Chapter 7: Part 1

GRAMMATICAL, SEMANTIC, AND LEXICAL CHANGE

So far in this textbook, I have been talking almost entirely about questions to do with sound change. There is more to language than sounds, however. We also have to consider the grammar of a language, i.e. the ways in which units of meaning are put together to make up larger units of meaning. Grammar is traditionally divided into morphology (the ways in which words are made up of smaller grammatical elements, i.e. morphemes) and syntax (the way that words are combined with other words to form larger elements, i.e. sentences).

The grammatical rules of a language are what link sounds to meanings. In talking about a language, we must also talk about the kinds of meanings that are expressed, i.e. the semantic system. Just as languages change in their sound systems, they can also change in their grammatical systems and in the meanings of their words. It is the purpose of this chapter to introduce the kinds of changes that take place in morphology, syntax, and semantics.

I have concentrated so far on the study of sound change, with comparatively little emphasis on grammar and semantics. This is no accident. The study of sound change has a long history, going back over 150 years. Scholars have therefore had lots of time to gather all kinds of information on sound change. Not only this, but it is probably inherently easier to study the changes in the sound system of a language than it is to study its grammatical and semantic systems. The number of individual phonemes of a language ranges from around a dozen or so in some languages, to 140 or so at the very most in other languages. The range of possible variations and changes in phonology is, therefore, much more restricted than in the grammatical system of a language, where there may be dozens (or even hundreds) of grammatical categories; not only that, we also have to consider the existence of thousands of particular grammatical constructions for any language. Also, when considering the semantic system of a language, the number of semantic relations that hold between different items in the lexicon would be so huge that they would be almost uncountable. So it is not really surprising that we know more about phonological change than we know about grammatical and semantic change.

7.1 TYPOLOGY AND GRAMMATICAL CHANGE

Languages of the world can be classified according to their grammatical *typology.* A typological classification of languages is one that looks for certain features of a language, and groups that language with another language that shares the same features. A typological classification differs fundamentally from a genetic classification of languages. While two languages may be grouped together typologically, this does not mean that they are genetically related, though of course it may turn out that this is the case. Similarly, it is possible for two languages that are genetically related to be typologically quite different. English and the Tolai language of Papua New Guinea, for example, belong to the same typological grouping if we consider the fact that they both share the same basic word order: SUBJECT + VERB + OBJECT.

Tolai and Motu (also of Papua New Guinea) are both genetically related in the Austronesian language family, yet they belong to different typological groups if we consider their basic word orders. The basic word order in Motu is SUBJECT + OBJECT + VERB.

While it is possible for a language to belong to only one genetic classification, we can group languages into as many typological groups as we want, depending on which particular linguistic feature we want to classify them by.

If we were to classify languages according to the way in which they express inalienable possession in noun phrases, we would find that Tolai and Motu both belong to the same typological group, while English behaves quite differently. In both Tolai and Motu, there are pronominal suffixes which are added to nouns, whereas in English, there is a separate possessive pronoun which precedes the noun to express the same meaning. Examine the following examples:

Tolai	Motu
bilau-gu	idu-gu
nose-my	nose-my
'my nose'	'my nose'

(In this particular case, Tolai and Motu are typologically similar because they have both inherited a feature that was present in the protolanguage through which they are genetically related.)

Typological classifications of languages can be based on whatever features we might find it useful to base them on. Some shared features are of little general interest, while other features are of much greater interest. In the study of grammatical change, linguists are interested in looking at how languages evolve from one grammatical type to another. I will now describe some of the major grammatical typologies, and you will see how languages that belong in each of these typological groups may have come to be like that, or how they might change typologically in future.

It can be observed that diverse languages tend to change independently in similar sorts of ways. For instance, certain types of lexical items – especially verbs or locational items - often change to become prepositions or postpositions (which can be collectively referred to as *adpositions)*.

Adpositions can then become attracted to nouns to become affixes. Affixes can then be lost, which means that other grammatical strategies must be developed in order to express the functions originally expressed by the now lost forms. It should be pointed out, however, that typological changes such as I have just described are not always unidirectional. By this I mean that it is possible for a variety of different sorts of changes to follow from a single starting point, as it is also possible for some of these changes to operate in the reverse direction. If language change was unidirectional, then human language – in all the typological diversity that we find today - would be inexorably moving towards a single type of language. What we find, in fact, is that the typological mix of the world's languages has been constantly changing in a variety of directions at once, resulting in the typological mix that we find today.

