impair the normal orderliness and efficiency of speech. Language change, on the other hand, occurs when people whose brains and muscles are acting normally speak fast and efficiently. It would be most surprising if there were any substantial links between the two.

Summary

Overall, language development and language breakdown are of minor importance for the study of historical change.

The belief that children initiate change was a hopeful guess made by linguists to whom the whole process of change was mysterious. In fact, similarities between child language and language change are largely illusory. Children are unlikely to initiate change, since change is spread by social groups, and babies do not have sufficient group influence to persuade other people to imitate them.

The symptoms found in language breakdown only incidentally coincide with those of language change. Drunken speech contains some of the natural tendencies found in historical change, but it also contains some very different characteristics. Slips of the tongue may affect isolated lexical items. The study of language breakdown in brain-damaged people is almost totally irrelevant to the study of historical change.

15 Language birth

How languages begin

> Language was born in the courting days of mankind – the first utterances of speech I fancy to myself like something between the nightly love-lyrics of puss upon the tiles and the melodious love-songs of the nightingale.
>
> Otto Jespersen, *Language, its nature, development and origin* (1922)

Most people are quite puzzled about how languages might come into being. When they think about language birth, their thoughts are led inevitably to the fascinating problem of the ultimate origin of language. Various bizarre hypotheses have been put forward over the past hundred years or so. The 'ding-dong' theory claimed that the earliest words were imitations of natural sounds such as *bang!*, *cuckoo*, *splash!*, *moo*. The 'pooh-pooh' theory suggested that language arose from cries and gasps of emotion. The 'yo-he-ho' theory proposed that language was ultimately based on communal effort, with essential instructions such as *Heave!* and *Haul!* being the first words spoken, and numerous other speculative ideas were put forward.[1] For example, the Danish linguist Otto Jespersen argued that 'We must imagine primitive language as consisting (chiefly at least) of very long words, full of difficult sounds, and sung rather than spoken . . .[2] His musings on 'the courting days of mankind' are given in the quote at the top of the chapter.

Eccentric speculations led to widespread disapproval. In 1866, a ban on papers about language origin was issued by the Linguistic Society of Paris, the foremost linguistic society of the time. In 1893, the linguist William Dwight Whitney commented that: 'The greater part of what is said and written upon it is mere windy talk.'[3] Serious scholars mostly avoided the topic, which was regarded as a playground for cranks. Yet language evolved by normal evolutionary mechanisms, as has recently been widely recognized,[4] and the topic has finally become respectable.

This chapter will outline recent ideas on language origin. It will then discuss the birth of pidgins, restricted language systems which cater for essential common needs when people speaking different languages come into contact. Finally, it will show how pidgins may, in certain cirumstances, become elaborated, and grow into creoles, which are potential 'full' languages.

The origin of human language

Africa was probably the homeland of modern humans, and also of human language.[5] An 'East-side story' provides a plausible backdrop. Several hundred thousand years ago, we and our chimp cousins were spread across Africa. Then a major earthquake created the Great Rift Valley, splitting Africa into lush forest in the west and relatively dry savannah in the east.

Future humans were stranded in the arid east. Their desiccated territory became even drier, and they were forced to adapt, or die. They supplemented their meagre diet by scavenging for meat, which aided brain growth. They started to walk upright, partly in order to minimize the heat of the sun on their bodies. An upright stance promoted the production of clear sounds.

These physical developments were supplemented by mental advances. Primates – the animal order to which humans belong, alongside chimps, gorillas and others – are social animals. They have strong family ties, they interact with other group members, and they have a well-defined ranking order. Language may have developed as part of this extensive interaction. Perhaps 'grooming talking' – social chit-chat – supplemented, then largely replaced, manual grooming, the gentle picking out of each other's nits.

The ability to deceive provided a further incentive. True deception requires an animal to see things from another's point of view. This enabled humans to develop a 'naming insight', an understanding that an object may have a 'name', a symbol which can replace it. Chimps, incidentally, can easily label an object such as *banana* when they are requesting one to eat, but they rarely use such names at other times.

These underpinnings – clear sounds and the naming insight – possibly led to a heaping up of dozens, even hundreds, of vocabulary items.

From words to grammar

Numerous words led to the need for some kind of word order, and inbuilt predilections probably paved the way.

Humans have certain basic biases when they view the world, such as a tendency to place references to animate beings, especially humans, before other words. They also usually position verbs next to the objects involved in a verbal action. So words which meant, say, 'I killed a turtle', might come in a probable order *me kill turtle*, or *me turtle kill*. At first such an order might be variable. But later it might firm up: preferences become habits, then habits may became 'rules'.

This 'grammaticalization' tendency seems to be a firm characteristic of the speech of human beings. We see it happening in day-to-day language (Chapter 9). We also observe it happening in the development of pidgins, embryo languages.

How pidgins arise

A pidgin is frequently described as a 'marginal' language, used by people who need to communicate for certain restricted purposes. For this reason, pidgins tend to arise on trade routes, for example, along the coast of West Africa, in the Caribbean and on Pacific islands. We have records of a pidgin formed by Russian traders and Norwegian fishermen in north Norway,[6] and another between American-Indians in northwest USA and Canada.[7] The origin of the term *pidgin*[8] is also disputed, and a number of explanations have been put forward. The most popular theory is that it comes from Chinese Pidgin English, where the word *pidgin* means 'business', as in *gospidgin man* (literally *god-business-man*) 'a man who has a god as his business, a priest'. Another theory is that it is derived from a Hebrew word *pidjom* 'barter' – though at least five other origins have been claimed for the word. It is possible

that similar terms arose independently in different places, and then reinforced one another, coalescing in the common term 'pidgin'.

A pidgin takes one or more already existing language(s) as its point of origin. Many Pacific and West African pidgins are based on English, while a number of those found in the Caribbean are French-based. At first sight, therefore, most of the pidgins we know appear to be crude and oversimplified forms of a more sophisticated language. Take Tok Pisin, the English-based pidgin found in Papua New Guinea, which is also known as New Guinea Pidgin. It has now been in existence for about a century.[9] Here we find the word *mi* for 'I' and 'me' and the word *yu* for 'you', as in:

mi go	'I go'
yu go	'you go'
mi lukim yu	'I see you'
yu lukim mi	'you see me'

The plural of 'I' and 'you' is formed by adding the ending *pela* (from English *fellow*), so we get:

mipela go	'we go'
yupela go	'you (plural) go'

The English possessive 'my', 'your', 'our', and so on is expressed by using the word *bilong* 'of' (from English *belong*), so we find phrases such as:

papa bilong mi	'my father'
haus bilong mipela	'our house'
gras bilong het	'hair' (from 'grass of head')
gras bilong pisin	'bird feathers' (from 'grass of pigeon')
gras bilong solwara	'seaweed' (from 'grass of salt-water')
sit bilong paia	'ash' (from 'residue (shit) of fire')
sit bilong lam	'soot' (from 'residue (shit) of lamp')
papa bilong yu	'your father'
haus bilong yupela	'your (plural) house'

Faced with such superficially hilarious adaptations of the English language, some people have condemned pidgins as 'crudely distorted by false ideas of simplification' and dismissed them as 'broken language' or a 'bastard blend', unworthy of serious study.[10] Hugo Schuchardt, one of the few scholars who considered them worthy of attention in the nineteenth century, was warned by a

senior colleague that if he wished to further his academic career he should abandon this foolish study of funny dialects, and work on Old French – a warning repeated as late as the 1950s to Robert Hall, an American pioneer in the field.[11] So pervasive was this attitude that only in recent years have pidgins received their fair share of attention. The result of this neglect is that the formation of most pidgins went unrecorded, and the exact process by which pidginization occurred has been lost in the snowdrifts of time. Instead of accurate observation, there are a number of conflicting theories about the steps by which these restricted languages come into being.

The earliest theory, commonly found in the first half of the nineteenth century, was based on the false assumption that European languages are too sophisticated and complex to be learnt by supposedly primitive 'natives', who therefore simplified these advanced languages down to their own level: 'It is clear', commented one writer in 1849, 'that people used to expressing themselves with a rather simple language cannot easily elevate their intelligence to the genius of a European language . . . it was necessary that the varied expressions acquired during so many centuries of civilization dropped their perfection, to adapt to ideas being born and to barbarous forms of language of half-savage peoples'.[12] This arrogant and naive viewpoint is no longer thought to be relevant. It is a mistake to think that societies which lack Western technology have primitive languages. A stone-age culture may well possess less sophisticated vocabulary items, but the language's essential structure is likely to be as complex as that of any other language.

Today, there are four commonly held theories of pidgin origin which are not necessarily mutually exclusive.[13]

The first theory is that of imperfect learning. According to this viewpoint, a pidgin represents the best attempt of a people to learn a language quite unlike their own. In so doing, they produce a simplified form of speech comparable with that produced by children learning to speak for the first time. This becomes petrified when the speakers are no longer in contact with the base language. This is an attractive suggestion, and may well be partially correct. It cannot, however, be the sole source of the pidgins of the world, because we have evidence that the Portuguese-based

pidgin spoken in West Africa around 1500 was developed by the Portuguese, who taught it to the Africans.[14]

The second theory, therefore, suggests that a pidgin represents unconscious attempts by native speakers of the base language to simplify it in ways that might make it easier for non-native speakers to learn. Such a view regards a pidgin as a regularized form of 'foreigner talk', the sort of broken speech Londoners frequently use if a foreign tourist asks them how to get to the zoo. This viewpoint was put forward by the famous American linguist Leonard Bloomfield, and is found in a number of subsequent textbooks. Bloomfield claims, without giving any evidence, that such 'foreigner talk' is based primarily on imitation of learners' errors:

> Speakers of a lower language may make so little progress in learning the dominant speech, that the masters, in communicating with them, resort to 'baby-talk'. This 'baby-talk' is the masters' imitation of the subjects' incorrect speech . . . The subjects in turn, deprived of the correct model, can do no better now than acquire the simplified 'baby-talk' version of the upper language. The result may be a conventionalised jargon.[15]

The 'foreigner talk' theory has a number of supporters, although it is unlikely that such talk is based on imitation of learners' errors. There is no evidence that speakers of the base language ever listen critically or attentively to non-native speakers. 'Foreigner-talk', therefore, has its source mainly in the preconceived notions of people who *think* they are imitating foreigners, but are in fact spontaneously creating the simplified talk themselves.

Both the imperfect learning and the foreigner talk theories leave one major problem unsolved. They do not account for the fact that many pidgins share certain features. These shared characteristics have given rise to the suggestion that the pidgins of the world ultimately derive from one common source. The main candidate is a Portuguese-based pidgin which was widespread in the trade routes of the world in the fifteenth and sixteenth centuries at a time when Portugal was at the height of its economic power as a trading nation. Supporters of this theory point to Portuguese-based words which are found in a large number of pidgins, such as *save* or *savvy* for 'know', from Portuguese *saber* 'know', and

pikinini or *pikin* for 'child' from Portuguese *pequeno* 'little'. Two problems arise from this monogenetic ('single birth') theory: first, it cannot be proved. Secondly, there seem to be pidgin languages with pidgin characteristics based on non-European languages in places unlikely to have been influenced by Portuguese pidgin.

