

Language Change

3 *Language change*

- 3.1 The nature of language change
 - 3.1.1 Internal and external motivation
 - 3.1.2 Consciousness and attitudes
 - 3.1.3 Why change happens
 - 3.1.4 Handling change
- 3.2 Relative chronology
- 3.3 The force of analogy
- 3.4 Lexicalisation and grammaticalisation
- 3.5 Remnants of former processes
- 3.6 Transmission and propagation of change
 - 3.6.1 Gradual or global change
- 3.7 The techniques of historical linguistics
- 3.8 Instances of language change
 - 3.8.1 Phonological change
 - 3.8.2 Morphological change
 - 3.8.3 Semantic change
 - 3.8.3.1 General features of semantic change
 - 3.8.3.2 Types of semantic change
 - 3.8.3.3 Means for extending word stock
- 3.9 Change in present-day English
 - 3.9.1 Shifts in the lexicon
 - 3.9.2 Shifts in syntax
 - 3.9.2.1 New words by class shift

4 *Language typology*

- 4.1 Language types
- 4.2 Word order in languages
- 4.3 Implications of language type
- 4.3 Typological change in English
- 4.4 Drift and language typology
- 4.5 Language typology and universals
- 4.6 Cross-categorical generalisations
- 4.7 Clause organisation among languages

5 *Language contact*

- 5.1 Language shift
- 5.2 Dialects in contact
- 5.4 Areal linguistics

6 *Language variation*

- 6.1 Pidgins and creoles
- 6.2 Developmental stages of pidgins and creoles
- 6.3 General features of pidgins
- 6.4 Grammatical restructuring
- 6.5 Theories of origin

3 **Language change**

3.1 **The nature of language change**

Any treatment of linguistics must address the question of language change. The way languages change offers insights into the nature of language itself. The possible answers to why languages change tell us about the way language is used in society, about how it is acquired by individuals and may reveal to us information about its internal organisation.

There is no simple explanation for why languages change. This is an area in which there is much speculation and little proof. The area is an interesting and fruitful one but there are few if any direct answers. For this reason historical linguistics has traditionally been concerned with how languages evolve and not why they do so in one particular direction and not in another. To begin this section a number of statements about language change are to be made.

- 1) *All languages change* There is no such thing as a language which is not changing. The rate of change may vary considerably due to both internal and external factors (see below). English, for example, has changed greatly since Old English. Other languages, like Finnish and Icelandic, have changed little over the centuries.
- 2) *Language change is largely regular* One can recognise regularities in the types of change which languages undergo, even if these cannot be predicted.

3.1.1 *Internal and external motivation*

Language change can basically be assigned to one of two types: either the change is caused by a structural aspect of the language – this is internally motivated change – or it does not in which case one speaks of externally motivated change.

Internal change Internally motivated change usually leads to balance in the system, the removal of marked elements, the analogical spread of regular forms or the like. In a nutshell it produces regularity in the grammar. As languages consist of different levels, a change in one quarter may lead to an imbalance in

another and provoke a further change. For instance, a change in the pronunciation can affect the morphology of a language. In Old English the blurring of word endings led to the demise of the case system and the loss of grammatical gender in Middle English.

The existing structure of a language is important in furthering or indeed inhibiting change. For instance, English has maintained a distinction in voice among interdental fricatives as seen in *teeth* /ti:θ/ and *teethe* /ti:ð/ although the functional load is very slight, that is there are very few words which are distinguished by the difference between /θ/ and /ð/.

Other instances of internal change would be what is called ‘analogy’. This term has a number of meanings; the one intended here can be paraphrased as ‘regularisation of irregular set of forms (paradigms)’. The simplest example comes from strong and weak verbs. In English the weak verb pattern (with a /d/ or /t/ as ending in the past) is the most common. The reason for this is probably that it leaves the stem unaltered and involves only one type of ending. It is the form favoured in first language acquisition and which has spread at the expense of the strong verbs as these involve stem alteration with unpredictable forms in the past. Examples of the change from strong to weak would be *to dive : dived* (former *dove*) or *prove : proved* (former *proven* as past participle).

Regularisation can occur within a verb paradigm. Consider English *lose* and German *verlieren* ‘lose’. In the latter verb the /r/ has been generalised – compare *Verlust* ‘loss’ which still has the /s/ whereas with the English verb the /s/ (later /z/) has become dominant – compare *forlorn* (borrowed from Dutch) as in *a forlorn hope* which still shows the /r/ which alternated with /s/ originally. In Dutch one has the infinitive *verliezen* (with a sibilant) ‘to lose’ but the simple past has an /r/: *verloor* ‘lost’, hence English *forlorn*.

See section 3.3 *The force of analogy* below for more detailed discussion of analogy.

External change Change in history is regarded as externally motivated if there is no obvious internal reason for it. An instance of this is the major shift in long vowels which began in the late Middle English period. This is basically a raising of long vowels by one level and the diphthongisation of the two high vowels /i:/ and /u:/ as can be seen from the following table.

There was no discernible internal reason why this change should have started as it did in the late Middle English period, so the assumption is that there was external motivation: for some reason a raised realisation of long vowels, or a slight diphthongisation of high vowels – whichever came first – became fashionable, caught on in the speech community and so the ball started rolling and has, for Cockney at least, not come to rest since.

Another example of external change is the development colloquially of synthetic forms of auxiliary verbs, particularly in American English. Phonetic reduction leads to a fusion of *to* with a preceding verb form as in *going to* →

gonna or *want to* → *wanna*. Whether this will ever be accepted in more standard varieties of English depends ultimately on language attitudes and the readiness to accept vernacular forms.

Social reasons can be given for why change appears to be more common in some areas of language. For instance, swear words have a high turnover because they lose their force for speakers when they are used and hence the need for new and more forceful terms arises constantly.

3.1.2 *Consciousness and attitudes*

The extent to which speakers are aware of language change depends on the level affected. As might be expected, change which involves a closed class of segments is not as conscious for speakers as change which takes place within an open class. The prime example for the latter type of change is lexical change. Indeed when lay speakers mention change it is nearly always the use of new words or phrases which they comment on.

From time immemorial lay speakers have regarded language change as language decay. There are probably two main reasons for this. One is a general yearning for immutability which humans show. The other is the association of language change with a social group which the commentators disapprove of, for instance grown-ups vis à vis teenagers or the middle classes vis à vis the working classes.

The desire to stop language change and looking to the past to find models of unchanging language, has led to the notion of correct and incorrect language. Correct usage is that which is supposedly immutable – cast in iron with explicit rules, and which is somewhat old-fashioned. Incorrect usage, by contrast, is fluid, decadent, without any rules and socially undesirable. For an objective examination of language change such views are spurious. They have more to do with people who use language and our attitudes towards them than with language itself which is of course neutral.

One can get use to an item of change, no matter how unpleasant one may regard it initially. In general one can say that the first time one hears something, it is strange, the second time a little unusual, the third time it is perfectly normal. Do you find the sentence *The house is alarmed* strange? Twenty years ago you would probably have heard the sentence in the form *The house is fitted with an alarm*. But you only have to hear the first form a few times not to notice it anymore. So much for the absolute nature of ‘correct’ language.

3.1.3 *Why change happens*

Language change is not a goal of speakers. Rather it is what is called an ‘epiphenomenon’ – something which happens but which is not intentional. In linguistic terms, an epiphenomenon means that change occurs for internal or external reasons – or a combination of both – but the change is not intended by

the speakers. A comparison with a traffic jam might help to illustrate the point: if every car brakes to avoid hitting the one in front the result is a traffic jam, but the jam is not the goal of any driver, it arises as a consequence of the the compression of the traffic which results from stopping and starting. Thus the traffic jam is an epiphenomenon resulting from the behaviour of the drivers.

It is not possible to predict language change, either internal or external. For instance, German has lost the inherited ambidental fricatives from Germanic but English has not (contrast *Du* from *þu* with *thou* in English). One can say that German removed unusual, marked segments, but why did English not do the same? English simplified the complex clusters /kn-, gn-/ at the beginning of words to /n/ (*know*, *gnaw*) but German did not.

One can nonetheless offer explanations for why certain changes might have taken place or why marked elements might be retained. Consider the claim that unusual changes can be carried through if the speech community is homogenous or if for some reason they become markers of social class.

Icelandic has a distinction between long and short diphthongs which is statistically very rare in the world's languages. However, the Icelandic speech community is small, closely-knit and aware of its language and the need to preserve it was handed down by previous generations.

Nasal vowels are less usual than oral vowels statistically but nasality is often a feature of a class or recognisable groups in a society. This may account for why these vowels developed as phonemes in French, assuming that the better positioned groups in French society of the time favoured audible nasalising of vowels before nasals consonants.

Despite the lack of predictability one can observe that certain forces are applicable on different levels of language. There is a certain tension between these forces because they yield conflicting results. As can be seen from the following table, the phonetic level of language favours simply syllable codas, indeed many languages, including unrelated ones in south-east Asia, show an almost total lack of clusters at the ends of words. If a language has a complex morphology involving endings on word stems, then the phonetic tendency to reduce syllable codas can have severe consequences if this gets the upperhand, that it comes to be preferred by succeeding generations of speakers. This is what happened in the history of English and led to the demise of the complex morphology of Old English.

Dominant forces and levels of language

Phonetics Optimisation of syllable structure, merging of unstressed syllables with stressed ones, reduction in syllable coda complexity.

Morphology and syntax Clarity of structure, isomorphism with form and content (one meaning, one and only one form), regular and symmetrical sets of word forms, correspondence of linear order with temporal order in basic sentences.

3.1.4 Handling change

When two words are pronounced the same, e.g. *meat* and *meet*, linguists speak of homophony. How much of this can a language handle? The simple answer is quite a lot. The main reason is that languages contain a lot of redundancy – information specified more than once, e.g. *Fiona's umbrella* where both the /-s/ and the position of the first noun immediately before the second indicate the genitive. Furthermore, the context in which something is said usually provides unambiguous clues about what is meant.

Given that a language is a set of subsystems, disadvantageous developments in one area are often of little consequence because information from another area is still available. For instance, the homophony which arose in certain varieties of English due to the loss of syllable-final /r/ did not disturb the overall system as word-class considerations were sufficient to differentiate the resulting homophones: *bored* : *baud*, *court* : *caught*, *horse* : *hoarse*, *paw* : *pour*. Differing word-classes mean that the homophonous elements cannot occur in the same environment and so are unlikely to be ambiguous in communication. As long as the context disambiguates language, speakers would appear not to resist possible language-internal developments.

The above remarks on homophony are necessary because lay speakers frequently believe that a certain change took place in order to avoid homophony. Here is an instance of what is meant. The word for 'barrel for alcoholic drink' used to have an initial /f-/ (the inherited sound, cf. German *Fass*) but was replaced by a borrowing from the dialect of Kent which had a voiced initial fricative, hence modern English *vat*. Before this the word was homophonous with the adjective *fat*. But it would be an unsubstantiated claim to maintain that the Kentish borrowing of the noun took place in order to avoid homophony with this adjective.

3.2 Relative chronology

It is very rare that one can date a certain change precisely. What is more common is an approximate dating with a century or more. Evidence is also easier to gain for relative rather than absolute chronology by which is meant that two or more changes can be put in chronological order relative to each other. This is usually possible because the result of one change would have been different if it had preceded or followed the other. Here are some examples to illustrate what is meant.

1) Palatalisation and i-umlaut in Old English

-
- a) palatalisation *cinn* → *chin* [tʃɪn] (shift of c [k] to [tʃ])

- b) *i*-umlaut *cuning* → *cyning* [kynɪŋ] (fronting of back [u] to [y])

It is obvious that palatalisation preceded *i*-umlaut otherwise the pronunciation of the word for 'king' would be [tʃɪŋ], that is the process of palatalisation would have appeared to have become inactive before *i*-umlaut set in so that those words which experienced *i*-umlaut did not go through palatalisation.

A tendency which can be observed in the history of English is for long /u:/ to be shortened. This started in the early modern period and continues to the present-day. The forms affected by this change differ in their realisations today depending on when the shortening took effect with them.

2) *Vowel shortenings in the history of English*

	Great Vowel Shift	17c	19c	
a)	<i>food</i> /o:/ → /u:/			(no shortening)
b)	<i>blood</i> /o:/ → /u:/ → /ʊ/ → /ʌ/			(early shortening)
c)	<i>took</i> /o:/ → /u:/		→ /ʊ/	(late shortening)
d)	<i>room</i> /o:/ → /u:/		→ /ʊ/	(present shortening)

With these changes one can specify the phonetic environment in which they took place. The earliest shortening affected /u:/ before /d/. It took place before the general lowering of /u/ to /ʌ/ in southern English in the early modern period and hence underwent this change. After this shortening came that of /u:/ before /k/. This took place after the lowering of /u/ to /ʌ/ had become inactive, hence the pronunciation /buk/ for *book* and not /bʌk/. Finally, the shortening before /m/ occurs. This shortening has not been completed yet as can be seen from words which have variable realisations in British English: *room* /rʊm/ or /ru:m/. The earlier shortenings may or may not be present in different varieties of English. For instance, northern English and Scottish English do not have the lowering of /u/ to /ʌ/. Irish English does not have the shortening before velars in all cases, cf. *cook* /kʊk/ and not /kʌk/, *book* /bʊk/ (colloquially) and not /buk/.

The Great Vowel Shift is a process which began in the late Middle English period. By this time most of the French loans (Norman and Central French) had already entered the language and thus underwent the shift, e.g. *doubt* /daʊt/ from an earlier /du:t/. However, a significant number of loans were not affected and so one must assume that they were borrowed after the shift had been completed.

3) *Great Vowel Shift and French loans*

	ME	vowel shift	EME
a)	<i>divine</i>	/i:/ → /ai/	<i>machine</i> /i:/ (no shift)
b)	<i>gout</i>	/u:/ → /au/	<i>rouge</i> /u:/ (no shift)

One must also consider the operation of later analogy. There are a few instances where orthographic *ou* is realised as /au/ for example with *route* /raut/ in American English whereas British English still has /rut/.

Relative chronology can also be useful when dealing with borrowings, for instance, English *wine* is ultimately a Latin loanword, *vinum*, borrowed in continental Germanic when Latin *v* was /w/. The word *vine* is a later borrowing of the same word in the Middle English period from Latin via Old French where the pronunciation of *v* was /v/.

4) *Latin /w/ and /v/*

Latin <i>vinum</i> /winum/	↔	Germanic <i>wīn</i> (later English <i>wine</i>) with /w-/
Old French <i>vine</i> /vi:n/	↔	(Middle + Modern) English <i>vine</i> with /v-/ (< Latin <i>vinea</i> ‘vine(yard)’)

3.3 The force of analogy

The term *analogy* is used in a number of different senses and it is essential to distinguish these carefully. *Proportional analogy* and *analogical levelling* are the two main types and a large number of forms in the history of English have been affected by their operation.

Proportional analogy This kind of analogy can be summarised as a change on the basis of the following formula.

$$A : B :: C : ? \quad (\text{A is to B as C is to D})$$

This can be seen working in the occasional change of weak to strong verbs, a change which is attested in varieties of southern American English and in first language acquisition (1) and is attested in cases of shift of conjugational type in the history of English (2).

- | | | |
|----|------------------------------------|---|
| 1) | A: <i>sing</i> : B: <i>sang</i> | C: <i>bring</i> : D: <i>brang</i> (for <i>brought</i>) |
| 2) | A: <i>teach</i> : B: <i>taught</i> | C: <i>catch</i> : D: <i>catches</i> → <i>caught</i> |

Analogical levelling The second sense in which analogy is used is ‘spread of a dominant pattern’, or in single cases, ‘change under the influence of another

form'. For instance, in Irish there is a process – called nasalisation – where after certain numerals a nasal is prefixed to a word, e.g. *dún* 'castle' but *seacht ndún* 'seven castles'. This process was triggered by the numerals 7, 9 and 10, which originally ended in a nasal, cf. Latin *septem*, *novem*, *decem*. However, the number 8 also causes nasalisation in Irish although it did not originally end in a nasal, cf. Latin *octō*. However, the analogy with 7, 9 and 10 meant that it was brought into line with the numbers preceding and following it, hence *ocht ndún* 'eight castles'.

Analogical levelling can also be seen in the phonetic adaptation of words on the basis of semantic similarity as with the following French loans after they were borrowed in the Middle English period (this kind of change is sometimes labelled *contamination*).

denizen and *citizen* (< *citeain*) *male* and *female* (< *femelle*)

The spread of a dominant pattern frequently involves a levelling of phonological contrast in order to attain paradigmatic regularity. This type of analogy only occurs after a certain change has become unproductive in a language. An example of this can be taken from the development of plural types in English. In Old English there were various plural patterns, some of which survived into the Middle English period. Of these the nasal plurals lasted a considerable time but were finally replaced by the s-plural, e.g. *eye* has the plural *eyen* in Chaucer but later shows a final *s*. Here the *s*, as the dominant plural suffix in the history of English, came to replace the nasal which is nowadays only present in English in *ox* : *oxen* as well as in *children* and *brethren*. (actually 'double' plurals as they contain the former /r/ plural suffix as well, see below).

