Understanding language change

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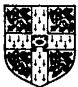
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1 Introduction

1.1 Linguistic similarities and relationships

> I knew that Magyar belonged to the Ugro-Finnic group, part of the great Ural-Altaic family, 'Just', one of my new friends told me, 'as English belongs to the Indo-European.' He followed this up by saying that the language closest to Hungarian was Finnish.
> 'How close?'
> 'Oh, very!'
> 'What, like Italian and Spanish?'
> 'Well no, not quite as close as that...'
> 'How close then?'
> Finally, after a thoughtful pause, he said, 'About like English and Persian.' (Leigh Fermor 1986:33)

Although not everyone knows the names for groups of languages, most people will recognise that certain languages share similarities, or resemble one another in particular ways. For instance, any native speaker of English who has ever learned any French or German will have noticed that some items of English vocabulary look and sound more like their translation equivalents in German (as in (1a)), or in French (1b); others share affinities with both (1c), or indeed with neither (1d). I remember being particularly delighted, on beginning German at school, to find how similar *Kuh* [ku:] 'cow' and *Tochter* [tɒxtəʁ] 'daughter' were to the [kʉ:] and [dɒxtəɹ] found in my Scots dialect.

(1)	English	French	German
a.	*hand*	*main*	*Hand*
	milk	*lait*	*Milch*
	son	*fils*	*Sohn*
	book	*livre*	*Buch*
b.	*colour*	*couleur*	*Farb*
	flower	*fleur*	*Blume*
	knife	*canif*	*Messer*
	river	*rivière*	*Fluss*
c.	*cat*	*chat*	*Katze*
	mother	*mère*	*Mutter*

	three	*trois*	*drei*
	night	*nuit*	*Nacht*
d.	*horse*	*cheval*	*Pferd*
	child	*enfant*	*Kind*
	black	*noir*	*schwartz*
	cloud	*nuage*	*Wolke*

The discipline of comparative linguistics involves the identification, enumeration and evaluation of such cross-linguistic similarities. On the basis of a close inspection of the vocabulary and structures of the languages under inspection, linguists can propose groupings of languages which show close and consistent similarities into families. For instance, we find that Latin, German and English have a large number of words which show regular and repeated correspondences of a particular sound in one language to another sound or sequence of sounds in the others, along with similarity in meaning. These words are cognates, and we hypothesise that they derive from a common ancestor. However, as (2) shows, these similarities do not extend to the Indian language Kannada, which does not have forms cognate with those in the three European languages.

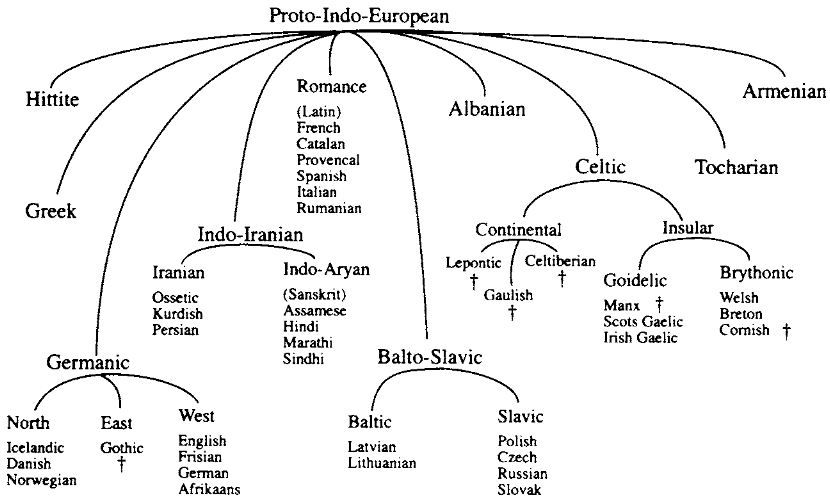
(2)	English	Latin	German	Kannada
	mouse	*mūs*	*Maus*	*ili*
	father	*pater*	*Vater*	*appa*
	three	*trēs*	*drei*	*muru*
	fish	*piscis*	*Fisch*	*minu*

However, although Kannada does not belong to the same group as English, German and Latin, it does have a family of its own: this is the Dravidian group, which also includes Tamil, Tulu and Malayalam – their words for 'mouse' are *eli*, *ili* and *eli* respectively, clear cognates of Kannada *ili*.

