Longman in 1952, the year before he died (McArthur 1992:871). Roget's Thesaurus remains as an institution among reference works for the English language and as a monument to the thematic tradition of wordbooks.

### 12.3 Specialist thesauruses/thesauri

A number of compilers of modern reference books about words have chosen to present their material in a thematic, rather than alphabetic, format. They believe that it serves their purposes to greater effect and gives an enhanced insight into

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the set of vocabulary that they are describing. We review here four such reference works. The first is A Thesaurus of Old English (Roberts et al. 1995), which is a presentation of the vocabulary of Old English, as far as it can be gleaned from the extant manuscripts of the period. The vocabulary is arranged in 18 broad classes:

1 the physical world
2 life and death
3 matter and measurement
4 material needs
5 existence
6 mental faculties
7 opinion
8 emotion
9 language and communication
10 possession

11 action and utility
12 social interaction
13 peace and war
14 law and order
15 property
16 religion
17 work
18 leisure.
Each of these classes is further subdivided. For example, '9. Language and Communication' has a general class and seven subclasses:

09 Speech, vocal utterance
09.01 To speak, exercise faculty of speech
09.02 Silence, refraining from speech
09.03 A language
09.04 Sense, purport, meaning
09.05 Curiosity
09.06 To take matter for discourse
09.07 Dispute, debate.

Under each of these is listed the modern English word or paraphrase, followed by the OE term, e.g.
09.01.01 A speech, what is said, words: (ge)spræc, word, wordlac

A dictum, remark, observation: spell
A saying, words: cwide, word, wordcwide
A phrase: foreset(ted)nes
A formula: formala, hiw
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An idiom: wise
A verse, sentence (of Bible): fers

A discourse: mæpelcwide, mæpelword, spræce, tospræc
A set speech: getynges
An instructive talk: spell
A thesis, proposition: betynung.
The Thesaurus provides a most insightful analysis of the vocabulary available at this early period in the history of the English language, as well as a sober reminder of the words that disappeared from English as a consequence of the Norman conquest.

The second example is a presentation of the vocabulary of a regional variety of the language, The Scots Thesaurus (McLeod 1990). The Thesaurus presents some 20,000 Scots words, with the focus on rural Scotland, under fifteen broad categories:

1 birds, wild animals, invertebrates
2 domestic animals
3 water life
4 plants
5 environment
6 water, sea, ships
7 farming
8 life cycle, family
9 physical states
10 food and drink
11 law
12 war, fighting, violence
13 architecture, building, trades
14 religion, superstition, education, festivals
15 emotions, character, social behaviour.
Each category is further subdivided, e.g. 10.6 gives words for 'Bread, Oatcakes, etc.' and 10.7 for 'Cakes, Pastry, Biscuits'. Within the subdivisions, the items are listed in alphabetical order; 10.6 contains almost 90 lexemes, some of which are regionally restricted - the relevant areas or counties of Scotland are indicated, e.g.

- luifie a kind of flat bread roll Ags [i.e. Angus]
- nickie an oatcake or bun with an indented edge chf Fif [i.e. chiefly Fife]
- rumpie a small crusty loaf or roll now Per WC [i.e. now Perthshire West Central]
- skair scone a kind of oatmeal-and-flour scone made with beaten egg and milk.

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The third example is still under construction in the Department of English Language at the University of Glasgow under the direction of Professor Christian Kay: the Historical Thesaurus of English. Begun in 1964 by Kay's predecessor, Professor M.L. Samuels, the Historical Thesaurus is based on the materials of the OED, supplemented by further research. It aims to present the vocabulary of English from the earliest written records onwards in a semantic and chronological arrangement, so that a user can see how the vocabulary of English has developed in any particular area of meaning. As with all thematic dictionaries, its effectiveness depends in large part on its classification system:

The classification which has resulted from examination of the data is based on a modified folk taxonomy. There are three major divisions: (I) The World, including the physical universe, plants and animals; (II) The Mind, covering man's mental activities; and (III) Society, which deals with social structures and artefacts. Within these major divisions the material is arranged in numbered hierarchical categories, each consisting of a defining heading followed by chronological lists of all the words, with their dates of currency, ever used as synonyms or near synonyms for the definition.
(HTE website)
The database of the HTE will be constructed in such a way that sophisticated searches will be possible, e.g. to find all the words meaning 'laugh' that came into the language between 1300 and 1500 , or to find all the words current in Renaissance English for a particular area of meaning. The Thesaurus of Old English, considered earlier, is an offshoot of this project, but while the OE thesaurus presents, in lexical field arrangement, a snapshot of the vocabulary at a particular time period, the HTE will show how the vocabulary has developed from OE over time, lexical field by lexical field. Further information on the HTE project, together with examples, can be viewed on the Historical Thesaurus of English website (see References).The final example of a specialist thematic dictionary is specialist in two ways: it is restricted to a particular area of vocabulary, that of science, and it is directed specifically at learners of English: the Longman Dictionary of Scientific Usage (Godman and Payne 1979). This dictionary is aimed at those who are studying science through the medium of English and for whom English is not their first language. The vocabulary of science is presented under 19 broad divisions, numbered 'A' to 'U' ('I' and 'O' are not used). Division A contains 'Basic Terms', and like the other divisions it is subdivided into 'Sets':

AA Space
AB Matter

AC Shape<br>AD Existence

## AE Constitution

AF Movement

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AG Change
AH Time
AJ Process
AK Knowledge
AL Word analysis
AM Statement
AN Measurement
AP Relationship
AQ Experiment.
The remaining divisions contain the 'Scientific Terms'; each division contains sets that are semantically related, e.g. H has the following sets:

HA Irritability
HB Nervous System
HC Sight
HD Hearing
HE Sense Organs.
Within each set, the individual terms are arranged, not alphabetically, but in order to form a coherent account of the area of science, proceeding from those terms that have a more general reference to those that are more specific. Each term is provided with a word class label, a definition and explanation, occasionally an example sentence, and extensive cross-references, both to earlier and later within the set and to other sets. For example, from Set HD 'Hearing':

HD001 hearing (n.) One of the senses of animals, concerned with the stimulus of sound. Hearing is well developed in tetrapod vertebrates, but poorly developed in fishes; it is well developed in insects but not in most other invertebrates. - hear ( $v.) \downarrow$ AUDIBILITY •

SCOLOPHORE •STATOCYST • LATERAL LINE SYSTEM • AUDIBLE • EAR • MIDDLE EAR • INNER EAR • MEMBRANOUS LABYRINTH • COCHLEA $\rightarrow$ IRRITABILITY

HD005 statocyst (n.) (In some invertebrates) an organ of balance, consisting of a vesicle containing statoliths with sensory cells on the vesicle walls, Hair-like processes on the sensory cells are stimulated by the statoliths when the animal moves. $\downarrow$ OTIDIUM • OTOCYST • STATOLITH $\uparrow$ HEARING

The downward-pointing arrow indicates a cross-reference to an item or items later in the set, an upward pointing arrow to those earlier in the set, and an arrow pointing to the right cross-refers to another set. The dictionary is supplied with an alphabetical index, which gives the code for the set in which the term is described, together with its number within the set. The authors envisage that the dictionary will be used in four ways:

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1. 'Finding the meaning of a term when reading' - using the index in order to locate the term. This is a conventional dictionary use.
2. 'Using a term when writing' - again the index is used to locate the term, but the focus is on what can be gleaned from the entry about using the term. This is a conventional use for learners’ dictionaries.
3. 'Searching for an unknown term when writing' - either with the index using a known term, or with the contents to identify the set that represents the area of meaning being written about. This is the genuine thesaurus use, as envisaged by Roget for his Thesaurus.
4. 'Revising the terms of a particular topic' - because each set of terms is logically structured and internally cross-referenced, it gives a good overview of the topic for revision purposes.

What these four examples show is that the thematic tradition in lexicography can be exploited imaginatively to present information about words for specific purposes, where an alphabetical arrangement would be incapable of yielding the desired insights for the intended uses and users.

### 12.4 Thematic dictionaries for learners

A thematic presentation can help learners of English as a second or foreign language in at least two ways. First, much language teaching tends to be by topic, and a thematic dictionary would, therefore, be an obvious reference work to accompany such an approach. Second, one of a learner's difficulties in writing, besides ascertaining the appropriate grammatical and collocational patterns that a word may enter, is making the appropriate choice of word in the first place. This presupposes knowledge of the vocabulary items that could be used to express the idea or concept, from among which the item may be chosen. Moreover, learners benefit from some more explicit help in enabling them to perceive the often subtle semantic and pragmatic distinctions between words with similar meaning.