(a) Morphological Type

Languages can be grouped according to their *morphological type,* i.e. the way m which the main features of the grammar are expressed morphologically.

The first type of language that I will talk about is the *isolating* type of language. Such a language is one in which there tends to be only one morpheme per word, i.e. there are many free morphemes with very few bound morphemes. A language of this type would be the Hiri Motu language of Papua New Guinea. If you examine the sentence below, you will see that each word expresses only a single meaning:

Lauegu	sinana	gwarume	ta	ia	hoia	Koki	dekenai.
My	mother	fish		one she	bought	Koki	at

'My mother bought a fish at Koki.'

A second type of language is what we call the *agglutinating* type. An agglutinating language is one in which a word may contain many separate morphemes - both free morphemes and bound morphemes. However, the boundaries between morphemes in an agglutinating language are clear and easy to recognise, and it is as if the bits of the language were simply 'glued' together to make up larger words. In such a language, each morpheme will typically express a single meaning, while words will typically consist of several - perhaps even many - morphemes combined together. A language such as Sye (spoken on the island of Erromango in Vanuatu), has agglutinating constructions in sentences of the following type:

ov-nevyarep	yu-tw-ampy-oyh-or	u-ntoy
plural-boy	they-will-not-want-to-see-them	in-sea

'The boys will not want to see them in the sea.'

The single word /yu-tw-ampy-oyh-or/ 'they will not want to see them', for example, expresses several meanings, some expressed by prefixes, i.e. ɤu - 'they', tw- 'will not', ampy- 'want to', one by the suffix -or 'them', and one by the root oɤh 'see'.

A third type of language that we can consider is the *inflectional* type. Inflectional languages are those in which there are many morphemes included within a single word, but the boundaries between one morpheme and another are not clear. So, in inflectional languages, there are many meanings per word, but there is not a clear 'gluing' together of the morphemes as is the case with agglutinating languages. An example of an inflecting language is Latin. Examine the following sentence:

> *Marcellus amat Sophiam*
> 'Marcus loves Sophie'

Each of these words contains a number of different meanings. In the first word, we can recognise the root *Marcell-,* but the single suffix *-us* expresses a number of different meanings. For one thing, it indicates that *Marcell-* is the subject of the verb (rather than the object), and it also indicates that *Marcell-* is both masculine in gender and singular in number. In the case of *Sophiam,* the root is *Sophia-,* and the suffix *-m* indicates that she is the object (rather than the subject), that she is feminine, and that she also is singular. Finally, the word *amat* includes the meaning of 'love', as well as indicating that this particular activity takes place in the present tense, that the one performing the activity is in the third person, as well as being singular. If anyone of these items of meaning in any of these words were to be changed, then a different form of the word would have to be used. As Latin is an inflectional language, you should also note that although we can recognize a suffix of the form *-us* on the root *Marcell-,* and a suffix *-m* on the noun *Sophia-,* we cannot further subdivide either of these suffixes corresponding to the various meanings that these both express. That is, there is no single morpheme that expresses the meaning of 'singular', for example, or 'feminine', or

'subject'. The fact that a singular masculine subject is indicated by means of the single suffix *-us* is a typical characteristic of an inflectional language.