So far, however, we have only established that one can classify languages into groups on the basis of shared features and common patterns. We have barely touched on the historical relevance of such groupings, or the 'language change' of our title. We can introduce this historical dimension by taking our analysis one step further, and claiming that related languages, which belong to the same group or family, were once the *same* language: that is, they are derived, due to the operation of linguistic change over long periods of time, from a single, earlier ancestor language. To be more specific, English, German, French and Latin all form part of a much larger group known as the Indo-European family, all members of which have a common ancestor known as Proto-Indo-European. The Indo-European family includes many of the languages of Europe and some from areas further east, including India, Turkey and Iran, and has been

extensively studied from the historical point of view. Such families of genetically related languages may be represented graphically using family trees like the one in (3), which includes all the branches of Indo-European (IE), but does not list all the constituent languages, since the family is a very large one. Linguistic family trees are, rather confusingly, drawn upside-down; the root of the IE tree in (3) is therefore at the top. Proto-Indo-European is the mother language of the family, from which all the others, its daughters, have diverged. The branches below correspond to language subfamilies like Celtic or Indo-Iranian, and the individual languages, or twigs, appear at the lowest level. It is not at present clear whether the IE family has other, more distant relatives.

(3) The Indo-European languages



† = no longer spoken

Some rudimentary texts, in the shape of the first line of the Lord's Prayer in languages from seven of the branches of IE, are given in (4), to indicate the range of variation which can be accommodated within one family. These languages have been diverging from their common source for at least 5,000 years, and have become considerably differentiated, so that our methods for uncovering relationships between languages must clearly be rather powerful. However, if there is little apparent resemblance between Celtic and Balto-Slavic, or Germanic and Indo-Iranian, there is clear evidence of relationship within subfamilies, as is shown by a comparison of Scots Gaelic with Irish Gaelic, or of Latin with French; and the word for 'father', for instance, does show some consistency across the whole range of IE languages.

(4) CELTIC
Ein Tad, yr hwn wyt yn y nefoedd (Welsh)
Ár n-atheir, atá ar neamh (Irish Gaelic)
Ar n-athair a tha air nèamh (Scots Gaelic)

GERMANIC
Unser Vater, der Du bist im Himmel (German)
Fæder ūre, þū þe eart on heofonum (Old English)
Fadar vår, som är i himmelen (Swedish)

ROMANCE
Pater noster, qui es in caelis (Latin)
Notre père, qui es aux cieux (French)
Padre nuestro, que estás en los cielos (Spanish)

ALBANIAN
Ati ynë që je në qiell

GREEK
Páter 'ēmōn, 'o en toīs ouranōis (New Testament)
Patéra mas, poù eisai stoùs ouranoús (Modern)

BALTO-SLAVIC
Otīče našī iže jesi na nebešīchū (Old Church Slavonic)
Ótče naš, súščij na nebesách (Russian)
Ojcze nasz, ktörys jest w niebiesiech (Polish)

INDO-ARYAN
Bho asmākhaṃ svargastha pitaḥ (Sanskrit)
He hamāre svargbāsī pitā (Hindi)
He āmār svargat thakā pitri (Assamese)

In spite of the striking nature of some of these similarities, such relationships among languages were only recognised relatively recently. Sir William Jones first suggested that Sanskrit, Latin and Greek might be related in 1786, when he wrote, with the reverence for ancient languages common at the time, that:

The Sanskrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong indeed, that no philologer could examine them all three, without believing them to have sprung from some common source, which, perhaps, no longer exists.

Jones' conviction, and subsequent work in historical linguistics, arises from two related facts about language and linguistic change. First, patterns in language are predominantly arbitrary: that is, there is no inevitable and natural connection between, say, the English word *cat* and the small, nominally domesticated, furry feline quadruped which it denotes. This entity might as well be called a *seagull*, or a *pot*, or a *tac*, and the fact that it is not is a matter of convention, not the result of any inalienable and essential connection of sound and meaning. If languages were entirely

arbitrary, speakers of each language could invent their own word for each entity or action to which they wished to refer, and we might then expect each language to differ in random ways from every other. When, instead, we find principled and repeated similarities, such as those obtaining among the IE languages, we clearly have something to explain.

Of course, producing an explanation in terms of genetic relationship of languages, and their derivation from a common source, is only one of a number of possibilities. For instance, the sorts of resemblances we have been discussing could be due to chance; for any two languages selected at random, it is likely that there will be at least one fortuitous resemblance, such as those shown in (5).