The common ground for both meanings of analogy discussed here is the creation of symmetry. This would seem to suggest that speakers value symmetry in an abstract way and that their knowledge of language and its possible forms includes the concept of system regularity.

Analogical maintenance In general /w/ after /s/ and before /o/ is lost in English. However, in those cases where the /w/ is present elsewhere in a word's paradigm this may exert pressure to maintain it. Hence *sword* has lost the /w/ but *swore* has retained the /w/ because this occurs in the present tense *swear*.

Analogical creation Here again one form acts as a model for another. In this instance, however, it is not a re-arrangement of an already existing form which occurs but a new word is created on the basis of another. *Moonscape* modelled on *landscape* is a good example. *Regardless* → *irregardless* on the basis of *irrespective* would be another case.

Salience and productivity The dominant pattern for any series of alternations can be called a productive pattern. This raises the question of why a given

alternation or ending should come to be favoured by speakers. Take the example of the change from /θ/ to /s/ in the third person singular verb inflection as with *hath* ← *has*. Why should /s/ be favoured here? One good reason is that the alveolar fricative is phonetically more salient than the dental fricative.

This notion of salience can be invoked in the development of plural patterns in English. In Old English *r*-plurals occurred. Some of these were replaced by nasal plurals and later virtually all were replaced by the *s*-plural type as noted already. This progression illustrates an increase in phonetic salience for the plural ending. The transition from *r*-plural to nasal plural type can be seen in the plural of *child* which is formally a double plural, containing both /r/ and /n/: *childer* + *en* → *children*.

3.4 Lexicalisation and grammaticalisation

Lexicalisation At any one time in a language certain words are transparent in their composition or in the derivational process used to construct them. A simple example is the word *asleep* which derives from Old English *on slāpe* but which in Modern English is not understood as being ‘on sleep’. In Old English one had a transparent phrase, in Modern English one has an opaque compound. The phrase became lexicalised, i.e. speakers can no longer derive it from *on* + *sleep* but learn it as a single indivisible word. The same applies to similar items such as *alight*, *alive*, *awake*.

Lexicalisation is most often connected with phonetic developments. Consider the following example. The word *pan* has full stress as it is a monosyllable, /pæn/. However *saucepan* has reduced stress on the second syllable so that the word is no longer interpreted as being ‘a pan for cooking a sauce in’. Nowadays the conceptual difference between the two words is that a pan is flat and broad whereas a saucepan is considerably deeper. One can say that *saucepan* is lexicalised, i.e. it is a single word and not now derived productively from *sauce* + *pan* by native speakers of English.

Names frequently show lexicalised elements, e.g. *Clapham*, *Greenham* which contain as second element the Old English word *hām* ‘home’ which, because unstressed, did not undergo the later vowel shifts from /ɑ:/ to /əʊ/. This situation is also to be seen with the word *hamlet* ‘small village’ which now has a short /æ/ from Old English /ɑ:/ which was raised to /o:/ and diphthongised in Early Modern English to /əʊ/ in RP, yielding *home* /həʊm/. The result is that speakers no longer see a connection between *home* and *hamlet* and the latter word is lexicalised. Another instance of such lexicalisation is *Lambeth* which contains the words for *lamb* + *heath* but where the latter is reduced to an unstressed vowel whereas the independent word *heath* retained the long vowel and went through the later vowel shift.

Examining common words from the core vocabulary of a language shows

that lexicalisation is a frequent process. For instance, the words *husband* (a Norse loan) and *woman* are now indivisible forms but they each derive from two units, i.e. *hus* + *bond* ‘house’ + ‘tiller of the soil’ and *wif* + *mann* ‘female’ + ‘man’ respectively. Further instances which involve the shortening and reduction of vowels and which have led to a dissociation between the compound and its elements are *holiday* < *holy* + *day*; *garlic* < *gar* + *lēc* ‘sharp leek’; *breakfast* < *break* + *fast*; *gospel* < *gōd spel* ‘the good news’; *sheriff* < *shire* + *reeve* ‘county warden’.

Grammaticalisation In this process words are involved in a shift in status from full lexical items to grammatical endings or words. There is usually a sequence of steps which the words pass through during grammaticalisation (development of grammatical endings).

Process of grammaticalisation

<i>Status</i>	<i>Steps in process</i>
lexical word, semi-lexical word	loss of meaning through semantic bleaching
clitic	frequent attachment to another lexical word
affix (inflection)	permanent loss of independence and retention of grammatical meaning only

A few examples from the history of English can illustrate this process clearly. Old English *lic* [li:tʃ] meant ‘form, body’ and existed as a separate word and in certain combinations, e.g. *man-lic* ‘form, body of a man’. Later it lost its independent status because of semantic bleaching (a loss of independent meaning). It was retained only as an ending *-lice* which later resulted in the modern adjectival suffix *-ly* as in *manly*, *quickly*, *slowly*. A northern pronunciation of the word without palatalisation of the final segment gave *like* which is both an independent grammatical word and an element of a compound as in *childlike*.

Another instance is provided by contrasting forms from Old English and Old Norse. *Leas* /laəs/ is an Old English form which corresponds to Old Norse *lauss* ‘loose’. This was borrowed into English and resulted in Modern English *loose*, whereas the Old English form is still to be seen in the suffix *-less* which has been grammaticalised to a privative ending as in *homeless*, *hapless* (the first element of the latter form is also a bound lexical morpheme, i.e. there is no *hap* in Modern English, although *happen* ‘occur by chance’ still exists).

A further example is provided by Old English word *hwil* ‘time’ which occurred in the dative plural *hwilom* meaning ‘during’, lit. ‘at times’. This was reduced to *while* by inflectional loss and survives as an adverb of time. Again in Old English there was a word *dōm* meaning ‘judgement, condition, realm’ (Modern English *doom*) which lost its independent status but was retained and

as an element of a compound, e.g. *free-dom* ‘realm of freedom’ > ‘freedom’. It is now taken to be a grammatical suffix indicating a quality noun as in *kingdom*, *wisdom*.

The situation just described is very common and is attested in present-day English with such endings as *-burger* which from the original *hamburger* came to be used in other cases like *cheeseburger*, *veggieburger*, *fishburger* where meat is not necessarily found. Yet another example would be modern English *lemonade* which has been expanded to include drinks from other fruits, e.g. *orangeade*. This ending is also found in with another sense, namely, ‘location with a specific function’: from an original *arcade* one now has formations like *parkade* ‘building with parking facilities’.

The development of manner adverbs in Romance provide another instance of grammaticalisation. In Latin *mente* (ablative) < *mens* ‘mind’ was used in the sense ‘with a state of mind’ as in *clara mente* ‘with a clear mind’, *lenta mente* ‘slowly’, *dulce mente* ‘softly’. Later one finds (in Italian, Spanish and French) the ending *-mente/-ment* as a general ending indicating quality: Italian *assolutamente* ‘absolutely’, French *doucement* ‘softly’, *lentement* ‘slowly’, *fermement* ‘firmly’.

Small sets phrases are a further candidate for grammaticalisation, e.g. Italian *forse* ‘perhaps’ from Latin *fors sit* ‘be the chance’ or Dutch *misschien* ‘maybe’ from *mach schien* ‘(it) may happen’.

Grammaticalisation can occur incidentally as a bye-product of some other development, notably the loss of an element which leads to the raising of the remaining element to grammatical status. In the history of French the negator *ne* was deleted, leaving the second element as the sole carrier of negation: *(ne) pas* ‘not ... step’, *(ne) point* ‘not ... point’, *(ne) personne* ‘not ... person’, i.e. ‘nobody’.

Any word class can be subject to grammaticalisation. An example from that of verbs would be the development of the future with *go* in English. This was originally locative in meaning (and still is in cases like *She goes to work at eight*) but the lexical meaning of movement forward in space came to be interpreted as a movement in time and sentences like *She’s going to buy some new clothes* show that both a locative and a temporal interpretation are possible while instances like *She’s going to say something about her new clothes* show a purely temporal meaning. The use of *werden* ‘become’ in German to indicate the future, e.g. *Er wird morgen kommen* ‘He will come tomorrow’, is a similar case of grammaticalisation.

The context in which a word or phrase is used can lead to grammaticalisation, frequently if it is reduced phonologically. An example in present-day English is *lets* which went through a development as follows: *Let us* (< ‘allow us do something’) > *let’s* > *lets* ‘why don’t we’, as in *We could go for a walk. Yeah, lets*.

Researchers on grammaticalisation, such as Elizabeth Traugott and Bernd Heine, have stressed that there are pathways of change for which one

finds cross-linguistic support. An instance of this would be the development of reflexive pronouns from intensifiers. This is well attested in the history of English where in Old English the form *sylf/seolf* was an intensifier and used much as Modern German *selbst*. The frequent co-occurrence of these intensifiers with personal pronouns, as in *Christ sealde hine selfne for us* ‘Christ gave himself for us’, meant that in time, through coalescence and univerbation (pronoun + intensifier), reflexive forms developed: *him + self* → *himself*.

Unidirectionality is a much debated issue in grammaticalisation theory. From the data presented in various studies it would seem that the path of grammaticalisation is unidirectional. There are few exceptions to this, such as Irish *muid* ‘we’ which derives from suffix for the first person plural, *-m(u)id*, as in *baileoimid* ‘we will gather’. Such cases do not, however, diminish the overall unidirectionality of grammaticalisation.

3.5 Remnants of former processes

Umlaut At any stage a language will contain remnants of processes which were once active. Such remnants are important in reconstructing previous stages of the language concerned. For instance, umlaut is a process which was once productive in English. The principle was that a high vowel or /j/ in a syllable (usually a grammatical ending) caused the vowel of the preceding syllable, if a back vowel, to be moved to a front position. This is a kind of assimilation where the frontness of the following vowel or approximant is anticipated in the preceding syllable. The umlaut process became inactive in the Old English period and no new instances of it arose in Middle English. But because the words affected by umlaut belonged to the core of the vocabulary – for instance names for humans, animals or parts of the body – and because such words change slowly if at all, traces of umlaut are still to be found in English.

Umlaut in English

tooth : teeth, man : men, goose : geese, mouse : mice,
blood : bleed, doom : deem

Various changes have obscured the original process. For example, *tooth* now has /u:/ but formerly had /o:/, compare the orthography. *Teeth* shows /i:/ today but derives from /e:/ which in turn once was /ø:/, the original change between singular and plural was /o:/ → /ø:/. Umlaut was not confined to the alternation of number in nouns. It could also occur with verbs, for instance those which originally showed the ending *-jan* underwent umlaut in the stem vowel, hence *doom* and *deem* from a very much earlier *dømjān* from an even earlier *dōmjān*.

Verner’s Law This is one of the major changes in Germanic and its effects can

be recognised to this day in the present-day languages. In essence it says that if the accent does not fall on an immediately preceding syllable then the onset of the following syllable is voiced. Thus one had 'V/s/V but V'/z/V, for example in verbal paradigms. Now the /z/ which arose in this way was frequently subject to rhotacism (shift of /z/ to /r/) so that the alternation was then /s/ ~ /r/. Indeed if the /s/ was later voiced (after rhotacism had declined as a phonological process) then the alternation may have become /z/ ~ /r/ which is what one has in *was* : *were* in present-day English.

Older forms may still be found in fixed expressions. In English there is an expression *to wend one's (weary) way* which contains the verb *wend* (cf. German *wenden* 'to turn') which is an older verb meaning 'to go'. This verb has died out but the past form of the present verb *go* – *went* – derives from this source. This process is known as *suppletion*, the appearance of a form from one paradigm in another paradigm in which it did not originally occur. Suppletion can occur with nouns as well, e.g. Russian *celovek* 'person' has the plural *liudi* 'persons' which is not related to the singular formally.

Reflexes of older words may be available in different word classes. For instance the only reflex of Old English *wyrd* 'destiny' is the present-day adjective *weird*. A reflex may also be contained in a compound as with Old English *wer* (a common Indo-European word, cf. Latin *virus* 'man') which does not exist anymore but is found in the compound *werewolf* 'man-wolf'. Another Old English word for 'man' *guma* is contained in *bridegroom* (originally *brýdguma*) but by folk etymology (see section ??? below) the second element was re-interpreted as *groom*.

Remnants of processes involving vowels are also to be found in Modern English. Consider the alternation *keep* : *kept* which has a long : short vowel alternation because in Old English there was a general shortening of vowels before two consonants: *cēpan* : *cēpte* became *cēpan* : *cepte*. This also applied to cases of gemination as with *blēdan* : *bledde* (← *blēdde*) which with the later loss of geminates (long consonants) resulted in *bleed* : *bled*.

Working backwards: unravelling sound changes The techniques illustrated above all involve the undoing of changes in order to arrive at an original form of some earlier stage of a language. This working backwards is a common method for reconstructing previous stages of a language. It consists basically of reversing known changes in order to gain time depth. A complete example of this technique is offered here to show that useful results can be achieved. The goal is to show what the original singular ~ plural alternation was for a word pair which shows an irregular alternation in Modern English, *mouse* ~ *mice*.

Singular	/maus/	– Great Vowel Shift	=	/mʌs/
Plural	/mais/	– Great Vowel Shift	=	/mi:s/

/mi:s/	– unrounding	=	/mys/
/mys/	– inflectional loss	=	/my:si/
/my:si/	– <i>i</i> -umlaut	=	/mu:si/

Original alternation: /mu:s/-SG : /mu:si/-PL

3.6 Transmission and propagation of change

If one assumes that language does not exist separate from the speakers who use it, then a major question arises for language change: how will a following generation know what changes are in progress in a current generation? The answer to this is that at any one time there co-exist two or more competing variants. Of these one is dominant and the other recessive.

Linguists believe that children during first language acquisition note not only what forms a language possesses but also what the variation among these forms is. For instance, a child would note that both *dived* and *dove* are possible preterite forms of the verb *dive*. He/she would furthermore register other relevant aspects of the distribution, e.g. if one form is more common among older speakers, only used in more formal styles or conversely predominant in colloquial usage, etc. By these means a child can register the direction in which language change is moving and later contribute to this by unconsciously favouring those forms which are preferred in the change.

This view of how language change is transmitted enables one to better understand the notion of ‘drift’ (a slow movement of change in one direction). If speakers at any point in time are aware of which variants are preferred and which are being increasingly neglected then the language can move in a definite direction as was the case with the drift from synthetic to analytic in the history of English (see section on typology ??? below).

The propagation of change would seem to follow a pattern which is found in other spheres apart from language. The pattern is termed an S-curve because of the approximate shape which it has. In essence an S-curve describes a change which starts slowly, picks up speed and proceeds rapidly but which stops – or at least slows down considerably – before it reaches completion (see discussion in section on sociolinguistics ??? above).

One can think of an S-curve like a car which is started, accelerates to a given speed, travels the greatest distance and then slows down gradually when the driver takes his foot off the accelerator. Whether the car in this example will cross the finishing line depends on how much momentum it gains in the central phase.

A linguistic example to illustrate an S-curve is the shift from /ʊ/ to /ʌ/ in early modern English. This change would appear to have started in the mid 17th century and was active for at least 150 years after this in the south of England. Not all instances of /ʊ/ were shifted to /ʌ/. The small set of forms which did not

undergo the shift from /ʊ/ to /ʌ/ are those which were phonetically resistant to the change, i.e. which were both preceded and followed by sound with inherent rounding. The elements which have such rounding are labial plosives, palato-alveolar fricatives and a velarised syllable-final [ɫ], hence *pull*, *bull*, *push*, *bush*, *should* still have /ʊ/ in standard English. These words occupy the gap between the top of the S-curve and the 100% mark on the vertical axis.

3.6.1 Gradual or global change

Where a change does not immediately encompass all possible inputs one speaks of *lexical diffusion*, that is the change spreads gradually through the vocabulary of a language affecting an increasing number of words. This type of change is contrasted in historical linguistics with what is termed the *Neogrammarian model* of change. The name comes from the group of German linguists in the late nineteenth century – called *Junggrammatiker* ‘Neogrammarians’ – who assumed this was the way all languages changed and who sought to document such change in the history of the Indo-European languages.

Imagine minute variation for all instances of a sound occurring in a community, say the sound /i:/ in the late Middle English period. This became slightly diphthongised and thus began its path to Modern English /aɪ/ as in *like* /laɪk/. The Neogrammarian model would maintain that this change affected all possible inputs. Every case of /i:/ in late Middle English – in the entire lexicon of the language – would have started to diphthongise. This cannot have happened with the later shift of /ʊ/ to /ʌ/ because there are cases of /ʊ/ left, e.g. *push*, *pull*, etc. The lexical diffusion path which is assumed in these cases is not always recognisable in retrospect. After all, even if a change proceeds in this manner, it may still in the fullness of time affect all possible inputs so that a change in hindsight looks as if it progressed according to the Neogrammarian model.

