

Chapter 7: GRAMMATICAL, SEMANTIC, AND LEXICAL CHANGE

7.2 GRAMMATICALISATION

Words in languages can be grouped into two basic categories: *lexical* words and *grammatical* words. Lexical words are those which have definable meanings of their own when they appear independently of any linguistic context: *elephant, trumpet, large*. Grammatical words, on the other hand, only have meanings when they occur in the company of other words, and they relate those other words together to form a grammatical sentence. Such words in English include *the, these, on, my*. Grammatical words constitute the mortar in a wall, while lexical words are more like the bricks.

If a particular meaning is expressed by a grammatical rather than a lexical word, the form is obligatorily present. For instance, in the sentence:

I will come later

the meaning of 'future tense' is expressed twice - firstly in the auxiliary *will*, and secondly in the adverb *later*. Of these, *will* is a grammatical word and *later* is not, because we cannot omit the future marker *will*, whereas we can omit the future marker *later*:

**I come later.*

I will come.

Words in languages can often change from being lexical words to grammatical words. This process is referred to as *grammaticalisation*. We can see evidence of grammaticalisation in progress in English with the following sentences:

I'm going to cut a piece of chocolate cake.

I'm going to the supermarket.

Although these two sentences both contain the sequence *going to*, these two words do not have the same status in both cases, in that it is only in the first sentence that we can contract *going to* to give *gonna*.

Thus:

I'm gonna cut a piece of chocolate cake.

**I'm gonna the supennarket.*

In the first example, it is clear that the meaning of *going to / gonna* is different to the meaning of *going to* in the second example. Rather than expressing the purely lexical meaning of the intransitive verb *go*, this sequence in the first sentence expresses a kind of intentional future tense. In this case, then, we say that *going to* has been grammaticalised, and that English has acquired a new kind of auxiliary, along with other auxiliaries such as *can, will* and *might*, and other more recently grammaticalised auxiliary-like constituents such as *oughta, wanna* and *hafta*.

Grammaticalisation can affect lexical words in a variety of ways, though there is a tendency for forms to become increasingly closely linked to some lexical form in a sentence as the process continues. The change from lexical word to grammatical word is only the first step in the process of grammaticalisation, with the next step being *morphologisation*, i.e. the development of a bound form out of what was originally a free form.

In fact, morphologisation can also involve degrees of bonding between bound forms and other forms as it is possible to distinguish between *clitics* and *affixes*. A clitic is a bound form which is analysed as being attached to a whole phrase rather than to just a single word. An affix, however, is attached as either a prefix or a suffix directly to a word.

In the Syle language of Erromango in Vanuatu, the free form /im/ 'and' is currently developing into a clitic with the shape /m-/, and this attaches to the beginning of whatever happens to be the second

element of two coordinated noun phrases. It is possible to say either of the following in this language, in which /im/ appears as a free form:

netor	im	nevyarep	netor	m-nevyarep
Netor	and	boy	Netor	and-boy
'Netor and the boy'			'Netor and the boy'	

However, when some other constituent intervenes between the coordinator and the second noun, the coordinator can be attached to whatever happens to be the first constituent of the second noun phrase.

netor	im	ovon	nevyarep	netor	m-ovon	nevyarep
Netor	and	plural	boy	Netor	and-plural	boy
'Netor and the boys'				'Netor and the boys'		

Morphologisation can proceed one step further, with lexical forms (or clitics) becoming genuine word-level affixes. There are many languages in which locative affixes on nouns began as free postpositions or prepositions, while before this they were ordinary lexical items with some kind of locational meaning. In this discussion of morphologisation, it is impossible not to refer back to the earlier discussion of morphological change in languages, where I demonstrated that isolating languages tend to move towards agglutinating structures, while agglutinating structures tend to move towards inflecting structures. These kinds of changes clearly involve increasingly grammaticalised (and correspondingly delexicalised) patterns.

Lexical items can obviously grammaticalise to varying extents and in differing ways in languages. Despite the varying possible end results, the process is a strongly unidirectional one in that lexical items generally become grammaticalised, while grammatical items generally do not become lexical items. As an example of how grammaticalisation can develop along a continuum from a fully lexical item to a fully morphologised affix, let us consider some developments affecting some verbs in Oceanic languages.

In the Paamese language of Vanuatu, there are two verbs of the shape /kur/ 'take' and /vul/ 'break':

inau	na-kur	a:i	inau	na-vul	a:i
I	I-took	stick	I	I-broke	stick
'I took the stick.'			'I broke the stick.'		

In Paamese, the verb /vu1/ 'break' can also enter into a serial verb construction in which both verbs retain their lexical status, as follows. Thus:

inau	na-kur	vul	a:i
I	I-took	broke	stick
'I took the stick, thereby breaking it.'			

However, in languages to which Paamese is related, the form that originally occupied the second slot in this kind of serial verb construction no longer occurs as an independent verb. There is typically a restricted set of forms in such languages that can behave in this way, so what was originally a lexical verb has been grammaticalised to become a kind of post-verbal modifier of some kind. Examine the following example from the Numbami language of Papua New Guinea:

i-tala ai tomu
 he-chopped tree broke
 'He chopped the tree, thereby breaking it.'

In this case, the form /tomu/ 'break' cannot be used as a verb in its own right. Thus, it is not possible to say:

*i-tomu ai
 he-broke tree
 'He broke the tree.'

