consulted to see the forms with the laryngeals present.) For the history of words in English, I have used the *Oxford English Dictionary* (Oxford University Press, 1989) extensively.

Phonetic Symbols and Conventions

The conventions for presenting examples used in this book are widely utilized in linguistics, but it will be helpful to state the more important of these for readers unfamiliar with them.

Most linguistic examples are given in italics and their glosses (translations into English) are presented in single quotes, for example: Finnish *rengas* 'ring'.

In instances where it is necessary to make the phonetic form clear, the phonetic representation is presented in square brackets ([ ]), for example: [sĩŋ] 'sing'. In instances where it is relevant to specify the phonemic representation, this is given between slashed lines (//), for example: German *Bett* /bɛt/ 'bed'.

Double slashes (// //) are used for dictionary forms (or underlying representations).

The convention of angled brackets (< >) is utilised to show that the form is given just as it was written in the original source from which it is cited, for example: German <Bett> 'bed'.

A hyphen (-) is used to show the separation of morphemes in a word, as in *jump-ing* for English *jumping*. Occasionally, a plus sign (+) is used to show a morpheme boundary in a context where it is necessary to show more explicitly the pieces which some example is composed of.

It is standard practice to use an asterisk (*) to represent reconstructed forms, as for example Proto-Indo-European **pətér* or **ph₂tér* 'father'.

A convention in this text (not a general one in linguistics) is the use of ✘ to represent ungrammatical or non-occurring forms. Outside of historical linguistics, an asterisk is used to indicate ungrammatical and non-occurring forms; but since in historical linguistic contexts an asterisk signals reconstructed forms, to avoid confusion ✘ is used here for

It is standard in historical linguistics to use > to mean 'changed into', for example: **p* > *b* (original *p* changed into *b*), and < to mean 'changed from, comes from', for example: *b* < **p* (*b* comes from original *p*).

To show an environment where something occurs, the notation of / __ is used, where __ indicates the location of the material that changes, much as in the idea of 'fill in the blank'. Thus, a change in which *p* became *b* between vowels is represented as: p > b / V__V. A change conditioned by something in the context before the segment which changes is represented as, for example, in: k > c /__ i (meaning *k* became *c* [IPA [tʃ]] in the environment before *i*). A change conditioned by something in the environment after the segment which changes is represented as, for example, in: k > c / i__ (meaning *k* became *č* in the environment after *i*). The symbol # means 'word boundary', so that /__# means 'word-finally' and /#__ means 'word-initially'.

To avoid notational (and theoretical) complications, when whole classes of sounds change or when only a single phonetic feature of a sound or class of sounds changes, sometimes just individual phonetic attributes are mentioned, for example: *stops* > *voiced*, meaning 'all the stop consonants change by becoming voiced'. Distinctive feature notation and other theoretical apparatus are not used in this text in order to make the examples more accessible to readers who have less background.

Finally, there are traditions of scholarship in the study of different languages and language families which differ significantly from one another with respect to the phonetic notation that they use. For example, vowel length is represented by a 'macron' over the vowel in some (as for example, [ā]), as a colon (or raised dot) after the vowel in others (as [a:]), and as a repetition of the vowel in still others (as [aa]). In this book, for the presentation of some of the examples cited, some of these different notational conventions commonly used for the various languages involved have been kept, though in cases where difficulty of interpretation might result, forms are also given in IPA symbols.