The difficulties of the single birth theory, combined with the observation that all pidgins have common features, have led other scholars to a fourth 'universalist' viewpoint.[16] They suggest that universal language structures automatically surface when anyone tries to build a simple language, and that any shared features will be universal features. Unfortunately, the similarities between pidgins seem to be enormously vague ones, and there is very little that can be said about common language universals beyond the fact that pidgins tend to follow the maxim 'one form per unit of meaning' (Chapter 12) to a greater extent than fully developed languages. A major problem is that any structural universals which might be trying to surface are often obscured by common features shared by the base and the substratum languages. If such a shared feature exists, it is highly likely to appear in the pidgin, even if it is a characteristic which is otherwise rare in the languages of the world. This is shown by 'Chinook jargon', a pidgin probably developed by American-Indians in the northwest USA and Canada before the arrival of Europeans. It contained a number of highly idiosyncratic features, by the standards of the rest of the world, but these all occur in the American-Indian languages of the region.[17]

While scholars argue the merits of these four theories, considerable light has been shed on the origins of Tok Pisin.[18] It is a product of the particular socio-economic conditions prevalent in the Pacific in the last century. In its formation, all the above theories may have played a part.

In the nineteenth century, there were extensive coconut and cocoa plantations on Samoa, for which the German owners had considerable difficulty finding adequate labour. Workers were therefore recruited in large numbers from the surrounding Pacific islands. Trading records show, for example, that in the last decade of the century, numerous labourers were shipped from New Guinea and the surrounding islands. Approximately a quarter of them died away from home, but the survivors were eventually

repatriated. Altogether around 6,000 labourers had a spell of several years on Samoa.

It seems likely that these workers were exposed to a jargonized form of English on the recruiting vessels taking them to Samoa. This broken English probably utilized conventions which had existed in trading circles for some time, such as the Portuguese-based *pikinini* 'child', and *save* 'know', mentioned earlier. Once on Samoa, this jargon seems to have been developed and stabilized. It was the means by which workers speaking a variety of different languages communicated with each other and with their masters.

Governor Solf's diary for 1895 includes a number of relevant comments on this:

> It is a well-known fact that almost everyone of the various native islands of the blacks in the South Seas possesses not only one but a whole number of different languages . . . Thus, in what way do the workers from such different places and islands communicate, when thrown together in Samoa? They use that Volapuk of the South Seas, which has become international among whites and coloureds: pidgeon English . . . The words *belong* and *fellow* are especially important. The former used with nouns and pronouns indicates property, *house belong me, horse belong me* 'my house', 'my horse' . . . The latter is added to all numbers, without regard to the gender of the following noun, *three fellow woman* 'three women', *two fellow horse* 'two horses'. It is incredible how quickly all blacks learn this lingua franca . . . [19]

Once repatriated, the labourers retained the pidgin they had learnt in Samoa in order to communicate with each other, which was otherwise impossible owing to the estimated 700 languages which are spoken in what is now Papua New Guinea. Whereas the pidgin on Samoa died out as soon as recruiting for the plantations ended at the time of the First World War, the pidgin in New Guinea expanded as it was gradually used for more purposes, particularly administrative and mission ones. At first it was a subsidiary language used when communicating with strangers. Eventually, with increasing mobility of the population, and the growth in importance of towns, it became the first language for children of mixed marriages. At this point it is no longer a pidgin – a subsidiary language used for certain restricted purposes – but a **creole**, an almost fully fledged language.

Embryo languages

A pidgin is, as it were, a language in embryo. Let us consider its essential characteristics.[20]

First of all, a genuine pidgin must not be confused with broken English, as frequently happens in popular usage. For example, when the pop singer Paul McCartney was imprisoned briefly in Japan, he claimed that he communicated with the other prisoners in pidgin English, meaning that he used some type of broken English.

A true pidgin has consistent rules. No one can make them up on the spur of the moment. In Papua New Guinea, there is a type of English known as Tok Masta, which is the broken English of certain Europeans who think they are speaking Tok Pisin, but who are in fact merely simplifying English in their own idiosyncratic way.[21] Such people often assert that the natives are stupid. In fact, the natives are simply finding these Europeans incomprehensible. One cannot talk Tok Pisin by simply adding *bilong* and *-pela* randomly between English words, as is sometimes believed.

A pidgin is not made up exclusively from elements of the base language. Vocabulary items are incorporated from native languages spoken in the area, and from others further afield as well. Tok Pisin vocabulary includes, for example, *kaikai* 'food, meal', a word of Polynesian origin, *susu*, an Austronesian word for 'milk', and *rausim* 'throw out', from the German *heraus* 'outside'. Constructions are also imported from other sources, particularly the languages spoken in the area.[22] Tok Pisin, unlike English, has two forms of the pronoun 'we': *mipela* meaning 'we excluding you', and *yumi*, which means 'we including you', a distinction found in a number of other languages in the Pacific area. Again unlike English, Tok Pisin distinguishes between the form of intransitive verbs (verbs which do not take an object) and transitive verbs (verbs which do), as in the following example using the word *bagarap* 'break down' (from English *bugger up* though with no obscene overtones) and *bagarapim* 'smash up': *ka bilong mi i bagarap* 'my car broke down' (intransitive verb, no ending); *em i bagarapim ka bilong mi* 'he smashed up my car' (transitive verb, ending *-im*). Note also the use of the particle *i*, which often precedes verbs. These examples show that speakers of the base language

cannot simply make up a pidgin, its rules have to be learnt. Just as the rules of chess cannot be predicted from looking at the old Indian game from which it was adapted, so the rules of an English-based pidgin cannot be deduced from the standard version of the English language. The pidgin is a separate system, with an identity of its own.

A pidgin is, however, relatively easy to learn. Compared with most fully fledged languages, it is both impoverished, and simpler. It is impoverished in that it has a smaller number of elements. There are fewer sounds, fewer words, fewer constructions. This becomes clear when Tok Pisin is compared with its base language, English. Most varieties of English have a large number of vowels, whereas Tok Pisin has five: [a], [e], [i], [o], [u]. So the words *slip* 'sleep' and *sip* 'ship' rhyme, and so do *tok* 'talk' and *wok* 'work' – and to avoid confusion the word for 'walk' is *wokabout*. Tok Pisin does not distinguish between [p] and [f], so *lap* 'laugh' and *kap* 'cup' rhyme, and so do *lip* 'leaf' and *slip* 'sleep'. Nor does it distinguish between the consonants [s], [ʃ] and [tʃ], so *sua* means both 'shore' and 'sore'. 'Watch' is *was*, and to avoid confusion 'wash' becomes *waswas*. 'Ship' becomes *sip* and 'sheep' is *sipsip*. Consonant clusters are mostly avoided, so 'salt' and 'shoulder' become *sol*, and 'cold' becomes *kol*. 'Six' becomes *sikis*, and 'spear', in many areas, is *supia*.

There are relatively few vocabulary items, so the same word can mean a number of different things depending on the context. Take the words *pikinini* 'child', *han* 'hand', and *haus* 'house'. *Pikinini man* is 'son', and *pikinini meri* is 'daughter' (from 'child woman'; the word *meri* derives from the name 'Mary', possibly reinforced by the word 'marry'). *Pikinini dok* is 'puppy', and *pikinini pik* is 'piglet'. *Pikinini bilong diwai*, literally 'child of tree', is the fruit of a tree. *Karim pikinini* is therefore either 'to give birth to a child', or 'to bear fruit'. *Han bilong dok* are the front legs of a dog, and *han bilong pik* is a shoulder of pork. *Han bilong pisin* is a bird's wing, *han bilong diwai* is the branch of a tree, while *han wara*, literally 'hand water', is the tributary of a river. *Plantihan* 'plenty hands' is a centipede. *Haus sik* is a hospital, and *haus pepa* 'house paper' is an office. *Haus bilong pik* is a pigsty, and *haus bilong spaida* is a spider's web.

Tok Pisin not only has relatively few vocabulary items, it also has only very limited means for expressing the relationship of one item to another, and of binding them together. For example, English often expresses the relationship between words by means of prepositions, *to, for, by, up, down*, and so on. Tok Pisin makes do with only three prepositions, *bilong* 'of', *long* 'to', 'for', 'from', and *wantaim* 'with'.

The time of an action is not normally specified, since verbs do not distinguish between tenses, though an adverb can be added if required, as in *Asde dispela man i stilim pik* 'Yesterday this man stole a pig.'

In true pidgins, there is little or no embedding – that is, the combination of two potential sentences by inserting one into the other – does not normally occur. Take the statements: *This man smashed up your car. He is my brother.* In English, these would be combined into a single sentence by means of an introductory word such as *who, that: This man who smashed up your car is my brother.* In a pidgin, the two statements would simply be juxtaposed: *Dispela man i bagarapim ka bilong yu, em i brata bilong mi*, literally, 'This man smash up your car, he is my brother.'

A pidgin is simpler than a mature language because it is more **transparent** (see chapter 10), in that it is nearer to the ideal of one form per unit of meaning, with systematic and easily detectable rules governing the alternations, as in the forms *mi* 'I, me', *yu* 'you', *mipela* 'I plural' = 'we', *yupela* 'you plural'.

The low number of elements and the transparency might make a pidgin seem like a linguist's dream – a near-perfect language. It certainly makes it an easily learnable tool for elementary communication purposes. Unfortunately, such simplicity brings its own problems. One of these is ambiguity. With a meagre sound system and a limited number of vocabulary items, the opportunities for confusion are multiplied. The sequence *hat*, for example, can mean 'hot', 'hard', 'hat' or, less usually, 'heart'. The phrase *bel bilong mi i pas* 'My stomach/heart is closed up/fast,' may mean, depending on the area or the circumstance, 'I am depressed', 'I am using a contraceptive', 'I am barren', or 'I am constipated.'

A second problem is that of length. In order to express quite ordinary concepts, a quite inefficient number of words are required.

A hymn, for example, is *singsing bilong haus lotu* 'song of a house worship', and a fertile woman is *meri i save karim planti pikinini* 'a woman (who) is accustomed / knows how to bear plenty of children'. Furthermore, the absence of adequate means of joining sentences together creates extraordinarily long strings of juxtaposed phrases, as well as frequent ambiguity.

In brief, true simplicity in a language system is gained at a high cost, such a high cost that it is only feasible in subsidiary, restricted languages. Once a pidgin becomes used for a wide variety of functions, it is forced to expand. It becomes first of all an extended pidgin – a pidgin which utilizes extra linguistic devices and vocabulary items, and which is halfway to being a full language. Eventually, when children of mixed marriages learn a pidgin as their first language, it becomes by definition a **creole**. At this point it expands still further. Let us now go on to consider by what means this expansion comes about.