(5)	English *man*,	Korean *man*	'man'
	German *nass*,	Zuni *nas*	'wet'
	Italian [dɒnna],	Japanese [ɒnna]	'lady'

However, coincidence is always a rather weak explanation, quite apart from the fact that we would have to assume an extraordinarily high accident rate to allow for the number of similarities between Italian and French, for instance.

There are also similarities between languages that result from borrowing: that is, one language originally had a word, and the speakers of another have imitated it and introduced it into their own language. It is certainly true that historical linguists can be misled if they do not consider language contact of this sort as a factor when attempting to explain cross-linguistic resemblances. For instance, English *street* and German *Strasse* are both borrowed from Latin *viā strāta* 'a paved road'; English *wine* and German *Wein* are loans from Latin *vīnum*; English has borrowed *river* from French *rivière*; and conversely, French has borrowed *canif* from English *knife*. However, it is highly unlikely that borrowing should have taken place as frequently, and affected as much vocabulary, as we would have to assume to account for the shared properties of the IE languages. As we shall see in Chapter 8, languages are not often quite such promiscuous borrowers; and furthermore, contact between speakers of some groups of IE languages has been rather sparse, so that it might be difficult to show when so much borrowing could have taken place. Consequently, since the other available explanations are insufficiently strong, we hypothesise that most of the similarities between the IE languages, and the members of other similar groups, are due to genetic relationship and common origin.

The fact that sound-meaning relationships are generally arbitrary also places a natural limit on language change, in that speakers must learn their native language(s) in such a way as to allow communication with the generations above and below them: since language is a vehicle of communication, it would be failing in its primary function if it did not

allow parents to be understood by their children, or grandchildren by their grandparents. It follows that change is most unlikely to occur in catastrophic ways, altering the whole structure of a language and rendering inter-generational communication impossible. One theme in this book will be the identification of trends in language change; and one such trend is that change is predominantly gradual, and very frequently regular. Of course, if change were random, arbitrary and unconstrained, we would not be able to recognise languages which came from a common ancestor. The fact that we still can, some thousands of years after their initial divergence, is testament to the fact that linguistic change is often slow and steady. So, paradoxically, the arbitrariness of language ensures the non-arbitrariness of change: because language must be learned, and used for inter-generational communication, there must also be limits on how much can change, how it does so, and how fast it happens.

1.2 Language change and linguistic reconstruction

It is, in fact, possible to study the history of languages in two ways, or in two directions, just as a video may be played forwards or backwards. There exist, in other words, methods for climbing both down and up linguistic trees, or for moving both forwards and backwards in time (always with the proviso that we can go no further forward than the present day – few historical linguists would claim to be able to see, with any degree of reliability, into the future). These two parts of historical linguistics are known as the study of language change and linguistic reconstruction respectively.

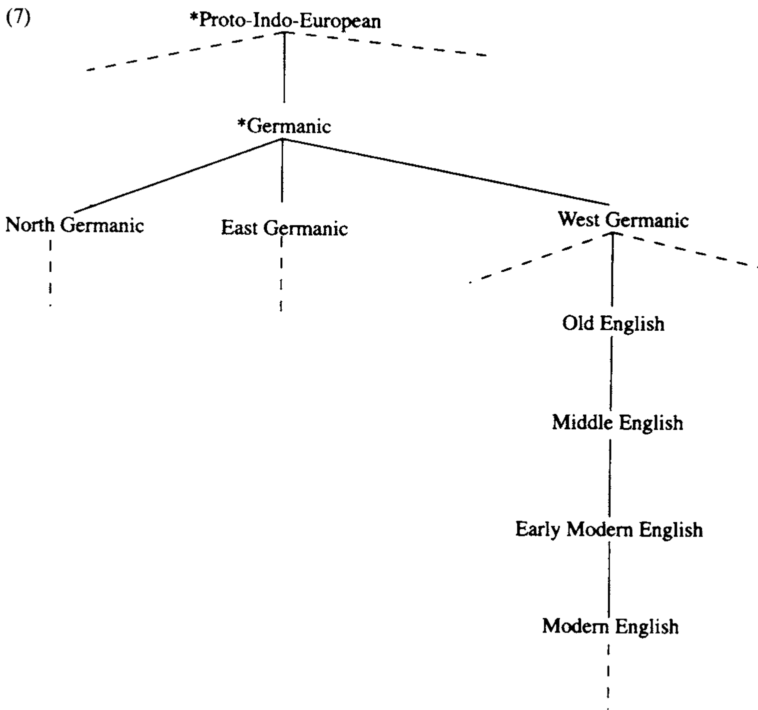
In practising reconstruction, linguists begin with the earliest actual data available for the members of a language family, whether written or spoken, and attempt to ascertain what earlier stages of the languages, or ultimately their common ancestor, might have been like. For instance, in (6) some words cognate with English *ewe*, from various IE languages, are given; by the methods of linguistic reconstruction, these can be traced back to a projected ancestral form in Proto-Indo-European, the mother language. This proto-form appears in (6) with a preceding asterisk, to indicate that there is no direct evidence for it; we have no texts and no speakers, and must rely on comparative reconstruction using the daughter forms to hypothesise what the word would have been.