Other languages may then undergo further grammaticalisation in which forms behaving like /tomu/ in Numbami end up as verbal affixes that express meanings that are still clearly related to the meanings of the verbs from which they were originally derived. In some cases, a pre-verbal grammaticalised item may become a kind of classificatory verbal prefix that is attached to a general semantic category of verbs. For instance, all verbs that involve some kind of finger action, such as pinching, picking, plucking, flicking and so on, might be marked by a prefix that derives from a verb that perhaps originally meant something like 'pinch'. In the Manam language of Papua New Guinea, such a development has taken place, so we find the verb /sere?/ 'break', along with the prefixed form /?in-sere?/ 'break with the fingers'. The verb /sere?/ 'break' is then free to appear with other classificatory prefixes, such as /tara-/ 'do by chopping', which therefore gives /tara- sere?/ 'break by chopping'.

Given that grammaticalisation is a diachronic process, it is possible for synchronic descriptions of languages to represent situations that are still only partly grammaticalised. In such cases, the distinction that I made at the beginning of this section between lexical and grammatical items will seem somewhat arbitrary. Instead of a clear-cut distinction between these two categories of words, there will appear to be a continuum between two extremes. For instance, the Paamese serial verb construction that I described earlier is already moving along the way towards grammaticalisation with some verbs. For one thing, the great majority of verbs in Paamese cannot appear in the second structural slot in such constructions. While there are some verbs which can appear in either the first or second slot, there are other forms which can never appear as independent verbs. Such forms have therefore already undergone functional restriction to post-verbal modifiers. Thus, the form /vini:/ 'kill' - which derives from an earlier genuine verb with the same meaning - can now only ever occur as a serialised verb, and never as an independent verb. Thus:

inau	na-sal	vini:	vuas	*inau	na-vini:	vuas
I	I-speared	killed	pig	I	I-killed	pig
'I speared the pig to death.'				'I killed the pig.'		

Grammaticalisation tends to be a unidirectional process, with forms moving along a continuum of increasingly grammaticalised status:

lexical word → grammatical word → clitic → agglutinated affix → portmanteau affix

While grammaticalisation is quite a common process, the reverse - *degrammaticalisation* (or *lexicalisation*) - is attested, though it is much rarer. There are some examples that can be given of this kind of change, however. For instance, a grammatical item such as the suffix *-burger* in words such as *hamburger*, *cheeseburger* and *fishburger*, has become a genuine noun in English, and it is possible nowadays to ask for just a *burger*. The forms *pro-* and *anti-* were originally just prefixes in English in words such as *prodemocratic* or *anti-Castro*. However, these days, they can also be used as lexical adjectives:

Are you pro or anti?
She is more anti than I am.

7.3 MECHANISMS OF GRAMMATICAL CHANGE

In all of the grammatical changes that I have just discussed, there are three general factors that seem to be involved in one way or another in grammatical change whenever it occurs. These factors are *reanalysis*, *analogy*, and *diffusion*. I will discuss each of these mechanisms in this section.

(a) Reanalysis

Reanalysis in grammatical change refers to the process by which a form comes to be treated in a different way grammatically from the way in which it was treated by speakers of the protolanguage. What often happens in the history of languages is that a particular form may be structurally ambiguous between *two* interpretations in some of the contexts in which it occurs, i.e. it may be analysed grammatically in more than one way. What can then happen is that one of these analyses 'takes over' from the original analysis in the minds of speakers of the language. This new analysis may then become the basic form for a whole new paradigm of forms or constructions. For instance, the original word for the first person singular pronoun has been reconstructed for many Australian languages as */*ŋaj/*. When this pronoun was used as the subject of a transitive verb, it added the ergative suffix, and after the final glide the form of this suffix was */*-ɖu/*. Thus, the pronoun that was used as the subject to an intransitive verb was */*ŋaj/*, while the form that appeared when the verb was transitive was */*ŋaj-ɖu/* (and this form was later phonologically reduced to */*ŋaɖu/*). The transitive subject form then in some cases 'took over' from the intransitive */*ŋaj/* form. Some languages later reanalysed this new */*ŋaɖu/* form, which was used with both transitive and intransitive verbs, as being basically an intransitive form, then added a new ergative suffix to it when it was used before transitive verbs. There are now Australian languages such as Warlpiri which have the intransitive subject form */*ŋaɖu/* and the transitive subject form */*ŋaɖu-lu/* (in which *-lu/* is the allomorph of the ergative suffix that is found on stems that end in vowels)!

Some Austronesian languages of the Pacific area have also undergone grammatical reanalysis of what were originally noun markers. In languages such as Tolai (spoken in Papua New Guinea), common noun phrases must be preceded by a marker of the form */a/*, which simply has the function of indicating that what follows is a noun. So, we find forms in Tolai such as the following:

Tolai	
a vat	'stone'
a vavina	'woman'
a pal	'house'

This /a/ is, in fact, inherited from the protolanguage where it apparently had a very similar function. However, in the Paamese language of Vanuatu, this original /*a/ has been reanalysed as part of the root of some (but not all) nouns, and the two cannot be separated, for example:

		Paamese	
*batu	→	ahat	'stone'
*tansik	→	atas	'sea'
*niu	→	ani	'coconut'

The original noun marker has lost its noun marking function, and has become an integral part of the following noun root.