3.7 The techniques of historical linguistics

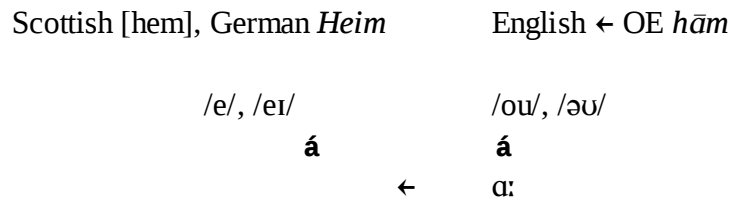
In the course of the nineteenth century when Indo-European studies (one kind of historical linguistics) evolved as a science in its own right various techniques and methods were developed which helped linguists to arrive at facts about previous stages of languages. Two main methods are used in historical linguistics – (1) and (2) below. Additional techniques which can be useful are also listed, see (3) to (5). The last technique below is important when considering the plausibility of change.

1) *Comparative method* This refers to the practice of comparing forms in two or more languages with a view to discovering regular correspondences. A simple instance from English and German concerns /t/ and /s/. With a series of native

words, i.e. not loans, one can see that where English has /t/ German has /s/: *water* : *Wasser*, *better* : *besser*, *foot* : *Fuss*. It is obvious here that English /t/ corresponds to German /s/ in non-initial position. The question is whether the /t/ or the /s/ is original. Here one can quote other Germanic languages, e.g. Swedish has *vatten*, *betra*, *fot* for *water*, *better*, *foot* and this would imply that it is German which has changed the original /t/ to its present /s/. One could also use the arguments under (5) below to show that a fricative is more likely to develop from a stop, through a general process of weakening, rather than vice versa (unless through assimilation to another stop).

The comparative method is also useful in the reconstruction of morphological endings. Take the nominative singular masculine ending of Germanic. This is postulated to have been /-z/. The evidence is as follows. Whatever sound there was at the end of masculine nominatives, it became /-r/ in North Germanic through rhotacism and is still seen in Icelandic which is particularly archaic, compare English *wolf* with Icelandic *ulfr*. Now in Finnish there are a number of well-preserved old Germanic loans such as *kuningas* 'king' which shows a final /-s/. But Finnish does not have /z/ and we know from rhotacism in other languages (such as Latin, compare *flōs* : *flōris* 'flower') that /r/ arises from a voiced sibilant so that we are justified in assuming /-az/ as the ending of the nominative masculine singular in Germanic.

Another major concern of the comparative method is justifying a postulated original form which is not attested. An example of this would be the vowel which was originally present in the words *home* (English, [həʊm]) and *Heim* (German, now [haɪm], earlier [heɪm]) (German). The vowel is called West Germanic /ɑ:/. The assumption is that it was a low back vowel and that the development was as follows.



The reason for assuming /ɑ:/ as the original vowel is that this requires the shortest movement to both a mid front and a mid back vowel. Furthermore, in Germanic long monophthongs tends to rise rather than fall so that postulating a low starting point makes sense. We also know from Old English that the vowel then was /ɑ:/.

2) *Internal reconstruction* This is the second major technique in reconstructing previous stages of languages. The basic principle is that one uses evidence from within a single language to gain knowledge of an earlier stage. Such evidence is

usually available in forms which embody unproductive processes which are remnants of those which were formerly active.

An example can be given from Old English where there was an allophony (alternation of sounds without change in meaning) which led to morphophonemic alternations in Modern English as seen in word pairs like *roof* : *rooves*, *wife* : *wives*, *life* : *lives*. The change between singular and plural here is between a voiceless and a voiced fricative. The reason for this is that in Old English [f] and [v] were allophones of each other. The [f] occurred at the beginning and end of words as well as in the environment of other voiceless consonants. The [v] was found intervocalically and in a voiced environment. Unchanging words like *five* and *live* show [v] in the singular from the previously intervocalic position of the fricative.

The voiced environment was provided in the plural where the ending /-as/ caused the word-final fricative of the singular to be in an intervocalic position and hence voiced: *rof* [ro:f] : *rofas* [ro:vas]. This alternation has remained although the automatic voicing rule has been lost and both /f/ and /v/ are now phonemes.

3) *Consistency of orthography* Latin orthography is known in its entirety and much is known of other systems as well, for instance that þ, ð in Old English were realised as [θ, ð], because the first letter is a known Runic symbol and the second a ‘crossed d’, a fricative voiced alveolar stop used elsewhere as well. Æ is a ligature and symbolised a sound between [a] and [e]. Equally this principle tends to apply to orthographical diphthongs such as *eo* and *ea* in Old English.

The orthography is not always reliable, however. Take the practice in Early Modern English of writing *ye* as a shorthand for *the*. The *y* never had any phonetic basis although it has led to a curious spelling pronunciation /ji:/ which is found in names of supposedly traditional pubs and restaurants such as *Ye Olde Shippe* /ji: əʊld ʃɪp/.

4) *Rhyme material and reverse spelling* If a word is made to rhyme with another whose pronunciation is known then the same sound value can be assumed for the first word. Take the following well-known lines from Shakespeare’s *Cymbeline* (1609).

Fear no more the frown of the great
 Thou art past the tyrant’s stroke
 Care no more to clothe and eat
 To thee the reed is as the oak.

Here one can see that the word *great* [gre:t] rhymes with *eat* which means that for Shakespeare the pronunciation of the latter was [e:t], that is the word had not

completed the Great Vowel Shift and moved up to [i:t], its present-day value.

A reverse spelling is where a writer does not use the usual spelling for a sound A but that for another sound B, as when Middle English writers used *wright* for *write*. The conclusion to be drawn here is that the sound indicated by *-gh-* [x] was already lost by this stage so that the spelling *-igh-* was interpreted as an adequate representation of /i:/ as in the word *write* (pre-Great Vowel Shift value).

5) *General knowledge of linguistic processes* If two languages have [k] and [tʃ] then one can safely assume that [tʃ] is from [k] as [tʃ] to [k] is a non-attested sound change (palatalisation as a process always involves a forward movement from the velum to the palate). Another example of a general process would be rhotacism, the development of /r/ from /z/. This is attested in a wide variety of languages and language groups such as Latin and Germanic (see above). The direction is generally from the fricative to the sonorant, though examples in the opposite direction are not unknown. Yet another example of general reasoning would concern front vowels. If a language has /y/ and /ø/ then one can assume that *i*-umlaut (the anticipation of a high front vowel in a preceding syllable) has occurred as this is generally the source of front rounded vowels. There is a second possible origin in language contact though this type of source is not accepted by all linguists.

Again an instance of general knowledge helping in an individual case would be with morphology. If a language has fewer inflections than another then it is probably right to assume that the latter is older at least more conservative as inherited inflections tend to be lost by phonetic attrition and to be gained by grammaticalisation of semantically bleached lexical elements.

Applying general knowledge in particular cases assumes that linguists have an accurate conception of what constitutes a typical and what an unusual change. There is not always agreement among scholars on this point and it is difficult to quantify 'typical' and 'unusual'. Despite these difficulties the notions are nonetheless useful. For instance, palatalisation is a very common phenomenon. It involves the shifting of an articulation from a velar position to a palatal one, normally with a change in manner from stop to affricate, this later being simplified to a fricative in many instances. This can be seen in Slavic and Romance languages, e.g. Latin *camera* became *chambre* in French, first with /tʃ/ then with /ʃ/ by affricate simplification. Old English also shows this change with /tʃ/ in southern forms and /k/ in northern forms, in Scandinavian and in German, e.g. *chin* versus *Kinn*.

A common principle may be seen to apply to a specific process in language change. For instance, there is a general principle that words normally maintain their total quantity, despite changes in individual sounds within them. Thus on consonant loss, there is frequently compensatory lengthening by a short vowel becoming long. In Middle English the /x/ sound was lost in southern

English and the vowels before this segment were lengthened, thus maintaining the entire quantity of the word, e.g. *light* was originally /lɪxt/ and later became /li:t/ (and /laɪt/ with the Great Vowel Shift). If one considers single consonants and short vowels as consisting of one unit of quantity then one can interpret the long vowel (a segment with two units of quantity) as arising due to the adoption of the quantity released by the loss of /x/.

3.8 Instances of language change

3.8.1 Phonological change

In the discussion of sound laws above, major examples of phonological change have been presented. In the current section some different types are to be found which have not been touched on yet.

Epenthesis Vowel epenthesis is a low-level phonetic rule which is used to break up clusters of consonants which are unacceptable in a certain language or variety. There are instances from the varieties of English where a prohibition on sequences of two sonorants in a syllable coda is resolved by vowel epenthesis which leads to re-syllabification (the syllable boundary is indicated by a dot in the following).

<i>film</i>	/fɪlm/	→	[fɪ.ləm]	(Irish English)
<i>arm</i>	/ɑrm/	→	[ɑ.rəm]	

Consonant epenthesis is different in its motivation. It arises in order to provide a more consonantal syllable coda. There are some words in English which originally ended in an alveolar nasal or an /s/ and which developed an epenthetic stop after the final segment. The result is that the syllable rhyme of such words shows a steady decrease in sonority from the nucleus to the right edge. Examples can be found from the history of English.

High sonority	→	Low sonority
vowel	nasal/fricative	stop
<i>sound</i> (< French <i>son</i>)	<i>against</i> (< <i>againes</i>)	

Metathesis This phenomenon involves the reversal of linear order with two segments. It most commonly occurs with a vowel and /r/ and is attested widely across many languages.

<i>bridde</i>	<i>bird</i>	(Middle English and Modern English)
<i>modern</i>	[mɒd.rən]	(Modern English and Irish English)

brennen *burn* (German and English)

Metathesis may also occur with two consonants. In the history of English and among different varieties of the language a change in order of /ks/ or /sk/ to /sk/ or /ks/ is frequent, e.g. *ask* derives from Old English *ascian* which also showed a variant *acsian*. The second form is the source for the modern word. It stems from the first form by metathesis and itself was subject to metathesis again, reversing the original change in segment order. In the period when it was /aksian/ (at least for a significant section of the West Saxon population) the palatalisation of /sk/-clusters took place – cf. *dish*, Old English *disc* from Latin *discus* – but the metathesised form was not affected. After the reversal of the first metathesis, the form *ask* resulted and retained this pronunciation which is why one does not have /æʃ/ in Modern English which would be the regular development of Old English *ascian*.

Two words from one root It may occur that different variants of a single root develop different meanings and thus survive in a language. Normally such variants do not continue if the meanings are the same. The source of the differences in form may vary. For instance, the word *parson* is a form of *person* with the lowering of Early Modern English /e/ before /r/ which is found in many other words such as *dark* (< *derk*) or in place names like *Berkshire* /bɑ:kʃə/. The form with /ar/ came to mean not just any person but an ecclesiastical person and so the two forms continued with separate meanings in the standard.

Tawny ‘yellow-brown in colour’ and *tan* ‘brown skin colour resulting from exposure to sunlight’ both go back to the same root – Anglo-Norman *tauné* – but the first still has a reflex of the /au/ diphthong whereas the latter has the vowel simplification to /a/ which usually resulted before a nasal in French loans after the Middle English period.

Dough and *duff* ‘a type of boiled pudding’ (originally a northern English form) are etymologically identical. The former shows entire vocalisation of Middle English /oux/ and the latter has the shift of /x/ to /f/ (as in *tough*) with the vowel change as follows: /ou/ → /u:/ → /u/ → /ʌ/.

Palsy is a doublet of *paralysis*. It furthermore is an early example of the loss of syllable-final /r/ as it derives from Middle English *palsie*, an alteration of Old French *paralisie*, itself from Latin *paralysis*.

Shirt is a form which derives directly from Old English *scyrte* (probably related to *short*) and meant something like ‘short garment’. In the period of Scandinavian influence the Norse form of the same root *skyrta* was borrowed and developed the meaning ‘garment for the lower half of the body’. The Scandinavian form shows the typical lack of palatalisation, i.e. /sk-/, while the Old English form has /ʃ-/ at the beginning of the word.

Collapse of phonetic form This is a common change which leads to homonymy.

The principle is simple: two words which originally had two different pronunciations end up with one due to convergence. A case in point would be the words *ear* (part of the body) and *ear* (head of corn with seeds) which have, by chance development, become identical in pronunciation. If one compares their German equivalents, *Ohr* ‘ear of body’ and *Ähre* ‘ear of corn’, then it is obvious that etymologically the English words are separate entities.

Dissociation of monosyllabic and polysyllabic words It is a commonly observed phenomenon that long vowels in words of more than one syllable tend to become short or, conversely, that vowels in monosyllabic words lengthen. This can be subphonemic as in Modern English *mad* [mæ:d] versus *madder* [mædə]. But in the course of time a re-alignment of the short vowel in the polysyllabic form with phonemically short vowels can lead to a dissociation of the two words. Furthermore, if later changes only affect one type of vowel then the words can become quite different in their sound structure. This is the case in the history of English where only long vowels undergo the Great Vowel Shift. This has led to the quite different pronunciation in pairs of words like *vine* /vaɪn/ (← /vi:n/) and *vineyard* /vɪnjɑ:d/ because only the vowel in the monosyllabic form remained phonemically long and thus underwent a shift in vowel.

H in the history of English The story of this segment reaches back far beyond Old English. The sound in Germanic is represented by χ , a cover symbol for a velar-uvular voiceless fricative which in turn derives from Indo-European /k/ by the Germanic sound shift. There was also a labialised version of the sound, i.e. with a following [w] element.

By the Old English period an allophony had developed whereby in initial position the sound was weakened to a glottal fricative /h-/, the velar form /x/ being retained in medial and final position. Late Old English shows an additional aspect in the allophony which was determined by the frontness or backness of the following vowel, i.e. [ç] occurred after high vowels, [x] was found after back ones. In the Middle English period all instances of /x/ were lost except in Scottish and Ulster English. The distribution of /h/ – which derived from /x/ – was restricted. It hardly ever occurs medially, except in a word like *behave* and is not found finally in English. Put in terms of prosody, the distribution in Modern English is such that /h/ can only occur immediately before a stressed vowel.

Then /h-/ in general was dropped but the standard and certain conservative dialects, like Irish English, retain it. Early evidence for the loss of /h/ is found in expressions like *to eat humble pie* which contains ME *umbles* ‘offal’ which has a non-etymological /h/ added to it for reasons of hypercorrection. Present-day instances of hypercorrection can be seen in pronunciations like *hobviously*, *hour* with an initial [h-].

Parallel to the loss of /h/ one finds the loss of [ʍ] from Old English /hw-/ which is simplified to [w], again in southern British English but not in more archaic forms, including many varieties of American English, where *which* is pronounced [ʍɪtʃ] as opposed to *witch* [wɪtʃ].

The original situation in Old English involved /h/ before sonorants as well – /hw-, hl-, hn-, hr-/ – but these clusters were simplified quite early on by the loss of pre-consonantal /h/.

3.8.2 Morphological change

Second person pronouns in English In Old and Middle English there are singular pronouns for the second person – *thou* /ðu:/ (later /ðau/) and *thee* /ðe:/ (later /ði:/) – which have long since disappeared from mainstream varieties of English except in religious usage. The survival of *you* as the only second person pronoun is somewhat surprising as this was previously an oblique form. The original distribution of pronominal forms is given in the following table.

	Singular	Plural	
Nom.	<i>thou</i>	<i>ye</i>	
Acc./Dat.	<i>thee</i>	<i>you</i>	à sole surviving form in mainstream varieties

There are many varieties of English which retain a distinction between singular and plural for second person pronouns. Most have a simplified system which shows 1) lack of case distinctions, 2) one singular form *you* and 3) alternative plural forms which are either the inherited nominative plural (*ye*) or a morphological compound (*yous*, *y'all* /jɔ:l/) or a combination of these two options (*yees*).

	Singular	Plural
Nom./Acc.Dat.	<i>you</i>	<i>ye, yees, yous, y'all, y'uns</i>

In colloquial language various devices are employed to compensate for the missing second person plural pronoun in standard English. One which is gaining increasing popularity, even beyond American English where it originated, is *you guys* for *you*-PL. An indication of the gradual grammaticalisation of *you guys* is that the word *guys* has no longer an exclusively male reference.

Unrecognised morphology In a language contact situation (see section ??? below for more discussion) it may happen that speakers of the receiving language fail to recognise the morphological structure of a borrowed word. This has happened with a small group of Scandinavian verbs which were borrowed in the north of England in the late Old English period. Here the reflexive pronominal suffix *-sk* was not recognised by the English and the reflexive verbs

were treated as monomorphemic non-reflexive verbs. An example is Old Norse *batha-sk* which appears as Middle English *bask* ‘to bathe in sunlight’; another case is the northern verb *busk* ‘prepare, get dressed, hurry’ from Old Norse *bua-sk*.