There is a tendency for languages to change typologically according to a kind of cycle. Isolating languages tend to move towards agglutinating structures. Agglutinating languages tend to move towards the inflectional type, and finally, inflecting languages tend to become less inflectional over time and more isolating. This cycle can be represented by the following diagram:
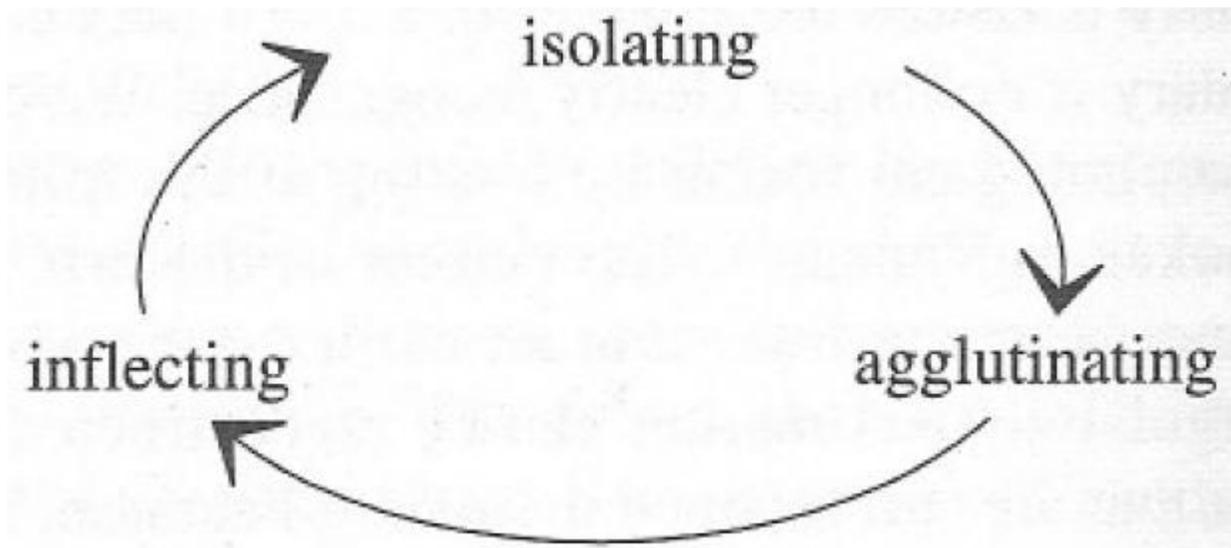
Isolating languages become agglutinating in structure by a process of *phonological reduction.* By this I mean that free form grammatical markers may become phonologically reduced to unstressed bound form markers (i.e. suffixes or prefixes). If we look at modem Melanesian Pidgin, for example, (at least as it is spoken, rather than written) we can see that a number of grammatical changes appear to be taking place. Firstly, the prepositions that are written as if they are pronounced /loŋ/ 'on, at, in' and /bloŋ/ 'of, for' tend to be pronounced nowadays as prefixes to the following noun phrases. The forms of these-evolving prefixes are:

lɔ-/blo-	before consonants
l-/bl-	before vowels

So we find that changes such as the following seem to be taking place:

aus   bloŋ mi → aus   blo-mi
house   of   me   house   of-me
'my house'   'my house'

loŋ aus   → l-aus
at   home   at-home
'at home'   'at home'

Not only are these two prepositions being phonologically reduced in this way, but so too are some of the preverbal tense and mood markers. For instance, the future marker /bai/ is now sometimes reduced to the prefix /b-/ when the following word begins with a vowel rather than a consonant. Compare the following:

bai   yu go
future you go
'you will go'

b-em   i   go
future-(s)he predicate go
'(s)he will go'

As I have said, languages which are of the agglutinating type tend to change towards the inflectional type. By the process of *morphological fusion,* two originally clearly divisible morphemes in a word may change in such a way that the boundary is no longer clearly recognisable. We could exemplify this process of morphological fusion by looking at the following example from Paamese (spoken in Vanuatu). The marker of the first person singular subject on verbs can be reconstructed at an earlier stage as /*na-/, and the second person singular subject marker can be reconstructed as /*ko-/, and these are the forms that are still retained in modem Paamese, for example:

na-lesi-ø
I-see-it
'I see it'

ko-lesi-nau
you-see-me
'you see me'

Other tenses, as well as the negative, are expressed by adding other prefixes and suffixes in sequence, for example:

ko-va-ro-lesi-nau-tei
you-immediate future-not-see-me-not
'you are not going to see me'

The distant future tense was also originally marked in the same way, by a prefix of the form /*i-/ which appeared after the subject marker, in the same position as is occupied in the example that I just gave you by the prefix /va-/. However, the future tense marker /*i-/ fused morphologically with the preceding subject prefix. So, what was originally /*na-/ followed by /*i-/ became /ni-/, and what was originally /*ko-/ followed by /*i-/ became /ki-/:

*na-i-lesi-ø	→	ni-lesi-ø
I-future-see-it		I+future-see-it
'I will see it'		'I will see it'

*ko-i-lesi-nau	→	ki-lesi-nau
you-future-see-me		you+future-see-me
'you will see me'		'you will see me'

In modern Paamese, we can no longer divide the /ni-/ and /ki-/ prefixes into a subject marker and a future tense marker, as /n-/ and /k-/ do not occur anywhere else in the language as recognisable morphemes, and there is no longer any clearly recognisable /i-/ morpheme as a future marker. We must therefore regard these two prefixes in modem Paamese as expressing two meanings at once. Such morphemes are called **portmanteau morphemes**. This situation has arisen as a result of the fusion of two originally separate morphemes into one form. When this kind of fusion affects the grammar of a language in a major way, then the language can be said to have changed from an agglutinating type to an inflectional type.