A final example of grammatical reanalysis comes in the morpheme *-burger* that is creeping into the English language in words such as *hamburger*, *cheeseburger*, *eggburger*, *fishburger*, and now even *Kiwiburger* (which refers to a hamburger marketed in New Zealand by McDonalds, and which contains not kiwi meat, but a fried egg and pickled beetroot). The word *hamburger* was originally the only one of these four words to be used in English. Its derivation was from the name of the city *Hamburg*, with the suffix *-er* (on the same pattern as the noun *Berliner* derived from *Berlin*). However, speakers of English perceived an ambiguity between this explanation of the word's origin and the interpretation of *hamburger* as *ham* (because of the meat filling in the bun) plus *burger*. The second analysis seems to be winning out, and a new morpheme *-burger* has come into the English language. The meaning of this new morpheme appears to be something like 'toasted (or, nowadays, perhaps microwaved) bread roll with a certain kind of filling and salad'. This suffix then came to be attached to other nouns that referred to the possible range of fillings around which the *hamburger* could be constructed.

In fact, the suffix *-burger* even seems to be undergoing further reanalysis as a noun root rather than just as a suffix - it is now possible to ask for just a *burger*, instead of what used to be called a *plain hamburger*. This is an example that runs counter to the generally unidirectional tendency for lexical items to become bound morphemes, and not the other way round.

There is another kind of grammatical reanalysis that we can talk about, and that is *back formation*. An example of this process is involved in the development of the English word *cherry*. This word was originally borrowed from the French word *cerise*. In its pronunciation in French, the word is identical in both the singular and the plural, i.e. /səʁiz/. When *cerise* was copied into English, people analysed the word as being plural (as cherries are small fruit that are generally seen in large numbers anyway!) The final /-z/ of the word in French was thought to be the plural suffix, so when English speakers wanted to speak of a single *cerise*, they simply dropped off this /-z/ and came up with the previously non-existent word *cherry*. If those earlier English speakers had not reanalysed this root, we would today be speaking of *one cherries* and *two cherrieses!* (Of course, English copied the French word *cerise* again at a later point in its history to refer to a deep purplish colour, which is pronounced in English exactly as we would predict on the basis of its pronunciation in French, i.e. /səˈʃiːz/)

(b) Analogy

Another powerful force in grammatical change in addition to reanalysis is *analogy*. Grammatical systems operate in terms of general patterns. Patterns, however, tend to have exceptions (or special 'sub-patterns') that are used in only a small and unpredictable set of situations. For instance, to form the plural

of nouns in English, we regularly add a morpheme which has the following variants or allomorphs: /-əz/ after sibilants, /-s/ after voiceless nonsibilants, and /-z/ after voiced non-sibilants. There are, however, a few irregular plural forms that all speakers of English simply have to learn, including the following:

Singular	Plural
<i>man</i>	<i>men</i>
<i>woman</i>	<i>women</i>
<i>child</i>	<i>children</i>
<i>mouse</i>	<i>mice</i>
<i>foot</i>	<i>feet</i>
<i>ox</i>	<i>oxen</i>

Anybody who makes a mistake and says (as a child might) *mans* for *men*, or *foots* instead of *feet*, would be operating under the influence of analogy. While such forms are clearly regarded by English speakers as mistakes, there are some forms that started out as mistakes but which have become fully standardised as part of the language. For instance, the word *shoe* originally had an irregular plural *shoen*, but this has of course now become completely regularised to *shoes*. The word *book* now has its plural as *books*, but if the word had continued on from its earlier irregular plural we would now be reading *beeche* instead of *books*! Finally, what we now call *nuts* would have been *nit* if we had not regularised the earlier irregular plural under the influence of analogy.

Analogy can also operate in the opposite direction. Instead of creating more regularity, it can cause regular forms to become irregular on the basis of partial patterns that already exist in the language. For instance, in most dialects of English, the verb *dive* is quite regular in its past tense, and people simply say *dived*. In American English, however, it is quite normal to say *dove* (even though this sounds as odd to non-Americans as it would if somebody said *squoze* as the past tense of *squeeze*!). The reason for this change in American English is presumably analogy on the basis of the already existing irregular pair *drive/drove*.

(c) Diffusion

Another factor that can influence the direction of grammatical change is *diffusion*; you have already seen that languages can influence each other in their vocabulary, as words are frequently copied from one language to another. Languages do not copy just words, as they can also copy grammatical constructions, and sometimes even the morphemes that are used to construct sentences in a language. This happens when there are enough people who speak two languages, and they start speaking one language using constructions that derive from the other language. In the first section of this chapter, you saw that it has been suggested that an original SVO word order in Austronesian languages switched in the languages of the Central and Milne Bay Provinces to SOV under the influence of the neighbouring non-Austronesian languages. This means that the SOV word order in this case has *diffused* to the Austronesian languages. (In Chapter 12, I look in more detail at how languages can change grammatically as a result of diffusion.)

7.4 SEMANTIC CHANGE

I mentioned at the beginning of this chapter that phonological change has been fairly intensively studied in the world's languages. Grammatical change is less well studied, but it is an area that is receiving a lot of attention from linguists at the present. Semantic change, however, seems to be the area of diachronic linguistics that is least well understood, perhaps because semantics has for a long time been the weak point in synchronic language study.