The first thematic dictionary for learners was Tom McArthur's Longman Lexicon of Contemporary English (1981), whose genesis and career he describes in Chapter 14 of McArthur (1998). McArthur consciously places his work in the thematic tradition, which he subsequently
reviewed in Worlds of Reference (1986):
The alphabetical dictionary has a logic, but it is not the logic of everyday life. In principle, one feels, words should be defined in the company they usually keep. Two famous moves in this direction have been the Janua Linguarum Reserata in 1631, the work of the Bohemian educator Comenius, and Roget's Thesaurus, first published by Longman in 1852. The Longman Lexicon of Contemporary English belongs in this tradition.

Comenius had a hundred chapters and a religious bias, while Roget used a scheme of universal concepts as a framework for his prodigious lists. The

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Lexicon, however, has only fourteen 'semantic fields' of a pragmatic, everyday nature.
(Preface, p. vi)
As McArthur indicates, the vocabulary selection that he takes - 15,000 words from the 'central vocabulary of the English language' - is arranged in fourteen broad categories, numbered ' A ' to ' N ':

A Life and Living Things
B The Body: its Functions and Welfare
C People and the Family
D Buildings, Houses, the Home, Clothes, Belongings, and Personal Care
E Food, Drink, and Farming
F Feelings, Emotions, Attitudes, and Sensations
G Thought and Communication, Language and Grammar
H Substances, Materials, Objects, and Equipment
I Arts and Crafts, Science and Technology, Industry and Education
J Numbers, Measurement, Money, and Commerce
K Entertainment, Sports, and Games
L Space and Time
M Movement, Location, Travel, and Transport
N General and Abstract Terms.
Each broad 'semantic field' is subdivided, and within the subdivisions the lexical items are arranged in related sets, often belonging to the same word class. Each item is provided with definitions and examples. Although its compilation preceded it, McArthur had access to the

LDOCE1 (1978) materials, so that the entries in the Lexicon match those in the Dictionary. The careful arrangement of items in sets and the provision of definitions and examples enable a learner to understand the differences between related words and to choose the one appropriate to the particular context of use. By way of illustration, here are the subdivisions of Field F, followed by the entries for the set F173:

F1 Feeling and Behaviour Generally
F20 Liking and Not Liking
F50 Good and Evil
F70 Happiness and Sadness
F100 Anger, Violence, Stress, Calm, and Quietness
F120 Fear and Courage
F140 Admiration, Pride, Contempt, and Abuse
F170 Kindness and Unkindness
F190 Honesty, Loyalty, Trickery, and Deceit
F220 Relaxation, Excitement, Interest, and Surprise
F240 Actions of the Face Related to Feelings
F260 Senses and Sensations.

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F173 adjectives: humanitarian and charitable [B]
humanitarian concerned with trying to improve life for human beings by giving them better conditions to live in and changing laws, esp those which punish too severely
generous showing readiness to give money, help, kindness, etc: She's not very generous with the food; she gives very small amounts. You are far too generous with your money. -ly [adv]
liberal generous, esp in giving or being given quickly and easily or in large amounts: He is very liberal with his money. She gave us liberal helpings of food. -lly [adv]
magnanimous having or showing unusually generous qualities towards others: A country should be magnanimous towards its defeated enemies. -ly [adv]
charitable showing kindness and charity [ $\rightarrow$ F175]: Be charitable; try to help them. -bly [adv Wa3]

The codes (B, Wa3) are those from LDOCE1. The Lexicon contains line drawings and it is
provided with an alphabetical index, where the pronunciation is indicated (in IPA transcription). Where an item has more than one sense, or belongs to more than one word class, which would assign it to different semantic fields or sets, this is given briefly in the Index, e.g.
long wish $v$ F6
measurement adj J63
distance or time adj L139, N307
The index thus enables a learner to quickly review the semantic range that a word has, as well as to locate the item in the appropriate semantic set.

Unlike Roget's Thesaurus, McArthur's Lexicon provides in the thematic format the range of information that would be expected in a dictionary, at least for learners. In that sense it is a true 'thematic dictionary'. It is to be regretted that it has never been updated or expanded, or, indeed, that no publisher has dared to produce such a work as a complement to a general-purpose native speaker dictionary. The semantic classification of the words in CIDE on the CD-ROM (see 11.5) proceeds along the same lines and encompasses all the 50,000 headwords of CIDE, but the electronic format does not allow the overview of the structure of the vocabulary that the printed Lexicon does. After all, the basic arrangement of the entries in CIDE on CD-ROM is still the alphabetical format of the print version.

There is one further reference work for learners that incorporates some of the insights from the thematic tradition: the Longman Language Activator (1993), which advertises itself as 'the world's first production dictionary'. It addresses specifically the needs of learners in writing and speaking to be able to choose the appropriate word and to use it correctly. The Activator is constructed around 1052 'concepts' or 'key words':

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These concepts express the meanings at the heart of the English language. It should be pointed out straight away, however, that the Activator does not address itself to words for 'real world' items, some of which, of course, also belong to the core of English. We believe that concrete nouns, and content words in general, present fewer, less serious problems of correct use for students, so you will not find different types of transport, dogs, machinery or buildings here. That is left to the Longman Lexicon, which deals effectively with semantic fields, including real world items.

The concepts ... have clear, direct names such as FAR, SAD/UNHAPPY, HOPE, INTEND, EASY, FAULT/STH WRONG, and BUT.
(Introduction, p. F8)
The key word entry is structured in the following way. If the word has more than one broad meaning, these are identified first and a reference given to the keyword under which each meaning is explained. For example, the key word modern has two meanings identified:

- modern places, methods, etc. $\rightarrow$ MODERN
- using the newest equipment, technology, etc. $\rightarrow$ ADVANCED.

Then, under each key word, lexical items are grouped together in related sets, with a summary of the sets at the beginning of the entry, e.g. for modern:

1 words for describing machines, systems, processes etc that have been developed using the most recent ideas and equipment

2 using, or willing to use, the most recent ideas and ways of thinking
3 words for describing modern art, literature, music, etc
4 to change something in order to make it modern.
The items in each of these sets are listed, together with the description (as above) at the beginning of the set. For Set 2 of modern, the items are: modern, progressive, innovative, forward-looking, move with the times, go-ahead. Each of the lexical items is provided with an entry including pronunciation, word class, definition and examples.

The key words are arranged alphabetically in the dictionary, and the alphabetical list contains all the lexemes treated in the dictionary. Those that are not key words are cross-referenced to the key word under which they are treated. The Activator has its headwords ordered alphabetically, but under 1052 of them - the 'key words' - a thematic approach is taken and lexical items are organised into lexical sets.

### 12.5 Continuing the tradition

A thematic dictionary provides an insight into the structure of the vocabulary that an alphabetical dictionary cannot possibly afford. Nevertheless, even with

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works like Roget's Thesaurus, for most people the entry point to any wordbook is through an alphabetical list. Thematic dictionaries such as Roget and the Longman Lexicon have needed to provide an index in order to facilitate their use, provide an entry point, and enhance their usefulness. This, along with the fact that many words will be entered several times, in different places, in a thematic dictionary, has tended to make such dictionaries either limited in scope the Longman Lexicon has only 15,000 items - or potentially rather unwieldy. Perhaps it is not surprising that no publisher has ventured a general-purpose thematic dictionary. The other potential disadvantage of a thematic dictionary is that, because a word with multiple meanings may be entered partially in several places, no overall view of the word's lexical description is offered.

The electronic medium, however, opens up new possibilities (McArthur 1998, Ch. 15). So far, most, if not all, publishers that have brought out a CD-ROM version of their dictionaries have simply transferred the alphabetically arranged print version to the electronic medium. Any enhancement has, for the most part, been in the search facilities provided for the electronic version, though learners' dictionaries on CD-ROM have gone further. Most notable is CIDE on CD-ROM's semantic field analysis (see 11.5 and above), which assigns each headword/meaning
to a set within an elaborately structured hierarchy of fields. It has, thus, bolted a thematic framework onto an alphabetical one, but it is the alphabetical one that is transparent, since you can browse/scroll through the entries in the alphabetical list, but not through those in the thematic one: you have to pull each item in the list individually from its place in the alphabetical structure. I would like to suggest that this is the wrong way round.