Finally, languages of the inflectional type tend to change to the isolating type; this process is called *morphological reduction.* It is very common for inflectional morphemes to become more and more reduced, until sometimes they disappear altogether. The forms that are left, after the complete disappearance of inflectional morphemes, consist of single morphemes. The functions that were originally expressed by the inflectional suffixes then come to be expressed by word order or by free form morphemes. As I indicated earlier, Latin was an inflectional language. So many ideas were expressed in a single word that there was no need in Latin for word order to be rigidly fixed Words could occur in any order because the one who was performing an action and the one who was on the receiving end of an action were always marked in the suffixes that were attached to the noun phrases themselves. So, the meaning of the sentence that you saw earlier could be equally well expressed in Latin in any of the following ways:

Marcellus amat Sophiam.
Sophiam amat Marcellus.
Sophiam Marcellus amat.
Amat Sophiam Marcellus.
'Marcus loves Sophie.'

To indicate that the roles are reversed in this situation (i.e. that it is Sophie who is keen on Marcus), we would need to change the marking on the nouns, but the word order could be just as variable. We could indicate that it is Sophie who loves Marcus by the following sentence:

Sophia-ø   amat Marcell-um.
Sophie-subject loves Marcus-object
'Sophie loves Marcus.'

However, any of the following would do just as well to express the same meaning in this inflectional language:

Marcellum amat Sophia.
*Sophia Marcellum amat.*
Amat Sophia Marcellum.

Latin evolved into modern Italian, and in the process lost a lot of its original inflections, thereby moving towards the isolating type. Nouns in Italian are no longer marked by suffixes to indicate whether they are the subject or the object, and they do not change in form as they did in Latin. In modern Italian, the only way to express the fact that Marcus loves Sophie is the following:

Marcello ama   Sophia.
Marcus   loves Sophie
'Marcus loves Sophie.'

Whereas, in Latin, we would be free to change the order of these words without changing the meaning, this is no longer possible in Italian, as the nouns have lost their 'suffixes which indicate subject and object. If we were to change the Italian sentence that I just gave you into the following sentence, we would change the meaning as well:

Sophia ama   Marcello.
Sophie loves Marcus
'Sophie loves Marcus.'

In modem Italian, it is now word order alone which marks the difference between the subject and the object of a verb, whereas before it was the presence or absence of an inflectional suffix on the noun. This typological cycle, and the processes involved in the transformation from one type to another, can be summarised in the following diagram:
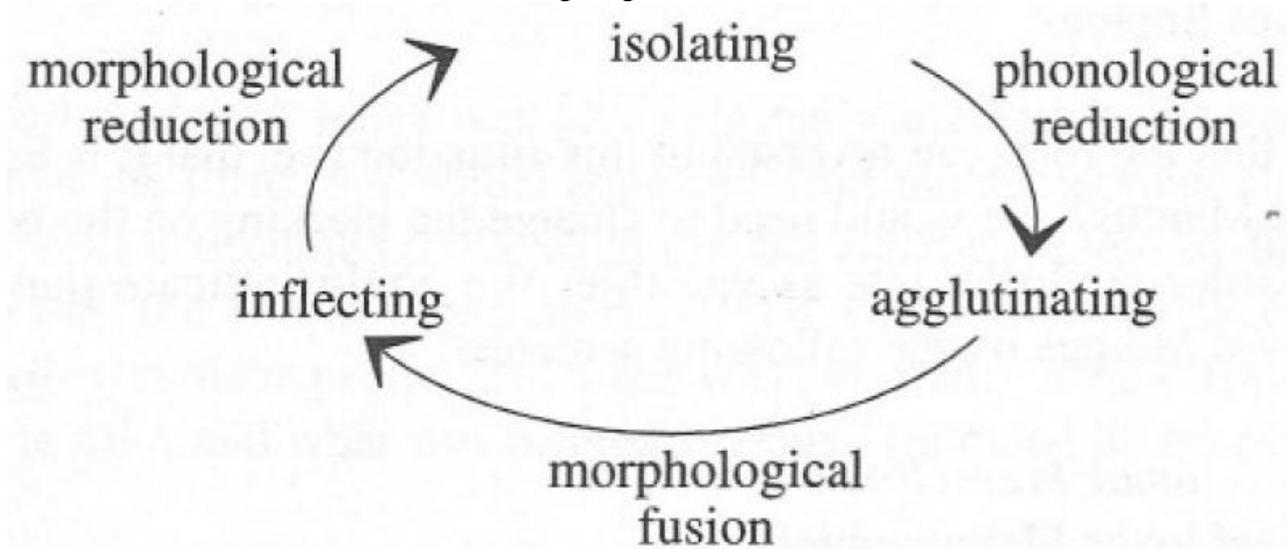
There is, in fact, a fourth type of language: those having *polysynthetic* morphology. Such languages represent extreme forms of agglutinating languages in which single words correspond to what in other kinds of languages are expressed as whole clauses. Thus, a single word may include nominal subjects and objects, and possibly also adverbial information, and even non-core nominal arguments in the clause such as direct objects and spatial noun phrases. The following example from the Yimas language of Papua New Guinea illustrates a polysynthetic structure:

na-ŋa-mpa-na-ŋkan-mpan-ra   amtra
plural-give-now-imperative-few-them   food
'You few give them food now!'

Polysynthetic languages can develop out of more *analytic* (i.e. non-polysynthetic) languages by a process of *argument incorporation.* In English, we find some evidence of this kind of construction in the form of incorporated objects, such as the following:

Professor Hawne took up pipe smoking to make himself look pompous.

In the example, a generic object such as *pipe* can be preposed to a transitive verb such as *smoke,* instead of its usual position after the verb. In fact, we can even incorporate spatial noun phrases in the same sort of way, as in the following:

He just sat there star gazing.

Since *gaze* is an intransitive verb, this sentence can only be derived from the following, in which the incorporated noun *stars* appears in a prepositional phrase:

He just sat there and gazed at the stars.

It is possible for such patterns to become established as the normal pattern in a language, and for these to completely replace earlier patterns in which there are free form nominal arguments and other kind of arguments in a clause.

(b) Accusative and ergative languages
Languages of the world can also be grouped typologically according to the way in which they mark the subject and object noun phrases in a sentence. In a language like English, we speak of the *subject* of a verb, and its *object.* The subject is the noun that comes before the verb and which causes the verb to choose the suffix -*s* if it is singular and **-ø** if it is plural, when the verb is in the present tense. The object is the noun phrase that comes after the verb in English. So we have sentences like the following in English:

The Vice-Chancellor is praising   the students.
SUBJECT (singular) VERB (singular) OBJECT

The Vice-Chancellors are praising   the students.
SUBJECT (plural)   VERB (plural) OBJECT

There are other languages which differ from English in the way that the subject and the object noun phrases are marked. Look at the following sentences in the Bandjalang language of northern New South Wales (in Australia):

Mali-ju bajgal-u mala ḍa:ḍam buma-ni.
the   man   the   child   hit-past
'The man hit the child.'

Mala bajgal gaware-:la.
the   man   run-present
'The man is running.'

Mali-ju ḍa:ḍam-bu mala bajgal ɲa:-ni.
the   child   the   man   see-past
'The child saw the man.'

You will notice that the noun /bajgal/ 'man' appears in two separate forms, either /bajgalu/ (with the suffix /-u/) or just /bajgal/ (with no suffix). The word that precedes it also varies in its shape. When the word for 'man' appears with the suffix /-u/, this word has the form /mali-ju/, but when the word for 'man' appears without any suffix, the preceding word has the shape /mala/. If you examine the sentences carefully, you will find that the noun phrase appears as /maliju bajgalu/ when it is the subject of the transitive verb /buma-/ 'hit', but when it is the subject of the intransitive verb /gaware/ 'run', it appears without any suffixes, as /mala bajgal/. You will also see that when the same noun phrase appears as the object of the transitive verb /ɲa:/ 'see', it also has the unsuffixed form /mala bajgal/. The noun phrase referring to 'the child' behaves in exactly the same way. When the child is the object of the verb /buma-/ 'hit', the object appears without any suffix as /mala da:da:m/ 'the child', but when the child functions as the subject of the transitive verb /ɲa:-/'see', it appears with suffixes, i.e. /maliju da:dambu/.