(6) Proto-Indo-European *owis

Lithuanian	*awis*	Greek	*ois*
Luwian	*hawi*	Sanskrit	*avis*
Latin	*ovis*	English	*ewe*
Old Irish	*oi*		

Although the methodologies of linguistic reconstruction are powerful and sophisticated, and much of interest can be said about them, reconstruction will not be pursued in this book. The speed of current developments in both subfields of historical linguistics makes it impossible to do justice to both in a single volume, and our topic here will be the other subdiscipline, language change. That is, we shall concentrate on the development of earlier stages of languages into later ones, and the mechanisms involved, rather than on the reconstruction of hypothesised past language states from present or recorded ones; we shall be moving from the past closer to the present, rather than extrapolating from the present into the past. We shall therefore be charting developments over time from nearer the top of linguistic trees like that in (7) to nearer the bottom, and attempting to seek patterns which repeat themselves from family to family and period to period, as well as explanations for such repetitions.

(7)



Part of our investigation will focus on *what* in fact changes in the course of linguistic change. It is as well to be clear now that the very notion of 'a

language' is an idealisation, a shorthand term for the usage of a group of people, all of whom consider themselves to be speakers of Norwegian, or Welsh, or Quechua. Some people may think of 'Welsh', for instance, as the linguistic units and patterns which all Welsh speakers have in common; or perhaps as the totality of units and patterns which make up the usage of *all* Welsh speakers; others might consider 'Welsh' to mean 'Standard Welsh', and not include dialectal or non-standard usage in their definition. To some extent, therefore, we have to recognise that the notion of a language is not a linguistic one at all, but rather a socio-political matter. However we define language, we must also accept that whole languages do not change wholesale: as discussed above, it is rather the case that only small elements of them alter at any particular time, and that these are changed by speakers. In other words, we should never lose sight of the fact that languages are spoken by people for purposes of communication; consequently, speakers change languages, although that is not to say that they are necessarily conscious of doing so, or that they intend to make changes. Indeed, the history of any language, from a sociolinguistic point of view, is the story of an unbroken chain of generations of speakers, all able to communicate with their parents and children while perhaps noticing minor differences in inter-generational usage, and all believing they speak 'the same language'.

It follows that we should be careful not to see languages as single entities; they are rather amorphous masses made up of accents, dialects and ultimately individual idiolects. On the other hand, linguists often find it useful, convenient, and enlightening to idealise, and to talk about developments in a language – after all, certain changes must ultimately affect all speakers, since there are for instance no English speakers today who natively use Old English, while the rest of us have moved forwards to the Modern variety. It can be profitable to recognise that there is an idealised system which native speakers of a language, or perhaps a dialect, share – so long as we remember that we are abstracting, or idealising. It is clear that there are also norms of behaviour which members of a speech community perceive, although they do not always follow them: for instance, most British English speakers consider it to be 'wrong' not to produce the [h] in words like *hat*, *high* and *heaven*, although many who recognise this overall attitude in the speech community nonetheless drop their own [h]s. If we recognise that there are individual idiolects, shared norms, and an idealised linguistic system, we can in theory study language change in all of these areas, and their possible interrelations: that is, an individual or group of individuals may produce a novel pronunciation or other form of speech, which contributes to variation in the speech community; this may ultimately be adopted by more speakers, and cause

a change in the norms of the community; and finally, it may become the expected, or standard usage, being incorporated into the shared linguistic system of native speakers of the language. This sort of interactional approach, which takes account of idealisation and variation, and involves both the individual and the language, informs much recent historical linguistics, and will form the basis for the rest of this book.

1.3 Synchrony and diachrony

Any language, or group of languages, can be approached in two different ways: we can establish the properties of the language(s) at a given point in time, in which case we are making a synchronic study; or we might wish to consider the history and development of the language(s), the domain of diachrony. Of course, our topic of language change is part of diachronic linguistics.