An alphabetical lookup is always for a single item. Because you type the item in for a lookup in an electronic dictionary, it does not matter how the dictionary is structured. Indeed, some electronic dictionaries (e.g. COD10) show you only one entry per screen. The entries could therefore be stored on CD-ROM in random order; it would make little difference to a search for a single item. However, if they were stored by semantic field, and it was possible to scroll through the entries, a CD-ROM dictionary could fulfil both purposes: the single lookup, which is the advantage of an alphabetical organisation; and the lexical field analysis, which is the benefit of a thematic organisation. Some provision would also need to be made for composite entries of items distributed across semantic fields. But the electronic medium does not have the space considerations of print.

### 12.6 Further reading

A most lucid account of the development of the thematic tradition in reference works, including lexicography, is found in Tom McArthur's Worlds of Reference (1986), now, lamentably, out of print. Chapters 12 to 14 of his Living Words (1998) also deal with thematic lexicography, including an account of the Longman Lexicon. Werner Hüllen's English Dictionaries 800-1700: The Topical Tradition

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(1999) treats in some detail the major works during the development of the tradition.

Genuine editions of Roget's Thesaurus (e.g. Kirkpatrick 1995) contain Roget's original introduction in which he outlines the rationale for the work and its underlying conception.

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## 13

## Compiling dictionaries

Any dictionary, apart perhaps from the occasional scholarly undertaking, is a commercial venture. It requires considerable investment in staff, equipment, materials, and time. The investment is unlikely to be recouped for a number of years. Dictionary projects run to a budget and to a timetable. They have to be planned and managed; they require the involvement of people with a wide range of specialist knowledges and skills. Like marriage, compiling a dictionary is not something to be 'contemplated lightly'. This chapter looks at some of the issues involved in dictionary compilation and considers some of the decisions that confront lexicographers and editors of dictionaries.

Some dictionaries have had their stories told. Reddick (1990) uses recent scholarship to recount how Samuel Johnson went about compiling his Dictionary of the English Language. Elizabeth

Murray's biography of her grandfather, James Murray, entitled Caught in the Web of Words (1977), traces the genesis of the Oxford English Dictionary and especially James Murray's contribution as the principal editor of the first edition. Herbert Morton has written an account of Webster's Third and its editor, Philip Gove (Morton 1994). And the volume entitled Looking Up, edited by John Sinclair (1987), gives insight into the development of the COBUILD learners’ dictionary.

### 13.1 The plan

No dictionary can begin to be compiled without considerable forethought and planning. Commercial publishers do not normally release their plans to the public, though some of the thinking that underlies a particular dictionary or edition often finds expression in the preface or introduction. The one famous published plan is Samuel Johnson's (see 4.5) Plan of a Dictionary of the English Language (in Wilson 1957), written to satisfy his bookseller/publisher sponsors and, at their instigation, to seek the patronage of the Earl of Chesterfield, unsuccessfully as it turned out. Whether made public or not, the plan of a dictionary has to address a number of important questions and make decisions about issues that will affect the nature of the finished product.

One of the earliest decisions to be made relates to the target user group. Indeed that decision may already have been taken before the planning process

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starts. Deciding, for example, to produce a dictionary for children aged 7 to 10 (Years 3 to 6 of primary school) will need to be a starting point from which other questions and decisions will flow. Similarly, if a learners' dictionary is proposed, that needs to be in view from the outset of the planning. General-purpose dictionaries, however, even though having a general nativespeaker target audience, may have a conscious bias towards a particular subset of those users. ECED, for example, has 'the needs of families and students in mind' (dust jacket). Most dictionaries presuppose a general user, without specifying any particular subgroup; CCD4 is 'for everyone whether reading, writing or studying, and ... for all who love the English language' (p. ix), whereas Chambers attempts to be all-inclusive in its identification of potential users:

Chambers is a dictionary of unrivalled value to users of English - to students, scholars, writers, journalists, librarians and publishers. It is replete with words of technical importance to scientists, lawyers, accountants and people in business. Chambers is the reference dictionary for the UK National Scrabble ${ }^{\circledR}$ Championship; it is the favourite dictionary of crossword setters and solvers; it is the treasure chest for all word-game players and word lovers.
(dust jacket)
There is some benefit in specifying as wide a market as possible for one's product!
Almost as crucial as the target audience is the decision on the size of the dictionary, since this will have a significant effect on a number of further issues at the planning stage. Size itself correlates both with cost and with the price at which the dictionary can be sold. A 'concise' dictionary (see 3.2) would probably have between 60,000 and 90,000 headwords and cost
between $£ 16$ and $£ 20$ (at 2001 prices); ‘desk-size’ dictionaries are substantially larger and sell at around $£ 30$. Size will also have an effect on the format of the printed product, both in terms of its overall dimensions and the layout of its page, though other factors will significantly affect the latter as well, such as how many columns the page has. Most dictionaries have two columns of text to the page, but some recent dictionaries, both desk-size (NODE) and concise (ECED), have three columns.

Both size and target users will influence a further decision in the planning stage, concerning the coverage of the dictionary. A learners' dictionary will seek to pay more attention to the core vocabulary of the language, rather than to more specialist and technical words. A 'pocket' dictionary will also have less room for specialist vocabulary. But, in an effort to be up-to-date, general-purpose dictionaries will want to include, certainly in their desk and concise editions, words from fields such as computing, medicine, technology, business and finance, and the environment. Similarly, dictionaries will want to include current colloquial and slang words that have earned their place in the record of the vocabulary, even vulgar or taboo words. More optional may be the inclusion of words from other varieties of English around the world, though it would

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be unusual to exclude words at least from American English. More optional still would be dialect words from within the British Isles, though this could be a feature of the dictionary (e.g. Scots words in Chambers). Just as significant an influence on scope and size would be the decision to include encyclopedic entries, i.e. names of people and places, which can be quite lengthy, e.g. in CED4, which claims more than 18,500 , as against the single liners in ECED and only 9,000 of them.

After all these decisions are taken, the headword list has to be chosen to reflect the target user group, the agreed size, and the intended coverage. As we have noted before (3.4), all dictionaries make a selection from the total vocabulary. How does a dictionary achieve its desired coverage but avoid becoming unbalanced in its selection of words, by, for example, having a disproportionate number of words beginning with the letter ' $b$ ' in its headword list? There are, for instance, many more words beginning with ' $c$ ' in English than beginning with ' $g$ ', in fact between two and three times as many. One of the solutions to this problem was proposed by Edward Thorndike in the US in the 1950s, in preparation for a series of Thorndike-Barnhart dictionaries. He divided the alphabet up into 105 'blocks' of approximately equal size, to reflect the distribution of English words among the letters of the alphabet. The letter ' $c$ ', for example, has ten blocks, while ' $g$ ' has only four. In fact, the final block for a letter may not contain as many words as the others, nor may letters with only one block, or the final block covering ' $x$ ', ' $y$ ' and ' $z$ '. A number of dictionaries have followed Thorndike's system, which is reproduced in Table 13.1, taken from Landau (1989:242, 2001:361), but with the number of words added for each block found in COD10 (CD-ROM) headword list.

The total number of headwords given for the COD10 CD-ROM is 64,679, which would give a mean of 616 for each of the 105 blocks. The COD10 headword list includes abbreviations, derivational affixes and combining forms, which may not have been taken into account by Thorndike. Given the incidence of some low numbers for understandable reasons, only 345 for

Q-74, the single block for the letter ' $q$ ', for example, and in the final block for some letters - e.g. 324 in F-37, the numbers are fairly consistent. Unusually high numbers are probably explicable: K-51 (854) is a single letter block, U-98 (958) contains words beginning with the negative prefix un-, whose numbers are likely to be variable in a dictionary. Overall, Thorndike's system, as tested on COD10, seems to have some validity, although, more than half a century later, it may need adjusting to the current vocabulary and to the current practices in respect of what are included as headwords.