However, there are some observations that we can make as to the kinds of semantic changes that occur in languages, and the forces that are involved in bringing these changes about. Changes in meaning can be divided into four basic types: *broadening*, *narrowing*, *bifurcation*, and *shift*. In the following sections I will discuss each of these in turn.

(a) Broadening

The term *broadening* is used to refer to a change in meaning that results in a word acquiring additional meanings to those that it originally had, while still retaining those original meanings as part of the new meaning. Quite a number of words have undergone semantic broadening in the history of English. The modern English word *dog*, for example, derives from the earlier form *dogge*, which was originally a particularly powerful breed of dog that originated in England. The word *bird* derives from the earlier word *bridde*, which originally referred only to young birds while still in the nest, but it has now been semantically broadened to refer to any birds at all.

(b) Narrowing

Semantic *narrowing* is the exact opposite of the previous kind of change. We say that narrowing takes place when a word comes to refer to only part of the original meaning. The history of the word *hound* in English neatly illustrates this process. This word was originally pronounced *hund* in English, and it was the generic word for any kind of dog at all. This original meaning is retained, for example, in German, where the word *Hund* simply means 'dog'. Over the centuries, however, the meaning of *hund* in English has become restricted to just those dogs which are used to chase game in the hunt, such as beagles. The word *meat* in English has also been semantically narrowed. It originally referred to any kind of food at all (and this original meaning is still reflected in the word *sweetmeats*), though now it only refers to food that derives from the flesh of slaughtered animals.

(c) Bifurcation

A third type of semantic change can be called *semantic split* or *bifurcation*. These terms describe the change by which a word acquires another meaning that relates in some way to the original meaning. For instance, if you take the phrase *pitch black* in English, you will find that some people do not realize that the word *pitch* comes from the name of the very black substance like tar. These speakers of English might simply regard *pitch* in this example as meaning 'very' or 'completely'. If you were ever to hear anybody saying *pitch blue* or *pitch yellow*, then you would know that, for these people, the original meaning of *pitch* has split into two quite different meanings.

(d) Shift

The final kind of semantic change that I will talk about is *semantic shift*, where a word completely loses its original meaning and acquires a new meaning. In all of the examples of semantic shift that you have just learned about, at least something of the original meaning is retained, but this is not the case with semantic shift. The history of the word *silly* in English illustrates this process. This word is cognate with the German word *selig* 'blessed', and it is derived from *Seele* 'soul'. The meaning of the German word represents the original meaning of the word, so there has clearly been a major semantic shift to get from the meaning 'blessed' to the meaning in modern English of 'stupid' or 'reckless'. Words obviously do not jump randomly from one meaning to another when they undergo semantic shift of this kind. They may shift in smaller steps that go under some of the headings that I have already presented, but as some original meanings are lost, the points of connection between intermediate semantic stages may also be lost. The German word *selig* has also acquired the meaning 'blissful' from its original meaning of 'blessed'. This represents an understandable semantic broadening, as somebody who is blessed is likely to feel blissful at the prospect of getting into heaven. From 'blissful', the more

general meaning of 'happy' was acquired in German. Perhaps somebody who is happy ends up skipping around and being silly, giving us the modern English meaning of the word.

When talking about semantic change, we can recognise a number of different forces which operate to influence the directions which these changes take, including *metaphor*, *euphemism*, *hyperbole*, and *interference*. I will discuss each of these in turn.

(a) Metaphor

A *metaphor* is an expression in which something is referred to by some other term because of a partial similarity between the two things. For example, if you say, Kali is a pig, you do not mean literally that he is a pig, but that there are certain things about his appearance or his behaviour that remind you of a pig. Perhaps he eats a lot, or he eats sloppily, or he is an extremely dirty or untidy person. Sometimes the metaphoric use of a word can cause the original meaning to change in some way. The word 'insult' in English originally meant 'to jump on'. Presumably, if you insulted someone, it was as though you had metaphorically jumped on them. However the metaphoric use of the word then completely took over the original word and a semantic shift had taken place.

(b) Euphemism

A *euphemism* is a term that we use to avoid some other term which has some kind of unpleasant associations about it, or a term which is completely taboo in some contexts. For instance, in colonial Papua New Guinea, Europeans often referred to Melanesian people as *natives*. As Papua New Guineans became more aware of the connotations of the word 'native' (as it implies a certain backwardness), people had to find a new word to talk about Papua New Guineans that was not offensive. This is how the expression 'a national' became the accepted expression to replace *native*. The term *national* has therefore undergone a semantic broadening in Papua New Guinea English under the pressure of euphemism. In Vanuatu, the word *native* was also felt to have offensive connotations, and a new term was also created there, but in this case out of local lexical resources, and the word *ni-Vanuatu* (literally: of + Vanuatu) was created. This word has become accepted, but those Europeans who still insist on putting Melanesian people down (but who dare not use the word *native*) have re-created their own insulting word from this new word, and refer to *ni-Vanuatu* as *ni-Vans*.