Creoles as new-born languages

A pidgin is a language in embryo, a foetus with the potential to become a full language, but not yet capable of fulfilling the entire communication needs of a human. Some pidgins exist for a limited amount of time, and then die out. Others get progressively more complex as the purposes for which they are used expand. Eventually a pidgin may be learnt by someone as a first language. At this point it has become a **creole**, from the French *créole* 'indigenous', borrowed in turn from the Spanish *criollo* 'native'. The most widely accepted definition of a creole is that it is a one-time pidgin which has become the mother tongue of a speech community: 'A pidgin is no one's first language, whereas a creole is.'[23]

From the point of view of structure, it is difficult to know where a pidgin ends and a creole begins, since one can merge into another. A pidgin must undergo fairly massive changes in order to be viable as a full language, but we cannot pinpoint the stage at which it is mature. All we can say is that around the time of its 'birth' as a creole, it grows rapidly and extensively. Some of the changes seem to occur before it is acquired as a first language, others are initiated by the new native speakers.

Let us look at the kind of maturation which a pidgin undergoes when it turns into a creole. The examples below come from Tok Pisin,[24] which is now the first language for an estimated 10,000 speakers in Papua New Guinea, the commonest reason being intermarriage between speakers of different languages who can communicate only by means of Tok Pisin.

Let us look briefly at four different types of alteration and expansion. The first involves the speed of speech; the second lexical expansion; the third the development of tenses; and finally, the development of relative clauses.

People for whom a pidgin is a second, subsidiary language speak it slowly, one word at a time. When Tok Pisin is learnt as a first language, the rate of speech speeds up remarkably. This in turn has a dramatic effect on the phonology. Words are telescoped, and endings omitted. For example, rarely do native Tok Pisin speakers say the word *bilong*, like the older generation. Instead they say *blo*. So *man bilong mi* 'my husband' sounds like [mamblomi]. The word *long* 'to' is shortened to *lo*, and *save* 'to be accustomed to' is shortened to *sa*. So whereas an older speaker might say, *mi save go long lotu* 'I am accustomed to go to church', a native Tok Pisin speaker would say *mi sa go lo lotu*. To an outsider, the speech of the older generation, the non-native speakers, is fairly clear, but creolized Tok Pisin, on the other hand, sounds just like any other foreign language, an allegro ra-ta-tat of incomprehensible words and syllables.

In the realm of vocabulary, a number of cumbersome phrases are being replaced by new shorter words. For example, the old phrase *bel bilong mi i hat* 'my stomach/heart is hot' meaning 'I am angry' now exists alongside *mi belhat* 'I am stomach/heart hot' with the same meaning. The old phrase expressing a person's aptitude for something by the words *man bilong . . .*, as in *em i man bilong pait* 'he is a man of fight, he is a fighter', now exists alongside a shortened form, *em i paitman* 'he is a fightman/fighter'. In addition, technical, political and medical terms are being imported from other languages, particularly English.

Meanwhile, it is becoming relatively normal to mark the time of an utterance, even when this is clear from the context. *Bin*, from the English *been*, is now used in some areas to mark past

time, even when it is quite obvious that the action took place in the past, as in *Asde mi bin go lo(ng) taun* 'Yesterday I (past) went to town'. The same is happening with the future. *Baimbai* from English *by and by* was once used as an optional adverb, as in the government advertisement for peanuts:

Sapos yu kaikai planti pinat, *baimbai* yu kamap strong olsem Phantom.
'If you eat plenty of peanuts, you will become strong like Phantom.'

(Phantom is a popular cartoon figure who resembles Batman.) *Baimbai* has now been shortened to *bai*. It is now often used even when it is obvious that an event will take place in the future, as in:

Bai mi stori long wanem?
FUT I narrate about what
'What shall I talk about?'

But the position of *bai* fluctuates.[25] Mostly it comes before the first pronoun, as above. But with *em* 'he, she, it', it often comes after, perhaps to stop *bai* + *em* coalescing into a single word:

Em *bai* tokim liklik brata bilongen
'She will/would talk to her little brother.'

Time only will tell how this fluctuation will resolve itself.

Other types of wavering are found. *Bin*, a particle indicating the past, is firmly placed between a noun phrase and a verb, as:

faia *bin* kukim mi
'The fire burned me.'

Yet this also is seesawing, though in a different way. In some parts of Papua New Guinea, *pinis* from English 'finish' is used for PAST:

oi, wanpela mi kikim *pinis*[26]
hey, one I kick PAST
'Hey, I kicked one' (a crocodile).

But in areas which use *bin* for pastness, *pinis* has changed to meaning 'after':

mi sa skinim banana *pinis*, orait, mi kisim kokonat
'After I've peeled the banana, I take a coconut.'

This fluctuation, and also the tendency to find new uses for redundant words, show that changes in pidgins are ordinary changes, of the type found everywhere in languages.

And further similarities with full languages are emerging – *bin* can now be combined with other particles, as in:

mi no *bin sa* go klas
I not PAST CUSTOMARILY go class
'I habitually didn't go to school.'

This described how a pupil did not go to school for a long time, during an illness.

Tok Pisin, then, is twisting and turning English words into syntax of its own, as shown further below.

Almost there

The English word *like* appears in Tok Pisin as *laik*[27]:

mi *laik* toktok long dispela
'I would like to talk about this.'

Alongside this meaning, 'layering' (Chapter 9) is taking place: *laik* sometimes now means 'to be about to', at first via ambiguous usages:

mi smelim kaikai, mi *laik* troaut tasol
'If I smelled food, I wanted to / felt as if I was about to throw up'
mi *laik* pundaun tasol
'I was on the point of fainting' (lit. falling down)
wanpela big woa i *laik* kamap
'A big war is about to occur.'

Laik is therefore showing the layered behaviour typical of grammaticalization. In its most grammaticalized usages, it has become a true *proximative*, a grammatical structure found in various languages, meaning 'almost', 'nearly', 'to be about to'.

But *laik* is still competing with, or perhaps, learning to live with, its older rival *klostu* 'almost' (from 'close to'):

Klostu em *laik* paitim dispela sista hia
'Almost she was on the point of striking this nurse.'

Time will tell whether these will continue to combine, or whether *klostu* will fade away, or acquire a different meaning.

Who and where

Tok Pisin is also developing complex sentences – sentences with more than one clause.[28] Since creolized Tok Pisin is not yet standardized, different areas have developed these clauses in different ways. The following is a method of forming relative clauses (clauses introduced by 'who', 'which', 'that') which is found among a group of relatives originally from Goroka, a town in the Highlands of Papua New Guinea. In their speech the word *we* 'where' is also used to mean 'which'. The usage possibly developed through ambiguous sentences, sentences in which the word *we* could mean either 'where', its original meaning, or 'which'. One speaker, Henni, for example, spoke of the big hospital where / to which all people in Morobe Province go. But in another sentence uttered a few minutes later, she used *we* in a way that could only mean 'which'. She spoke of *sista we wok* 'the sister who was working' meaning 'the sister on duty in the hospital'. Her cousin Betty also used *we* in this way. Henni is a strong character who dominates those around her, who talks a lot, and whom other people tend to imitate. It is possible that her use of *we* will spread to others in the hostel where she lives, girls who come from different areas – and Henni herself may have picked up this usage from friends and relatives.

Time only will tell whether this particular method of forming relative clauses will catch on in Tok Pisin as a whole, or whether it will remain limited to a small geographical area, and then die out. At the moment, there are several independent means of making relative clauses in creolized Tok Pisin, depending on the area. When, or if, Tok Pisin becomes standardized, one of them will win out over the others. Clauses introduced by *we*, as described above, have a good chance of being the 'winner', since this construction appears to be used in other areas in the Papua New Guinea region, for example, Manus in the New Hebrides. Note, incidentally, that relative clauses beginning with the word 'where' are not an exclusively Tok Pisin phenomenon, since they

have also reputedly been found in other parts of the world – for example, West African Pidgin, and certain German dialects.

These changes illustrate how Tok Pisin is developing from a pidgin with limited resources into a full language.

A creole is a full language in the sense that it is often the only language of those who learn it as their mother tongue. It therefore has to be capable of dealing with a greater range of communication needs than a pidgin. The language is likely to develop fast during the first two generations of creole speakers. Later, its rate of growth will slow down, as it becomes a fully mature language, and takes its place among the thousands of others spoken in the world.

Some of today's best-known languages may have started out as creolized pidgins. It has even been suggested that the Germanic branch of the Indo-European language family, which includes English, German and Dutch, started out as a pidginized version of Indo-European. This startling theory is not generally accepted. But it does emphasize the fact that in the long run there is no way of distinguishing one-time pidgins and creoles from any other language.

Is there a bioprogram?

What guides creoles as they emerge? Let us consider two opposing hypotheses, the 'bioprogram' theory[29] and the 'spaghetti junction' point of view[30] Both of these viewpoints agree that there are some surprising similarities between widely separated creoles. But they disagree as to how this came about.

The bioprogram theory suggests that creoles follow a biologically programmed blueprint which exists in the human mind. Consequently, certain universal features are bound to surface when a creole emerges, and the creole moves straight to these. The spaghetti junction point of view suggests that initially a creole sprouts out various possibilities, like a spaghetti junction, a road intersection with several possible turn-offs. These are then gradually narrowed down, so that in practice only one exit is used.

The bioprogram view therefore regards the emergence of a creole as a fairly dramatic event, strongly influenced by genetic

programming. The spaghetti junction view considers the birth of a creole to be an accelerated version of the normal processes of change, revealing the same natural and social pressures as in any other language change.

On investigation, the bioprogram claim does not seem to be born out.[31] Creoles do not all follow the same path. Certain features are statistically likely to emerge, but they are not inevitable, nor do they appear instantaneously.

In conclusion, the stages by which pidgins develop into creoles seem to be normal processes of change. More of them happen simultaneously, and they happen faster, than in a full language. This makes pidgins and creoles valuable 'laboratories' for the observation of change.

16 Language death

How languages end

> I am always sorry when any language is lost, because languages are the pedigree of nations.
>
> Samuel Johnson, *Letter to Boswell*

In the nineteenth century, scholars frequently talked about languages as if they were organic entities, like plants, which went through a predictable life cycle of birth, infancy, maturation, then gradual decay and death. In 1827, the German scholar Franz Bopp claimed that 'Languages are to be considered organic natural bodies, which are formed according to fixed laws, develop as possessing an inner principle of life, and gradually die out because they do not understand themselves any longer, and therefore cast off or mutilate their members or forms.'[1]

Nowadays, we no longer have this simple belief that languages behave like beans or chrysanthemums, living out their allotted life, and fading away in due course. It is, however, a fact that languages sometimes die out. This is the process which we shall be discussing in this chapter.

Note that when we talk about languages dying, we are not referring to languages which gradually alter their form over the centuries, and in so doing possibly change their names. Latin, for example, is sometimes spoken of as a 'dead' language, because nobody today speaks it. But it did not really die, it merely changed its appearance and name, since French, Spanish, Italian and Sardinian are all direct descendants of Latin and are in a sense the same language. By language death, then, we do not simply mean this gradual alteration over time. We are referring to a more dramatic and less normal event, the total disappearance of a language.

Human beings never stop talking. How then can a language die out? When a language dies, it is not because a community has forgotten how to speak, but because another language has gradually ousted the old one as the dominant language, for political

and social reasons. Typically, a younger generation will learn an 'old' language from their parents as a mother tongue, but will be exposed from a young age to another more fashionable and socially useful language at school.