Indeed, the planning stage needs to decide what the macro-structure and the micro-structure (see 3.3) of the dictionary will look like. In macro-structure terms, the tendency is towards a single alphabetical list of headwords that includes compounds, defined derivatives, affixes and combining forms, as well as abbreviations, and, if the dictionary is to include them, names of people and places. In micro-structure terms, the information to be included in an entry, as well as its format and its order, needs to be decided. Will pronunciation, for

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Table 13.1 Thorndike's block system of distribution of dictionary entries by initial letters
Block Letters No. in COD10
A-1 a-adk 616
A-2 adl-alh 672
A-3 ali-angk 654
A-4 angl-arak 659
A-5 aral-ath 632
A-6 ati-az 420
B-7 b-basd 660
B-8 base-benf 602
B-9 beng-bld 772
B-10 ble-bouq 858
B-11 bour-buc 698
B-12 bud-bz 444
C-13 c-caq 625
C-14 car-cel 686
C-15 cem-chim 737
C-16 chin-cled 733

C-17 clee-col 667
C-18 com-conf 549
C-19 cong-coo 431
C-20 cop-cq 677
C-21 cra-culs 656
C-22 cult-cz 340
D-23 d-defd 653
D-24 defe-deteq 558
D-25 deter-discol 678
D-26 discom-dold 569
D-27 dole-dt 715
D-28 du-dz 314
E-29 e-elk 551
E-30 ell-en 573
E-31 eo-exb 689
E-32 exc-ez 393
F-33 f-fem 541
F-34 fen-flah 654
F-35 flai-ford 649
F-36 fore-fror 591
F-37 fros-fz 324
G-38 g-geq 634
G-39 ger-gord 707
G-40 gore-grouo 625
G-41 group-gz 352
H-42 h-hav 617
H-43 haw-hh 627

H-44 hi-horr 740
H-45 hors-hz 663
I-46 i-inam 542
I-47 inan-infn 486
I-48 info-intn 594
I-49 into-iz 461
J-50 j-jz 615
K-51 k-kz 854
L-52 1-ld 640
L-53 le-lil 656
L-54 lim-louh 724
L-55 loui-lz 385
M-56 m-marb 720
M-57 marc-med 561
M-58 mee-mil 820
M-59 mim-monn 608
M-60 mono-mz 976
N-61 n-nif 735
N-62 nig-nz 747
O-63 o-oo 706
O-64 op-ou 682
O-65 ov-oz 367
P-66 p-par 729
P-67 pas-peq 681
P-68 per-picj 752
P-69 pick-plea 636
P-70 pleb-poss 699

P-71 post-prh 632
P-72 pri-prot 564
P-73 prou-pz 574
Q-74 q-qz 345
R-75 r-reen 683
R-76 reco-renn 615
R-77 reno-rhn 556
R-78 rho-rotd 678
R-79 rote-rz 369
S-80 s-sat 640
S-81 sau-sd 626
S-82 sea-seo 668
S-83 sep-shio 610
S-84 ship-sinf 638
S-85 sing-smd 611
S-86 sme-sors 624
S-87 sort-spln 627
S-88 splo-stas 542
S-89 stat-stov 531
S-90 stow-sucg 553
S-91 such-swar 553
S-92 swas-sz 319
T-93 t-tel 729
T-94 tem-thq 664
T-95 thr-too 663
T-96 top-trh 668
T-97 tri-tz 852

U-98 u-unl 958
U-99 unm-uz 686
V-100 v-vim 673
V-101 vin-vz 349
W-102 w-wess 688
W-103 west-wis 676
W-104 wit-wz 456
XYZ-105 x-zz 478

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example, be given for all headwords? what transcription system will be used? how will word stress be indicated? In terms of usage, what set of labels will be used? and will any additional usage guidance be offered? For etymology, how much information will be given? will it include some indication of when the word came into the language? As such matters are decided, they need to be recorded in a manual so that everyone who works on the dictionary, or who joins the dictionary staff at a later date, knows what policies and ground rules have been determined.

Not strictly lexicographical, but nevertheless of crucial importance, are decisions about budgeting, both of money and of time. Ladislav Zgusta (1971:348) comments:

I certainly do not know all lexicographic projects past and present; but of those I know not a single one was finished in the time and for the money originally planned.
(cited in Landau 2001:347)
This was indeed true of some of the more famous dictionaries - Johnson's, scheduled for three years and taking nine; the OED, with Murray contracted by the Oxford Delegacy to produce in ten years and four volumes, taking fifty years and ten (subsequently twelve) volumes. But with the advent of computer technology, Zgusta's pessimism is probably no longer justified: OED2 was published on time in 1989, and it is noticeable that the timespan between editions of dictionaries appears to be decreasing, e.g. COD7-1982, COD8-1990, COD9-1995, COD101999, with an updated edition of COD10 in 2001.

The costs associated with compiling a dictionary are quite different from those for other kinds of book publication, as Sidney Landau observes:

Most books cost comparatively little to prepare (the plant cost, in publishing argot) but a great deal to produce (paper, printing, and binding costs). The opposite is true of dictionaries, where the cost of production, though hardly negligible, is small compared to the huge editorial development costs, which must be amortized over a much longer period of time than book publishers are generally familiar with. Data-management costs (systems analysis, computer
programming and processing) are also much higher than they are for other books.
(Landau 2001:348)
The size of the budget and its distribution between the various processes of dictionary compilation may have a significant effect on what the dictionary will turn out to be like in the end. If time, effort and money is focused on one, perhaps novel, aspect of the dictionary, this may have a detrimental effect on the quality of other aspects: usage information may be prioritised over etymology, for example.

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### 13.2 The data

Having decided the headword list and made all the other necessary preliminary planning decisions, the issue arises of where the data for the dictionary is going to come from. There are essentially three possible sources of data: previous dictionaries, citations, (computer) corpora. Any newly published dictionary will be either a new edition of an existing line of dictionaries or a new departure. In both cases, the dictionary stands in a long tradition of dictionary making (Chapters 4 to 6), and, whether consciously or not, previous dictionaries exert their influence. Samuel Johnson used one of Nathaniel Bailey's dictionaries, Noah Webster used Johnson's, F.G. and H.W. Fowler used the OED for the first edition of the COD. It would be foolish, even when the boundaries of lexicography are being extended, to ignore the achievements of the past, though it may be sometimes more sensible to borrow the principles rather than the content from previous dictionaries. Landau (2001:346) goes so far as to assert: 'All commercial dictionaries are based to some extent on preexisting works.'

Publishers with long-established dictionary departments build up an extensive archive of citations, often going back many decades. They continue to have a reading programme, scouring recent publications for new words or new uses of existing words. They may have readers inhouse, but will often invite interested members of the public to contribute material as well. Longman ran a 'Wordwatch' programme for a number of years during the 1980s, which contributed to the Longman Register of New Words (Ayto 1989, 1990). Oxford has a 'World Reading Programme', an international network of some sixty readers, who contribute some 18,000 items a month for inclusion in the 'Oxford Bank of New Words' (cf. Ayto 1999). The collection of citations has a long history, going back at least to Samuel Johnson, who extracted material from the literature of the day for inclusion in his dictionary. The OED was founded on the practice of recruiting voluntary readers to undertake the reading of specific works or authors and to submit appropriate citations. Among the instructions issued by James Murray, when he renewed the call for voluntary readers in 1879, were the following:

Make a quotation for every word that strikes you as rare, obsolete, oldfashioned, new, peculiar, or used in a peculiar way.

Take a special note of passages which show or imply that a word is either new and tentative, or needing explanation as obsolete or archaic, and which thus help to fix the date of its introduction or disuse.

Make as many quotations as convenient to you for ordinary words, when these are used significantly, and help by the context to explain their own meaning, or show their use.
(Murray 1977:347)
Readers were to write their quotations on slips of paper the size of 'a half-sheet of note-paper', together with full bibliographical information; Murray gives the following specimen (from Murray 1977:350):

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## Diplomatist, $n$.

1860. J. L. MOTLEY, United Netherlands (ed. 1868), I. ii. 24.

If diplomatic adroitness consists mainly in the power to deceive, never were more adroit diplomatists than those of the sixteenth century.

It is estimated that some five million quotations in this form were submitted by some 2,000 readers to the OED editors, of which 1.8 million appeared in the first edition of the dictionary (Berg 1993).