(The forms of the suffix on the word /bajgal/ 'man' and /da:dam/ 'child' are different, but these are phonologically determined allomorphs of the same morpheme.)

If you compare the structure of English and Bandjalang sentences, you will see that there are three basic grammatical functions that are being expressed in the two languages, but in different ways in both cases. In English, we have:

> Intransitive subject
> Transitive subject

being marked in the same way, and being distinguished from:

> Transitive object

In Bandjalang, however, we have:

> Intransitive subject
> Transitive object

being marked in the same way, while these two functions are distinguished from:

Transitive subject

In a language like English, the transitive and intransitive subject functions are referred to collectively as the *nominative* noun phrases, while the transitive object is said to be the *accusative* noun phrase. In a language like Bandjalang, the transitive subject is referred to as the *ergative* noun phrase, while the intransitive subject and the transitive object noun phrases are referred to collectively as the *absolutive* noun phrases.

Languages in the world fall into one of these two basic typological groupings, though the type represented by English is much more widely distributed than the type represented by Bandjalang. (It is also possible for languages to be structurally intermediate between the two patterns.) With such different types of languages, we cannot really use the term *subject* for all languages of the world because it will have to mean different things depending on which of these two types of languages we are looking at. In order to make it clear which type of system we are talking about, we need to distinguish between two basic types of languages: *nominative-accusative* languages (such as English), and *ergative-absolutive* languages (such as Bandjalang). Sometimes these labels can be shortened, so English can also be called an *accusative* language, and Bandjalang can be called an *ergative* language.

Just as it is possible for a language to change its basic morphological type over time, it is also possible for an accusative language to evolve into an ergative language, and for an ergative language to become an accusative language. Most Australian languages behave like Bandjalang, i.e. they are ergative rather than accusative. Some linguists have argued that they were originally accusative and that they changed to become ergative. The original language might have had constructions like these (in which the roots and affixes are largely hypothetical, as indicated by the double asterisks):

**wati-ø   ɲina-ŋu
 man-nominative sit-past
 'The man was sitting.'

**wati-ø   jipi-ku   paka-ŋu   juku-ŋku
 man-nominative   woman-accusative   cover-past   blanket-with
 'The man covered the woman with a blanket.'

These sentences are clearly accusative in type. Just as English has a passive construction, so too, it is argued, did this hypothetical language. The passive could have been marked by the suffix */-li/* on the verb. In the passive construction, what was originally the accusative noun phrase became the nominative noun phrase, and what was originally the nominative noun phrase was marked by the instrumental suffix, which translates as the by phrase of a passive sentence in English:

**jipi-ø   wati-ŋku   paka-li-ŋu   juku-ŋku
 woman   man-instrumental   hit-passive-past   blanket-instrumental
 'The woman was covered by the man with a blanket.'

If you compare this hypothetical passive sentence with the sentence above in which a blanket is referred to as an instrument, you will see that the instrumental suffix and the ergative suffix are the same, with the shape /-ŋku/. It is then argued that the passive eventually 'took over' from the active sentences, and the active sentences completely ceased to be a part of the grammar of the language. The last example would then have become the normal way of saying 'The man covered the woman' . So, the performer of the action (i.e. the transitive subject) would always have been marked differently from the intransitive subject and the transitive object. (Note that this hypothesis is not widely accepted for the history of Australian languages, and there are few linguists who would take it seriously now. However, this example does show one way in which a language might change from an accusative type to an ergative type.)

Of course, ergative languages can also change to become accusative languages. Just as accusative languages often have passive constructions, ergative languages often have what are referred to as *antipassive* constructions. In an antipassive sentence, a transitive verb with an ergative subject is structurally marked and detransitivised, with the original subject receiving absolutive marking. The original absolutive object is then marked in some other way. If the original antipassive function of the marker on the verb were to have this function obscured over time - perhaps by phonological reduction or loss, or the acquisition of new functions - then we would be left with a system of accusative marking.