(c) Hyperbole

Some words in languages are felt to express meanings in a much stronger way than other words referring to the same thing. For instance, the two words *good* and *fantastic* can be used to refer to more or less the same things, but it is the second word which has the greater impact. Stronger words can often change to become more neutral if used often enough. This force in semantic change is referred to as *hyperbole* - this means that an originally strong connotation of a word is lost because of constant use. An example of this kind of development involves the change of earlier French *extonare*, which originally meant 'strike with thunder'. This form has developed into modern French *etonner*, which simply means to 'surprise'.

(d) Interference

A final force that operates in semantic change is *interference*. Sometimes one of a pair of similar words, or a pair of homonyms (i.e. words with the same form but totally different meanings) can undergo semantic change of one kind or another to avoid the possibility of confusion between the two meanings. The word *gay* in English is undergoing semantic shift at the moment as a result of interference. Until thirty years ago, in mainstream society, this simply meant 'happy' or 'cheerful'. Then the word *gay* underwent a semantic split, and acquired the second meaning of 'defiant and proud homosexual'. When the heterosexual majority of the English-speaking population became aware of this new meaning of the

word *gay*, they tended to avoid the word altogether when they wanted to express the fact that they were happy. People are now unlikely to say *I am gay* unless they want to declare that they are homosexual.

Another example of semantic interference involves the Bislama word *melek*. When the English word *milk* was originally copied into Bislama, this was the form that it took. The word *melek* then acquired a second meaning, that of 'semen'. The association of the word *melek* with the taboo connotations of the meaning 'semen' has recently become so strong that younger speakers of Bislama tend to avoid using the word *melek* to refer to plain milk, and have re-borrowed the English word *milk* in the shape *milk*.

7.5 LEXICAL CHANGE

If you study the history of particular words in themselves rather than the changes in their actual pronunciations, you are engaging in a study of *lexical change* (which is sometimes known as *etymology*). While some lexical items can be traced back all the way to a reconstructible protolanguage, there are almost certainly going to be some words in the lexicon of any given language that represent innovations since the break-up of the protolanguage.

Innovations in the lexicon can come from a number of different sources. One of the most common sources of new words in a language is words from a different language. Traditionally, linguists refer to this process as *borrowing*. While using this term, many linguists express their unease about it, as a language which 'borrows' a word from another language does not give it back, nor is the first language denied the use of a word that it has 'lent' to another language. It is more accurate to speak of one language *copying* words from another language, because this is precisely what happens. In this book, therefore, I have generally used the term *copying* rather than *borrowing* to refer to this process, though it should be kept in mind that both terms can be used to refer to the same process.

When a language copies a lexical item, it takes the form of a word in one language and it generally reshapes that word to fit its own phonological structure. This means that non-occurring phonemes may be replaced with phonemes that are present in the system of the language that is taking in the new word, and words may be made to fit the phonological pattern of a language by eliminating sounds that occur in unfamiliar positions, or inserting sounds to make words fit its patterns. For instance, Tongan does not allow consonant clusters at all, nor does it allow word final consonants. Tongan has no distinction between [l] and [r] either, so when Tongan speakers want to talk about an ice-cream, they use a word that has been copied from English into Tongan, with the shape /aisikilimi/.

Languages are more likely to copy words from other languages in the area of *cultural vocabulary*, rather than *core vocabulary*. Core vocabulary is basically vocabulary that we can expect to find in all human languages. It is difficult to imagine any language that does not have some convenient way of expressing meanings like the following: *cry, walk, sleep, eat, water, stone, sky, wind, father, and die*. Cultural vocabulary, on the other hand, refers to meanings that are *culture-specific*, or which people learn through the experience of their own culture. Culture-specific meanings are obviously not core vocabulary, as only some languages have words to express these meanings: *tepee* and *peace-pipe* (in North America), *frost* and *snow* (in nontropical climates), *kava* and *tapa cloth* (in the South Pacific), *dreamtime* and *rainbow serpent* (in Aboriginal Australia), *earthquake* and *lahar* (in geologically unstable areas), *television* (in western technological societies), *holy war* and *muezzin* (in Muslim societies), and *trinity* and *resurrection* (in Christian societies).

There is some other terminology which is culture-specific, but this fact may not be obvious at first glance. *Thank you* is one good example of such an expression. Western children are constantly reminded to say *thank you* at every appropriate opportunity, but the verbal expression of thanks is a very Western habit. Many languages in the South Pacific, for example, do not have words to express this meaning, and

it is not considered necessary in these cultures to express thanks in words (though thanks can still be expressed in other ways, of course). Even such apparently basic words as the numbers one to ten are not found in all languages. Very few Australian Aboriginal languages, for example, have separate words for numbers above two or three. Anything more than three is simply expressed by the word for *many*, or an awkward compound of the existing numbers could be used. In the Bandjalang language of northern New South Wales in Australia, for example, there are the numbers /jabur/ 'one' and /bula:bu/ 'two', and if you needed to express *seven*, you would say /bula:bu-bula:bu-bula:bu-jabur/. Given that this is awkward once the numbers get any larger, it is clear that counting is something that was not done very often. The obvious explanation for this is that counting was not a major part of the non-acquisitive cultures of the Australian Aborigines.