Phonetic Symbols Chart

	Bilabial	*Labiodental*	*Dental*	*Alveolar*	*Palato-alveolar*	*Retroflex*	*Palatal*	*Velar*	*Uvular*	*Pharyngeal*	*Glottal*
Voiceless stops	p			t		ʈ		k	q		ʔ
Voiced stops	b			d				g	ɢ		
Voiceless affricates				ts	č						
Voiced affricates				dz	ǰ						
Voiceless fricatives	ɸ	f	θ	s	ʃ	ʂ	ç	x	χ	ħ	h
Voiced fricatives	β	v	ð	z	ʒ	ʐ		ɣ	ʁ	ʕ	
Nasals	m			n		ɳ	ɲ	ŋ	ɴ		
Approximants	w			ɹ			j		ʀ		
Laterals				l							

	Front	*Central*	*Back*
High			
close (tense)	i y	ɨ ʉ	u
open (lax)	ɪ ʏ		ʊ
Mid			
close (tense)	e ø	ə	o
open (lax)	ɛ œ		ɔ
Low	æ	a	ɑ

Phonetic Symbols Chart

C^h	aspirated consonant
C̪	dental consonant
C'	glottalized consonant
C^w	labialized consonant
C^j	palatalized consonant
V̥, Ç	voiceless sound
tl	voiceless lateral affricate
ɬ	velarised or pharyngealized lateral approximant
l̥	voiceless lateral approximant (sometimes symbolised as ɬ)
ɓ	voiced imploded bilabial stop
s̬	voiceless apical alveolar fricative
s	voiceless laminal retroflex fricative
č	voiceless laminal retroflex affricate
ć	voiceless prepalatal affricate (IPA [tɕ])
r (or r̃)	voiced alveolar trill
ɾ	voiced alveolar flap (tap)
l^j, l^y	voiced palatalized alveolar lateral approximant, palatal "l" (IPA [ʎ])
h	voiceless pharyngeal fricative (used in Arabic sources)
d, t, s	pharyngealized consonants (as in Arabic)
Ç . .	retroflex consonants as represented in Sanskrit, South Asian and Native American sources
i̯	voiced high front semivowel (second vowel in some diphthongs, not the nucleus of the syllable)
ʍ	voiceless rounded labiovelar approximant or fricative (devoiced w)
Ṽ, V̰	nasalized vowel
V:, V̄	long vowel (vowel length)
C:	long consonant (geminate consonant)
ñ, n^j	palatalized alveolar nasal, palatal nasal (IPA [ɲ])
x̂	fronted velar fricative
n	symbol for retroflex nasal used in Sanskrit sources
ń	palato-alveolar nasal (Sanskrit)
ś	voiceless palato-alveolar fricative (used in Sanskrit sources) (IPA [ʃ])
ś	voiceless prepalatal fricative (IPA [ɕ])
ç	voiceless alveo-palatal fricative
ʑ	voiced alveo-palatal fricative
*k̂, *ĝ, *ĝh	"palatal" stops in Indo-European

Note that usually no distinction is made between [a] and [ɑ], and *a* is

1

Introduction

ȝe [ye] knowe ek [also] that in [the] fourme [form] of speche
[speech] is chaunge [change],
With-inne [within] a thousand ȝeer [years], and wordes tho [then]
That hadden [had] pris [value], now wonder [wonderfully]
nyce [stupid] and straunge [strange, foreign]
Us thenketh hem [we think them/they seem to us]; and ȝet [yet] thei
[they] spake [spoke] hem [them] so,
And spedde [succeeded] as wel [well] in loue [love] as men now do.

(Geoffrey Chaucer [1340–1400],
Troilus and Criseyde, book II, lines 22–6)

1.1 Introduction

What is historical linguistics? Historical linguists study language change. If you were to ask practising historical linguists why they study change in language, they would give you lots of different reasons, but certainly included in their answers would be that it is fun, exciting and intellectually engaging, that it involves some of the hottest topics in linguistics, and that it has important contributions to make to linguistic theory and to the understanding of human nature. There are many reasons why historical linguists feel this way about their field. For one, a grasp of the ways in which languages can change provides the student with a much better understanding of language in general, of how languages work, how their pieces fit together, and in general what makes them tick. For another, historical linguistic methods have been looked to for models of rigor and excellence in other fields. Historical linguistic findings have been utilized to solve historical problems of concern to