In this situation, one of two things is liable to happen. The first possibility is that speakers of the old language will continue speaking it, but will gradually import forms and constructions from the socially dominant language, until the old one is no longer identifiable as a separate language. This is in reality an extreme form of borrowing. The language concerned seems to commit suicide. It slowly demolishes itself by bringing in more and more forms from the prestige language, until it destroys its own identity.

The second possibility is more dramatic. In some circumstances, the old language simply disappears. We are dealing not with the natural passing away of a language, but rather with a case of murder – murder by the dominant language as it gradually suppresses and ousts the subsidiary one. Let us look at these two phenomena.

Language suicide

Language suicide occurs most commonly when two languages are fairly similar to one another. In this situation, it is extremely easy for the less prestigious one to borrow vocabulary, constructions and sounds from the one with greater social approval. In the long run, it may obliterate itself entirely in the process.

The best-known cases of language suicide are those in which a developing language, a creole, gets devoured by its parent. A creole is often situated geographically in an area where people still speak the **lexifier** language, the one which provided most of the creole's vocabulary. This dominant language is usually one with social prestige. Consequently, social pressure tends to move the creole in its direction. This process is known as **decreolization**.[2]

Decreolization begins, as with other cases of borrowing (Chapter 10), in constructions and sounds in which there is an overlap between the lexifier and the creole, and, like all language change, it occurs in a series of small steps.

Consider the changes occurring in Bushlot, a Guyanan village which contains approximately 1,500 inhabitants of East Indian

origin.[3] These are the descendants of labourers brought from India in the nineteenth century, who learnt a pidgin English from African field-hands, which has developed into what is today known as Guyanan Creole. This creole is gradually becoming decreolized as it moves back towards English in a series of step-by-step changes. For example, among 'deep-creole' speakers, the word *fi* or *fu* is used where English would use *to*:

Tshap no noo wa *fu* du
chap not know what to do
'The fellow didn't know what to do.'

In less deep creole the word *tu* is used:

Faama na noo wat *tu* duu
farmer not know what to do
'The farmer didn't know what to do.'

At first sight, the alteration between *fu* and *tu* seems to be chaotic, since both forms can occur in one person's speech in the same conversation. Closer inspection shows that, where *tu* is replacing *fu*, it is doing so in an orderly fashion, working through the verb system in three stages. At each step, there is fluctuation between *fu* and *tu*, with *tu* gradually winning out. First, *tu* is introduced after ordinary verbs, such as *ron* 'run', *kom* 'come', *wok* 'work', as in:

Jan *wok tu* mek moni
'John works to make money.'

As a second stage, it begins to occur after verbs expressing wanting, or desire (known as desiderative verbs):

Jan *won tu* mek moni
'John wants to make money.'

Finally, it spreads to verbs meaning 'start' or 'begin' (so-called inceptive verbs), as in:

Jan *staat tu* mek moni
'John started to make money.'

This change, then, moves onwards and outward, like other linguistic changes, saturating each linguistic environment in turn (Chapter 6).

Decreolization is also occurring in urban varieties of Tok Pisin.[4] In Papua New Guinea towns, English is the language of instruction used in universities, and the language of commerce and business establishments such as banks. In these environments, Tok Pisin is being increasingly swamped by English words and constructions – a fact sometimes resented by rural speakers. In a letter to *Wantok*, a Tok Pisin newspaper, one rural dweller complained bitterly about this happening: 'Nongut yumi hambak nambaut na bagarapim tokples bilong yumi olsem' – 'We must not [literally, 'It is no good for us to'] mess around and ruin the language of our country in this way.'[5]

Massive vocabulary borrowing is the most superficially noticeable aspect of decreolization in Tok Pisin. Since many existing pidgin words are based on English ones, the mechanisms of adaptation are well understood by the speakers, and hundreds more can easily infiltrate, particularly in situations in which Tok Pisin lacks sufficient vocabulary of its own. For example, Tok Pisin is now the official language of parliamentary transactions in the House of Assembly in the capital, Port Moresby. Political crises require heavy borrowing from English, since Tok Pisin does not have the technical terms to cope. The following is an extract from a radio broadcast[6] describing a change of government:

> Lida bilong oposisen bipo, Mista Iambakey Okuk, i kirap na go muvim dispela mosin ov nou konfidens long praim minista, Mista Somare. Tasol memba bilong Menyama, Mista Neville Bourne, i singaut long point ov oda na tokim palamen olsem dispela mosin i no bihainim gud standing oda bilong palamen na konstitusin bilong kantri.
>
> 'The previous leader of the opposition, Mr Iambakey Okuk, stood up and proceeded to move this motion of no confidence in the prime minister, Mr Somare. But the member for Menyama, Mr Neville Bourne, called out on a point of order and told parliament that this motion was not in accordance with the standing orders of parliament and the constitution of the country.'

In the passage above, English structures are imported, as well as English words and phrases, as in *na tokim palamen olsem* 'and told parliament that'.

Advertisements, which often advocate Australian products, also tend to be direct translations of English ones:

> Bilong lukautim gud gras long hed bilong yu na rausim ol laus, traim Pretty Hair. Pastaim tru, wasim gras long wara, bihain putim Pretty Hair pauda. Usim wanpela liklik paket Pretty Hair olsem tede, wet inap de bihain long tumora, na usim gen . . .[7]
>
> 'To look after your hair properly and get rid of the lice, try Pretty Hair. First of all, wet your hair with water, then apply Pretty Hair powder. Use one little packet of Pretty Hair in this way today, wait until the day after tomorrow, and use it again . . .'

Rural pidgin would have a number of differences. For example, it would probably use the pidgin word *haptumora* instead of the English-based *de bihain long tumora* 'day after tomorrow'.

Expressions of time, such as the one above, are the aspect of English which has most obviously influenced urban pidgin. Many English phrases crop up, even when speakers are convinced that they are speaking 'pure' pidgin. This is a continuation of a movement which has been going on in pidgin for some time. Nowadays, even rural speakers tend to say *foa klok, hapas tri*, 'four o'clock', 'half-past three', and so on, instead of the more cumbersome pidgin phrases which describe the position of the sun or the amount of natural light, as in *taim bilong san i godaun* 'the time of the sun going down', which is around six o'clock in the evening. In addition, for dates, the English system of weeks and months has been imported. The days of the week are derived from the English ones: *Sande, Mande, Tunde* 'Sunday, Monday, Tuesday', and so on; and so are the words *wik* 'week' and *yia* 'year'. In these circumstances, it is extremely easy for more English words and phrases to creep in, especially as most urban speakers have a reasonable knowledge of English. So we find expressions such as *fes yia* 'first year' instead of the older *namba wan yia*, beside an already existing pidgin *las yia* 'last year'. The pidgin *sampela taim* 'sometimes' tends to be shortened to the English-based *samtaim(s)*. Phrases and words such as *next morning, weekend, late, early, ten o'clock* (instead of *ten klok*) frequently creep into conversations. As in all language change, there is a tremendous amount of fluctuation. On one day a person might use an English phrase, on another day a Tok Pisin one. Sometimes English and Tok Pisin forms of the same word occur in a single sentence, as in *Sampela taim mipela*

goaut o samtaims mipela stap na stori '*Sometimes* we go out, or *sometimes* we stay in and chat.' At other times, Tok Pisin and English phrases get mixed together. The Tok Pisin for 'first . . . then . . .' is *pastaim . . . bihain . . .* (as in the Pretty Hair advertisement quoted above, 'First . . . wet your hair . . . then apply Pretty Hair'). One informant was completely inconsistent over this. Sometimes she used the expected *pastaim . . . bihain*, at other times the English *fest . . . afte* 'first . . . after'. Sometimes she mixed the two, as in *Fest mi boilim pitpit . . . bihain mi putim banana insait* '*First* I boil the pitpit . . . *then* I put the banana in.' This girl also once confused *pastaim* and *fest* into a single word, producing the hybrid *festaim: Festaim mipela go kisim paiawut* '*First* we go and get firewood.'

In some sentences, the English and Tok Pisin are so inextricably mixed that it is hard to tell which language is being spoken, as in *Krismas bilong mi, em eighteen years old* 'My Christmases, it's eighteen years old'. The true Tok Pisin form would have been *Mi gat wanpela ten et krismas*, or literally 'I have one ten and eight Christmases'.

These expressions of time represent more than the importation of isolated vocabulary items. Many of them have a more insidious effect. For example, Tok Pisin does not normally alter the form of a word when it is plural. Instead a numeral is added to the front, as in *tripela pik, planti pik* 'three pigs', 'many pigs', or the 'pluralizer' *ol, ol pik* 'pigs'. But in expressions of time, English *-s* is frequently inadvertently added, as in *tu wiks moa* 'two weeks more', *tri des* 'three days', *wan an haf auas* 'one and a half hours', *wikends* 'weekends'. This creeping in of *-s* plurals may represent the first slow stages of a much wider change in the formation of plurals (Chapter 7).

Expressions of time are also having an effect on the sound patterns of the language. For example, the increasing use of the words *after* and *afternoon* means that many people now feel *ft* to be a normal combination of sounds in the middle of a word, even though previously it did not exist, as is shown by the pidgin word *apinun* 'evening'.

Time expressions are not the only portion of English which is infiltrating the speech of the average urban speaker, though they are perhaps the most pervasive. Numerous other aspects of English

life are insidiously making their way into Tok Pisin, and disrupting its structures and vocabulary. For example, most shops and businesses are structured in accordance with the meal breaks in a standard Australian day, so pidgin speakers talk about *hevim brekfas, lunch, tea, dinner*, and so on. This, incidentally, sometimes angers older speakers who boast that in their youth they used to work all day without stopping to eat.

Western foods are being introduced alongside the traditional root vegetables such as yam, taro, sweet potato, which used to comprise the total diet of many Papua New Guineans. So people now talk about *mekim sandwich, bread*, as in *Favourite kaikai bilong mi, em bread, toasted bread* 'My favourite food is bread, toasted bread', *kiau na bread slice* 'eggs and a slice of bread'. As can be seen, this is another area in which Western words and phrases have become totally mixed with Tok Pisin ones.

The interweaving of English and Tok Pisin occurs not only in single sentences, but also in conversation. One person may ask a question in English, and the other reply in Tok Pisin:

Speaker A Have you seen our brush?
Speaker B Mi no lukim. ('No, I haven't seen it.')
Speaker C It might be in the bathroom.
Speaker A Yes, em i stap. ('Yes, here it is.')

The fact that this mixture is totally natural, and not an attempt to be clever or funny, is shown by the fact that it happens in situations where the participants are totally wrapped up in what they are doing, and not consciously paying attention to their speech. Rugby football is a game in which emotions run high, and the surrounding crowd is continually yelling encouragement or abuse, in an inextricable mixture of English and Tok Pisin. *Come on, boys! Autim!* 'Pass it out!', *Em nau!* 'That's it!', *Some more of that! Some more, Brothers!* (Brothers is the name of a football team), *Maski namba tu!* 'Don't pay any attention to number two!', *Good work, Jumbo. Gerim low!* 'Get him low' (English words with Tok Pisin pronunciation of [r] for [t] as in *wara* 'water'), *Don't let them put a try! Ah, em i putim trai!* 'Ah, he scored a try.'