Morphological misinterpretation This is, in a way, the reverse of the previous phenomenon. It can be seen clearly with some French loanwords in Middle English where the final /s/ was misinterpreted as a plural suffix (as in English) and removed for the singular form of the loan. An example is Old French *cerise* which turns up in Middle English as *cherry* without the final /s/ (in the singular). The word *pea* is a similar case: the Old English word *pise* (plural *pisan*) was misinterpreted as a plural and the final /-s/ was removed.

3.8.3 *Semantic change*

Changes in meaning are as common as changes in form. Like the latter they can be internally or externally motivated. The equivalent to the paradigm in morphology is, in semantics, the word field in which words and their meanings stand in a network of relationships. The alteration of meaning occurs because words are constantly used and what is intended by speakers is not exactly the same each time. If a different intention for a word is shared by the speech community and becomes established in usage then a semantic change has occurred.

There is an established branch of linguistics called *etymology* which is concerned with tracing the history of words, both in their forms and their meanings. The development of different meanings for words automatically raises the question of whether there is an original meaning. Many lay speakers tend to think there is. This view is termed the *etymological fallacy*, because it supposes that there is an original meaning to a word if one could only go back far enough in time (the fallacy has a distinguished pedigree: ancient Greek authors like Plato believed in it). But this is obviously not true. No matter how far back one can trace a word there will always have been a stage before that probably with a different meaning. Linguists see meaning as primarily determined by contemporary usage. For instance, if speakers nowadays use *joy* in the sense of *success*, e.g. *He got no joy out of the insurance firm* ‘His insurance claim was unsuccessful’, then that is one of its meanings.

3.8.3.1 *General features of semantic change*

Loss of lexical transparency If in the course of its development a word or part of a word becomes opaque to a later generation then its meaning may be re-interpreted in a manner inconsistent with the former meaning. Such a reinterpretation is called a *folk etymology* and occurs on the basis of another word or words which are similar in sound and meaning.

Examples from the history of English illustrate this process clearly. The Early Modern English word *sandblind* ‘partially sighted’ derives from Old English *sam-blind* which contains the element *sam* ‘half’ (cf. Latin *semi*). When *sam* was lost in English, the word came to be written with *sand-* at the beginning.

The word *shamefaced* comes from Middle English *schamfast* with the meaning ‘firm in modesty’. When the adverb *fast* altered its meaning to ‘quick’ it was reinterpreted in this compound as *face* and the compound came to mean ‘with a face full of shame’.

A key to the phenomenon of folk etymology is that words which are similar phonetically can develop similar meanings. The example this time is a Latin loan *obnoxious* which originally meant ‘liable to injury’ but came to mean ‘very objectionable’, probably under the influence of the related word *noxious* ‘harmful, very unpleasant’.

Polysemous words These are words which have a basic and a related figurative meaning, e.g. *foot* and *foot of the mountain*. Characteristic for the figurative meaning is that it occurs in a phrase in which its metaphorical use is clear. But with time the secondary use may occur without any specifying information. This is the first step towards a shift from basic to figurative meaning as the unmarked member of a pair. For instance, *decimate* formerly meant to reduce to one tenth in size (from Latin *decem*) but now the secondary meaning ‘to waste, destroy’ has become the primary meaning and the originally basic one is lost. An example of a word which has both meanings in approximate equilibrium would be *headache* which means both ‘pain in the head’ and ‘unwanted problem’.

Bad meanings replace good meanings Pejoration (disimprovement) in meaning, is more usual than amelioration (improvement) i.e. there are more instances of words developing a negative meaning than the opposite case. Two good examples are related to terms for people. The word *churl* stems from a Germanic root meaning ‘man’ and came to mean ‘a peasant, someone of low birth’ and later still ‘an ill-bred person’. The root is still to be seen in the adjective *churlish* ‘mean, despicable’.

The same development is seen in *boor* ‘farmer’ > ‘crude individual’, especially in the adjective *boorish*. The word *knave* (now somewhat antiquated) has the negative meaning ‘scoundrel’. But it comes from the more neutral word *cnafa* ‘boy, servant’ in Old English (cf. (southern) German *Knabe* ‘young boy’ to which it is related).

Objective terms become discourse terms Words may become indicators of the structure of discourse. Two illustrations of this are *but* and *while*. The former once meant ‘outside of’ and the latter ‘a period’ (still to be seen in *She rested for a while*). Now these words mean ‘however’ and ‘during’.

*It's a beautiful painting but too large for the wall.
She took a rest while the others were in the restaurant.*

Meanings tend to become subjective This principle can be illustrated with the word *while* which has shifted beyond 'during' to encompass the meaning of 'although' as in *While Fiona likes Italian she's quite fond of Spanish too*. What has happened here is that the meaning has come to include a subjective assessment of a matter, here the fact that an individual likes two languages. The cline in development can be shown as follows.

Modern English *while* (< Old English *hwilum* 'at times')

Temporal > concessive > personal opinion

There are many other instances of words accruing subjective meaning. The word *feel* originally meant only 'touch' but has shifted to a general term referring to the sentiments of the speaker. The word *apparent* meant 'in appearance' but now refers to the belief/opinion of the speaker: *That's an apparent mistake on her part*.

Does a language lose words? The answer to this question is not simple. The clearest instance is where a word is borrowed from another language and the original word is then lost. This has happened with Old English *niman* (cf. German *nehmen*) which was replaced in Middle English by *take* from Old Norse *taka*. However, most loans do not lead to the replacement of native words with similar meanings. Rather they attain connotations which the native words do not possess.

There may be an instance or two where a word almost dissolves phonologically. Old English *æa* 'river' from an earlier **ahu* (cognate with Latin *aqua*) was [æ:], and would have raised to [ɛ:, e:, i:] if it had continued, but it was replaced by *stream* (itself from Old English) and *river* (a French loan in Middle English) both of which contain more phonetic substance in the form of consonants.

The more usual situation is for a language to differentiate two words semantically and for both to survive. For instance, Old English *fōda* and *mete* co-existed with the meaning of what people eat. After the Middle English period the second word occurs only in the sense of 'flesh of animals' and the word *flesh* (← *flesc*) is itself largely restricted to 'human flesh' (see *Semantic restriction* below). The original meaning of *mete* is found in *mincemeat* 'minced food' which does not contain any meat.

In Old English there were at least three words for 'man': *guma*, *wer* and *mann*. Only the last of these survived into Modern English. *Guma* 'man' was lost in the course of Middle English. It was formerly an independent noun and also occurred in compounds. One of these was *brýdguma* which consisted of the

words for ‘bride’ and ‘man’ (see above). With the loss of the independent form *guma*, it was reinterpreted in this compound as being *-groom*. There may have been contamination with the independent word *groom* which itself may be from Anglo-Norman *gromet* ‘servant, attendant’. The second word for man, *wer*, disappeared unobtrusively and is today only found in the compound *werewolf* ‘man-wolf’.

Words which drop out of general use may still be found in fixed expressions which is why these are such a useful tool in historical linguistics. Consider Old English *sweltan* ‘die, perish’. This verb was replaced by a borrowing from Old Norse, still seen in present-day *die*. However, the word did survive in the very restricted sense of ‘uncomfortably hot’ as in *sweltering heat*. Another example is the word *snide* ‘cutting’ as in *a snide remark* which may well be a remnant of Old English *snipan* ‘to cut’ (though this instance is hard to trace).

Apart from borrowings and semantic shifts there is another reason why words can disappear from a language. This is social decorum which is responsible for the increasing restriction in the general use of the word *intercourse* because of one specific uses, viz. in the sexual sphere.

3.8.3.2 Types of semantic change

The simplest type of semantic change is a shift. For instance, the Latin verb *arrivare* derives ultimately from *ad ripam* ‘at the shore’ but has long lost this meaning, that it is it has shifted to a new one. There are different manners in which meanings can shift, various types of shift, diverse ways in which words can be affected by shifts. Linguists have long since recognised that when words change their meaning they do so in the context of other related words in a language. To capture this generalisation one speaks of a *word field* which is the set of words which share some core of meaning, though separated in specific and connotations. The simplest word fields are those which reflect groupings of objects in the non-linguistic world. For instance, there is a word field ‘dwellings’ which in English includes such words as *house*, *castle*, *chalet*, *bungalow*, *manor*, *lodge*, *mansion*, *hut*, *shed*, etc. If any of these words shifts then the rest are affected. This issue will be addressed in the following paragraphs, especially when considering semantic expansion and restriction.

1) *Semantic shift* Old English *fæger* ‘fit, suitable’, Modern English *fair* came to mean ‘pleasant, enjoyable’ then ‘beautiful’ and ‘pleasant in conduct’, from which the second modern meaning ‘just, impartial’ derives. The first meaning continued to develop in the sense of ‘of light complexion’ and a third one arose from ‘pleasant’ in a somewhat pejorative sense, meaning ‘average, mediocre’, e.g. *He only got a fair result in his exam*.

Gentle was borrowed in Middle English in the sense of ‘born of a good-family, with a higher social standing’. Later the sense ‘courteous’ and then

‘kind, mild in manners’ developed because these qualities were regarded as qualities of the upper classes.

Lewd (Old English *læwede*) originally meant ‘non-ecclesiastical, lay’, then came to mean ‘uneducated, unlearned’ from which it developed into ‘vulgar, uneducated’ and then through ‘bad-mannered, ignorant’, to ‘sexually insinuating’.

Sophisticated meant ‘unnatural, contaminated’ but now has the sense of ‘urbane, discriminating’. The word *sophistry* (from Old French *sophistrie*) still has its original meaning of ‘specious, fallacious reasoning’.

Artificial originally meant ‘man-made, artful, skillfully constructed’, compare *artifice* ‘man-made construction’. But by comparison with ‘natural’ the word came to acquire a negative meaning because today things which are natural are regarded positively.

Silly (Old English *sælig* ‘happy, fortuitous’) had by the 15th century the sense of ‘deserving of pity’ and then developed to ‘ignorant, feeble-minded’ and later ‘foolish’.

Fast (OE *fæste* ‘firm’) later developed the meaning ‘quick’. The original sense is still seen in *steadfast* ‘firm in position’.

2) *Semantic differentiation* The above cases are all cases of shift, the original meanings are not available anymore, or only in an opaque compound (see last example). The process whereby two meanings arise from a single original one is termed *semantic differentiation*. The following instance illustrates the phenomenon.

In English there has been considerable fluctuation in the preterite and past participle endings after sonorants for weak verbs: either a voiced /-d/ or a voiceless /-t/. This has resulted in the exploitation of the two options for semantic purposes. The situation for most varieties of English today is that the ending *-ed* stresses the process of the verb and the ending *-t* emphasises the result as seen in the following examples.

Process	Result
<i>He spoiled his daughters</i>	<i>A spoilt brat</i>
<i>The timber burned for hours</i>	<i>Burnt timber</i>

3) *Semantic expansion* Here a word increases its range of meaning over time. For instance, in Middle English *bridde* was a term for ‘small bird’, later the term *bird* came to be used in a general sense and the word *fowl*, formerly the more general word was restricted to the sense of ‘farmyard birds bred for egg-laying and consumption’. Another case is *horn* ‘bone-like protrusion on the heads of certain animals’, then ‘drinking vessel’, then ‘musical instrument’ of similar shape.

4) *Semantic restriction* This is the opposite to expansion. Already to be seen

with *fowl* but also with many other words, such as *meat* which derives from Middle English *mete* with the general meaning of ‘food’ (cf. Danish *mad* /mað/, Swedish *mat* /ma:t/ both ‘food’) and now restricted to processed animal flesh. In turn the word *flesh* was narrowed in its range to ‘human flesh’ (see above).

Borrowing from another language may be involved here. For instance, Old English *snipan* (German *schneiden*) was replaced by Old Norse *cut* as the general term and the second Old English word *ceorfan* was restricted in meaning to ‘carve’.

5) *Semantic deterioration* A worsening in the meaning of a word. The term *knave* meant originally (Old English) ‘male servant’ from ‘boy’ but deteriorated in meaning to ‘base or coarse person’, having more or less died out and been replaced by *boy*. *Villain* developed from ‘inhabitant of a village’ to ‘scoundrel’. The word *peasant* is used now for someone who shows bad behaviour as the word *farmer* has become the general term. In official contexts, however, the term ‘peasant’ is found for small and/or poor farmers.

6) *Semantic amelioration* An improvement in the meaning of a word. The term *nice* (Latin *nescius* ‘not knowing’) is recorded from the 13th century in the sense of ‘foolish’, then it shifted to ‘coy, shy’ and by the 16th century had the meaning ‘fastidious, dainty, subtle’ from which by the 18th century the sense ‘pleasing, agreeable’ developed.

7) *Shift in markedness* The marked element becomes unmarked and vice versa. Originally a *jet* was a special type of aeroplane (a marked item in the semantic sense), now it is the norm (semantically unmarked) and the propeller machine is regarded as the special kind. *Hardware* was originally a term for non-perishable goods – tools, domestic appliances, etc. – sold in dedicated shops. The meaning of ‘everything physical in and around a computer’, i.e. not the programmes and operating system, has taken over as default so that the original meaning is now the marked item.

8) *Rise of metaphorical usage* A very common semantic development is for literal expressions to acquire figurative usages, for instance the phrase *ahead of someone* means literally ‘in front of someone’ but now has the meaning of ‘more advanced, in a better position’ as in *She’s ahead of her sister now*. There are many other instances of metaphorical extensions of locatives, e.g. *The police are after the criminal. We’ve put that behind us. He’s got four people under him*. Verbs expressing movement are also prone to metaphorical usage, e.g. *move, carry on, flow, kick in, fall back*, as is the word *space* itself.

9) *Reanalysis* The Latin morpheme *min-* ‘little’ is seen in *minor* and *minus* but the words *minimum* and *miniature* led to the analysis of *mini-* as the morpheme meaning ‘small’ which has become general in English as a borrowed morpheme,

cf. *minibar*, *minicomputer*, *miniskirt*.

Semantic change can arise through a reanalysis of a structure within a language, a kind of reinterpretation made by language learners (children during first language acquisition), as in *a cup full of water* > *a cupful of water*. Here the adverb *full* is reinterpreted as the second element of a compound in which it indicates 'the contents of'. This reanalysis has led to new compounds arising, e.g. *handful*, *fistful*.

10) *Truncation* An element is deleted without substitution. Developments in word formation often show this with some elements understood but not expressed: *mini* in the sense of *miniskirt* (see previous section). Other cases may involve compound phrases, e.g. *documentary film* and *feature film* have both been reduced by truncation of the head noun *film* to the qualifiers *documentary* and *feature* which are used on their own. Truncation may also involve an expansion in meaning. For instance, in American English especially the term *Cologne*, from *Eau de Cologne*, is often used in the broader sense of 'perfume for men'.

11) *Meaning loss through homophony* Old English had two verbs *lætan* 'allow' and *lettan* 'obstruct, hinder'. These became homophonous when the vowels coalesced and the distinction between simple (-[t]-) and geminate (-[tt]-) consonants disappeared during the Middle English period. Only the meaning 'allow' survived. However, in the expression *without let or hindrance* the original meaning survives.

12) *Development of opposite meanings* It might seem a strange concept, but opposite meanings for one and the same word do exist in languages. Such words are distinguished either by word class or by context (or both). A good example of this phenomenon is the word *sanction* which has come to have two opposite meanings. It can mean 'to allow something' as in *They sanctioned the proposal* or 'to forbid something' especially in the nominalised form as in *Britain imposed sanctions on Rhodesia*.

3.8.3.3 Means for extending word stock

As the lexicon of a language is an open class it is constantly expanding. It gains words for new phenomena, concepts, etc. in the society which uses the language. There are various means of extending a language's word stock. These can be broken down into two basic groups. The first creates compounds out of material from the language itself and the second resorts to borrowing material, integrating it into the system (phonology, morphology, semantics) of the language as it does so.

1) *Utilisation of native resources* This consists primarily of the twin processes

of compounding and derivation. The former involves two or more elements which are combined to form a single word, e.g. *hatchback* from *hatch* and *back*. Derivation consists of adding a productive ending to a lexical stem in order to create a new word, e.g. *more* + *-ish* → *morish* ‘tasty, enticing’, *job* + *-wise* → *jobwise*.

2a) *Borrowing from another language* This is a very common process which is attested for all periods in the history of English or most other languages as well. The reasons for borrowing are basically twofold. On the one hand there may be a necessity for a foreign word, to fill a *lexical gap*. This is the case with many adjectival formations in the Early Modern English period which were coined on the basis of classical stems and which provided a form either not available in English at the time or not appropriate, e.g. *marine* as an adjective to *sea*; *pedestrian* to *walk* : *walker*; *equestrian* to *horse* (*horsey* means ‘like a horse in manner or gait’); *aquatic* to *water* (*watery* means ‘overcooked, soaked in water’), etc.