These days, dictionary departments that have a reading programme will also derive data from computer corpora. The reading programme may be only in specialised areas, as indicated by the Editor-in-Chief of ECED:

Where did the Encarta Concise English Dictionary's editors find the information on which to base their definitions? The Bloomsbury Corpus of World English, which now has over 150 million words, provided the main evidence. We amplified this with a tailored reading programme in science, technology, business, and other key areas in order to find evidence of word use in varied fields. Lastly we used the Internet as a research source.
(Introduction, p. xiii)
We noted (in Chapter 11) the COBUILD dictionary as the pioneer in the use of computer corpora for providing the data from which the dictionary is compiled. The Bank of English, now amounting to in excess of 400 million words, continues to supply data for Collins dictionaries, both for native speakers and for learners. Oxford and Longman consult the British National Corpus, and Cambridge the Cambridge Language Survey corpus.

A computer corpus consists of a collection of texts in electronic form, for lexicographical purposes drawn from both written and spoken English and representative of the vast range of text-types and registers found in language (see Antoinette Renouf's chapter on 'Corpus Development' in Sinclair 1987). Computer corpora can be easily searched, so that all the occurrences of a word can be identified, rather than just those that happen to be noticed by a reader. In that sense, the data from computer corpora are more complete and more reliable than from any other source; they also provide information about relative frequency of occurrence, not only of words and homographs, but also of senses of words. The usual output of a computer search is a concordance list, such as the following for the word conductor (taken from the one
million word Lancaster- Oslo/Bergen Corpus of written English):
$1 \ldots$ owski*> $\left.\right|^{\wedge} \mathrm{T}^{*} 2 \mathrm{HAT} * 0$ former fire-eating [[conductor]] *4Leopold Stokowski *0is a mellowed man ...
$2 \ldots$ party, to save any tickets he receives from the [[conductor]], the number of which ends in *"7.**"^Wh ...
$3 \ldots$ closing curtains were combined by producer and [[conductor]] into an exquisite theatrical unity ...

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$4 \ldots \backslash \mathrm{Mr}$. Harry Tomkins) and $\backslash 0 \mathrm{Mr}$. George Hespe their [[conductor]]. ${ }^{\wedge} \mathrm{I}$ am sure everyone will agree that the ...

5 ... Robert Hughes, euphonium solo, and the [[conductor]] played a tubular bell solo accompanied b ...
$6 \ldots$ and lead the others. $\wedge$ As for basses and altos the [[conductor]] had to teach by singing the parts with $\mathrm{t} .$. .
$7 \ldots$ was unhappy about a forthcoming concert. $\wedge *$ "The [[conductor]]*-so-and-so*- he has no temperament. $\wedge$ It ...
$8 \ldots$ composers. ${ }^{* *}{ }^{\prime}{ }^{\wedge}$ It is true that he was the first [[conductor]] to put Elgar on the musical map, the rea ...

9 ... Hamilton Harty in 1933 as the permanent [[conductor]] of the Halle*?2 Concerts, the orchestra ...
$10 \ldots$ stra declined in its ensemble. ${ }^{\wedge}$ Another permanent [[conductor]] was needed, but the Halle*? 2 Society wer ...
$11 \ldots \mathrm{n}$ ordinary theatre managements to choose [[conductor]], producer, designer, and so on, and then, having ...
$12 \ldots$ all responsible should be experts*- the [[conductor]], the orchestral players, the singers, the ...
$13 \ldots$ stage (which includes arranging that the [[conductor]] can catch the eye of the singer at neces ...
$14 \ldots$ be guided. ${ }^{\wedge}$ How often does an excellent [[conductor]] wish to take a passage of music at an *' ...
$15 \ldots$ in the circumstances? ${ }^{\wedge}$ The co-operative [[conductor]], like Beecham, will always listen and be ...
$16 \ldots$ tage is wrong. $)^{\wedge}$ But I have known a good [[conductor]] insist on what was arguably a *'correctly**' fast ...
$17 \ldots$ is too clean to be the score used by the [[conductor]], and it was probably the fair-copy prepa ...
$18 \ldots$ transmitted to the voltmeter V by a nickel [[conductor]] D , nickel being resistant to corrosive a ...
$19 \ldots$ ed to the voltmeter by an earthed nickel [[conductor]] attached to the bottom of a well E in th ...
$20 \ldots$ coupling H which also positions the $\backslash 0+$ ve nickel [[conductor]] with respect to the sodium by circlips o ...
$21 \ldots$ ectrolyte J attached to the $\backslash 0+$ ve nickel [[conductor]] by nickel circlips. ${ }^{\wedge}$ Fixing and positioning of th ...
$22 \ldots$ ce, and with far more to offer. $\|^{\wedge}$ The [[conductor]] rang his bell. $\|^{\wedge *}$ "Good-bye, Dai,**"...
$23 \ldots{ }^{\wedge}$ Where indeed? ${ }^{\wedge}$ Megan Thomas spoke sharply to the [[conductor]], demanding an explanation. ${ }^{\wedge}$ But non ...
$24 \ldots$ demanding an explanation. ${ }^{\wedge}$ But nonplussed, the [[conductor]] was. ${ }^{\wedge}$ A good man, mind; knew his job. ${ }^{\wedge} \mathrm{B} .$.
$25 \ldots$ first thing about it.**" $\left.\right|^{\wedge}$ Stung, the [[conductor]] was. ${ }^{\wedge *}$ What you expect me to do?**" he
$\|^{\wedge}$ Stung, the [[conductor]] was. ${ }^{\wedge *}$ What you expect me to do?**" he ...
${ }^{\wedge}$ Stung, the [[conductor]] was. ${ }^{\wedge *}$ '"What you expect me to do?**" he ...
$\|^{\wedge}$ Stung, the [[conductor]] was. ${ }^{\wedge *}$ "What you expect me to do?**" he ...
$\mid \wedge$ Stung, the [[conductor]] was. ${ }^{\wedge *}{ }^{*}$ What you expect me to do?**" he ...
$26 \ldots$ proper $\left.\ldots\right|^{\wedge}$ Getting dark, now. ${ }^{\wedge}$ The [[conductor]] switched on the lights. ${ }^{\wedge}$ The beleaguered ...

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$27 \ldots$ ng the sleeping Cadwallader. ${ }^{\wedge}$ Driver and [[conductor]] peered ahead into nothingness. ${ }^{\wedge}$ On the b ..
$28 \ldots{ }^{\wedge * " C a n ' t ~ g o ~ l i g h t i n g ~ b o n f i r e s ~ o n ~ t h i s ~ b u s, ~ * * " ~ t h e ~[[c o n d u c t o r]] ~ s a i d ~ f i r m l y . ~}{ }^{\wedge * " C o n t r a r y ~ t o ~}$ the Company' ...

This is provided by way of exemplification of a concordance; it is from a small corpus and does not give enough data to make it possible to draw general conclusions. But it does illustrate the three main senses of conductor: the musical sense (Nos 1 to 17), its use in relation to electricity (Nos 18 to 21), and the bus conductor sense (Nos 21 to 28). And it shows the kind of material that a lexicographer has to work with and interpret, in order to decide whether a form represents potentially more than one homograph, and to determine how many senses should be recognised. The advantage of a concordance is that context is provided, and can be adjusted for size, so that the grammatical and collocational behaviour of words can be ascertained and used as guides for the determination of sense divisions, as Ramesh Krishnamurthy observes in respect of the COBUILD project (Sinclair 1987:75):

Collocational evidence was of great usefulness in an analysis of the corpus data. The concordance lines were arranged in alphabetical order of the first character after the space following the keyword. This meant that some features of the behaviour of a lexical item in text became immediately apparent.

It is no exaggeration to say that computer corpora have revolutionised the lexicographic process (Rundell and Stock 1992), in terms both of the quality of lexical data that can be obtained and of the reliability of the conclusions that can be drawn from that data.

### 13.3 The method

A computer corpus, with sophisticated search programs, may produce better quality data, and an electronic database may ease the task of putting the dictionary information together, but no program has yet been written, nor is it likely to be, to automate the process of getting from data to finished dictionary. All dictionaries nowadays require the input of a range of staff with different skills and specialisms. Long gone are the days of the lonely lexicographer, like Samuel Johnson, toiling in his garret with the help of a few assistants, or even the Fowler brothers putting together the first edition of the COD at their home on the island of Guernsey, with occasional forays to the OED office in Oxford. CED4, for example, lists some twenty editorial staff, including lexicographers and computing experts, as well as seventeen 'Special Consultants' on varieties of English around the world and fifty-eight 'Specialist Contributors' on topics ranging from aeronautics to industrial relations to religion. A further thirty 'Other Contributors' are also listed, alongside their specialist topic, from horology to place names to sports. Some dictionaries have established additionally an

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advisory board; ECED has a forty-strong 'Academic Advisory Board on English Usage', drawn from universities in the UK, Australia, Canada and the US.