No culture is constant, and often cultural changes are brought about as the result of contact with culturally or technologically different people. As European technology and beliefs have spread into the Pacific, many words of English origin have been copied into the languages of this region. Speakers of Motu in Papua New Guinea use the word /botolo/ for 'bottle', the Maori use the word /hikareti/ for 'cigarette', the Tongans refer to a 'car' as /motuka/ and the Paamese in Vanuatu refer to a 'letter' as a /ve:va/ (from the English word 'paper'). The expression *thank you* has now also been copied into Paamese, where it has been reshaped into the single word /tagio/. (In Paamese, sequences of [iu] are not possible, so the final vowel has been changed.) It is not just English words that have been copied into Pacific language; colonial powers have been introducing cultural changes to this part of the world for the last century and half. The French, for example, have contributed the word /la:lene/ 'queen' into the languages of Wallis and Futuna (from *la reine*), and the Germans have contributed words like /beten/ 'pray' into some of the languages of New Guinea.

Lexical copying is not the only source of lexical changes as a way of expressing cultural changes. Speakers of languages also make use of their own linguistic resources in creating new words. If they take an existing word and extend its area of reference to express a new meaning, this becomes an example of semantic change which has been used to *fill* a lexical gap in the language. For instance, when the Paamese people in Vanuatu saw their first aeroplane, it must have looked to them like a large bird. The word for 'bird' in Paamese is /aman/, and this word is now also used as the Paamese word for 'aeroplane'. People also fill lexical gaps by generating new words and joining existing words together in new compounds, according to the existing rules of the language, in order to express new meanings. When the Fijians first saw planes, they called them instead /waga-vuka/, which is derived from the words /waga/ 'canoe' and /vuka/ 'fly'. An airport in Paamese is an /out ten aman/, which literally means 'place of birds (i.e. aeroplanes)'.

While the non-core component of the lexicon is highly susceptible to change in a language because of the need to express 'technological and cultural change, lexical copying is not restricted just to the expression of new meanings. In Chapter 1, I mentioned that the younger generations of Paamese speakers frequently use the English-derived words /bu:s/ 'bush' and /ka:ren/ 'garden', instead of the indigenous words /leiai/ and /a:h/ (respectively) that their parents and grandparents use. There is no *need* for this, as the Paamese language already had perfectly good words to express these meanings.

These are not the only 'unnecessary' words that Paamese has copied. For instance, we also find words like /sta:t/ 'start', /ma:s/ 'must', and /ale/ 'OK then' (from French *allez*). Although there are perfectly adequate ways of expressing these meanings using indigenous Paamese words, few people use these words (and younger people would even have trouble saying what the Paamese word for 'start' actually is). Paamese has an efficient counting system, yet few younger speakers of the language can count in their language beyond five, preferring instead to use the English derived terms /wan/, /tu/, /tiri/, /vo:/, /vaiv/, and so on.

Why do people do this? It is quite difficult to find a good explanation.

However, if a speaker of English uses the French-derived expression *coup de grace* instead of 'final blow', many people would suspect that the speaker is trying to demonstrate his or her level of education. In the same way, when speakers of Pacific languages use words that are copied from English, they may simply be trying to say that they consider themselves to be much more of the modern world than the old-fashioned world of their grandparents.

English, French, and German are obviously not the only sources from which the languages of the Pacific can copy vocabulary. Although lexical copying is frequently associated with dominant economic and political powers, *any* kind of cultural contact can bring about lexical copying between languages. There had been long-term contact between Tongans and Fijians from well before the first European arrived in the Pacific, and there has been much copying of vocabulary between these two languages. Similarly, there are many words of Kiribati origin in the lexicon of the Tuvaluan language.

The Rotuman language of Fiji shows evidence of having copied words from Polynesian languages at different periods in history. Sometimes we find the same original form being regularly inherited with one meaning, and later copies with a slightly different meaning. For instance, the form /*toka/ 'come ashore' has been directly inherited as /foʔa/ with the same meaning. However, the word was later copied from another language, where it had not changed its shape, so we now find the word /toka/ meaning 'settle down' in Rotuman.

Cases such as this are referred to as *doublets*, i.e. historically related pairs of words in which one is directly inherited, while the other is a later copy from a related language. Obviously, however, if a Pacific language has copied a word from a language to which it is not genetically related, it is going to be very easy to spot the word as being a relatively new part of the lexicon. When a language copies words from another language to which it is fairly closely related, it is often much more difficult to recognise it as a later lexical innovation.

Obviously, if a Pacific language has copied a word from a language with which it is not related genetically, it is going to be very easy to identify the word as being a relatively new addition to the lexicon. When a language copies words from a language with which it is fairly closely related, it is often much more difficult to recognise it as a later lexical innovation.

There are other reasons why languages undergo lexical change. In many cultures in the Pacific and Australia, for instance, there is a strong tendency to name people after some particularly noticeable occurrence in the environment at the time of the child's birth. For instance, a child born during a violent thunderstorm might be called Lightning. One child born out of wedlock in Vanuatu in the 1980s was called Disco because it was after a night of dancing that he was conceived. In some societies, there are powerful social restrictions against mentioning people's names in certain situations. In Australian Aboriginal societies, for example, it is forbidden to mention somebody's name when they have died. In modern times, this restriction carries over to a prohibition against hearing their voice on tape, or seeing their face in a photograph or on video. If somebody is named after some common thing and that person dies, then speakers of that language cannot use the name of that thing either. In situations like this, the easiest way of avoiding the problem is to copy a word meaning the same thing from a nearby language. Australian Aborigines traditionally spoke more than one language anyway, so this was often very easy to do.