The second reason for borrowing is because of the relative prestige (social standing) of the speakers using the donor language. This was the case with many French loans in European languages in the 18th century and is often the reason with loans from English in modern European languages today. However, loans made for this reason will only survive in the language if there is a semantic justification for them, i.e. if the loanword is separate from the corresponding native word in some aspect of its meaning. This is the case, for instance, with German *Behälter* ‘container, vessel’ and *Container* ‘very large container, e.g. for builders’ rubbish’. It is embryonically the case with many other loanwords in German *Lied*, *Chanson* (French) and *Song* (English) or German *Gefühl* and *Feeling* (English) or German *kämpfen* and *fighten* (English).

Where a loanword enters a language, the broadest general meaning may be retained for the native word, as with borrowings from English in many of today’s languages. This is not always so. For instance, the Scandinavian loans in English show a situation where the native English word is later the more restricted in meaning, e.g. *die* (from Scandinavian) and *steorfan* (Modern English *starve*) which was narrowed semantically to ‘die of hunger’. Here a comparison with the later French loans is illuminating. These do not usually replace the native English words but complement them by being located on a higher register, i.e. they are stylistically more elevated. Hence the word *decease* means ‘die’ but is used in a more solemn or ceremonious context. The greater use of Scandinavian loans in everyday language may well be a result of the original face-to-face contact of the Old English with the Scandinavians in the north and north-east of Britain. Such contact would have meant that the loanwords became part of the vernacular and not the written language as was the case with the later French words.

One should also mention externally motivated borrowings. These are

typical of overseas varieties of English. In the new environments into which English was introduced during the colonial period there were many phenomena for which there were no terms in English. These are often called collectively ‘flora and fauna’ terms, for instance the native words in Australian and New Zealand English such as *kangaroo*, *kiwi*, *koala*, etc.

A word can be borrowed more than once into a language, with different meanings and usually with different forms as well. The words *catch*, *chase* and *capture* in English all go back to Latin *capere*, *capt-* ‘seize, seized’. The first word, *catch* is from Anglo-Norman, the second *chase* is from Central French and the third *capture* ‘seize in a military sense’ is an early modern borrowing based on Latin *captura*. The first two words are interesting because their meanings are related in a particular way: *catch* refers to the goal of the action of chasing, that is the words denote a process and its result. This is a type of metonymic change (see section 5.4 *The figurative use of language* above). Another instance of this is the shift from action and instrument as in *The nine fifteen service to Edinburgh*, i.e. the train which provides the service. A further example is the connectivity of space and time, e.g. German *Dasein* ‘existence’ which derives from *da sein* ‘to be there [locative], to exist’.

If a word is borrowed more than once, then there is usually a time lapse between the first case and the second. English *risk* was borrowed from French *risque* in the seventeenth century and *risky* ‘hazardous’ was later formed. In the nineteenth century the word was re-borrowed as an adjective *risqué* (note the French spelling) which has the meaning ‘slightly shocking’.

Not only can a word be borrowed more than once, it can be ‘given’ to another language and ‘taken back’ with the altered meaning in the second language. An example of this is provided by *crack* which was borrowed from English into Irish where it is written *craic* and means ‘social fun, enjoyment’. In this meaning the word was borrowed back from Irish into Irish English.

2b) *Loan translations, calques* A calque is a piece-by-piece translation of a foreign word. These were common in Old English but have been recessive since. An examples is *gospel* consisting of *good* + *spell* taken from Latin *evangelium*, itself from Greek. Other languages also have calques, e.g. German *Vorsehung*, lit. ‘pre-seeing’ is a loan translation of Latin *providentia* ‘providence’.

3.9 Change in present-day English

It is often thought that universal education and the standardisation of languages, such as exists in western societies, slows down language change. This is true of changes in writing as people learn standard orthography at school. It can also lead to the maintenance of obsolete structures not found in colloquial speech. For example, the use of *whom* as an oblique form of *who* as in *The director*

whom we supported is a remnant of former usage and only continues to exist because of prescriptive notions of standard English which is conveyed to pupils at school.

Despite schooling in the standard, or regardless of this, there is still dynamic movement in English and this can be seen in shifts of word class and productive processes in syntax and the lexicon, some of which are discussed with illustrations below. The full sentences in the following sections all stem from a corpus collected by the author since the mid 1990s as part of a study of productive processes in present-day English vocabulary.

3.9.1 *Shifts in the lexicon*

Present-day English shows quite a number of semantic changes which consist of expansions, restrictions, ameliorations and deteriorations. The following is a selection of words illustrating these processes.

Philosophy is originally a science concerned with the nature of knowledge, reasoning, reality, existence and the metaphysical. Now it has come to also denote ‘policy’, particularly in the context of industry and official institutions, e.g. *The company’s philosophy is to be aggressively competitive.*

Culture is a collective term referring to the arts and human intellectual achievement in general. However, it has come to be used in the sense of ‘general set of attitudes and behavioural types, usually in a public context’ as in *The culture of violence in our inner cities.*

Choreography means ‘a pre-arranged sequence of movements for ballet performance’ but has come to embrace any set of arrangements or plan of action as seen in a sentence like *The choreography of the handover has now been agreed by the occupying forces.*

Surgery is a word which originally had an exclusively medical meaning, first the treatment of patients by incision as opposed to giving medication, then by metonymy it came to be used for the rooms in which patients were thus treated or indeed the times of the day at which this treatment was administered. Latterly, this second meaning has come to denote also the consultation hours for the public given by non-medical professionals, such as politicians vis á vis their constituents, who are viewed as parallel to patients.

Students used to be an exclusive term for those studying at universities and other institutions of higher education. But more and more the term is also being used for *pupils*, perhaps to attribute more adult status to those still at school, perhaps as a consequence of political correctness.

Older affixes These can retain their productivity, for instance, the Romance verbal prefixes are an integral part of English word formation to this day, e.g. *de-* as in *detox*, *dehire* ‘sack from one’s job’, *deselect*, *decommission* ‘remove from use’ even *dearrest* ‘release from police custody’.

Revivals and continuations A closer look at new words shows that occasionally one can find cases of revivals. A good example is the word *serendipity* for *fortunate, felicitous development*. This word first appeared in 1754: it was coined by Horace Walpole, suggested by *The Three Princes of Serendip*, the title of a fairy tale in which the heroes were always making fortunate discoveries.

Other new words are in fact continuations of established processes. The productive use of *-ery* in *dotcomery*, *theme-parkery*, for instance, actually has a long precedent: words of some vintage, like *trickery*, *skulduggery*, show that the ending has been around for quite some time, and indeed that it has the connotation of *dishonesty* and *gimmickry*, something which may arise through phonetic association.

Productive prepositions Phrasal verbs often arise through the productive use of prepositions in new combinations. For instance, the use of *out* or *away* to create new phrasal verbs is based on the interpretation of *out* to mean ‘completely absorbed’ and *away* to mean ‘fully engaged in an activity’ as the examples *blissed out*, *chilled out*, *freaked out*, *spaced out* or *shouting away*, *screaming away*, *pinting away* clearly demonstrate. The preposition ‘up’ is used in a general sense of ‘increase’, e.g. *beef up* ‘embellish’, *sex up* ‘exaggerate, make more dramatic’.

Analogical formations These are transparent structures which are synchronically derived by a productive process readily understandable to speakers when heard for the first time, e.g. *tug of love* < *tug of war*, *glitterati* < *glitter* + *literati*, *chatterati* < *chatter* + *literati*, *sword opera* < *soap opera*, *VJ* (videojockey) < *DJ* (discjockey). A particular feature of new analogical formations is that they may at first sound jocular but later come to be accepted as largely neutral, e.g. *underwhelm* from *overwhelm*.

Phonaesthetic formations The sound /z/ as part of a lexical stem is unusual in English and is traditionally recorded in initial position only in classical loans, e.g. *zoo*, *zodiac*, *zinc*. The lexically peripheral status of word-initial /z-/ has meant that it has leant itself to semi-onomatopoeic formations, like *zip* ‘slide fastener’, an attempt at an acoustic rendering. Other formations which employ /z/, either initially or medially, have general diffuse meanings suggesting ‘oddness, eccentricity, liveliness, colourfulness’ or more negatively ‘weakness, dullness’, especially if combined with /b/ at the end of the syllable starting with /z/: *zippy*, *zappy* ‘lively, amusing’, *zazzy* ‘colourful, vivid’, *zonky* ‘weird, freaky’, *pizzazz*, *sassy*, *snazzy*, *gonzo* ‘wild, eccentric’; *zob* ‘weak person’, *zombie* ‘dull apathetic individual’.

Alliterative constructions The rapid rise of new alliterative constructions continues a tradition already quite established in English, consider the common

bed and breakfast. Present-day English is very productive in this sphere, the following is just a small selection: *bail bandit*, *canteen culture*, *cardboard city* ‘makeshift accommodation for the homeless’, *carry the can* ‘take responsibility’, *cold calling* ‘unsolicited calls on prospective customers’, *compensation culture*, *drop-dead*, *gas-guzzler*, *gender gap* (orthographic alliteration), *lager lout*, *lava lamp* ‘lamp with transparent viscous liquid’, *lollipop ladies* ‘wardens guiding children across roads’, *loony left*, *mattress money*, *mean machine* ‘high-performance sports team’, *ram raid*, *road rage*, *think tank* (not a phonetically exact alliteration), *trailer trash*.

The desire to use an alliterative construction can mean that in some instances the semantics is bent somewhat to fit the phonetics as in *reformers and wreckers* ‘supporters and opponents of change’. A more common situation is where the exact interpretation of the alliterative construction must be known to the hearer or derivable from the speech context, e.g. *web-wise* ‘able to use the internet’, *free and fair elections*, *meeting of minds*, *from plough to plate*, *pension pot* ‘the money accrued in a pension fund’, *metric martyrs* ‘people who suffer legal consequences from their refusal to use metric measurements’, *pay with plastic*, *flexible friends* ‘credit cards’, *rural rebels* ‘people opposed to the hunting ban’, *digital divide* ‘gap between individuals/sections of society with regard to information technology’.

Rhyming constructions Second only to alliteration is the use of rhyme as a device for achieving a prosodic link between two words in a phrase. Like alliteration this is established in English, just think of phrases like *by hook or by crook*, *make or break*, *gloom and doom*. A representative selection of more recent formations might include *dream team*, *easy peasy* ‘ridiculously simple’, *pay and display*, *name and blame/shame*, *meeter and greeter*, *pooper-scooper* ‘shovel for gathering dogs’ excrement’, *pub-grub*, *sagbag* ‘large beanbag used as seat’, *happy-clappy* ‘singing of popular songs in church’, *gender-bender* ‘person who adopts manners and dress of opposite sex’, *sin bin* ‘area where sportspersons are sent for a period as punishment’, *snail-mail*, *stun gun*, *toy-boy*, *barmy army* ‘eccentric group of older individuals’, *stranger danger* ‘danger to children emanating from contact with strangers’.

Occasionally, adaptations of existing rhyming constructions are made up, e.g. *more spinned against that spinning* (with reference to the dismissal of a government spin doctor) on the analogy of *more sinned against than sinning*. A few of the phrases to be found are only semi-rhymes, for instance where only the vowel is common to the two words of the couplet as in *squeaky clean*.

Productivity of alliteration and rhyme Alliterative or rhyming combinations are very common in contemporary English and indeed extend to nonce formations as in the following case: *Vouchers will go, but they will probably just be replaced by some funny money scheme*. As with all nonce creations, the essential requirement is that they be readily interpretable to hearers.

3.9.2 Shifts in syntax

Verbal complements There are also grammatical changes taking place in English which are often used to achieve a certain semantic effect. For instance, the verb *talk* is assumed to take the preposition *about* when the object is inanimate as in *She was talking about the weather*. But there is an increasing use without a preposition to add force and immediacy to what one is saying: *Okay, so we're talking big money now*.

Quantifiers and non-count nouns Another change in syntax concerns quantifiers. In English the word *less* is used for non-countable nouns as in *There is less pollution in Sweden*. Although the *Oxford English Dictionary* contains the stricture 'The use of *less* with a count noun (*less people*) is incorrect in standard English', precisely this usage is increasingly common in British English, e.g. *There are less people interested in cricket nowadays*.

Compound adjectives The changes currently happening in English are often at the interface of syntax and the lexicon. This can be seen with the compounding of adjectives, an increasingly common process in official parlance and leading to sentence compaction: *The building of this road was part-financed by an EU grant. The service is grant-maintained. If you are time-rich but cash-poor. I just wanted to say that I am work-ready in case anything turns up. The parcels were tamper-evident* (i.e. had evidently been tampered with).

Attributive to predicative position Where a noun is taking on the function of an adjective one can see that it first appears before the noun it qualifies (attributively), e.g. *A key concern of the government*. Later it may occur after the noun, often qualifying a further phrase: *This matter must be regarded as key to our goal of restoring peace*. The final shift is where it occurs in bare, final (and stressed) position as in *This matter is key*, i.e. of central importance.

3.9.2.1 New words by class shift

Noun to verb This is undoubtedly the most common type and given the lack of verbal morphology in English the simple occurrence of a noun in a verbal slot establishes its use. The use of a noun as a verb without any formal change is a process which has a long tradition in English (it is amply attested in Shakespeare, for instance), as in *to bin something* from the noun *bin*, itself a contraction from *rubbish bin*. The technical term for this is *conversion* or *zero derivation*. Clear proof that one is dealing here with conversion can be seen in cases like *to mailshot* where the source is the noun *mailshot* and not the verb *to shoot* + *mail*. Some of these conversions can result in phrasal verbs as with *to cone off* (from *traffic cone*) 'cordoned off using traffic cones'. On occasions the

noun which provides the input is broken up into a verb and direct object as with *text message* (on a mobile phone) which appears as *to text s.o. a message (address, telephone number, etc)*.

Further examples of noun to verb conversions can be found easily, e.g. *Can you fax me the form? Can you pause the machine? We overnighted in Athlone. She bikes to the department every day. We towelled after the swim. There is no evidence that Al-Qaida is headquartered in that country. We must be properly resourced for the job. This programme showcases the masters of chamber music. We have to ringfence the necessary funds for effective cancer treatment.*

There may well be a certain pathway for the shift from noun to verb. In the case of the verb *to holiday*, the gerund would appear to be longer established and indeed, given its hybrid character as noun and verb, the gerund acts as a natural bridge in the shift from the former to the latter.

Noun à Gerund à Finite Verb
vacation, holiday à vacationing, holidaying à
It will change the way we holiday in future.

Many of the conversions to verbs have as their source not just a noun but a complex verbal phrase so that the result is considerable compaction of the outset construction.

If you are gifting money to your children...
 ⚡ ‘If you are making gifts of money to your children ...’
We must make cutbacks in a market which is overcapacitised.
 ⚡ ‘... in a market which is suffering from overcapacity.’
A nuclear-weaponised Korean peninsula is completely unacceptable to the international community.
 ⚡ ‘... where nuclear-weapons exist.’

Verb to noun This direction is not normally regarded as conversion but just derivation as it applies to virtually all verbs, often in older cases with a change in form, *to think : thought, to see : sight*. One finds here many cases of metonymic conversion, i.e. something X associated with Y comes to be used for Y itself. These contribute significantly to the flexibility of English lexis but also demand a higher degree of contextualisation. An example is the noun *spread* ‘a non-dairy butter substitute’ from ‘to spread more easily than cold butter’. This meaning has been added to the existing one of ‘lavish arrangement of food’.

Verbal phrase to noun or adjective These conversions are well established in English. Most of them result in nouns but in a few cases there is an adjectival use (as in the first example below). There are cases where the verb, from which the conversion can be taken to derive, is not an alternative in the context in

question, e.g. there is a *run-up* but one cannot *run up to something* in the same sense. One can also have a switch from phrasal verb to prefixed verbs without change in meaning: *This train will only stop to outlet passengers* (< *let out*).

Examples of the present type of conversion are: *It's a must-have item. It was such a put-down. There'll be no let-up in the fight against terrorism. The planned Israeli pull-out. A pull-up for our company. The letter was a give-away. The run-up to the election. There was time for a run-through that afternoon. A get-out clause. A push-over. Several lay-offs. Joined-up action/thinking. Overflight rights. (< fly over)*

Similar to these cases are many compound verbs, e.g. *flame-grill, stir-fry, blow-dry, fire-bomb, shock-freeze, shrink-wrap, blister-pack*, most of which do not have an analytic equivalent, for example *to blow your hair dry* is not the same as *to blow-dry your hair*, so that these compounds are clearly lexicalised. Related to these are cases where a verbal object, often complex, is converted to a verb, e.g. *There is no doubt about it, he false started*, i.e. 'he made a false start'. Finally there are instances where a noun is composed of an adverb and preposition but the verb is only implied, e.g. *The police gave him the once-over*.

Adjective to noun Adjectives used as nouns are by no means an innovation in English. As the noun which was originally qualified is no longer present, there may be a greater reliance on context for correct interpretation. For instance, *a primary* 'junior school; preliminary election' and *a secondary* 'high school; metastates; subordinate' can mean different things depending on context (and in this case on variety of English as well, i.e. in American versus British English). Another instance would be *a special* which has a variety of interpretations. In some established cases, an entire phrase is converted to an adjective, e.g. *What are we having for afters?*, i.e. 'for dessert after the main course'.