The input of all these people is required for the formulation of the dictionary entries. Not only will external consultants contribute their expertise on varieties of English and technical jargons, but it is likely that a member of editorial staff will specialise in one type of dictionary information, e.g. pronunciation, etymology, grammar, usage. Some will develop expertise in defining, or in selecting the appropriate example, or in researching and writing biographical entries. The hardest, and most important, part is often considered to be that of defining. Landau (2001:354) considers the qualities required of a good definer to be:

First and foremost, he or she must be able to write well and easily.
They must have analytical minds that seek to chop things up into parts ...
Definers must have a broad, but not necessarily deep, fund of information. ... definers must have a feeling for the language, Sprachgefühl, a sense of
aptness of expression, an appreciation of nuance, style and idiom.
However, dictionary editors may seek to impose a particular uniform style of defining on their lexicographers, as Philip Gove did for W3 with his 'single-statement defining style' (Morton 1994). Compare the rambling definition of arson from the first edition with the crisper singlephrase from W3:

The malicious burning of a dwelling house or outhouse of another man, which by common law is felony. The definition of this crime is varied by statutes in different jurisdictions, and generally it has been widened to include the similar burning of other property, as of churches, factories, ships, or of one's own house. (W1)
the wilful and malicious burning of or attempt to burn any building, structure, or property of another (as a house, a church, or a boat) or of one's own usu. with criminal or fraudulent intent (W3)

When a large number of people are contributing to a single work, one of the major concerns is to maintain a consistency of writing and presentation. Dictionary projects will, therefore, document their decisions about content and style in a set of guidelines or a manual, so that any contributor or new member of staff can be informed of the house rules for the particular publication. The manual will specify not just conventions for the macro- and micro-structure of the dictionary, but also points of detail, such as use of abbreviation and punctuation within an entry.

Besides using a computer corpus for obtaining data, dictionaries are now usually constructed using a computer database. A number of commercial products of this nature are available, but the larger publishers have their in-house systems. Such a database allows several lexicographers or specialists to be working on entries at the same time, e.g. for pronunciation, etymology and so on;

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and it allows each to see the work of the others. It also allows freelance lexicographers to work at a location remote from the dictionary offices. It facilitates the editorial and checking processes, and provides with relative ease the version for eventual printing, as well as any electronic (CD-ROM or online) version. Not only that, but once a dictionary database has been established, it can provide the material for dictionaries of other sizes (e.g. concise or pocket) and for other user groups (e.g. children or school students). It also provides the basis for easier updating and revising for the production of new editions.

The computer has changed the way dictionaries are compiled and produced, but it has not done away with the need for skilled lexicographers to practise the art, or craft, of constructing and writing dictionary entries. Like so many other tasks, lexicography is computer-aided rather than
computer-automated.

### 13.4 The result

After all the effort, skill and expertise devoted to the lexicographical task, the result is a book, of a particular size and format, printed using a number of selected typefaces, offered to the dictionary-buying public. How a dictionary handles, what the dictionary page looks like, how the information is arranged, are important factors in selling a dictionary, irrespective of the quality of its content. The impression of accessibility is of significance. The column on a page must invite scanning up and down. The headwords, alternative spellings, compounds, derivatives, phrasal verbs and idioms usually stand out in a bold typeface, as do the sense numbers. The headword itself is offset to the left. Italics are usually used for word class and usage labels, for illustrative examples, and for words cited from other languages in the etymologies. Crossreferences are normally in small capitals. Where a word belongs to more than one word class, and they are treated in the same entry, the beginning of the second and subsequent word class is clearly marked, e.g. with a bold diamond in CED4, with a large bold dot in COD10. Some information may begin on a new line within an entry, e.g. 'derivatives' and 'origin' (i.e. etymology) in NODE and COD10. The careful use of layout and typeface contributes to the ease with which a user is able to locate the exact piece of information that they are seeking about a word.

Another 'result' of the lexicographic process is a CD-ROM. One CD-ROM is much like another to look at, so there is no issue here of how it 'handles'. But there are serious issues about how the information is displayed on the screen, what search options are available, and how intuitive it is for the (naive) user to operate. CD-ROM dictionaries usually display two windows: a word list window and an entry window. The word list window contains the headwords in alphabetical order, together with a box for typing a word that the user wishes to look up. Typing in the word locates its place in the headword list; it may also bring up the entry automatically in the other window, or a further operation may be required (a mouse click or pressing the 'Enter' key). It is normally possible to scroll through the headword list, and if this is automatically linked to

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the entry window, then by this means to scroll through the dictionary entries. The entry window may contain a single entry, for the selected headword; alternatively it may contain that entry together with contiguous ones that will fit onto the screen. In the latter case, it is usually possible to scroll the entry window, as if scanning a dictionary page. The entries on screen replicate as far as possible the arrangement and typefaces of the print version, though without the double or triple columns. Scrolling through entries on the screen is, thus, not the same experience as browsing a print dictionary, but for single item lookups there is little difference.

One respect in which CD-ROM dictionaries score over their print counterparts is in their fulltext search facility, though this is, perhaps, of more interest to lexicologists and other students of language than to the ordinary user. CD-ROM dictionaries vary, though, in the sophistication of their search facilities, as we have noted both for native speaker dictionaries (6.7) and for learners' dictionaries (11.5), where these facilities are probably of greater importance. We are more adept at evaluating the facilities that electronic dictionaries give us, than at knowing how individual users exploit them for their own purposes (Creswell 1996; Nesi 1999; Holderbaum

1999; Heuberger 2000; Jehle 1999). Once a dictionary is published and it is on the market, it becomes the object of scrutiny by all kinds of critic, from newspaper journalists to academics. How the critic goes about their task, or ought to, is the topic of the final chapter of this book.

### 13.5 Further reading

The best place to start is with Chapter 7, 'Dictionary making', of Dictionaries: The Art and Craft of Lexicography (2001) by Sidney Landau, himself with experience of involvement in a number of dictionary projects. His Chapter 6, 'The corpus in lexicography', is also of relevance to the discussion in this chapter (13.2).

Bo Svensén's Practical Lexicography: Principles and Methods of Dictionary Making (1993) and Ladislav Zgusta's Manual of Lexicography (1971), though a little old now, both review some of the theoretical and practical decisions facing lexicographers in compiling a dictionary. Samuel Johnson's Plan and Preface are still worth reading for their forward-looking insights (both reproduced in Wilson 1957), and the original OED Preface and General Explanations in Volume 1 of OED1 merit study.

Some of the accounts of the making of individual dictionaries were mentioned earlier (13.1): Reddick (1990) on Johnson, Murray (1977) on the OED, Morton (1994) on W3, and Sinclair (1987) on COBUILD.

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## 14

## Criticising dictionaries

Academic lexicography, or 'metalexicography', as pursued in university departments of English or Linguistics, is concerned not primarily with the compiling of dictionaries - though academics may be involved in this, as consultants, for example - but with researching and teaching about the whole business of making dictionaries: their history, their typology, their structures, their users, and so on (Hartmann 2001). One aspect of academic lexicography looks at the products of commercial lexicography and subjects them to a rigorous critique, usually resulting in a review; though academics are not the only ones who review dictionaries. The process of critiquing and reviewing dictionaries is termed 'dictionary criticism'.

One of the crucial issues for dictionary criticism is to establish a sound and rigorous basis on which to conduct the criticism, together with a set of applicable criteria. Hartmann (2001:49) comments:

Anyone who has ever read (or written) a review of a particular dictionary will know that generally agreed criteria and standards for the assessment of quality and performance are still rare, if they can be said to exist at all.

This chapter discusses the business of dictionary criticism and proposes some ways in which it may be undertaken and some guidelines for assessing dictionaries.