In the Kabana language (spoken in the West New Britain province of Papua New Guinea), people typically have personal names that also refer to everyday objects. In this society, as in many other

Melanesian societies, there is a strong restriction against saying the names of one's in-laws. This is true even if you want to refer to the actual thing that your in-law is named after, and you are not using the word as a personal name at all. In cases such as these, the language has a set of special words that are held 'in reserve'. These special, reserved items are either words in the Kabana language itself (but have a different meaning), or words copied from neighbouring languages and which have the same meaning. For example, the word in Kabana for a particular kind of fish is /urae/. If your in-law is called Urae, this fish must be referred to instead as /moi/, which is usually the word for 'taro'. The word for 'crocodile' in Kabana is /puaea/, but this word cannot be used if your in-law is called Puaea, and the crocodile must be referred to instead as /bagele/. This form /bagele/ is apparently copied from a nearby language, where the word for 'crocodile' is actually /varele/.

A similar kind of cultural practice is found in Polynesia, though here the restriction against the use of words is associated with chiefly status. There is a custom in Tahiti, for example, that is known as /pii/, and this custom states that the name of a chief (or even a part of the name of a chief) cannot be used by ordinary people. So, for instance, during the time that the very powerful chief called Pomare was in power, the very common words /poo/ 'night' and /mare/ 'cough' became taboo simply because they sounded 'like parts of the chief's name. The word /poo/ was replaced by the word /ru?i/ and the word /mare/ was replaced by the word /hota/.

Another kind of restriction among the Wampar speakers of Morobe province in Papua New Guinea involves place-name taboo. Certain places are regarded as sacred, perhaps because the people's ancestors' blood had been spilt there, or because their ancestors are buried there. If Wampar people today use the names of these places, it is believed that the ancestral spirits will punish the people by causing disasters, sickness, or the failure of the crops upon which they depend for food. The people of this area also have a similar kind of restriction to the Kabana practice of not saying the names of in-laws. People have a range of options available that allow them to talk about things and at the same time avoid breaking these taboos. Some languages have two or three synonymous terms to refer to the same thing, especially for very common words. Another possibility is for people to substitute a word that is semantically related to the taboo word in some way. For example, in the Mari language of this area, if the word /zahl 'fire' is restricted, the word /pakap/ 'ashes' can be used to talk about fire instead. Words can be lost in a language and new words can be created for reasons that are not at all obvious. Sometimes when a new word appears in a language, we have no idea where it came from. The English word *man*, for example, has a very long history. It has cognates in other Germanic languages such as the German *Mann*, and it can be traced all the way back to Proto Indo-European through the Sanskrit word *manu*. The English word *boy*, however, is something of a mystery, as it appears in the historical record only after English became a separate language, and it has no known cognates in any other Indo-European languages. There are several possible explanations for this. One explanation is that the word from which *boy* was derived was in fact present earlier, but that it was lost at the same time in all other languages related to English. Another possibility is that *boy* was borrowed from some other language. However, we have no idea what language that might have been. A final possibility is that *boy* represents a genuine lexical innovation in English. It is hardly ever the case that words genuinely spring out of nowhere.

Occasionally a word like *googol* is invented (in this case by a mathematician's child, to refer to the figure 1 followed by 100 zeroes), but generally words have some basis in pre-existing forms. Presumably what happened in the case of *boy* is that some other existing word took on this new meaning and the old meaning was lost altogether. However, we have no evidence that this is what actually happened, so what we are left with is a word that *looks* as though it suddenly sprang into the lexicon out of nowhere.

There is a special category of lexical innovations that I will refer to at this point. These involve *compression* (or *clipping*). This typically applies only to a few words in a language, and is not general. Compression is the process of dropping off one or more syllables from the end or middle of a word, for example:

administration	→	admin
university	→	uni, varsity
Shepparton	→	Shepp
Wangaratta	→	Wang

In fact, in Australian and New Zealand English there is often an additional syllable added to the compressed forms in order to express a kind of diminutive meaning:

football	→	footie
biscuit	→	bikkie
Christmas	→	Chrissie
present	→	prezzie
hot water bottle	→	hottie
truck driver	→	truckie
wharf labourer	→	wharfie
Salvation Army	→	Salvo, Sallie
journalist	→	journie
politician	→	pollie
conscientious objector	→	conshie
Brisbane	→	Brizzie

A particular kind of compression involves the use of initials. Examples of this kind of lexical change using only initials include the following:

Canadian Broadcasting Corporation	→	C.BC
television	→	TV
World Health Organisation	→	WHO
Ministry of Foreign Affairs and Trade	→	MFAT

It is sometimes possible for initials completely to lose their association with the forms from which they are derived and to be reanalysed as a new lexical item. For instance in Bislama (in Vanuatu), there is a word /kao/ meaning 'flat out, fast asleep, completely used up'. This derives from the French pronunciation of the first letters of the English abbreviation *K.O.*, which stands for 'knock-out' (in boxing). However, very few speakers of Bislama would be aware of the source of this item as an abbreviation for *K.O.*, and a genuinely new word has entered the lexicon in this way.