Adjective from verbal, prepositional or adverbial phrase A process which leads to a considerable compaction as phrases can be reduced to single words as in the following examples.

The better suburbs constitute a gated community. **⚡**

The better suburbs constitute a community which lives behind gates.

You're dealing with receipted childminders. **⚡**

You're dealing with childminders who issue receipts.

You see, I'm a separated father. **⚡**

You see, I'm a father separated from his children.

The development of bare adjectives This refers to cases where there is a reduction in the amount of information presented when an adjective arises from a fuller phrase. Consider the following instance.

Most of the kids are unstructured during the summer holidays. B
Most of the kids have no structure to their lives during the summer holidays.

Shift in animacy Animacy requirements in English are a rather fluid matter. An instrumental object can often appear in subject position with verbs which regularly take animate subjects as in *The chisel opened the door* or *The stone broke the window*. Such fluidity would seem to lie behind the occurrence of more recent instances of apparent animacy violations. The following instances illustrate these. The second example again shows that contextualisation is an important factor in English because the meaning is ‘fitted with an alarm’. The third example may have stemmed from non-native usage but is in keeping with the animacy shift being discussed here.

After September 11 the number of distressed companies increased dramatically.
This door is alarmed. Our airport has handicapped toilets.

Noun duplication The duplication of a noun can be used to suggest that one is dealing with a genuine instance of something. This may be modelled on structures like *She’s a linguist’s linguist* ‘a real, genuine linguist’.

It’s a job job ‘It’s a full-time job’
He’s like a man man ‘He is a real man’

The X-ing public At any one time a language will have a set of particularly topical words and expressions, e.g. *spin*, *cherry-pick*, *on a learning curve*, *the leading/cutting edge*, *create a space for oneself*, etc. Some of these provide a pattern for a number of expressions and currently a common structure is *the X-ing public* where the de-verbal adjective can be filled by a number of options, e.g. *the thinking public*, *the viewing public*, *the queueing public*, *the spending public*, *the voting public*.

Increase in semantic range One means of increasing the semantic range of words is to remove specific connotations and use them in a more general sense. The spread of such words can only take place when the essential meanings are grasped by native speakers. Then they can be used productively.

- (i) *golden* (‘financially rewarding; decisive’)
golden handshake (original); *golden handcuffs*, *golden hello*, *golden parachute*; *golden goal* (a regulation in football after a draw in regular time)
- (ii) *granny* (‘referring to senior citizens’)
granny dumping, *granny flat*

- (iii) *designer* ('referring to film and fashion; made-to-measure')
designer suits, designer stubble, designer drug, designer baby
- (iv) *potato* ('someone passive and lacking in energy')
couch potato, mouse potato 'someone excessively engaged in computing'
- (v) *rogue* ('potentially dangerous')
rogue states, rogue asteroid, rogue missile (altered collocation from 'harmless, playful' to 'threatening, sinister')
- (vi) *tsar* ('person wielding great power')
Capturing London's drug tsar was a great coup for the police.
- (vii) *creative* ('not bound to the truth')
a creative approach to reporting, creative accounting

4 Language typology

Language typology is the study and classification of languages according to their morphological type. This emphasis on structure contrasts with the study of the genetic relationships between languages, the subject of historical linguistics. Language typology can and does establish connections between languages which are not related to each other by a common ancestor but by similarities in their grammars. There are basically four types of language, seen morphologically.

4.1 Language types

1) *Synthetic (inflecting)* This label refers to those languages which make use of several morphemes to indicate different grammatical categories. In the Indo-European language family this type is represented above all by early forms of classical languages such as Latin, Greek and Sanskrit. For example, the form *tabula* ‘table’ in Latin contains a final morpheme /-a/ which simultaneously indicates 1) singular number, 2) nominative case and 3) feminine gender.

German is also an inflecting language. Here one can see that the ancestor of both German and English – called Germanic – was itself a synthetic language and that it lost most of its endings in English but retained them in German. If one takes any verb paradigm and contrasts the forms of German and English then one can see the difference between the two languages: *ich gehe, du gehst, er/sie/es geht; wir gehen, ihr geht, sie gehen. I/you go, he/she/it goes; we/you/they go*. German has inflections for each person whereas English only has an inflection in the third person singular (in the standard). If one were to compare the nominal area in both languages then the pattern would be the same: German has far more endings than English. There are many plural class types in German whereas English has only one type in -s with a small residue of plural types which existed in older stages of the language. In addition German has grammatical gender and four cases which are found with nouns, verbs and prepositions whereas English has only a nominative case and a genitive in -s.

2) *Analytic* Basically an analytic language is the opposite of a synthetic one. Those languages where there is almost a one-to-one relationship between words and morphemes are labelled analytic. Examples are to be found in the east and south-east Asia (e.g. Chinese languages, Vietnamese, Thai) and to a large extent one could also classify English as analytic. The one-to-one relationship means that each grammatical category can be clearly identified by being associated with a unique morpheme.

Essentially, analytic languages have little or no inflectional morphology. This state is obviously original – in the evolutionary sense – as no language can

have started with a complex morphology. Inflections can only have arisen in languages where full lexical words lost their semantic profile – were ‘bleached’ to use the technical term – and then got attached to lexical stems, were ‘cliticised’. Once a word only occurs attached to a lexical stem one can speak of an inflection. If this process happens on a large scale over hundreds of years then a change in language type occurs.

Typological development can be seen as a cycle. Many languages which were once synthetic are now analytic, i.e. words became endings but then these endings were reduced and finally lost, so that the morphology of the language eroded away. English and the Scandinavian languages, Swedish and Norwegian (both forms), are good examples of this erosion of morphology. These languages lost most of their original morphology through the persistent loss of endings and in the course of their histories became analytic in type.

Typological cycle (1)

<i>Analytic</i>	à	<i>Synthetic</i>	à	<i>Analytic</i>
1) Semantic bleaching of lexical words		2) Cliticisation 3) Inflection		4) Later erosion 5) Loss of endings, perhaps back to (1)

The reasons for morphological erosion can be quite simple: endings are blurred, i.e. they are not pronounced fully and eventually dropped by later generations. This is particularly frequent in languages (like the Germanic branch of Indo-European) where there is strong stress on the stem of a word and correspondingly less on endings. The cycle can start again by renewed bleaching and cliticisation.

3) *Agglutinative* This type refers to those languages which, like the analytic ones, identify one grammatical category with a single morpheme but where the morphemes can be linked consecutively to each other to give long words consisting of strings of unique morphemes. Typical examples of such languages are Finnish and Turkish as can be seen from their inflectional morphology. Here are two instances from the nominal area. The inflectional morphemes can be recognised clearly: the stem of the noun in each case is unaltered irrespective of what endings are suffixed to it.

<i>ev</i>	‘house’	<i>mektup</i>	‘letter’
<i>evim</i>	‘my house’	<i>mektupım</i>	‘my letter’
<i>evler</i>	‘houses’	<i>mektuplar</i>	‘letters’
<i>evlerim</i>	‘my houses’	<i>mektuplarım</i>	‘my letters’

One may well ask how agglutinative languages fit into the typological cycle

outlined above. The answer is that they represent a development from an analytic stage through cliticisation to inflection. However, the essential feature is that the elements which are cliticised retain their phonetic form and are associated clearly with individual grammatical functions. Consider Turkish again, now from a phonetic angle. This language has weak stress and all syllables are pronounced clearly. In Finnish there is a pitch accent with unaccented syllables retaining their phonetic clarity. In such cases the association of a clear phonetic form with a single morphological function is maintained. In German and Russian, as examples of synthetic languages, there is phonetic reduction of unstressed syllables and many consonant clusters occur, the latter fact does not apply to Turkish or Finnish for instance. One can now revise the cycle model above and introduce a split in two directions, the path taken being determined by the phonetic character of the language involved.

Typological cycle (2)

<i>Analytic à</i>	1) <i>Synthetic</i>	languages with stress accent, reduced unstressed syllables and clusters
	2) <i>Agglutinative</i>	languages with pitch accent or only slight stress contrast; unstressed syllables retain full phonetic shape

Agglutination as a building principle is also found in English, in derivational but not in inflectional morphology, e.g. *un-friend-li-ness*, *de-centr-al-is-ation*, *dis-approv-ing-ly*, *non-seg-ment-abili-ty*, *inter-rupt-ibili-ty*.

4) *Polysynthetic* This last type refers to such languages which fuse several grammatical elements into a single form, usually containing major syntactic categories such as verbs and nouns. This type is not represented in the Indo-European language family with any degree of completeness, but is to be found in native American languages and those in the north-east of Siberia. In English a form like *won't* illustrates the phenomenon nonetheless: it consists of *will* and *not* and in the combined form neither of the combining elements can be identified (contrast this with agglutination). In French the form *au* consists of *à* and *le* but neither can be recognised in the combined form. Such words are called portmanteau morphs in linguistics.

Languages which show polysynthesis as a general principle have gone through a particular version of the typological cycle. The phonetics of these languages shows complicated consonant clusters and phonetic reduction of unstressed syllables to such an extent that the cliticisation which must have been typical of them at an earlier stage was carried to an extreme with an ever greater amount of fusing of endings together with the stems of the two major word classes, nouns and verbs. One can view polysynthetic languages as extreme cases of inflecting languages. This radical development is not undertaken by the

majority of languages because comprehensibility usually prevents the extreme reduction and fusion of word forms. The term *incorporating* is also found for *polysynthetic*.

4.2 Word order in languages

Apart from the morphological characteristics of language types outlined above there is an important syntactic feature which varies across the languages of the world. This is what is termed *basic word order*, the order of the main elements of a sentence when this is a statement (declarative sentence) and no element is particularly emphasised (no topicalisation, see section 6.8.2 *Highlighting in sentences* above). This is sometimes referred to as *canonical* word order.

When discussing word order it is common to use the abbreviations S (= subject), V (= verb) and O (= object). The basic word order of English, French, Italian, Spanish, Dutch, German, Swedish is SVO, that of Finnish and Turkish is SOV while that of Irish, Welsh, Arabic, Hebrew is VSO. Most of these languages allow for alternative word orders, usually as a result of fronting sentence elements in order to highlight them. Typologists assume that there is a correlation between basic word order and the position of modifiers relative to their heads. For instance, Irish with VSO has adjectives after nouns, *cailín meabhrach*, lit. 'girl intelligent', and the genitive after the nominative it qualifies, e.g. *gluaisteán Sheáin*, lit. 'car John-GEN'. English with SVO word order has the specifier before the head (consider the English equivalents to the phrases just given).

Typologists assume that the default value for the parameter of word order is SVO. This is the most common word order in the world's languages, it corresponds to a sequence of mentioning the actor, the action and the person or thing affected by the action. Furthermore, in 'new' languages like creoles, SVO is the dominant and often the only word order available. Other word orders such as SOV or VSO can arise historically due to shifts in the syntax of a language, for instance by the movements of elements to the front or rear of a sentence.

There are further respects in which the word orders of language differ. For instance, the word order of main and subordinate clauses may not be the same. In German SVO is found in main clauses but SOV in subordinate ones. This is a remnant of the SOV order which was dominant in all Germanic languages before they split up and went their separate ways.

Languages which share a word order say, SVO, may be more or less flexible in the requirement for this order. English allows an adverb before the subject of a sentence so that the verb is the third element of a sentence, e.g. *Certainly I will help you*. In the case of so-called V2 languages, the verb must always be the second element of a sentence. If an adverb is placed at the beginning of a sentence then the subject and verb are inverted to keep to the V2 requirement, e.g. Swedish *Säkert vill jag hjälpa dig* lit. 'Certainly will I help

you’.

4.3 Implications of language type

Synthetic languages, like Latin or Classical Greek, show much inflectional morphology (stem plus multi-functional endings) whereas analytic ones, like English or Chinese languages, have a much higher relationship of morpheme to word (approaching one-to-one). Language type is not, however, exhausted by the reference to the number of inflectional endings in a language. What is of interest here is how analytic languages express grammatical categories which are otherwise indicated by inflectional endings.

Consider the case of English and German. The latter has case forms for nouns and pronouns. English on the other hand uses word order and prepositions to express relations indicated morphologically in German.

Synthetic structure

Er schrieb ihr einen Brief. *ihr* = Prep. + dative (analytic structure)
 ‘He wrote to-her a letter’

Analytic structure

1)	Word order	<i>He wrote her a letter.</i>
2)	Preposition	<i>He wrote a letter to her.</i>

The morphological marking in German means that it enjoys relative freedom in the word order of sentence elements. Fronting without any other alteration of sentence structure is allowed in German because the grammatical relations of a sentence are still clear as can be seen in the sentence *Ihr schrieb er den Brief* ‘to-her wrote he a letter’. In (standard) English such fronting is unusual, indeed is impossible because the grammatical role of dative is only recognisable by virtue of the position before the direct object or by a preceding preposition *to*. To emphasise an element, English speakers stress it, by increasing the pitch with which the element is pronounced.

**To her he wrote a letter.* Better: *He wrote a letter to 'her.*

There is another alternative in English – *clefting* – which would yield the sentence *It's to her that I wrote the letter.* See section 6.8.2 *Highlighting in sentences* above.

4.3 Typological change in English

The earliest stage of English was typologically synthetic: it had grammatical genders, several cases, a complicated verb system and a fairly free word order

which allowed topicalisation by rearrangement of sentence elements. This was to change radically in the course of the Middle and Early Modern English period because inflectional endings were lost on a broad front with typological realignment as a consequence.

Move from synthetic to analytic This shift in the history of English is characterised by a variety of changes which can be summarised as follows.

- 1) Simplification of case system from five to two
- 2) Collapse of definite articles from three to one
- 3) Reduction in the number of verb forms
- 4) Reduction of auxiliary verb system from two (*be* and *have*) to one (*have*)
- 5) Disappearance of impersonal verb forms (type *methinks*)
- 6) Harmonisation of verb position in main and subordinate clauses
main SVO : sub SOV → main SVO : sub SVO
Abandonment of verb second 'V2' requirement of the type
Sadly has he gone → *Sadly he has gone*.

These are the most obvious changes when one looks at the five hundred years from ca. 1000 to 1500. Later instances of wider changes become noticeable, for instance during the Shakespearean period.

- 7) Development of conversion (zero derivation) as a productive means for creating new word class elements: *lunch* (n.) → *to lunch* (v.)
- 8) Relaxation of congruence requirements on verbs and subjects
The police have arrived. not *The police has arrived.*
- 9) Lack of congruence between formal and semantic sentence categories, e.g. instrumentals or inanimate subjects appear often in subject position.
The chisel opened the door.
The midlands report heavy snowfalls.

4.4 Drift and language typology

The term *drift* is used in linguistics to describe a slow and imperceptual change of language type in a given direction. One of the best documented case of this is the gradual development from synthetic to analytic in the history of English as outlined above. The point here is that the change has moved in a single direction. It may alter in direction but this is only possible in a gradual manner. Once momentum has been gained in a certain direction it maintains this for at least some few hundred years.

Although drift excludes a zig-zag course in typology there are, in present-day English, some signs of a move away from the analytic type which had established itself so firmly by the beginning of the early modern period.

Incorporation This is a process whereby elements fuse to forms which do not allow one to recognise their component parts. There is a degree of incorporation in the verb system of modern English. However, it is contained by prescriptivism and the orthographic standard. Nonetheless it shows an avenue of future typological development which could be taken by English.

Modal verbs tend to cliticise with prepositions and negators, yielding one-word forms. With these the elements of which they are composed are still recoverable as the standard retains the individual components.

<i>won't</i>	<i>will not</i>	<i>don't</i>	<i>do not</i>
<i>can't</i>	<i>can not</i>	<i>gonna</i>	<i>going to</i>

New inflections It is obvious looking at the languages of the Indo-European family that there is a general tendency to lose inflections and become analytic. But if this were a one-way street for all languages then each of them would become analytic and that would be the end of the matter. However, new inflections can arise through the merger of forms, in particular due to the absorption of grammatical words into lexical stems to produce a stem plus affix (usually a suffix). This is the chief source of inflectional morphology. A good example is provided by the development of Latin into the modern Romance languages. In Latin the future was expressed by a lexical verb followed by a form of *habere* 'to have' as in *cantare habeo* 'I have to sing', i.e. 'I will sing'. With time the form *habeo* was phonetically reduced, cliticised onto the stem and reduced to the level of an inflection which consists of just a vowel as seen in the following table.

Latin		French
full verb > auxiliary > clitic > affix		
<i>cantare habeo</i> 'sing I have'	>	<i>chanterai</i> 'I will sing'
<i>cantare habemus</i> 'sing we have'	>	<i>chanterons</i> 'we will sing'

This development also applied to other Romance languages, e.g. Italian where the future shows a stressed vowel ending which derives from Latin *habeo*: Italian *canterò* 'I will sing'.