### 14.1 The business of criticism

In the brief section on dictionary criticism in his chapter on lexicography in Solving Language Problems, Reinhard Hartmann (1996:241) defines it as the 'time-honoured' activity of 'evaluating and assessing lexicographic products'. It is an activity that has a long history. Every new edition of a major dictionary spawns reviews in all kinds of publication, from daily and weekly newspapers to academic journals. But dictionary criticism is an activity, as Hartmann notes, 'which has been beset by personal prejudice rather than noted for the application of objective criteria' (1996:241). This concern is echoed in Noel Osselton's article - the only one with 'Dictionary Criticism' in its title - in the International Encyclopedia of Lexicography (Hausmann et al. 1989). He notes 'a surprising lack

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of interest in general principles, with incidental sniping taking the place of any real exploration' (Osselton 1989:229).

Dictionary reviews vary enormously in their approach and in their scope, even those appearing in the same publication. Despite the fact that it is an important means by which information about dictionaries is disseminated, little attention has been paid to the methods and criteria underlying the business of dictionary criticism. A 'Note on Dictionary Criticism' (by K.D.) from the Dictionary Research Centre at the University of Exeter (date unknown) notes that: 'Of general dictionaries there are a lot of reviews which lack validity and reliability ... what is needed is a wider discussion of the standards of assessment of dictionaries.' The note goes on to argue for a more objective evaluation of dictionaries and greater clarity on what the criteria of assessment might be. It concludes: 'No definite theory of dictionary criticism has been established, and it should be made more sophisticated as one field of lexicographical research. Much remains to be done.'

Two main kinds of contribution have been made so far to the debate on criteria for dictionary criticism. One has put forward proposals for guidelines or criteria of reviewing. Roger Steiner's 'Guidelines for Reviewers of Bilingual Dictionaries' (Steiner 1984) would be a case in point, or Henri Béjoint's seven criteria for English monolingual learners' dictionaries in his comparison of $O A L D, C O D$ and $L D O C E$ (Béjoint 1978), or Robert Chapman's four proposals for a method of dictionary reviewing (Chapman 1977), or Herbert Ernst Wiegand's rather tongue-in-cheek 'Ten Commandments for Dictionary Reviewers' (Wiegand 1994).

The other kind of contribution, which is more recent, takes a set of dictionary reviews and subjects them to analysis, with the aim of discovering the enduring concerns of dictionary reviewers. Jerzy Tomaszczyk (1988) took 120 reviews of general-purpose bilingual dictionaries and distilled the concerns of the reviewers under the headings of: equivalents, directionality, reversibility, alphabetisation, retrievability, redundancy, coverage, currency and reliability. Martha Ripfel (1989) examined and compared the journalistic and academic reviews of five German monolingual dictionaries, to identify the differing evaluation and focus of the two types of review and the range of comments made by each type. Günther Jehle (1990) looked at 'popular' and 'academic' reviews of English and French monolingual learners' dictionaries, with a focus on the nature of a dictionary review as a text-type. He concludes his study thus (p. 300): 'The practice of reviewing monolingual English and French learners' dictionaries in many cases unfortunately gives the impression that the reviewer has given no prior thought to establishing
that relies solely on internal criteria may be biased too much in favour of the dictionary, unless a radically critical stance is taken to the claims that are made.

In using external criteria, a reviewer begins from a different standpoint. The criteria are determined prior to the review; they arise from the accumulated insights of the academic community (e.g. Hudson 1988; Ilson 1991). This does

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not mean that they need be overly 'academic', since the community must take account of the fact that dictionaries are as much reference works aimed at particular groups of users as they are linguistic descriptions of the lexical resources of the language. Rundell (1998:316) suggests two criteria for the evaluation of improvements in the development of learners' dictionaries:
the description of a language that a dictionary provides corresponds more closely to reliable empirical evidence regarding the way in which that language is actually used; the presentation of this description corresponds more closely to what we know about the reference needs and reference skills of the target user.

There is a need, therefore, for two sets of external criteria for the evaluation of dictionaries: one set relates to the reference function of dictionaries and the user's perspective, and is largely about presentation and accessibility; the other relates to the recording function of dictionaries, and is largely about content. Presentation and content overlap and interact with each other (e.g. the core sense and subsense division in NODE), so this is to some extent a false dichotomy. However, it will provide a useful framework for establishing criteria for dictionary reviewing.

### 14.4 Presentation

How a dictionary presents its material has an important influence on the accessibility of the information for its target users. In the preface to the first edition of the COD (1911), the Fowler brothers commented that they had used 'the severest economy of expression - amounting to the adoption of telegraphese - that readers can be expected to put up with' (p. iv). How they determined readers' tolerance levels is not stated, but they are surely rather different from those of today's dictionary users. Aspects of presentation that should be considered by a dictionary reviewer include at least the following.

## Page layout

The size of the page varies with the size of the dictionary (desk, concise, pocket - see 3.2). It is usual to have two columns, though three may be found in some dictionaries (e.g. NODE, ECED). A significant feature is the amount of white space, determined by the size of the margins, the spacing between entries, the inclusion of other material to break up the text (e.g. usage notes, diagrams, illustrations). All these can have an effect on the appearance of the dictionary page. Attractive page layout improves accessibility.

## Layout of the entries

Traditionally dictionaries have tended to pack all the information for a headword within a single paragraph, to save space; more recent editions have begun

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to unpack the paragraph and to use a new line to begin a new set of information. For example, NODE begins a new line for: a different word class, derivatives, phrases, etymology. In some learners' dictionaries (LDOCE3, CIDE), the layout has been used to enhance the user's access to specific meanings of polysemous words.

## Length of entries

This is determined largely by the practice of 'nesting', where derivatives, compounds, idioms and so on are included within a single entry under a root word. Chambers uses nesting extensively, as does the COD up to the seventh edition (1982). The use of separate headwords for compounds and derivatives, where these are individually defined, creates shorter and more numerous entries, and more white space, so enhancing page layout. Likewise the inclusion of abbreviations, affixes and combining forms as headwords (rather than in appendices) creates more and shorter entries and aids accessibility.

## Abbreviation

The use of abbreviations, like nesting, saves space, an important consideration in dictionary making. The Fowlers noted this as a feature of COD1; their assumption was that the users of the COD would understand and cope with a high degree of abbreviation. That is no longer the case, and many recent dictionaries (e.g. CED, NODE) now include the full forms of items such as word class labels and names of languages in etymologies. Fewer abbreviations mean greater accessibility.

Academic reviewers tend to concentrate on the content of dictionaries, but presentation and accessibility should not be ignored, because they make a significant contribution to enabling users to be successful in extracting information from the dictionary.

### 14.5 Content

Hudson's (1988:310-12) 'checklist of types of lexical fact' would provide a starting point for criteria of content, or alternatively Ilson's (1991) more inductively arrived at set of headings would serve. Such a set of criteria would encompass at least the following.

## Range of vocabulary

Modern dictionaries are keen to claim that they have included the latest words from areas where neologisms are common (e.g. business, information technology, the environment, medicine), as well as coverage of other national varieties of English (e.g. American, Australian). A reviewer would need to determine whether, for its size and scope, the dictionary had adequate coverage of up-

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to-date, technical, international and, if appropriate, regional lexis. Where a dictionary includes such items, geographical and biographical entries would also come under this heading.

## Word formation

On the one hand, this relates to whether affixes and combining forms are treated as headwords or gathered in an appendix, or not given any attention at all (cf. Prčic 1999). On the other hand, it relates to the treatment of derived and compound words, what the criteria are for separate headword status as against nested run-on. Also relevant here is the treatment of noun/adjective pairs that are not cognate, e.g. church - ecclesiastical, law - legal, mind - mental, lung pulmonary. The judgement to be made is whether the account of word formation enables a user to ascertain the formal (morphological) relations between words.

## Homographs

The usual basis for more than one headword for a single spelling is different etymologies. In some dictionaries (e.g. LDEL) each word class that a lexeme belongs to occasions a new headword. In COBUILD1 there is only one headword per spelling, whereas more recent monolingual learners' dictionaries (LDOCE3, CIDE) have multiple entries based on meaning. The criteria for determining what is a headword have important consequences for lexical description as well as for accessibility.

## Sense division

For words that have multiple meanings (senses), dictionaries do not always make clear how the senses have been established (cf. Allen (1999) on 'lumpers and splitters'), or the order in which they have been arranged. A tendency is emerging (e.g. NODE, COD10) to pull back from the over-differentiation of senses that has occurred in the past (CED, Chambers). The issue here relates both to the adequacy of the lexical description and to how straightforward it is for the user to find the desired sense.