In what follows, I shall be presenting synchronic and diachronic linguistics as inextricably linked, and adopting the view that studying language change involves the examination and comparison of distinct language stages and systems, which may be profitably analysed using models and theories developed in synchronic studies; conversely, these models can be usefully tested against historical data, and cannot be considered complete if they do not allow for the incorporation of change into the grammar. This approach requires a little consideration here, since not all linguists agree that synchronic and historical studies can or should overlap: some, on the contrary, adhere to the absolute distinction of synchrony and diachrony proposed by Saussure, who claimed that 'the opposition between the two viewpoints, the synchronic and the diachronic, is absolute and allows no compromise' (1974: 83). This assertion arose primarily from Saussure's idea that a language should be described from the point of view of its current speakers; these know, or perceive their language only in its synchronic state, and generally have no access to its history. So, if linguists wish to describe a language from the average speaker's-eye view, their goal will necessarily be the description of the single synchronic state. Historical linguistics could then be carried out, but would involve comparison of successive states as established by synchronic study. It follows that many synchronic linguists have seen diachronic work as secondary, and indeed often as an unnecessary extra.

A number of countering observations can be made here. It may, in fact, be the case that neither the synchronic nor the diachronic approach can provide a true picture of a language, but rather that both furnish us with particular types of information, which may then be combined to give a fuller account. To use a technological metaphor, a synchronic analysis is

like a still picture, whereas a diachronic one is more like a film. Imagine, for instance, walking into a cinema after the programme has begun, but finding that projector problems mean the picture has frozen. The single image you can see is of a man holding what might be a half-open book, unless of course it is a half-closed one. Now, a synchronic analysis would involve looking intently at this single frame, then formulating more or less elegant, illuminating and helpful hypotheses about it. On the basis of this analysis, we might even predict whether the book is being opened or closed. However, a diachronic analysis would introduce further information which might make our interpretation clearer. If we run the film backwards, then study the sequence of events leading up to the crucial frame, we are likely to glean some insight into the present situation. If previous shots show the character with a closed book, which he then begins to open, we have good evidence that the original image shows a half-open book. Of course, without moving the film forwards, we still cannot be absolutely sure that we are correct, and the problem with being a linguist, rather than a soothsayer or even a cinema projectionist, is that we can only look back and not into the future. Nonetheless, it seems that past events may cast light on present situations, so that we may understand current systems better by considering how they came to be. For these reasons, historical linguists may be able to illuminate synchrony, the study of a single language state, through diachronic work: understanding language change means understanding language better.

Furthermore, it seems that synchrony and diachrony, or the present and the past, cannot in practice be as separate as Saussure's dictum assumes, either in language or elsewhere. We might take the analogy of a tree, which is, as perceived at a particular moment, a synchronic fact. However, if we look at it from the roots up through the trunk to the branches and leaves, we are seeing the way the tree has grown and developed over time, to become the synchronic entity it now is. If we want to force a synchronic analysis, we can rob the tree of part of its diachronic dimension by cutting it down; but although we can eliminate its future in this way, we can't remove its past: in the cut surfaces of the trunk there will be rings, which reflect the age of the tree and the environment in which it has been growing. Languages, in this sense, are rather like trees; they have a past, and the synchronic state is a function of that past development. It is true that native speakers may not be aware of the history of their language, as they may not understand the mechanism by which seeds become plants, but that has never stopped botanists from developing diachronic theories, and arguably should not stop linguists either.

To pursue a more linguistic line of reasoning, most native speakers of any given language do not know the International Phonetic Alphabet, and

cannot draw syntactic tree diagrams to show sentence structures; but they do produce sounds and sentences, and linguists are responsible for analysing these using the best tools available. If we are truly interested in investigating the nature of language, then we must note that 'whatever else languages may be, they are objects whose primary mode of existence is in time' (Lass 1987: 156–7). In other words, one property of language (or at least of all the languages studied so far) is that it changes, and linguists and linguistic theories should therefore be able to accommodate that fact, and ideally to say interesting things about the nature and causes of such change. It follows that, although historical investigation may be subsequent to synchronic analysis, since it involves the comparison of successive synchronic states, an adequate linguistic theory must involve a diachronic dimension, and synchrony and diachrony are intertwined. To come back to an earlier analogy, if we do not accept, and reflect in our theories, that 'tall oaks from little acorns grow', how much can we really claim to know about trees?