The examples of decreolization discussed show the way the process occurs. Phrases from the base language are borrowed in

particular situations, usually where there is a strong overlap between the creole and the base language, and/or where the creole is lacking or cumbersome. The borrowed words and phrases, though seemingly isolated and innocuous, tend to have a more pernicious and far-reaching effect than is obvious at first sight. The base language spreads in all directions, like an octopus entwining its tentacles round all parts of an animal before it eventually kills it.

Language murder

Language murder is more dramatic than language suicide. The old language is slaughtered by the new. How does this happen?

The first stage is a decrease in the number of people who speak the language. Typically, only isolated pockets of rural speakers remain. If these isolated groups come into close contract with a more socially or economically useful language, then bilingualism becomes essential for survival. The 500 or so Kwegu in Ethiopia, for example, live along the banks of the Omo River, and mainly hunt hippopotamus.[8] They also keep bees. Honey is extremely popular in the Ethiopian Highlands because of its intoxicating properties when converted into mead by mixing it with water and yeast. The Kwegu exist partly by selling honey to the more numerous and powerful Mursi and Bodi who surround them. The Kwegu therefore speak either Mursi or Bodi, but the Mursi and Bodi do not usually speak Kwegu. Mursi and Bodi men marry Kwegu girls, who are absorbed into their husbands' lives. But the reverse does not happen. Consequently, the acquisition of Kwegu as a first language is decreasing.

The first generation of bilinguals is often fluent in both languages. But the next generation down becomes less proficient in the dying language, partly through lack of practice. The old language is therefore spoken mainly by the old people. As one of the few remaining speakers of Arvanítika (an Albanian dialect spoken in Greece) noted: 'We don't speak it with the children; with old folks like ourselves.' And if they do address the younger generation in Arvanítika, the latter are likely to respond in Greek.[9]

The younger generation lack practice, mainly because the old language is used on fewer and fewer occasions, to talk about fewer

and fewer topics. Consider the gradual contraction of German in a trilingual community in Sauris, a small village in northeast Italy.[10] Its inhabitants were once German speakers. Nowadays, the 800 or so villagers use three languages, Italian, Friulian and German. Italian is the official language, used in church and school. Friulian is the local dialect, which is used in bars and for everyday conversation round the village. German, once the main language, is now gradually being ousted by the other two. In the course of the twentieth century it gradually retreated, and became used in fewer and fewer circumstances. In recent years, it has been spoken almost exclusively in the home, as the language of intimacy between family members. Now even this function is dying out, as many parents feel that it is better for their children's future to converse with them in Italian, and German-speaking families have even begun to meet with some criticism: 'Poor child, he doesn't even speak Friulian',[11] was a remark made by the mayor's mother about a child whose family still addressed it in German. From this viewpoint, languages simply die out because there is no need for them: 'Languages at the lower end of the prestige scale retreat . . . until there is nothing left for them appropriately to be used about.'[12]

Finally, the few remaining speakers are 'semi-speakers'. They can still converse after a fashion, but they forget the words for things, get endings wrong, and use a limited number of sentence patterns. This phenomenon is reported fairly frequently in the literature. A typical example is Bloomfield's description of the speech of White Thunder, one of the last remaining speakers of the American-Indian language Menomini: 'His Menomini is atrocious. His vocabulary is small; his inflections are often barbarous; he constructs sentences on a few threadbare models.'[13]

One of the earliest detailed studies of language death was by Nancy Dorian, an American linguist who studied the demise of Scottish Gaelic, which is a receding language throughout Highland Scotland.[14]

Dorian looked in particular at isolated pockets of Gaelic speakers in three fishing villages, Brora, Golspie and Embo. These villages are situated on the eastern coast in the far north of Scotland, an area in which Gaelic has practically died out apart from in the villages under discussion. In Brora and Golspie there are a

number of seventy- to eighty-year-olds who were taught Gaelic as their first language, and in Embo, a more isolated village, it is possible to find people in their early forties who regard Gaelic as their mother tongue. These residual Gaelic speakers are bilingual, and a number of them speak English better than Gaelic. Most of them are aware that their Gaelic is inferior to that spoken by their parents and grandparents, and are particularly conscious of gaps in their vocabulary, explaining that their elders had many more 'words for things' than they have themselves.

Dorian divided her informants into three groups depending on their age and level of competence: older fluent speakers, younger fluent speakers and semi-speakers – the last being those who could make themselves understood, but whose Gaelic was aberrant in a number of ways. She then compared the speech of these groups.

Superficially, one would predict a straightforward reduction in complexity in the speech of the least competent Gaelic speakers, and in some constructions this was what Dorian found. For example, Gaelic has two types of passive construction (roughly comparable with sentences such as *Augustus was kicked by a cow* and *Augustus got himself kicked by a cow*). Dorian found that younger Gaelic speakers tended to confuse the two types, with one type gradually winning out over the other as a model for all passives. In the case of one mother and son pair, Dorian recorded eight correct and two incorrect attempts at translating English passives into Gaelic by the mother, a woman in her seventies. The son, on the other hand, an unmarried man in his forties who lived in his mother's household, made twelve incorrect attempts, and only one correct one.

However, in other respects the situation was more complex, as was shown when Dorian considered noun plurals. In general, the less competent speakers chose one of two paths when they could not remember the correct Gaelic inflection for a word. Sometimes they simply omitted the problem ending. At other times they retained and expanded Gaelic forms which had English equivalents, while decreasing the use of forms which were special to Gaelic, as the following paragraphs show.

There are eleven different ways of forming the plural in the East Sutherland variety of Gaelic under discussion. The four basic

devices are suffixation (adding on a suffix), vowel alternation (changing the vowel), final mutation (changing the final consonant), final lengthening (lengthening the final consonant):

Type	Singular	Plural		English comparable form
Suffixation	[pre:g]	[pre:gən]	'lies'	ox/oxen
Vowel alternation	[makh]	[mikh]	'sons'	foot/feet
Final mutation	[phũ:nth]	[phũ:ntʃh]	'pounds'	—
Final lengthening	[in'an]	[in'an:]	'onions'	—

The other seven ways are basically combinations of these four. For example, [se:x] [se:çɐn] 'dishes' involves both suffixation and final mutation, and [yax] [yəiçu] 'horses' uses suffixation, vowel alternation and final mutation.

If we leave aside the mixed plurals, and look only at the simple devices, we find the following percentages of use among the three groups of speakers:

	Older fluent speakers %	Younger fluent speakers %	Semi-speakers %
Suffixation	50	44	63.5
Vowel alternation	5	4.5	4
Final mutation	10	9	5
Final lengthening	7	5.5	1
Zero	—	0.5	9

These morphological alterations were accompanied by phonological ones: Gaelic sounds not shared by English, such as [ç] (palatal fricative) tended to disappear, or were used only sporadically.

The figures quoted above show the messiness of language death. Although general trends can be discerned, the old language does

not fade away neatly. Dorian noted that even in the language of the two weakest Gaelic speakers whom she interviewed, devices other than suffixation occurred in a number of plurals. Isolated words retain their Gaelic inflections right up to the end. As Dorian notes: 'East Sutherland Gaelic can be said to be dying . . . with its morphological boots on.'[15]

In the next stage, the younger generation will recognize only a few scattered Gaelic words, usually plants, foods, or town names. At this stage, the language can be said to have died, or, more appropriately, to have been murdered by the influx of another socially and politically dominant language.

Language death is a social phenomenon, and triggered by social needs. There is no evidence that there was anything wrong with the dead language itself: its essential structure was no better and no worse than that of any other language. It faded away because it did not fulfil the social needs of the community who spoke it.

So many doors

'Death hath so many doors to let out life', said John Fletcher in the seventeenth century.[16] And this is certainly true of language death. As more and more dying languages are explored, numerous variants of the scenarios outlined above have been found.[17]

In particular, sociolinguistic work on **code-switching** indicates how dying languages can be intertwined with healthy ones.[18] Bilingual speakers often 'switch codes', that is, move from one language to another and back again in the course of conversations. Sometimes, it is unclear which one they are speaking at any particular point. The process may result in language mixing (Chapter 10). But in most cases, one of the languages wins out, and the other is demoted to subsidiary status.

Children exposed to two languages can shed light on this switching and mixing. A child who was a fluent speaker of Hebrew moved from Israel to the USA at the age of two-and-a-half.[19] At around the age of three, she could speak both Hebrew and English. Soon after, she started to use defective Hebrew verb forms, and sometimes she inserted these into an English frame:

I'm **menagev**-ing myself. I want to **inagev** myself
'I'm **drying** myself. I want to **dry** myself.'

Eventually, Hebrew verbs faded away.

Diminishing numbers

A language finally dies when no-one speaks it, and this can happen suddenly. The last speaker of Kasabe, a Cameroon language, died on 5 November one year. By 6 November, Kasabe was an extinct language.[20] And this extinction is happening at an ever-increasing rate.

Around 6,000 languages exist, according to one count. Of these, half may be moribund: they are no longer learned as a first language by a new generation of speakers. A further 2,400 are in a danger zone: they have fewer than 100,000 speakers. This leaves only around 600, 10 per cent of the current total, in the safe category.[21]

Of course, new dialects, sometimes new languages, are constantly emerging, as existing languages split apart: English has already divided into many Englishes – American English, British English, Australian English, Indian English, and so on.[22] But the structural diversity of the world's languages will undoubtedly be diminished.

Is this a problem? Some people see it as a tragedy, a loss of the world's priceless cultural heritage: 'Just as the extinction of any animal species diminishes our world, so does the extinction of any language.'[23] 'With every language that dies, another precious source of data about the nature of the human language faculty is lost.'[24]

Others query this:

> Last summer I was working on Dahalo, a rapidly dying Cushitic language, spoken by a few hundred people in a rural district of Kenya. I asked one of our consultants whether his teen-aged sons spoke Dahalo. 'No', he said. 'They can still hear it, but they cannot speak it. They speak only Swahili.' He was smiling when he said it, and did not seem to regret it. He was proud that his sons had been to school, and knew things that he did not. Who am I to say that he was wrong?[25]

The answer, perhaps, is to ensure that people are aware of the value of their first-learned language. Only they, the speakers, can preserve it. And they can succeed, if they want to – as Hebrew and, to a lesser extent, Welsh, have shown. Both have been significantly revived in recent years.

Perhaps, in an ideal world, everyone would speak two, three or even multiple languages. This is not Cloud-Cuckoo Land. In Papua New Guinea, which is reputed to have more languages crammed into its small space than any other part of the world, numerous people are multilingual. When I admitted that I spoke only English fluently, my informants were puzzled: 'But how do you then talk to your relatives who live in a different place?'

17 Progress or decay?

Assessing the situation

If you can look into the seeds of time,
And say which grain will grow and which will not . . .
William Shakespeare, *Macbeth*

Predicting the future depends on understanding the present. The majority of self-proclaimed 'experts' who argue that language is disintegrating have not considered the complexity of the factors involved in language change. They are giving voice to a purely emotional expression of their hopes and fears.