## Defining

This is usually seen as the crucial task of the lexicographer, and there are some well established defining styles, notably the analytical (Kipfer 1984:66-8). However, these have been extended in recent years, especially in learners' dictionaries (e.g. with whole sentence definitions). Some dictionaries include a certain amount of encyclopedic information in their definitions, especially for words referring to flora and fauna. Not only does a reviewer need to assess the adequacy of the definitions, but also whether they are stylistically appropriate for the intended users.

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## Beyond denotation

Under this heading is included other aspects of a word's lexical behaviour over and above its denotation, such as its lexical relations (synonymy, antonymy, hyponymy - as indicated systematically in COBUILD1), its typical collocations, and any shared connotations. Sometimes this information is incorporated into definitions, but it is rarely handled systematically, though the 'synonym essays' in LDEL2 and ECED constitute a rare exception. Yet this information also contributes to an understanding of a word's meaning.

## Pronunciation

There are two issues here: the transcription system, which is almost universally IPA now in British dictionaries, and the accent to be represented. While many dictionaries now give alternative American pronunciations, no account is taken of the fact, for example, that the
majority of British speakers say /b t/ and /græs/ rather than /gra:s/. Some native speaker dictionaries (e.g. NODE) are now giving pronunciations only for words that are problematical, but what may be designated a problematical pronunciation is a matter of judgement (Allen 2000).

## Grammar

Dictionaries have traditionally given word class (part-of-speech) labels, and for verbs distinguished 'transitive' and 'intransitive' uses; NODE acknowledges that these may be opaque terms for modern users and substitutes 'with obj' and 'no obj'. Rarely have native speaker dictionaries given much more information about grammar beyond this; CED, and now NODE, are exceptions. By contrast learners' dictionaries have aimed for full coverage, which raises the question about how grammatical information is represented for effective access. A reviewer needs to evaluate how much information about the grammatical operation of words is necessary for a dictionary to fulfil its recording function, as against the need not to provide too much unnecessary information for the intended users.

## Usage

Dictionaries routinely label words or senses of words with 'restrictive' labels, to indicate that the word or sense may be used only in a specific context. Such labels may relate to: time (obsolete, archaic), dialect (North American, Australian English, Scottish), formality (informal, colloquial), evaluation (derogatory, pejorative, euphemistic), status (slang, taboo), field or topic (Astronomy, Music, Telecommunications). The extent to which dictionaries are consistent in using their range of usage labels and how they apply them are matters for the critic to evaluate. Some dictionaries include 'usage notes', especially to give

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guidance on controversial areas, e.g. the preposition to be used after different, the distinction between disinterested and uninterested. A critic may note how 'conservative' or 'progressive' a stance is taken by a dictionary on such issues.

## Examples

All dictionaries give example sentences or phrases to illustrate word meaning, grammar or usage. They are particularly numerous and prominent in learners' dictionaries, where they are seen as playing a crucial role. A number of questions need to be asked by the critic, relating to: the extent of the use of examples, what role they are seen to play in exemplification, where the examples come from (corpus or invented), and how consistently the dictionary's policy on examples is implemented.

## Etymology

Since the etymological dictionaries of the eighteenth century, it has been customary to include information about etymology in native speaker dictionaries, though not in learners' dictionaries (Chapter 10). It might be argued that such information has no place in a dictionary of the contemporary language and should be confined to 'historical' dictionaries (such as OED and SOED), though Hudson (1988) includes etymology in his checklist of lexical facts. The amount of etymological detail that general dictionaries include is variable; in some cases it is just the language of immediate origin, or the etymology may be traced back as far as possible, and perhaps with cognates in related languages. It is a matter of critical evaluation whether the information in the dictionary under review is appropriate to its size, purpose and intended users.

## Special features

A dictionary will often seek to distinguish itself from its rivals by including a special feature, e.g. the synonym essays and other boxed comments in LDEL2, usage and other notes in NODE, word formation boxes in COD10, misspellings in ECED, frequency information in COBUILD and LDOCE3. Sometimes these are a genuine enhancement of the information that the dictionary gives; sometimes they are more of a marketing gimmick. Other special features may be incorporated in the front-matter or the appendices, e.g. the essay on English as a world language in CED, or the punctuation guide in COD8/9. The question is whether they add to the lexical description and the coverage and usefulness of the dictionary.

### 14.6 Perspective

Besides following an appropriate method and making judgements against an explicit set of criteria, it is also possible for a reviewer to conduct dictionary

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criticism from a number of different perspectives. The discussion so far has more or less presupposed that dictionary criticism is undertaken from the perspective of the academic linguist or metalexicographer, applying lexicological and lexicographical theory and insight to the task. Certainly, in the reviews that have appeared in the International Journal of Lexicography, this has been, understandably, the predominant perspective adopted. But it has not always been appropriate. For example, there was a review of OALD4 by Dwight Bolinger (1990), which took the dictionary to task for not representing accurately some very subtle syntactic peculiarities of verbs, which, had they been so treated, would have probably baffled most users of the dictionary. Bolinger had, uncharacteristically, not appreciated the need for what Rundell has called 'a more utilitarian lexicography' (Rundell 1998:337), where there is a tradeoff between the needs of the user and the meticulous accuracy of the lexical description.

An alternative perspective to that of the metalexicographer would be that, for example, of the target user. The dictionary would be judged, by the method and on the criteria stated, from the point of view of the needs, expectations, prior knowledge and reference skills of the intended group of users. For an example, see Jackson (1995) which makes a comparison of LDOCE2 and the German learners' dictionary, Langenscheidts Großwörterbuch Deutsch als Fremdsprache.

A third possible perspective would be that of the language teacher - particularly in respect of learners' dictionaries - who would judge the dictionary from the point of view of its suitability for the language teacher's task and for the students that they are teaching, whether in a first or a second language context. Higashi et al. (1992) review COD8 from this perspective in the Japanese context, perhaps inappropriately, since COD8 was not intended as a pedagogical dictionary, although the COD seems to have been used widely for this purpose in Japan.

The reviewer's perspective can act as a focus for the attention to be paid in the critique to different aspects of the dictionary's presentation and content, especially since it is difficult to treat every aspect in a single review.

### 14.7 Purpose

In conclusion, we may reflect on the purposes for which dictionary criticism is carried out. Some reviews, especially in newspapers and magazines, have as their main purpose to inform the public of the existence of a new edition of, usually, a well-known dictionary; the content of the review then often reflects the publisher's press release or the dictionary's blurb. Other dictionary reviews, like any book review, are directed at an interested public (teachers, students, crossword addicts) and have as their purpose to inform this audience of the content of the dictionary and its fitness for their needs.

Reviews of dictionaries that appear in academic journals, such as the International Journal of Lexicography, while informing the journal readers about the existence and contents of the dictionary, are also intended in many instances to make a contribution to academic lexicography. Such reviews are often more

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thorough, pursue a more rigorous methodology, and draw on the accumulated wisdom and expertise of the academic community of dictionary scholars. There is one further purpose that academic reviews may have. Since their critique is drawn from an expert knowledge of dictionaries, dictionary making and dictionary use, they often propose ways in which dictionaries may be improved. So, they are offering advice to working lexicographers and dictionary publishers, and contribute towards the development of both practical and academic lexicography.

If dictionary reviews are to fulfil this function, or indeed if they are to make a serious contribution to the academic study of lexicography, then it is important that dictionary criticism is conducted on a sound basis, with a clear methodology and a set of explicit criteria.

One of the purposes of this book, and of this chapter in particular, is to give you, the reader, the background to enable you to look at dictionaries, both historical and contemporary, with a more informed insight. On the basis of your study, you might attempt the review of a dictionary.

### 14.8 Further reading

There is no full-length treatment of dictionary criticism. The place to start is with Reinhard Hartmann's Teaching and Researching Lexicography (2001), where he deals with the topic in Chapter 4, Sections 4.3 and 4.4, which also contain references to other relevant articles and
books.
From there it would be useful to read some of the reviews that have appeared, for example, in the International Journal of Lexicography. The reviews, mentioned earlier, of COD8 by Higashi et al. (1992) and of LDEL2 by Masuda et al. (1994), are particularly recommended; but most numbers of the journal contain dictionary reviews of varying extent and comprehensiveness. The other journal in which dictionaries are regularly reviewed is English Today.

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