4.5 Language typology and universals

Research into typology in the early 1960s began to concern itself with statements about languages in general, i.e. with universals. The impetus for this was the pioneering work of Joseph Greenberg and his associates who investigated large numbers of widely diverging languages in an attempt to arrive at statements about the structure of human languages.

The results of Greenberg's research have been published in several monographs and culminated in a four volume edited work in the late 1970s entitled *Universals of Human Language*. The essence of his work is the notion of implication. By this is meant that if one statement holds true for a language then others do as well. To this end Greenberg divided universals into two types, absolute and implicational universals. There are not many absolute universals and they are very general, e.g. 'All languages have nouns and verbs' and 'All languages have vowels and consonants'. There are also near-absolute universals which have only a very few exceptions, e.g. 'All languages have nasals' the exception here being a small group of Amerindian languages on the Pacific coast on the border between the United States and Canada, the Salish languages.

The second set of Greenbergian universals are more interesting as these are more definite. Here are a few instances from phonology. The arrow → means that the elements on the left imply the existence of those on the right.

Implicational universals according to Greenberg

nasal vowels	→	oral vowels
voiced stops	→	voiceless stops
labial, velar stops	→	alveolar stops

A glance at these shows that the statements in the left column concern more specific elements and what they imply in the right column is the existence of more general segments. One must be careful not to be circular in one's argumentation here. For instance, oral vowels are statistically more common than nasal vowels so that to say that the latter are marked is simply another way of saying that they are statistically rare. The informational value of an implicational universal lies not in the greater probability of one segment over another but the implication that the existence of one type presupposes the existence of the other within the same language, e.g. there are no languages which only have voiced stops or nasal vowels.

4.6 Cross-categorical generalisations

A concern of typology is with determining whether statements made about one language apply to more than one. Take as an example the notion of case. This is an agreement requirement between the governing and the governed elements in a sentence. The most obvious governing element is a verb and the most obvious governed one is a noun, with cases typically expressing the role of the nouns as demanded by the main verb. There are several major case types, seen semantically, accusative for the patient, the object of an action, dative for the beneficiary, genitive for the possessor, instrumental for the implement or tool

used for an action, etc. Such semantic case types have a morphological realisation in an inflecting language like German. There is a cross-categorical generalisation here, namely that not just verbs require morphological case but adjectives or adverbs as well, e.g. in the use of the genitive as in *Sie entsann sich des Tages, an dem sie heiratete*. 'She remembered the day-[GEN] she got married' *Kraft seines Einsatzes*. 'By virtue of his efforts-[GEN]' *Ich kam trockenen Fusses nach Hause*. lit. 'I arrived dry-foot-[GEN] back home'.

Another instance of a cross-categorical generalisation is that there are more case distinctions in the singular than the plural of nouns and the same number or more number/person distinctions in the singular than the plural of verbs. English has an inflection in the present singular but none in the plural of the verb. It has a distinction in the past of *to be* in the singular but not in the plural. Such observations lend credence to the primacy of singular over plural as a category in language.

A further example, this time from phonetics, would be the observation that alveolar fricatives are phonetically salient (easy to perceive) and hence preferred as markers of essential grammatical categories. To support this one can cite changes from different categories such as the shift from *-ep* to *-es* for the present singular of verbs in English, e.g. *He thinketh* → *He thinks*, and the demise of different plural forms of verbs in favour of the single /s/ plural morpheme in the history of English.

Not all observations in individual languages or small groups can be used to derive general statements. An example of a pitfall would be Germanic which only has separate forms for the past and preterite of verbs, all other tenses being formed by using an auxiliary verb and a non-finite form of the lexical verb. This holds true for English, German, Swedish, Dutch, etc. but a glance at the Romance languages shows that it is not generally valid and cannot be used to make a statement about the putative secondary importance of the future vis à vis the past tense.

4.7 Clause organisation among languages

When one views the overriding principles of grammar then one can divide languages into types in which either government or agreement is the dominant force behind clause organisation. The government type is common in the Indo-European language family and it shows two main subdivisions 1) *accusative* or 2) *ergative*. The accusative type is the normal Indo-European type: English, German, French, Russian etc. Such languages have a separate case for *nominative* and *accusative* which may be marked formally if the language has appropriate inflections.

The ergative type – of which Basque or Georgian are representatives – has a case, the *ergative*, for the subject of transitive verbs. On the other hand, the subject of intransitive and the object of transitive verbs are in a case called the

absolute. If one were to express this in English then it would look something like the following: *She saw her* and *Her went*. As there is no confusion between the object of a transitive verb and the subject of an intransitive both can occur with the same case form, i.e. the absolute. It is really a question of what elements are aligned together. In Indo-European all subjects, irrespective of verb type, are linked together as nominatives, the object is in the accusative (or perhaps another case). In Basque and Georgian, being ergative, the objects of transitives and the subjects of intransitives join together to form the absolute.

Accusative and ergative language types

Nominative-Accusative	Ergative-Absolute
Subj-NOM V[trans.] Obj-ACC	Subj-ERGATIVE V[trans.] Obj-ABSOLUTE
Subj-NOM V[intrans.]	Subj-ABSOLUTE V[intrans.]

Agreement is the second major principle in clause organisation. Languages demand that elements are aligned according to some basic semantic characteristic. The best example of an agreement language is the active type – the term derives ultimately from a direction in Soviet linguistics called ‘contentive typology’ whose chief representative was a Russian linguist called Georgij Klimov. In the active language type the alignment in sentences is along the animate – inanimate axis. Animate nouns match active verbs while inanimate nouns match stative verbs. Both nouns and verbs fall into an active or inactive class. Active languages may have two words for concepts rendered by one in government-based languages, e.g. *water* (moving or still).

Mention should also be made of the classification of languages according to head-marking or dependent-marking, something which has been the object of detailed investigation by the American linguist Johanna Nichols. What is meant here is that in constructions which involve a head and a dependent, e.g. English *the man’s house*, where *house* is the head (the modified element) and *man* the dependent (the modifier), those languages which mark the dependent element do so consistently and are labelled ‘dependent-marking’. Other languages, like Hungarian, cf. *az ember háza* ‘the man’s house’, where *haz* ‘house’ is marked with the pronominal suffix *-a*, are termed ‘head-marking’. Nichols notes that such marking is very stable over time and can thus be used as a criterion for the relatedness or non-relatedness of languages.

Summary

- *Language typology* is a classification of languages according to their grammatical type and not their historical backgrounds.
- The two main types are *analytic* and *synthetic*. Languages of the former type show few inflections and fixed word order while the latter have a complex morphology and a freer word order. A third type is

agglutinative which has a clearly structured morphology with one ending for one category. *Polysynthetic* languages have highly compacted forms, sometime with an entire sentence in a single word.

- Languages often develop with a *typological cycle*, becoming more synthetic by absorbing function words into content words, the former ultimately becoming inflections. If these in turn decay, a language can become analytic again and the cycle may start afresh.
- There are *implications of language type*, particularly for the variability of word order. Analytic languages tend to prefer clefting whereas synthetic languages allow fronting with splitting up a sentence into two.
- Many *generalisations* have been drawn from the study of typology and various *universals*, suggested above all by Joseph Greenberg, have been proposed as holding across languages

5 Language contact

Language contact is as old as language itself. It refers to a situation in which speakers from two speech communities are in contact with each other. There are different kinds of contact, depending on the manner in which speakers interface with each other. This can range from day to day contact as in the Scandinavian period in English history to a narrow range contact between a small number of prestigious speakers as during the later French period. Indeed in some cases the ‘contact’ does not involve speakers at all: members on one community can acquaint themselves with the language another through different media, the written word or today, the recorded word. This latter type of contact is what present-day languages have with English.

Ever since authors have written on language, contact has been considered as a source of features. In principle this stance is quite respectable but care is required not to attribute unexplained features in language X to contact with some other language Y just because Y also shows the feature. Furthermore, one must bear facts about internal development and historical input in mind. For instance, a striking parallel between English and Irish is that the third person singular personal pronoun in the feminine are homophonous, *she* [ʃi] and *sí* [ʃi]. In English the origin of *she* is not entirely clear, it could be a continuation of Old English *hēo* ‘she’, but this is not uncontroversial. The suggestion that the English pronoun is a borrowing from Irish is fatally flawed because the pronunciation of *she* [ʃi], from an earlier [ʃe], is a result of the Great Vowel Shift which cannot have taken place earlier than the fourteenth century when there was no contact between English and Irish (and contact in Ireland would not have affected developments in England).

Although contact cannot never be proved as a source, stringent principles must be applied when considering the question. Any doubts about contact must be foregrounded and only when these and all other sources, above all inherited historical input, can be excluded should contact be considered. To put it in a nutshell, contact explanations are a last resort. If treated as such, the likelihood of making false claims is reduced.

Direct and indirect contact Languages can come into contact in a variety of ways. Basically there are two types: the first is direct contact in which speakers of one language turn up in the midst of speakers of another (because of invasion, expulsion, emigration, etc.), the second is where the contact is through the mediation of literature or nowadays television, radio or the internet. This is the case with the contact between English and modern European languages at the moment. The former type can be illustrated clearly with examples from history such as Scandinavian or French contact with English.

In any contact situation there will be different scenarios for change.

Lexical borrowing can take place from language into the other. But structural influence from one language can lead to changes the other. The essential difference is that for grammatical interference to take place, there must be a degree of bilingualism in the community, otherwise there are no speakers to transfer structures from a second language into their mother tongue. With an indirect contact situation borrowing can take place without any bilingualism.

Divisions of language contact

Direct contact

(speakers intermingle)
Lexical loans; Structural
transfer in closed classes
(morphology / syntax)

Indirect contact

(no mixing of speakers)
Only lexical loans
(‘cultural borrowings’)

Some cases where attested

Scandinavian and late
Old English
Low German and Swedish

Central French and Middle English
Modern English and French, German, etc.

Contact situations have a number of further consequences for the languages involved. If contact is accompanied by extensive bilingualism then there is a distinct tendency for both languages to simplify morphologically to a more analytic type. This can be seen in the history of English where the periods of contact appear to have led to an accelerated movement from a synthetic to an analytic type (see remarks on language typology above). The most extreme case in this respect is that of pidgins which, given the type of imperfect bilingualism which is characteristic of them, always result in analytic language types.

Bilingualism usually sorts itself out and one language wins over the other (English over the other languages it has been in direct contact with), unless the languages involved enter some sort of equilibrium for social or political reasons as has happened in Belgium with French and Flemish, for instance. There is in fact an even clearer kind of stable bilingualism, called diglossia (see section 2.4 *Types of speech communities* above) where two languages or two distinct varieties of the same language are used side by side in separate spheres of life, typically in the public and private sphere. The functional distinction of the two varieties/language guarantees their continuing existence in a speech community.

5.1 Language shift

In a language contact situation speakers can retain their inherited language or switch to the language they come in contact with. The linguistic changes which

occur differ and the distinctions between them have been captured in the two terms *contact-induced change* and *shift-induced change* (a distinction stressed by the American linguist Sarah Thomason). Shift-induced change usually takes place over a few generations at least. This has happened historically in many countries, for instance in Ireland with the shift from Irish to English, in Scotland with the shift from Scottish Gaelic to English and in South Africa with the shift from Indian languages like Bhojpuri to English among the Indian population in KwaZulu-Natal. Contact with shift leads to new varieties of a language arising and here it is often the closed classes, the sound and grammar systems, which are affected. This is because in language shift (during adulthood, through a process of unguided second language acquisition) speakers search in the second language for equivalents to categories which they know from their first language. Historically, this can be seen clearly in the rise of certain aspectual categories in Irish English. Indeed a case can be made for speakers taking afunctional elements in the second language, such as the unstressed, declarative *do* of early modern English, and employing them for their own purposes, in the case of Irish English, to express the habitual aspect seen, for instance, in *She does be worrying about the children* ‘She is always worrying about the children’.

The relative social status of speakers in a language shift situation is an important consideration. This is usually captured with the terms ‘substrate’ and ‘superstrate’ for the language in the socially inferior and superior position respectively. If the shifting group has high social prestige (not the case with the Irish, Scottish and Indian populations just alluded to) then they may transfer their speech habits to the speakers of the language they are shifting to. This is technically known as *imposition* and it has been proposed that it has happened in many historically attested situations, such as the Scandinavian period in early medieval Scotland, with Vikings who switched to Gaelic, or the late medieval period in Ireland with the Anglo-Normans who later switched completely to Irish. Imposition may account for the appearance of borrowings from core vocabulary in a contact situation. If, for instance, the Normans retained French words in their form of Irish, then the Irish themselves may have picked up these words from the Irish of the Normans who were the military and aristocratic leaders in Ireland for a few centuries after their first arrival in the late twelfth century. This would help to account for why the words for ‘child’ (*páiste* < *page*) and ‘boy’ (*garsún* < *garçon*), for instance, are from Norman French in Irish.

The transfer of features from lower groups to the language of those above them on a social scale may take a long time. Imposition from below can, however, lead to considerable change, above all in the structure of a language. For instance, English is the only Germanic language to use possessive pronouns when referring to parts of the body, e.g. *I brush my teeth twice daily*. Other Germanic languages, including Old English, would have something which in translation would be like ‘I brush me the teeth twice daily’. The Celtic languages of Britain have been posited as a source for the use of possessive pronouns with

parts of the body, what is called *inalienable possession*, and Irish, Scottish Gaelic and Welsh still show this. There are other features which are candidates for transfer from Celtic to early English, e.g. the progressive tense as in *You are reading this book now*, which again is not typical of other Germanic languages.

5.2 Dialects in contact

Within Britain there has been considerable contact between the different dialects throughout history. In England there are three main dialect areas, the north, the midlands (east and west) and the south (south west and south east) which are already recognisable in the Old English period. The subdivisions have shifted somewhat but the tripartite division of England has remained. In the following a selection of features from the different dialect areas are discussed in the light of dialect contact and adoption into the modern standard.

Northern forms In the Old English period the dialect of the mid south (West Saxon) was the dominant one and that used for writing English. But as later stages show it is often the case that northern forms survive rather than their southern equivalents. For instance, *are* is a continuation of the northern verb forms (themselves borrowed from Scandinavian) rather than of the southern *syndon/sindon*. Other Scandinavian forms of the north, like *they*, *them*, *their* also spread to the south.

A particular feature of northern English is that it did not undergo the Great Vowel Shift in its entirety. Specifically, ME /u:/ did not diphthongise as is seen in local northern pronunciations like *town* /tʊn/. The form *uncouth* /ʌnkʊθ/ is a northern borrowing in the southern standard. It can be recognised as such because the southern form would be /ʌnkauθ/.

Western forms The number of western forms in the later standard is quite limited and is best seen in the spelling of words with a short high vowel, e.g. *busy*. In Middle English the high front rounded vowel /y/ was longest preserved in the west midlands and in accordance with Anglo-Norman scribal practice it was written with a single *u* (the Anglo-Norman spelling *ou* as in *house* was used for /u:/). The sound which corresponded to the western /y/ was /ɪ/ in the east midlands and /e/ in Kent. Hence one has the pronunciation /bɪsi/ for *busy* and /berɪ/ for *bury* which again shows a western spelling but a Kentish pronunciation (see below).

Midlands and North In present-day dialectology one does not treat these two large areas as a single unit, but in Old English studies this expanse is labelled *Anglian*. The reflexes of Anglian forms can still be seen today, for instance, words like *cold* and *old* derive from the Anglian forms *cald* and *ald*. The West

Saxon equivalents would have led to different pronunciations in Modern English.

South-East The south-east contains the county of Kent which already in the Old English period was linguistically distinct from other areas in England, having been settled by Jutes. One of the main features of this region is the presence of a mid front vowel where other areas have a high vowel. The case of *bury* has just been mentioned. The word *evil* shows the same phenomenon, this time with a long vowel. The West Saxon form of this word was *ȳfel* which would have developed regularly as follows: *ȳfel* /y:vəl/ → /i:vəl/ (unrounding) → /aivəl/ (Great Vowel Shift). However, the present-day form /i:vəl/ suggests (as does the orthography) that the input form was Kentish /e:vəl/.

Southern A feature which is found in the south in general (including Kent) is the voicing of fricatives in initial position, i.e. /f, s, ʃ, θ/ appear here as /v, z, ʒ, ð/. This is a phenomenon which the south shares to some extent with the varieties of Germanic in the Low Countries, i.e. Flemish and Dutch, which suggests that it could be an areal feature of considerable age. Initial voicing, or softening, can be seen in a few words in standard English whose pronunciation was taken from southern varieties, e.g. *vat*, *vixen* (cf. *fox* with /f-/), *vane*.

5.4 Areal linguistics

It has been observed that languages which are spoken in the same geographical region tend to have features in common even if the languages are not related genetically. In many cases this effect can be due to linguistic innovations originating in one language and then spreading to others in the area regardless of any linguistic or political boundaries. One can refer to a group of languages which show this type of diffusion as forming a ‘linguistic area’ or *Sprachbund* lit. ‘language federation’.