A closer look at language change has indicated that it is natural, inevitable and continuous, and involves interwoven sociolinguistic and psycholinguistic factors which cannot easily be disentangled from one another. It is triggered by social factors, but these social factors make use of existing cracks and gaps in the language structure. In the circumstances, the true direction of a change is not obvious to a superficial observer. Sometimes alterations are disruptive, as with the increasing loss of *t* in British English, where the utilization of a natural tendency to alter or omit final consonants may end up destroying a previously stable stop system. At other times, modifications can be viewed as therapy, as in the loss of *h* in some types of English, which is wiping out an exception in the otherwise symmetrical organization of fricatives.

However, whether changes disrupt the language system, or repair it, the most important point is this: it is in no sense wrong for human language to change, any more than it is wrong for humpback whales to alter their songs every year.[1] In fact, there are some surprising parallels between the two species. All the whales sing the same song one year, the next year they all sing a new one. But the yearly differences are not random. The songs seem to be evolving. The songs of consecutive years are more alike than those that are separated by several years. When it was first discovered that the songs of humpbacks changed from year to year, a simple explanation seemed likely. Since the whales only

sing during the breeding season, and since their song is complex, it was assumed that they simply forgot the song between seasons, and then tried to reconstruct it the next year from fragments which remained in their memory. But when researchers organized a long-term study of humpbacks off the island of Maui Hawaii, they got a surprise. The song that the whales were singing at the beginning of the new breeding season turned out to be identical to the one used at the end of the previous one. Between breeding seasons, the song had seemingly been kept in cold storage, without change. The songs were gradually modified as the season proceeded. For example, new sequences were sometimes created by joining the beginning and end of consecutive phrases, and omitting the middle part – a procedure not unlike certain human language changes.

Both whales and humans, then, are constantly changing their communication system, and are the only two species in which this has been proved to happen – though some birds are now thought to alter their song in certain ways. Rather than castigating one of these species for allowing change to occur, it seems best to admit that humans are probably programmed by nature to behave in this way. As a character in John Wyndham's novel *Web* says: 'Man is a product of nature . . . Whatever he does, it must be part of his nature to do – or he could not do it. He is not, and cannot be *un*natural. He, with his capacities, is as much the product of nature as were the dinosaurs with theirs. He is an *instrument* of natural processes.'

A consideration of the naturalness and inevitability of change leads us to the three final questions which need to be discussed in this book. First, is it still relevant to speak of progress or decay? Secondly, irrespective of whether the move is a forwards or backwards one, are human languages evolving in any detectable direction? Thirdly, even though language change is not wrong in the moral sense, is it socially undesirable, and, if so, can we control it?

Let us consider these matters.

Forwards or backwards?

'Once, twice, thrice upon a time, there lived a jungle. This particular jungle started at the bottom and went upwards till it reached

the monkeys, who had been waiting years for the trees to reach them, and as soon as they did, the monkeys invented climbing down.' The opening paragraph of Spike Milligan's fable *The story of the bald twit lion* indicates how easy it is to make facts fit one's preferred theory.

This tendency is particularly apparent in past interpretations of the direction of change, where opinions about progress or decay in language have tended to reflect the religious or philosophical preconceptions of their proponents, rather than a detached analysis of the evidence. Let us briefly deal with these preconceptions before looking at the issue itself.

Many nineteenth-century scholars were imbued with sentimental ideas about the 'noble savage', and assumed that the current generation was by comparison a race of decadent sinners. They therefore took it for granted that language had declined from a former state of perfection. Restoring this early perfection was viewed as one of the principal goals of comparative historical linguistics: 'A principal goal of this science is to reconstruct the full, pure forms of an original stage from the variously disfigured and mutilated forms which are attested in the individual languages', said one scholar.[2]

This quasi-religious conviction of gradual decline has never entirely died out. But from the mid nineteenth century onward, a second, opposing viewpoint came into existence alongside the earlier one. Darwin's doctrine of the survival of the fittest and ensuing belief in inevitable progress gradually grew in popularity: 'Progress, therefore, is not an accident, but a necessity . . . It is a part of nature',[3] claimed one nineteenth-century enthusiast. Darwin himself believed that in language 'the better, the shorter, the easier forms are constantly gaining the upper hand, and they owe their success to their inherent virtue'.[4]

The doctrine of the survival of the fittest, in its crudest version, implies that those forms and languages which survive are inevitably better than those which die out. This is unfortunate, since it confuses the notions of progress and decay in language with expansion and decline. As we have seen, expansion and decline reflect political and social situations, not the intrinsic merit or decadence of a language. Today, it is a historical accident that

English is so widely spoken in the world. Throughout history, quite different types of language – Latin, Turkish, Chinese, for example – have spread over wide areas. This popularity reflects the military and political strength of these nations, not the worth of their speech. Similarly, Gaelic is dying out because it is being ousted by English, a language with social and political prestige. It is not collapsing because it has got too complicated or strange for people to speak, as has occasionally been maintained.

In order to assess the possible direction of language, then, we need to put aside both quasi-religious beliefs and Darwinian assumptions. The former lead to an illogical idealization of the past, and the latter to the confusion of progress and decay with expansion and decline.

Leaving aside these false trails, we are left with a crucial question: What might we mean by 'progress' within language?

The term 'progress' implies a movement towards some desired endpoint. What could this be, in terms of linguistic excellence? A number of linguists are in no doubt. They endorse the view of Jespersen, who maintained that 'that language ranks highest which goes farthest in the art of accomplishing much with little means, or, in other words, which is able to express the greatest amount of meaning with the simplest mechanism'.[5]

If this criterion were taken seriously, we would be obliged to rank pidgins as the most advanced languages. As we have already noted (Chapter 15), true simplicity seems to be counterbalanced by ambiguity and cumbersomeness. Darwin's confident belief in the 'inherent virtue' of shorter and easier forms must be set beside the realization that such forms often result in confusing homonyms, as in the Tok Pisin *hat* for 'hot', 'hard', 'hat' and 'heart'.

A straightforward simplicity measure then will not necessarily pinpoint the 'best' language. A considerable number of other factors must be taken into account, and it is not yet clear which they are, and how they should be assessed. In brief, linguists have been unable to decide on any clear measure of excellence, even though the majority are of the opinion that a language with numerous irregularities should be less highly ranked than one which is economical and transparent. However, preliminary attempts to rank languages in this way have run into a further problem.

A language which is simple and regular in one respect is likely to be complex and confusing in others. There seems to be a trading relationship between the different parts of the grammar which we do not fully understand. This has come out clearly in the work of one researcher who compared the progress of Turkish and Serbo-Croatian children as they acquired their respective languages.[6] Turkish children find it exceptionally easy to learn the inflections of their language, which are remarkably straightforward, and they master the entire system by the age of two. But the youngsters struggle with relative clauses (the equivalent of English clauses beginning with *who, which, that*) until around the age of five. Serbo-Croatian children, on the other hand, have great problems with the inflectional system of their language, which is 'a classic Indo-European synthetic muddle', and they are not competent at manipulating it until around the age of five. Yet they have no problems with Serbo-Croatian relative clauses, which they can normally cope with by the age of two.

Overall, we cannot yet specify satisfactorily just what we mean by a 'perfect' language, except in a very broad sense. The most we can do is to note that a certain part of one language may be simpler and therefore perhaps 'better' than that of another.

Meanwhile, even if all agreed that a perfectly regular language was the 'best', there is no evidence that languages are progressing towards this ultimate goal. Instead, there is a continuous pull between the disruption and restoration of patterns. In this perpetual ebb and flow, it would be a mistake to regard pattern neatening and regularization as a step forwards. Such an occurrence may be no more progressive than the tidying up of a cluttered office. Reorganization simply restores the room to a workable state. Similarly, it would be misleading to assume that pattern disruption was necessarily a backward step. Structural dislocation may be the result of extending the language in some useful way.

We must conclude therefore that language is ebbing and flowing like the tide, but neither progressing nor decaying, as far as we can tell. Disruptive and therapeutic tendencies vie with one another, with neither one totally winning or losing, resulting in a perpetual stalemate. As the famous Russian linguist Roman Jakobson said over fifty years ago: 'The spirit of equilibrium and

the simultaneous tendency towards its rupture constitute the indispensable properties of that whole that is language.'[7]

Are languages evolving?

Leaving aside notions of progress and decay, we need to ask one further question. Is there any evidence that languages as a whole are moving in any particular direction in their intrinsic structure? Are they, for example, moving towards a fixed word order, as has sometimes been claimed?

It is clear that languages, even if they are evolving in some identifiable way, are doing so very slowly – otherwise all languages would be rather more similar than they in fact are. However, unfortunately for those who would like to identify some overall drift, the languages of the world seem to be moving in different, often opposite, directions.

For example, over the past 2,000 years or so, most Indo-European languages have moved from being SOV (subject–object–verb) languages, to SVO (subject–verb–object) ones. As we noted in Chapter 11, certain Niger-Congo languages seem to be following a similar path. Yet we cannot regard this as an overall trend, since Mandarin Chinese may be undergoing a change in the opposite direction, from SVO to SOV.[8]

During the same period, English and a number of other Indo-European languages have gradually lost their inflections, and moved over to a fixed word order. However, this direction is not inevitable, since Wappo, a Californian Indian language, appears to be doing the reverse, and moving from a system in which grammatical relationships are expressed by word order to one in which they are marked by case endings.[9]

A similar variety is seen in the realm of phonology. For example, English, French and Hindi had the same common ancestor. Nowadays, Hindi has sixteen stop consonants and ten vowels, according to one count. French, on the other hand, has sixteen vowels and six stops. English, meanwhile, has acquired more fricatives than either of these two languages, some of which speakers of French and Hindi find exceptionally difficult to pronounce. Many more such examples could be found.

Overall, then, we must conclude that 'the evolution of language as such has never been demonstrated, and the inherent equality of all languages must be maintained on present evidence'.[10]

Is language change socially undesirable?

Let us now turn to the last question, which has two parts. Is language change undesirable? If so, is it controllable?

Social undesirability and moral turpitude are often confused. Yet the two questions can quite often be kept distinct. For example, it is certainly not 'wrong' to sleep out in the open. Nevertheless, it is fairly socially inconvenient to have people bedding down wherever they want to, and therefore laws have been passed forbidding people to camp out in, say, Trafalgar Square or Hyde Park in London.

Language change is, we have seen, in no sense wrong. But is it socially undesirable? It is only undesirable when communication gets disrupted. If different groups change a previously unified language in different directions, or if one group alters its speech more radically than another, mutual intelligibility may be impaired or even destroyed. In Tok Pisin, for example, speakers from rural areas have great difficulty in understanding the urbanized varieties. This is an unhappy and socially inconvenient state of affairs.

In England, on the other hand, the problem is minimal. There are relatively few speakers of British English who cannot understand one another. This is because most people speak the same basic dialect, in the sense that the rules underlying their utterances and vocabulary are fairly much the same. They are likely, however, to speak this single dialect with different accents. There is nothing wrong with this, as long as people can communicate satisfactorily with one another. An accent which differs markedly from those around may be hard for others to comprehend, and is therefore likely to be a disadvantage in job-hunting situations. But a mild degree of regional variation is probably a mark of individuality to be encouraged rather than stamped out.