We could take the same original forms that were presented above and start out instead with an original ergative pattern of marking, as illustrated by the following:

```
*wati-ø            jipi-ku           paka-li-ŋu
 man-absolutive    woman-dative      cover-antipassive-past
'The man covered the woman.'
```

If the /*-1i/ suffix then became reanalysed in some way as part of the verb - perhaps as a generalised marker of any intransitive verb, then we would have a genuinely accusative pattern, as follows:

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*wati-ø            jipi-ku           paka-li-ŋu
 man-nominative    woman-accusative  cover-intransitive-past
'The man covered the woman.'
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*wati-ø            nina-li-ŋu
 man-nominative    sit-intransitive-past
'The man sat.'
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(c) Basic constituent order
When I talk about *basic constituent order,* I am referring to the relative order in the sentence of the three major components, i.e. the verb and the noun phrases that are centrally associated with it, these being the subject and object noun phrases. Languages of the world can be grouped typologically according to the way that these three major constituents in the sentence are ordered.

Most languages have the order SUBJECT + VERB + OBJECT (SVO) - English is a language of this type. The next most frequently found order is SUBJECT + OBJECT + VERB (SOV). The only other commonly found order is VERB + SUBJECT + OBJECT (VSO). (There are three other logical possibilities for the order of constituents in a sentence, i.e. OVS, OSV, VOS. However, these orders are much rarer among languages of the world.)

Many of the Austronesian languages of the Pacific - along with English as I have already said - are SVO languages. The Tolai language of New Britain in Papua New Guinea is a language of this type, as shown by the following example:

```
A    pap  i    gire     tikana  tutana.
the  dog  it   see      one     man
SUBJECT     VERB  OBJECT
'The dog saw a man.'
```

The Austronesian languages of Central and Milne Bay Provinces of Papua New Guinea, however, are generally of the **SOV** type. For example, the same sentence in Motu would be expressed as:

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Sisia ese     tau    ta    e-ita-ia.
dog   subject man    one   it-see-him
SUBJECT       OBJECT VERB
'The dog saw a man.'
```

The Austronesian languages of Central and Milne Bay Provinces appear to have changed their word order from the earlier order of SVO to the SOV order that they now have. Some scholars have argued that this change took place when the ancestor language from which Motu and its closer relatives are descended came into contact with the non-Austronesian languages of the area, as all of these non-Austronesian languages are SOV languages. For instance, in the non-Austronesian Koita language, which is spoken by the neighbouring group to the Motu, the sentence that I have just given for Tolai and Motu would be expressed as follows:

```
Tora          ata   be    eraɣa-nu.
dog           man   one   saw-him
SUBJECT       OBJECT VERB
'The dog saw a man.'
```

Language contact is not the only possible explanation for a change in basic word order, as languages clearly do undergo these sorts of changes without any evidence that language contact is involved. Many languages that have one particular basic constituent order often allow competing patterns in certain structural contexts. German, for example, is an SVO language in main clauses, as shown by the following:

> *Der Mann sah den Hund.*
> The man   saw the dog.

In subordinate clauses, however, German has SOV order, as shown by the following:

Ich	*glaube*	*dass*	*der*	*Mann*	*den*	*Hund*	*sah.*
I	believe	that	the	man	the	dog	saw

'I believe that the man saw the dog.'

When there are competing structures of this type, it is possible for one of the two patterns to be generalised to other contexts and for the typology of the language to change. (Note, however, that I am not trying to say here that German is moving from SVO to SOV constituent order.)

Other languages allow alternative word orders as a way of expressing purely stylistic contrasts in particular contextual environments. For instance, in an SVO language, it may be possible to focus attention on the object by moving that noun phrase to the beginning of the sentence, or by moving the subject to the end of the sentence. Even though English is an SVO language, we sometimes find OSV orders in sentences such as the following:

I quite like Harry, but John I can't stand!

Similarly, although French is an SVO language, we also find constructions such as the following in the colloquial language which appear to have a VOS order:

Il	*aime*	*bien*	*sa*	*petite*	*fille*	*le*	*vieux*	*mec.*
he	love	much	his	little	daughter	the	old	guy

'The old guy really loves his little daughter.'

Again, if constructions such as these originally purely stylistic variants were to take over from the dominant patterns, then a change of constituent order typology would have taken place.

(d) Verb chains

While there are many grammatical facts that we could consider when setting up language typologies, the final example of typological change that I want to look at in this chapter is the development of what is called in some languages *verb chains* or *serial verbs.* In some languages, we find that whole series of verbs can be strung together, sometimes in a single phonological word, with just a single subject and a single object. For instance, in the non-Austronesian Alamblak language of the East Sepik in Papua New Guinea, we find sentences such as these:

Wifërt	fïr	gëngimë-t-a.
wind	blow	cold-past-it-me

'The wind blew me and I got cold (i.e. 'the wind blew me cold').'

Another example comes this time from the Paamese language of Vanuatu (which is an Austronesian language):

Keik   ko-ro: vul   a:i.
you   you-sat break plank
'You sat on the plank, breaking it.'

Verb-serialising languages sometimes even allow three (or more) verbs to be chained together in single constructions of this type. For instance, in the Yimas language, which is a close neighbour of the Alamblak language, we find complex examples of clause chaining such as the following:

Na-bu-wul-cay-pra-kiak.
him-they-afraid-try-come-past
'They tried to frighten him as he came.'

Such constructions are not possible at all in English. Thus, we do not use equivalent constructions such as the following:

*The wind blew-colded me.
*You sat-broke the plank.
*They tried-frighten-he-came him.

Serial verb constructions of this type are quite common in the languages of eastern and southeastern Asia and in western Africa, as well as in the non-Austronesian languages of Melanesia. There is also evidence of serial verb constructions in some of the Oceanic languages, as well as Australian languages.

In languages that have these kinds of constructions, it is often possible to show that these chains of verbs originate from much simpler constructions in which each verb had its own set of subject and object noun phrases. For instance, the complex Alamblak structure that you have just seen could be derived from the Alamblak equivalents of the following:

'The wind blew me.'
'I got cold.'

Languages which develop serial verbs of this type are generally (but not always) SOV languages. This is not surprising, as this order allows speakers simply to state the subject and the object once at the beginning and then string the verbs together one after the other following these two noun phrases. It is then a relatively small step for these chained verbs to be 'collapsed' into a single grammatical unit, or even a single word.

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* **ergative:** [From Greek ergates, *worker*, from ergon, *work*; see werg- in Indo-European roots]

> *adj*. **1.** Of or relating to a language, such as Georgian, in which the subject of an intransitive verb and the object of a transitive verb is expressed by one grammatical case, and the subject of a transitive verb is expressed by another **2.** Of or relating to the grammatical case of the subject of a transitive verb in such a language.

> *n*. **1.** The ergative case **2.** An ergative inflection **3.** A nominal having an ergative form

Morphological language typology

There is an older system of morphological classification that divides languages into four basic types:

- isolating (or, monosyllabic),
- agglutinative,
- inflective (or, fusional), and
- incorporating (or, synthetic).

In the past, this four-way classification was misused by various scholars, who viewed the types as stages in linguistic evolution. This typology is no longer viewed this way, but it is certainly still used to provide an imprecise and imperfect but still useful rough morphological characterization of languages.

The four types differ in their degree of morphological synthesis, that is, the four types range from most analytic to most synthetic. Of course, these types are relative rather than absolute, that is, no language is purely one type or another.

For example, different parts of the English morphological system suggest different analyses. Monosyllabic English forms, particularly the grammatical words like *to, for, when, not, must, the,* and *or*, make English appear to be isolating (or, monosyllabic).

Inflectional paradigms such ox, ox's, oxen, oxen's for nouns; go, goes, going, went, and gone for verbs; and good, better, best and bad, worse and worst for adjectives suggest that English is inflectional (or, fusional). Words composed of easily segmentable prefixes, roots, and suffixes, like *anti-dis-establish-ment-ari-an-ism* and *photo-graph-ic-al-ly* make English look decidedly agglutinative. And, finally, verb constructions like *horseback-riding* and *baby-sitting* or *sun-loving* have an undeniable incorporative element to them.

a.   Ya dumayu chto eto xorosho ...

Ya	duma	-yu		chto	eto	xorosho ...
I	/ think /	1st person sg., indicative mood /		that /	it /	good/ ...

Russian is _____

b.   Es cer -u   ka   tu   es   -i   laimig   -a…

I/ hope/ 1st pers. sg., indic./ that/   you (sg.)/ are (2nd pers. Sg)/   happy   Feminine gender, singular

Latvian is _____