The best known example of a *Sprachbund* in Europe is the Balkans, though many others have been suggested in the past, e.g. the eastern Baltic area or the British Isles and western/northern Scandinavia. Outside Europe, South Asia, Middle America and Papua New Guinea have been classified as linguistic areas. In the geographically enclosed area of the Balkans there are a number of languages which are not all genetically related to each other and some that may show a fairly distant relationship. A variety of common features, so-called Balkanisms, are found among these languages as can be seen from the following table.

Affiliations of Balkan languages

<i>Language families</i>	<i>Individual languages</i>
Turkic	Turkish
Indo-European	Greek (Hellenic), Rumanian (Romance), Bulgarian, Macedonian (southern Slavic) Albanian (separate branch of Indo-European)

Common features of Balkan languages

- 1) Decay of nominal and pronominal inflection (merger of dative and genitive), but retention of complex verbal morphology in Bulgarian.
- 2) Pleonastic use of personal pronouns (redundancy in marking of grammatical categories), e.g. ???.
- 3) Loss of the infinitive and replacement by a personal construction, e.g. 'give me to drink' → 'give me that I drink'.
- 4) Use of postpositive article, i.e. 'house-the' for 'the house' (not in Greek, however).
- 5) Development of a mid-central vowel /i/.
- 6) The numerals 11 to 19 are frequently expressed in the form 'one on ten', 'two on ten', etc.
- 7) Periphrastic future tense (main verb plus auxiliary verb) with a verb of volition.
- 8) Analytic form of the comparative, like English 'more beautiful', rather than 'commoner' (synthetic comparative).
- 9) Many common idioms and calques.

Although no one language has all features listed above it is clear that in the course of history the languages of the Balkans have converged due to prolonged and close contact. This type of convergence is probably due to everyday speaker contact and possible co-habitation due to intermarrying and the sharing of economic resources.

Summary

- *Language contact* arises when speakers of different languages interface with each other. The more intensive the speaker contact, the greater the likelihood of mutual influence arising between the languages.
- In examining features unaccounted for in individual languages, contact explanations should only be assumed as a last resort, after considering *historical input* and *language internal developments*.
- There are different kinds of contact, *direct* and *indirect*. The effect of contact may be immediate and *direct transfer*, e.g. with borrowing of vocabulary, is obvious. Another type is terms *delayed effect contact*. Here the influence is less clearly felt and operates over a much longer

period of time. Typically it affects the grammar of a language and may lead over centuries to typological realignment.

- Where languages exist for centuries in a geographical circumscribed area they may come to share key features in their grammar, irrespective of their genetic background. In such cases one speaks of a linguistic area, e.g. the Balkans.

6 Language variation

6.1 Pidgins and creoles

A *pidgin* is a restricted language which arises for the purposes of communication between two social groups of which one is in a more dominant position than the other. The less dominant group is the one which develops the pidgin. Historically, pidgins arose in colonial situations where the representatives of the particular colonial power – soldiers, sailors, tradesmen, administrators – came into contact with indigenous populations. The latter were more or less forced to develop some form of communication with the former, particularly if they were enslaved. This resulted in a language on the basis of both the colonial language and that/those of the native population. Such a language represents a restricted form of the colonial one as it serves a definite purpose, namely basic communication with the colonists. In the course of several generations such a simplified language can become more complex, especially if it develops into the mother tongue of a group of speakers in which case it is termed a *creole*.

The interest of linguists in these languages has increased in recent decades. The main reason is that pidgins and creoles are young languages. In retracing their development it is possible to see how new languages can arise. Furthermore, the large number of shared features among widely dispersed pidgins and creoles leads to the conclusion these features are typical of language in general. Creoles are regarded by many linguists as embodying universals of structure. The features of older languages, such as complex morphology or intricate phonology, are seen as arising due to the action of various forces over a much longer period of time.

The pidgins and creoles which developed during the colonial period of the west European maritime powers – England, France, Spain, Portugal and the Netherlands – are distributed around the world in areas in which these countries were colonially active. The colonial language in the area where a pidgin arose is called the *lexifier language* because the vocabulary of the pidgin largely stems from this. One can recognise two main areas where pidgins and creoles with English as a lexifier language are to be found as shown in the following figure.

6.2 Developmental stages of pidgins and creoles

Pidgins are generally characterised as *restricted* and *extended*. In the life-cycle of pidgins one can note that they start off as restricted language varieties used in marginal contact situations for minimal trading purposes. From this original

modest outset a pidgin may, assuming that there are social reasons for it to do so, develop into an extended type. A particular scenario in the later development of a pidgin is where it is used as a means of communication not just between colonists and indigenous populations but among the latter themselves, especially if they have different native languages. This is the major reason for the survival of pidgin English in West Africa, i.e. as a *lingua franca*.

Social and linguistic scenarios with pidgins and creoles

	<i>Social situation</i>	<i>Linguistic correlate</i>
1)	Marginal contact	Restricted pidgin
2)	Nativisation	Extended pidgin
3)	Mother tongue development	Creole
4)	Movement towards standard language (not necessarily input language)	Decreolisation

The process of pidginisation is very common in any situation in which a *lingua franca* is called for. Such a variety can die out quickly once the situation which gave rise to it no longer obtains. If the situation does continue, however, then the pidgin is likely to survive. The steps from restricted to extended pidgin and further to creole are only taken in very few instances, particularly the major restructuring of pidgins, typical of creoles, does not normally occur.

Reasons for creole development Creoles may arise in one of two basic situations. One is where speakers of pidgins are put in a situation in which they cannot use their respective mother tongues. This was the case during colonial slavery (in the Caribbean and the southern United States) where speakers of the same language were deliberately kept in separate groups to avoid their plotting rebellion. They then had little choice but to maintain the pidgin which they had developed and pass it on to future generations, as the latter's mother tongue, thus forming the transition from a pidgin to a creole.

A second situation is where a pidgin is regarded by a social group as a desirable language and deliberately cultivated. This is the kind of situation which obtained in Cameroon and which does still on Papua New Guinea. The outcome of this situation has been that the children of pidgin speakers came to use the pidgin as a first language, thus rendering it a creole with the attendant expansion of all linguistic levels for the new creole to act as a fully-fledged language.

6.3 General features of pidgins

The essential characteristic of a pidgin is its structural simplicity. Because

pidgins are recent languages they have not had time to go through a cycle which would give rise to morphological complexity as, for instance, with the older Indo-European languages. The simplicity applies on a formal level, above all to phonology and inflectional morphology. However, pidgins, and even more so creoles, often have complex verbal systems, for instance with aspectual distinctions not found in the input languages.

Phonology The phonology does not contain any complex elements. For instance, if the input languages have clusters then these are simplified. This can lead to homophony, e.g. *mine* and *mind* would both be /main/. Marked sounds such as /θ/ and /ð/ are usually replaced by unmarked equivalents, e.g. /t/ and /d/, so that *the* is /də/ or /da/ and *teeth* is /tit/. The basic syllable structure is CV (consonant + vowel).

Morphology The morphology is always analytic in type (see section on typology above). By this is meant that there is almost a one-to-one relationship between words and morphemes. For instance, plural nouns which are formed in English by inflectional {S} are frequently formed by using a separate word along with the singular of the noun, e.g. for *boats* one finds analytic phrases such as *many boat*, *lot boat*, etc. Plurality can also be expressed by *dem* (< ‘them’ in English-based pidgins) as with *dem boats* in Atlantic pidgins or be implicit, i.e. recognizable from the context.

Other elements of pidgin morphology are the existence of second person plural pronoun forms, frequently by using non-standard *yous*, *yes* or *ye* (or *unu* – a native African form – in Carribean pidgins). This is an example of a distinction being introduced (or maintained from archaic or regional English during the formative period) which is not present in English any more, thus implying that the English situation is a marked one, reversed by pidgins. Gender distinctions, if existent in the input language, are normally not observed. Agreement between subject and predicate is often removed, both forms being unmarked, the context offering the necessary information on sentence roles.

Syntax The syntax of a pidgin is unelaborated as one would expect for a young language. The normal word order is SVO (subject-verb-object) in declarative sentences. Clause subordination is unusual or unknown, the juxtaposition of two main clauses being preferred as in *I sick and he come* ‘He came because I am sick’. Complex sentence features, e.g. raising as in *The car seems to be missing*, do not occur.

Serialisation and reduplication These are two syntactic features which are prominent in pidgins. By serialisation is meant that two or more verbs are used one after the other – in a series – to express some aspectual distinction, e.g. that an action has begun, as in *i go start begin teach* ‘he started teaching’. Reduplication is a feature which should not be overestimated in its significance

as a pidgin feature. It is to be found in a number of long-established languages – e.g. in Italian – and is thus a poor indicator of pidgin origin.

Lexicon The lexicon of a pidgin is derived from the needs of the environment in which it is spoken. It is fairly limited to start with. However, as the lexicon is an open class, it expands easily.

The lexicons of many pidgins share certain common elements. This fact has led linguists to assume a common base for the development of all pidgins. While this is a very strong claim, it is nonetheless undeniable that the lexical similarities between pidgins cannot be accidental, e.g. a form from Portuguese *saber* ‘know’ and *pequeno* ‘little, offspring’ is to be found in many English-based pidgins and creoles. A certain number of nautical terms are also occur widely in pidgins. For instance, the term *gali* now means any kitchen (in West African pidgins) and the term *cargo* refers to any load (see *Theories of origin* below).

6.4 Grammatical restructuring

The typical colonial situation was one where indigenous speakers developed a simplified form of the colonial language for basic communication purposes. Given the right circumstances, this could be *grammatically restructured* later. This happened to English in the Caribbean and West Africa, to French in Cameroon and in Haiti, in part also to Dutch in South Africa (in the genesis of Afrikaans). At these locations phonology and morphology were greatly simplified and the language in question became almost entirely analytical in type. This situation is different from the development of dialects (geographical variants of languages). Dialects are not simplified forms of a standard language. Furthermore, it is unusual for dialects to represent a different language type from the standard to which they relate.

Pidgins are formed by simplifying the input language. But the process of creolisation is more dynamic than simplification, which is typical of many other interim situations, such as those in second language learning. The dynamics of creolisation is evident in the structural reinterpretation of the input language. With English as base, many pidgins which became creoles have reinterpreted English inflections and formed new semantic equivalents to them which were not present in the input varieties from which they arose.

The question arises why this restructuring should take place? Furthermore, there is a striking similarity in the type of restructuring which pidgins undergo in the process of creolisation. Irrespective of where they are spoken and of the input languages, pidgins always restructure to an analytic type. A preferred interpretation of these facts is that the genesis of creoles from pidgins must be guided by structural universals of language. Assuming that a new language will have the characteristics typical of language in general, then it is

not surprising for creoles to show the same kind of analytical structure. This implies that the remaining language types – synthetic, agglutinative and polysynthetic – arise due to later developments after language genesis. Various minor changes (such as contractions, assimilations, etc.) would lead to synthetic structures arising. The loss of lexical status with some words and their attachment to other stems would yield inflections and variations in sentence structures which become established would lead to complexities in syntax.

6.5 Theories of origin

Various theories about the origin of pidgins have been proposed in the last hundred years or so. These can be presented as a basic group of five theories which show a degree of overlap. For the purpose of presentation the theories are treated separately. Naturally, a mixture of origins is also a possibility.

1) *The baby-talk theory* At the end of the nineteenth century Charles Leland, when discussing China coast pidgin English, noted that there were many similarities with the speech of children such as the following features:

- a) High percentage of content words with a correspondingly low number of function words
- b) Little morphological marking
- c) Word classes more flexible than in adult language (free conversion)
- d) Contrasts in area of pronouns greatly reduced
- e) Number of inflections minimised

Leland assumed that pidgins showed these features because it was a type of baby-talk. Later linguists, notably Otto Jespersen and Leonard Bloomfield, maintained that the characteristics of pidgins result from ‘imperfect mastery of a language’ and ‘disregard for grammar’. Although the features noted by these authors do exist, their implicitly evaluative assessment of pidgins is not acceptable today.

2) *Independent parallel development theory* This view maintains that the obvious similarities between the world’s pidgins and creoles arose on independent but parallel lines due to the fact that they all are derived from languages of Indo-European stock and, in the case of the Atlantic varieties, due to their sharing a common West African substratum. Some scholars, like the American linguist Robert Hall, believe that the similar social and physical conditions under which pidgins arose were responsible for the development of similar linguistic structures.

3) *Nautical jargon theory* As early as 1938 the American linguist John Reinecke noted the possible influence of nautical jargon on pidgins. It is known

that on the sea voyages during the colonial period many nationalities were represented among the crews of the ships. This fact may have led to the development of a core vocabulary of nautical items. Later pidgins show many of these lexical items irrespective of where they are spoken. Thus the word *capsize* turns up with the meaning ‘turn over’ or ‘spill’ in both West Atlantic and Pacific pidgins. So do the words *heave*, *hoist*, *hail*, *galley*, *cargo*. One of the shortcomings of this otherwise attractive theory is that it does not help to account for the many structural affinities between pidgins which arose from different European languages.

4) *Monogenetic/relexification theory* According to this view all pidgins can be traced back to a single proto-pidgin, a fifteenth century Portuguese pidgin, known as *sabir* from the word for ‘know’, which was itself probably a relic of the medieval *lingua franca*, common as a means of communication among the crusaders and traders in the Mediterranean area. *Lingua franca* survived longest on the North African coast and was attested in Algeria and Tunisia as late as the nineteenth century.

The theory maintains that when the Portuguese first settled on the west coast of Africa in the fifteenth century they would have used their *sabir*. When the Portuguese influence in Africa declined in the sixteenth and seventeenth centuries, the vocabulary of the then established pidgins would have been replaced by that of the new colonial language which was dominant in the area, usually English or French. As the Portuguese were among the first traders in India and South East Asia a similar situation can be assumed to have obtained: the vocabulary of the original Portuguese pidgin was replaced by that of a later European language.

According to this theory the grammatical structure of pidgins would not have been effected by the switch in vocabulary, that is by *relexification*. The analytic structure of all pidgins would go back to the grammar of the proto-pidgin coming from the Mediterranean area. However, there are a number of marginal pidgins – Russenorsk (on the Norwegian-Russian border) and Eskimo Trade Jargon – which are in no way connected with Portuguese and which are nonetheless analytic in structure.

5) *Universalist theory* This is the most recent view on the origin of pidgins and has elements in common with the other theories. The distinguishing mark of this theory is that it sees the similarities as due to universal tendencies in language genesis. These include analytic structure with simple phonology, SVO syntax with little or no subordination or other complexities and a lexicon which makes maximum use of polysemy (and devices such as reduplication) operating from a limited core vocabulary. To put it in technical terms, a creole will be expected to have unmarked values for linguistic parameters, e.g. with the parameter *pro-drop*, whereby the personal pronoun is not obligatory with finite verb forms (cf. Italian *capisco* ‘I understand’), the unmarked setting is for no *pro-drop* to be

allowed and indeed this is the situation in all pidgins and creoles, a positive value being something which can appear later with the rise of a rich morphology which renders the personal pronoun superfluous.

The term 'pidgin' There are a number of views on the origin of the term 'pidgin', which throw light on both linguistic argumentation and the scenarios for pidgins during the colonial period.

- 1) A Chinese corruption of the word *business*. As the word is used for any action or occupation (cf. *joss-pidgin* 'religion' and *chow-chow-pidgin* 'cooking') it should not be surprising that it be used for a language variety which arose for trading purposes.
- 2) Portuguese *ocupacao* meaning 'trade, job, occupation'. This suggestion is interesting as the Portuguese were among the first traders to travel to outside of Europe. Phonetically the shift from the original word to /pidʒɪn/ is difficult to explain.
- 3) The term could be derived from 'pequeno portugues' which is used in Angola for broken Portuguese spoken by illiterate people. This view is semantically justified seeing that the word 'pequeno' is often used to mean 'offspring', in this case a language derived from another. Phonetically, the shift would be from /peke:ɲo/ to /pidʒɪn/ (stages are not attested, however).
- 5) Hebrew word 'pidjom' meaning 'barter'. This suggestion is phonetically and semantically plausible, hinges however on the distribution of a Jewish word outside of Europe and its acceptance as a general term for a trade language.

The term 'creole' There is less controversy on this issue. The term would seem to derive from French 'creole', it in its turn coming from Portuguese 'crioulo' (rather than from Spanish 'criollo') which goes back to an Iberian stem meaning 'to nurse, breed, bring up'. The present meaning is 'native to a locality or country'. In the early colonial period it was used to refer to those from European countries born in the colonies. The term then underwent a semantic shift to refer to customs and language of those in the colonies and later to any language derived from a pidgin based on a European language, typically English, French, Portuguese, Spanish or Dutch. Now the term refers to any language of this type, irrespective of what the input language has been.