A number of people censure the variety of regional accents in England, maintaining that the accent that was originally of one

particular area, London and the south-east, is 'better' than the others. In fact, speakers from this locality sometimes claim that they speak English *without* an accent, something which is actually impossible. It is sometimes socially useful in England to be able to speak the accent of so-called Southern British English, an accent sometimes spoken of as Received Pronunciation (RP), which has spread to the educated classes throughout the country. But there is no logical reason behind the disapproval of regional accents. Moreover, such objections are by no means universal. Some people regard them as a sign of 'genuineness'. And in America, a regional accent is simply a mark of where you are from, with no stigma attached, for the most part.

Accent differences, then, are not a matter of great concern. More worrying are instances where differing dialects cause unintelligibility, or misunderstandings. In the past, this often used to be the case in England. Caxton, writing in the fifteenth century, notes that 'comyn englysshe that is spoken in one shyre varyeth from another'.[11] To illustrate his point, he narrates an episode concerning a ship which was stranded in the Thames for lack of wind, and put into shore for refreshment. One of the merchants on board went to a nearby house, and asked, in English, for meat and eggs. The lady of the house, much to this gentleman's indignation, replied that she could not speak French! In Caxton's words, the merchant 'cam in to an hows and axed for mete and specyally he axyd after eggys. And the good wyf answerde that she coude speke no frenshe. And the merchaunt was angry for he also coude speke no frenshe, but wolde haue hadde egges and she vnderstode hym not.' The problem in this case was that a 'new' Norse word *egges* 'eggs' was in the process of replacing the Old English word *eyren*, but was not yet generally understood.

Unfortunately, such misunderstandings did not disappear with the fifteenth century. Even though, in both America and England, the majority of speakers are mutually intelligible, worrying misunderstandings still occur through dialect differences. Consider the conversation between Samuel, a five-year-old coloured boy from West Philadelphia, and Paul, a white psychologist who had been working in Samuel's school for six months:

Samuel: I been know your name.
Paul: What?
Samuel: I been know your name.
Paul: You better know my name?
Samuel: I *been* know your name.[12]

Paul failed to realize that in Philadelphia's black community *been* means 'for a long time'. Samuel meant 'I have known your name for a long time.' In some circumstances, this use of *been* can be completely misleading to a white speaker. A black Philadelphian who said *I been married* would in fact mean 'I have been married for a long time.' But a white speaker would normally interpret her sentence as meaning 'I have been married, but I am not married any longer.'

Is it possible to do anything about situations where differences caused by language change threaten to disrupt the mutual comprehension and cohesion of a population? Should language change be stopped?

If legislators decide that something is socially inconvenient, then their next task is to decide whether it is possible to take effective action against it. If we attempted to halt language change by law, would the result be as effective as forbidding people to camp in Trafalgar Square? Or would it be as useless as telling the pigeons there not to roost around the fountains? Judging by the experience of the French, who have an academy, the Académie Française, which adjudicates over matters of linguistic usage, and whose findings have been made law in some cases, the result is a waste of time. Even though there may be some limited effect on the written language, spoken French appears not to have responded in any noticeable way.

If legal sanctions are impractical, how can mutual comprehension be brought about or maintained? The answer is not to attempt to limit change, which is probably impossible, but to ensure that all members of the population have at least one common language, and one common variety of that language, which they can mutually use. The standard language may be the only one spoken by certain people. Others will retain their own regional dialect or language alongside the standard one. This is the

situation in the British Isles, where some Londoners, for example, speak only Standard British English. In Wales, however, there are a number of people who are equally fluent in Welsh and English.

The imposition of a standard language cannot be brought about by force. Sometimes it occurs spontaneously, as has happened in England. At other times, conscious intervention is required. Such social planning requires tact and skill. In order for a policy to achieve acceptance, a population must *want* to speak a particular language or particular variety of it. A branch of sociolinguistics known as 'language planning' or, more recently, 'language engineering', is attempting to solve the practical and theoretical problems involved in such attempts.[13]

Once standardization has occurred, and a whole population has accepted one particular variety as standard, it becomes a strong unifying force and often a source of national pride and symbol of independence.

Great Permitters

Perhaps we need one final comment about 'Great Permitters' – a term coined by William Safire, who writes a column about language for the *New York Times*.[14] These are intelligent, determined people, often writers, who 'care about clarity and precision, who detest fuzziness of expression that reveals sloppiness or laziness of thought'. They want to give any changes which occur 'a shove in the direction of freshness and precision', and are 'willing to struggle to preserve the clarity and color in the language'. In other words, they are prepared to accept new usages which they regard as advantageous, and are prepared to battle against those which seem sloppy or pointless.

Such an aim is admirable. An influential writer–journalist can clearly make interesting suggestions, and provide models for others to follow. Two points need to be made, however. First, however hard a 'linguistic activist' (as Safire calls himself) works, he is unlikely to reverse a strong trend, however much he would like to. Safire has, for example, given up his fight against *hopefully*, and also against *viable*, which, he regretfully admits, 'cannot be killed'. Secondly, and perhaps more importantly, we need to realize

how personal and how idiosyncratic are judgments as to what is 'good' and what is 'bad', even when they are made by a careful and knowledgeable writer, as becomes clear from the often furious letters which follow Safire's pronouncements in the *New York Times*. Even a Safire fan must admit that he holds a number of opinions which are based on nothing more than a subjective feeling about the words in question. Why, for example, did he give up the struggle against *hopefully*, but continue to wage war on *clearly*? As one of his correspondents notes, 'Your grudge against clearly is unclear to me.' Similarly, Safire attacks ex-President Carter's 'needless substitution of encrypt for encode', but is sharply reminded by a reader that 'the words "encrypt" and "encode" have very distinct meanings for a cryptographer'. These, and other similar examples, show that attempts of caring persons to look after a language can mean no more than the preservation of personal preferences which may not agree with the views of others.

Linguistic activists of the Safire type are laudable in one sense, in that they are aware of language and pay attention to it. But, it has been suggested, they may overall be harmful, in that they divert attention away from more important linguistic issues. The manipulation of people's lives by skilful use of language is something which happens in numerous parts of the world. 'Nukespeak', language which is used to refer to nuclear devices, is one much publicized example.[15] We do not nowadays hear very much about *nuclear bombs* or *nuclear weapons*. Politicians tend to refer to them as *nuclear deterrents* or *nuclear shields*. Recently, other deadly Star Wars weapons have been referred to as *assets*.[16] Whether or not these devices are useful possessions is not the issue here. The important point is that their potential danger is simply not realized by many people because of the soothing language intentionally used to describe them. In the long run, it may be more important to detect manipulation of this type, than to worry about whether the word *media* should be treated as singular or plural.

Conclusion

Continual language change is natural and inevitable, and is due to a combination of psycholinguistic and sociolinguistic factors.

Once we have stripped away religious and philosophical preconceptions, there is no evidence that language is either progressing or decaying. Disruption and therapy seem to balance one another in a perpetual stalemate. These two opposing pulls are an essential characteristic of language.

Furthermore, there is no evidence that languages are moving in any particular direction from the point of view of language structure – several are moving in contrary directions.

Language change is in no sense wrong, but it may, in certain circumstances, be socially undesirable. Minor variations in pronunciation from region to region are unimportant, but change which disrupts the mutual intelligibility of a community can be socially and politically inconvenient. If this happens, it may be useful to encourage standardization – the adoption of a standard variety of one particular language which everybody will be able to use, alongside the existing regional dialects or languages. Such a situation must be brought about gradually, with tact and care, since a population will only adopt a language or dialect it *wants* to speak.

Finally, it is always possible that language is developing in some mysterious fashion that linguists have not yet identified. Only time and further research will tell. There is much more to be discovered.

But we may finish on a note of optimism. We no longer, like Caxton in the fifteenth century, attribute language change to the domination of man's affairs by the moon:

> And certaynly our language now vsed varyeth ferre from that which was vsed and spoken whan I was borne. For we englysshe men ben borne vnder the domynacyon of the mone, which is neuer stedfaste but euer wauerynge wexynge one season and waneth and dycreaseth another season.[17]

Instead, step by step, we are coming to an understanding of the social and psychological factors underlying language change. As the years go by, we hope gradually to increase this knowledge. In the words of the nineteenth-century poet, Alfred Lord Tennyson:

> Science moves, but slowly slowly, creeping on from point to point.

Symbols and technical terms

Most symbols and technical terms are explained in the text the first time they occur, in cases where an explanation seems necessary. But since several common ones occur more than once, this glossary has been added for the benefit of those readers not familiar with them.

General

[ ] Square brackets indicate sounds. For example, the pronunciation of the English word *kissed* may be represented by the phonetic transcription [kɪst].

* An asterisk indicates a non-permitted sequence of sounds or words in the language concerned. For example, English does not permit a word with the sound sequence *[tpet], or a sentence **Augusta roses wants.*

→ An arrow means 'changed into historically', as in [e] → [i], which means [e] changed into [i].

Phonetic symbols

When a phonetic symbol is essential, this book uses IPA (International Phonetic Alphabet) symbols, which are conventionally put between square brackets. However, since phonetic symbols make a text more difficult to read, the standard written form is used whenever possible, even though the spoken form is under discussion.

Phonetic symbols which are not explained are either obvious from the context, or have a value similar to that in the standard written form, e.g. [m] symbolizes the sound at the beginning of the word *men*.

The following list gives some of the less obvious terms and symbols.

Consonants

[θ] The sound at the beginning of English *thick*.
[ð] The sound at the beginning of *then*.
[ʃ] The sound at the beginning of *shock*.
[ʒ] The sound at the end of *beige* or in the middle of *leisure*.
[tʃ] The sound at the beginning and end of *church*.
[dʒ] The sound at the beginning and end of *judge*.
[ŋ] The sound at the end of *bang* (**velar nasal**).
[ʔ] A **glottal stop** – see explanation below.

Stop: a consonant involving a complete stoppage of the airstream at some point in the vocal tract, as [p], [t], [k]. A glottal stop [ʔ] is a complete stoppage of the airstream in the glottis (lower part of the throat), as at the end of Cockney or Glaswegian *pit* [pɪʔ].

Fricative: a consonant in which the airstream is never completely cut off, resulting in audible friction, as in [f], [v], [s], [z].

Affricate: a combination of a stop and a fricative, as in [tʃ], [dʒ].

Sibilant: a hissing or hushing sound, as in [s], [z], [ʃ].

Voiced: a voiced sound is one whose production involves vibration of the vocal cords, as in [b], [d], [g], [v], [z].

Voiceless: a voiceless sound is one whose production does not involve the vibration of the vocal cords, as in [p], [t], [k], [f], [s]. Technically, it involves 'late voice onset', that is, some voicing, but delayed.

Vowels

: A colon added to a vowel indicates length, as in [ti:] *tea*.

˜ A wavy line over a vowel indicates nasalization, as in French [bõ] *bon* 'good'.

[ə] **Schwa:** a short indeterminate vowel, like that at the beginning of *ago*, or the end of *sofa*.

[iɪ] a vowel somewhat like that in *meet, bee*.