Another possible source for new lexical items is *word mixes* or *blends*. By this, I mean new words that are created by taking parts of two different words and adding them together to make up a completely new word. For instance, the following word mixes are frequently used in Papua New Guinea:

Administrative College	→	Adcol
Electricity Commission	→	E1com
University of Technology	→	Unitech
administration	→	admin
university	→	uni, varsity

This kind of change seems to be particularly common in government departments and in relation to administration generally. In fact, in Indonesia, there has developed a special register of Bahasa Indonesia that is commonly used in the newspapers where there are many word mixes of this kind (as well as many abbreviations). People in Indonesia sometimes find it difficult to read some parts of the newspaper because so many word mixes and abbreviations are used as totally new lexical items. New lexical items of this type also seem to be entering the English vocabulary in advertisements. For instance, forgettable kettles which switch themselves off when the water has boiled are called *forgettles*, and folding, environmentally friendly bottles are referred to as *fottles*. .

READING GUIDE QUESTIONS

1. What is the difference between a genetic grouping and a typological grouping of languages?
2. What is an isolating language?
3. What is an agglutinating language?
4. What is an inflectional language?
5. How can phonological reduction cause a language to change its grammatical typology?
6. What is morphological fusion? What sort of typological change can result from this kind of change?
7. What is morphological reduction? What kind of grammatical type results from this kind of change?
8. What is meant by the terms ergativity and accusativity with respect to language typology? How can a language change its type from one to the other?
9. How can languages change their basic word order?
10. What are verb chains? How can these develop in languages?
11. What is meant by the term grammatical reanalysis?
12. What is back formation?
13. How can analogy cause grammatical change?
14. What is semantic broadening?
15. What is semantic narrowing?
16. What does the term bifurcation mean with respect to semantic change?
17. What is semantic shift, and how does this kind of change differ from the other kinds of semantic change mentioned in this chapter?
18. How can metaphor influence the direction of a semantic change?
19. What is euphemism? How can it influence semantic change?
20. What is meant by hyperbole, and how is this involved in semantic change?
21. What is meant by interference when speaking of change of meaning?
22. What is lexical borrowing, or copying?
23. What is the difference between cultural and core vocabulary?
24. What possible ways are there for a language to fill lexical gaps?
25. What problems can lexical copying cause in reconstructing the phonological history of a language?
26. What is the possible effect of lexical taboo in vocabulary change?
27. What do we mean by lexical innovation?
28. What is lexical compression?
29. What are word mixes?

EXERCISES

1. In Bislama (Vanuatu) it is possible to express contrast by shifting a noun phrase to the front of a sentence, for example:

Mi no stap slip long haos ya.
 I negative habitual live at house that
 'I do not live in that house.'

Haos ya mi no stap slip long hem.
 house that I negative habitual live at it
 'It is not *that* house that I live in.'

The basic word order of Bislama is SVO. How might the existence of the following sorts of variations affect the basic word order of the language in the future?

Saki i bonem haos ya.
 Saki predicate burn down house that
 'Saki burnt down that house.'

Haos ya Saki i bonem.
 house that Saki predicate burn down
 'It was *that* house that Saki burnt down.'

2. Many speakers of Tok Pisin (Papua New Guinea) express a relative clause by simply putting the relative clause inside the main clause without any special marking at all except that a repeated noun phrase is expressed by means of a pronominal copy, for example:

Dispela man ol paitim em asde i dai pinis.
 that man they beat up him yesterday predicate die complete
 'That man who they beat up yesterday has died.'

Mi no stap long ples ol paitim em long-en.
 I negative be at place they beat up him at it
 'I wasn't there where they beat him up.'

Some speakers of Tok Pisin (especially, but not exclusively people from the Highlands area), are coming to mark relative clauses by adding *longen* at the end of the relative clause, for example:

Em i bin draiv long bris i bruk longen.
He predicate past drive over bridge predicate broken relative clause
'He drove over the bridge that was broken.'

Mi paitem em long diwai mi holim longen.
I beat him with stick I hold relative clause
'I beat him with the stick which I was holding.'

How has this new function of *longen* evolved in Tok Pisin?

3. Tok Pisin has an interrogative *husat* 'who', which occurs in sentences such as the following:

Husat i kukim dispela haus?
who predicate burn down this house
'Who burnt down this house?'

Some speakers of Tok Pisin are coming to mark relative clauses by placing *husat* in front of the relative clause (at least in written forms of the language). Here is an example of such a construction that was taken from a student's essay in Tok Pisin for a course in linguistics at the University of Papua New Guinea:

Bai mi toktok long ol asua husat bai i kamap sapos Tok Pisin i kamap nambawan tokples bilong Papua Niugini.
'I will discuss the problems that would arise if Tok Pisin were to become the national language of Papua New Guinea.'

How has this construction arisen?

4. Transitive verbs in Tok Pisin carry an obligatory suffix of the form *-im* (which is illustrated in the forms *paitim* 'beat up', *kukim* 'burn down', and *holim* 'hold' in the previous exercises). There are a small number of transitive verbs in Tok Pisin which are exceptions in that they do not take any transitive suffix, including *save* 'know', *kaikai* 'eat', and *dring* 'drink'. However, while most speakers of Tok Pisin would say the following:

Yu laik dring sampela bia?
you want drink some beer
'Would you like to drink some beer?'

There are others who prefer to say the following to express the same meaning:

Yu laik dringim sampela bia?

What factor would you say is responsible for bringing about the change from *dring* to *dringim* in this example?