1.4 The organisation of this book

It follows from the discussion above that the aim of this book is to consider theories of language change as part of general linguistics: we will not simply catalogue changes, but use these to reflect on the nature of language, which, among other things, is inherently mutable. The changes we shall be considering affect all areas of the grammar: the sound system, or phonology; word-structure, or morphology; sentence-structure, or syntax; and meaning, or semantics. The changes will also be from a wide range of languages, although the bias towards Indo-European in historical linguistic research, and in my own background, will necessarily be reflected to some extent. In examining these changes, we shall also consider and evaluate a number of theories which have been formulated to account for them, and will return periodically to three related problems of linguistic change: the question of actuation, or how changes start; the transmission, implementation, or spread of change; and the more general issue of how and indeed whether linguistic changes can be explained.

The book is also divided into two halves, although the topics of the two sections are interrelated. Each of Chapters 2 to 7 focusses on changes in one particular area of the grammar: the phonetics and phonology in Chapters 2 and 3; the morphology in Chapter 4; the syntax in Chapters 5 and 6; and the semantics and lexicon, or vocabulary, in Chapter 7. The selection of changes reviewed in each of these chapters is by no means intended as exhaustive; rather, changes are included if they are of particular relevance in the history of the discipline, or of particular interest for a

general account of change, or especially important for the relationship of synchrony and diachrony. Chapters 8 to 12 are more topic-oriented, and are not restricted to specific linguistic levels: thus, Chapter 8 deals with the effects of linguistic contact; Chapter 9 involves sociolinguistics and the study of linguistic variation; pidgin and creole languages are discussed in Chapter 10; language death in Chapter 11; and the question of linguistic evolution is the topic of the final Chapter 12. Each of the topics explored in Chapters 8 to 12 has been the focus of a good deal of recent work in historical linguistics, and all seem likely to be important for the development of the discipline.

Three questions of organisation should be considered a little further here. First, anyone with any knowledge of historical linguistics will notice that certain topics are absent from this book. In many cases, this is because I consider them to be more appropriate to a discussion of linguistic reconstruction than language change, although some areas, such as the consideration of written evidence and the problems of its interpretation, might plausibly be included in either field. I have also excluded extensive discussion of matters of prescriptivism, language academies, and other components of language planning, on the basis that 'language planning is *deliberate* language change' (Rubin and Jernudd 1971: xvi); we concentrate here primarily on unplanned, or involuntary changes. I apologise to any reader who finds his or her favourite topic omitted, but have been constrained in my selection by obvious considerations of space.

Secondly, each of Chapters 2 to 7 is restricted to a single area of the grammar purely as an aid to exposition; this does not reflect a view that the linguistic levels operate entirely in isolation and without reference to one another. In fact, this isolationist viewpoint will break down periodically throughout the first half of the book: for instance, in Chapter 3, interaction between the phonology and morphology is assumed, while Chapter 4, on morphological change, introduces the concepts of analogy, which reappears in the syntax in Chapter 5, and of iconicity, which is of much more general relevance and plays a major part in Chapters 6 and 7. Similarly, Chapter 6 includes a discussion of grammaticalisation, a type of change involving not only the syntax, but also the phonology, morphology and semantics; and in Chapter 7, changes in both the semantics and the vocabulary are included, on the basis that it is not possible to talk about semantics in isolation from the words which express particular meanings. It might be argued that this framework of approaching changes as affecting or located in specific grammatical systems consequently breaks down too frequently to be useful. As noted above, it is adopted for purely presentational reasons; but having selected such a framework, one might then make it rigid, concentrating on changes which can be localised in

particular areas of the grammar: however, I prefer to compartmentalise the grammar for reference purposes, while confessing that there are phenomena which cross compartmental boundaries, and not concealing from the reader the fact that interaction and sometimes confusion do occur. This approach reflects current practice in much synchronic linguistics, where individual grammatical areas are recognised, but interaction is also permitted.

The final organisational comment relates to the causes of linguistic change. Whatever our views on the explicability of changes, it seems clear at least that some have internal motivations, within the linguistic system itself, while others are motivated by external factors, and notably by contact between languages. I have chosen to examine the topic of language contact in Chapter 8, as an area of interest in its own right, although influences of one language on another will frequently be mentioned elsewhere. This partial isolation of the topic has the drawback of leaving the tension between internal and external causation implicit rather than explicit in most chapters: however, it is again more straightforward to deal with different motivations separately; we must simply ensure that we do not forget the degree of idealisation involved. With this caveat in mind, we now proceed to an exploration of sound change.