[ɪ] a vowel like that in *hit*.

Other vowel symbols are mostly explained as they occur. Key words are less useful for vowels, since there is so much variation in accent in the English-speaking world.

Diphthong: a sequence of two vowels which glide into one another, as in *play* [pleɪ].

Notes and suggestions for further reading

1 The ever-whirling wheel

1 In Lehmann, 1976: 63.
2 In Fisher & Bornstein, 1974: 77. *Disours* and *seggers* are public reciters, *harpours* are harpers.
3 *Troylus and Criseyde* II, 22–6.
4 Saussure, 1915/1959: 77.
5 Spike Hughes, *Daily Telegraph*, 26 April 1968.
6 Anthony Lejeune, *Daily Telegraph*, 7 May 1971.
7 Mary Stott, *Guardian*, 9 September 1968.
8 Douglas Bush, *American Scholar*, Spring 1972: 244.
9 David Holloway, *Daily Telegraph*, 7 July 1978.
10 Richard Gilman, *Decadence*, London: Secker & Warburg, 1979.
11 Philip Howard, *Words fail me*, London: Hamish Hamilton, 1980.
12 Reuben Glass, *Guardian*, 13 July 1982.
13 Val Hume, *Evening Standard*, 22 July 1986.
14 Edward Pearce, *The Sunday Times*, 16 October 1988.
15 Kingsley Amis, in Ricks & Michaels, 1990: 458. On laments about language in general, Crystal (1981, 1984) lists some common current complaints about English usage, and points out that several of them have been around for centuries. Aitchison (1997), R. W. Bailey (1992), Tony Crowley (1989), Milroy & Milroy (1998) discuss 'the complaint tradition'.
16 Philip Norman, *The Sunday Times*, 14 February 1999.
17 Anthony Lejeune, *Daily Telegraph*, 7 May 1971.
18 Val Hume, *Evening Standard*, 22 July 1986.
19 In Jespersen, 1922: 322.
20 Jespersen, 1922: 263.
21 Vendryès, 1923/1925: 359.
22 In Hyman, 1975: 131.

The difference can be heard immediately when compared with some genuinely simple vowels, as in French *lit* [li:t] 'bed', *vous* [vu:] 'you'. The phonetic transcription of the other vowels has been slightly simplified for the sake of clarity. For a fuller account, see Gimson & Cruttenden (1994), Wells (1982), vol. II.

13 See Gimson & Cruttenden (1994), Wells (1982), for a more detailed account.
14 *The Sunday Times*, 7 June 1998.
15 Labov, 1994: 194.
16 Labov, 1994: 178.
17 Labov, 1994: 178.
18 Labov, 1994: 178.
19 Typological harmony. Early proposals, Greenberg 1963/1966. Further discussion in Aitchison, 2001; Comrie, 1989; Hawkins, 1983, 1988; Dryer, 1992.
20 Kuno, 1974; Vincent, 1976; Hawkins, 1983, 1988.
21 Aitchison, 1979.
22 Li & Thompson, 1974 – but see Sun & Givón, 1985; Vincent, 1976; Aitchison, 1979.
23 Moulton, 1985: 687. For a general view of causation different from that found in this book, see Lightfoot (1999), also review by Haspelmath (1999).

14 Development and breakdown

1 Paul, Whitney, Passy, quoted in King, 1969a.
2 Sweet, in Jespersen, 1922: 161.
3 King, 1969a: 65.
4 Andersen, 1978: 21.
5 Akmajian, Demers & Harnish, 1979: 210.
6 Halle (1962), subsequently followed by most linguists working within a transformational–generative framework.
7 King, 1969a: 80.
8 Critical period, Lenneberg, 1967.
9 Aitchison (1998) summarizes Lenneberg's critical period arguments, and the points against them.
10 R. Neville & J. Clarke, *Bad Blood*, London: Jonathan Cape, 1979.
11 Newport, 1991; Aitchison, 1998.
12 Kiparsky, 1968: 193.
13 Past tense errors by adults vs children, Bybee & Slobin, 1982.
14 Bybee & Slobin, 1982: 36–7.
15 *Guardian*, 9 February 1990.

16 Kiparsky, 1968: 193.
17 Klima & Bellugi, 1966; Fletcher, 1979.
18 Smith, 1973.
19 Stampe, 1979.
20 Differences between child language and language change, Drachman, 1978; Vihman, 1980. Additional child language examples from Ingram (1989).
21 Newport, 1991; Aitchison, 1998.
22 Roberts & Labov, 1993; Roberts 1997.
23 Roberts 1997: 264.
24 Chambers 1992, 1995.
25 Kerswill, 1996: 196.
26 Aitchison, 2001.
27 'The jungle husband', in Stevie Smith, *Selected poems*, edited by James McGibbon, London: Penguin, 1978, p. 190.
28 Drunken speech, Lester & Skousen, 1974.
29 Fromkin, 1973: 13. The speech error examples are from my own collection, from that of a London School of Economics student Elaine Simmonds, and from Fromkin (1973).
30 *New York Times*, 20 August 1971.
31 Safire, 1980: 96.
32 Safire, 1980: 98.
33 Folk etymology, Coates, 1987.
34 Aitchison (1994, 1998) gives an outline account of speech errors and their value for lexical storage and production.
35 For accounts of aphasia, see Caplan (1987, 1992); Light & Burke (1988); Obler & Gjerlow (1999).
36 Gardner, 1974/1976: 61.
37 Jakobson, 1941/1968: 60.
38 Refutation of 'regression hypothesis', Caramazza & Zurif, 1978.

15 Language birth

1 Language origin theories, Jespersen, 1922; Hewes, 1977.
2 Jespersen, 1922: 421. The quote at the top of the chapter is from Jespersen (1922: 434).
3 Whitney 1893: 279.
4 Pinker & Bloom (1990) was a 'landmark' article.
5 Aitchison (1996a) expands the scenario outlined in this section, and provides numerous further references. See also Hurford *et al.* (1998); Jablonski & Aiello (1998); Jackendoff (1999); DeGraff (1999).
6 Russenorsk, Broch & Jahr, 1984; Jahr & Broch, 1996.

7 Chinook jargon, Thomason, 1983a. A number of other pidgins are outlined in Arends *et al.* (1995) which provides a useful overview.
8 Origin of word *pidgin*, Hancock, 1979.
9 Information on Tok Pisin as a pidgin mainly from Dutton, 1973; Mihalic, 1971; Mühlhäusler, 1979a; Wurm & Mühlhäusler, 1985; Verhaar, 1995.
10 'crudely distorted' French, in Hall, 1966: 107; 'bastard blend' in Edward Marriott, *The lost tribe*, London: Picador, 1996, p. 74.
11 Hall, 1966. For Schuchardt's work, see Gilbert (1980).
12 M. Bertrand-Boconde, in Meijer & Muysken, 1977: 22.
13 Theories of pidgin origin: Valdman, 1977; Naro, 1978; Thomason & Kaufman, 1988.
14 Naro, 1978.
15 Bloomfield, 1933: 472.
16 Kay & Sankoff, 1974.
17 Thomason, 1983b.
18 Mühlhäusler, 1978, 1979a; Mosel & Mühlhäusler, 1982.
19 General Solf's diary, quoted in Mühlhäusler, 1978: 72.
20 On pidgin and creole characteristics, see Arends *et al.* (1995); Holm (1988, 1989); Mufwene (1995); Mühlhäusler (1986, 1997); Romaine (1988); Todd (1990); Wurm & Mühlhäusler (1985).
21 Mühlhäusler, 1979a, 1979b.
22 Keesing, 1988; Singler, 1988.
23 Todd, 1990: 4.
24 Information on creolization in Tok Pisin from my own recordings and observations, partially published in Aitchison (1989, 1990, 1992b, 1996b). See also DeGraff (1999); Mühlhäusler (1980b, 1986); Romaine (1988); Sankoff (1977); Todd (1990); Wurm & Mühlhäusler (1985).
25 Aitchison, 1989.
26 Laycock, 1970: 55.
27 On Tok Pisin *laik*, Romaine (1999). Most of the examples I have used are from my own data.
28 Aitchison, 1992b.
29 Bioprogram, Bickerton, 1981, 1984.
30 Spaghetti junctions, Aitchison, 1989.
31 Critical reviews of Bickerton, 1981, in Aitchison, 1983a; Goodman, 1985.

16 Language death

1 Bopp, 1827, in Jespersen, 1922: 65.
2 Decreolization, Bickerton, 1971, 1973; Rickford, 1987.

3 Guyanan Creole, Bickerton, 1971.
4 Examples of decreolization in Tok Pisin from my own recordings and observations.
5 Mühlhäusler, 1979a: 51.
6 NBC radio broadcast, March 1980.
7 NBC radio advertisement, March 1980.
8 Kwegu, Dimmendaal, 1989.
9 Arvanítika, Tsitsipis, 1989.
10 Sauris, N. Denison, 1972, 1977, 1980.
11 N. Denison, 1972: 68.
12 N. Denison, 1977: 21.
13 Bloomfield, 1927/1970: 154.
14 Scottish Gaelic, Dorian, 1973, 1978, 1981. Another important study of a dying language is Schmidt (1985), on Dyirbal in Australia.
15 Dorian, 1978: 608.
16 John Fletcher (1579–1625), *The custom of the country*, II. ii.
17 Grenoble & Whaley, 1998; Robins & Uhlenbeck, 1991; Schilling-Estes & Wolfram, 1999; Schmidt 1985; Seliger & Vago, 1991.
18 Myers-Scotton, 1993, 1998.
19 Kaufman & Aronoff, 1991: 182.
20 Crystal, 1999.
21 Hale *et al.*, 1992.
22 McArthur, 1998.
23 Hale *et al.*, 1992: 8.
24 Crystal, 1999: 58.
25 Ladefoged, 1992: 811.

17 Progress or decay?

1 Whales, Payne, 1979.
2 Curtius, 1877, in Kiparsky, 1972: 35; cf. views of Trench (Chapter 1).
3 Herbert Spencer, *Social statics* (1850), Part i, Chapter 2, 4.
4 Darwin, 1871, in Labov, 1972a: 273.
5 Mühlhäusler, 1979a: 151.
6 Slobin, 1977.
7 Jakobson, 1949: 336. Translation in Keiler, 1972.
8 Li & Thompson, 1974. The claim that Mandarin is changing to SOV is disputed by Sun & Givón (1985).
9 Li & Thompson, 1976.
10 Greenberg, 1957: 65.
11 Caxton, preface to *Erydos* (1490).

12 Labov, 1972b: 62.
13 On language planning, see Cooper (1982), Fasold (1984), Lowenberg (1988). Bex & Watts (1999) and Milroy & Milroy (1998) discuss the notion of standard language.
14 Safire, 1980, from whom the quotations in this section are taken. For a professional viewpoint on 'good' English, see Greenbaum (1988), especially 11–12, where the word *hopefully* is discussed.
15 'Nukespeak', Aubrey, 1982; Chilton, 1985/1988; Hilgartner, Bell & O'Connor, 1983.
16 Ayto, 1989.
17 Caxton, preface to *Erydos* (1490).

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