Yapese Reference Grammar

PALI LANGUAGE TEXTS: MICRONESIA

Social Sciences and Linguistics Institute
University of Hawaii

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Yapese Reference Grammar

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For the Yapese people, with the hope that it might be a means of practical help, and further appreciation of the "riches of the glory of God" in His creation.

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Foreword

This book has been long in the making, and the resulting product is both gratifying and, nevertheless, somewhat disappointing.

Writing the book has taught me much about the Yapese language that I could have learned in no other way. The publication of this substantial amount of information about the language, which has not been heretofore available, will no doubt be of interest to the small segment of the scholarly and academic worlds who are concerned with Yap. It is expected that the book will be useful in the development of bilingual education in Yap. These are causes enough for gratification.

At the same time the book suffers from incompletenesses and errors that would have been avoidable had I been more diligent in research and in writing. I ask forgiveness from those who must use the book. Its faults are strictly my own responsibility.

I am deeply indebted to a multitude of friends and helpers, and wish to thank the most important of them here.

At the head of the list is my editor, Donald M. Topping, director of the Social Sciences and Linguistics Institute (SSLI) of the University of Hawaii. Without his guidance, criticism, and his combination of patience and stimulating encouragement, the book would not have been finished at all.

It goes without saying that a great deal of the credit goes to my Yapese informants. Informants are not mere passive sources, but to a degree become linguists in their own right. I wish to thank especially my own principal informants John Iou, Leo Pugram, and Raphael Defeg. Each has contributed to the analysis of Yapese contained in this book, and Pugram helped considerably with the task of writing. For assistance in bringing Pugram to Auckland in 1974 to help with the grammar and the dictionary, my thanks go to the University of Auckland for a grant from its Research Fund (Grant #141 Anthro 33).

I wish to thank Robert W. Hsu of the SSLI, University of

Hawaii, for his help and especially for his permission to draw on his doctoral thesis "Phonology and Morphophonemics of Yapese" (University of California, Berkeley, 1969) in writing chapters 2 and 3.

Many others have been helpful. I would like to name in particular Freda Hellinger, who copy edited the manuscript; Joel Bradshaw, who provided insights about Yapese; Bruce Biggs, Sheldon Harrison, and Tomas Ludvigson, who provided needed encouragement; and Ann Carver, who helped in the many ways that secretaries do. Each knows well the extent of my indebtedness.

Susan Peery lived with the book and encouraged me for two years, then became my wife and thus discovered that "for better, for worse" includes the writing of reference grammars.

The grammar is not finished; while no grammar of a language can be more than partial, this is more than usually true of a first effort. I hope that there will be more material published on Yapese in the near future. This might be done on Yap, possibly by some of the Yapese (such as Pugram, Defeg, and Iou) who have had training in linguistics. A Yapese edition would be very desirable for use on Yap. These and other such projects may some day be accomplished; for now the present volume will have to serve.

Preface

This book represents a relatively large expenditure of time, money, and effort. Some might wonder whether it is justifiable to spend great sums and effort to produce a book about a language spoken by only five thousand people. It is indeed justifiable, and it is worthwhile to consider briefly some of the reasons why that is so. In discussing these reasons I will also be involved in discussing the various audiences for whom the book is written.

The primary audience is the Yapese people. The book is consciously written with the assumption that the main readership will be native speakers of Yapese. At first consideration, it may seem almost superfluous for a person to study his own language. After all, he already knows it. This is why we call it "his own."

Although there are some situations in which a person may be considered justified in telling others how they *ought* to speak, this book does not do that. Questions of how one ought to speak are questions that must be worked out among the members of a speech community. This book is a description of how people actually *do* speak Yapese, not of how I—or anyone else—think people ought to speak Yapese.

Therefore, although this book is about something that you (if you are a native speaker of Yapese) already know, it is nevertheless the case that you do not normally stop and analyze your knowledge of Yapese. This analysis is what this book is about. There are several good reasons for such an analysis.

In the first place, all languages are apparently constructed according to one basic design, and thus have some very important similarities. Of course the differences between languages are great and usually attract our attention much more than do the similarities. Nevertheless, the similarities are many. Knowing something about the structure of language in general proves very helpful in studying particular languages.

However, it is not possible to study the structure of "language

in general" except by studying actual examples of real languages. Examples of different types of structure, for instance, are easy to find in your own language because you can think them up for yourself. Such study helps you become familiar with the technical terms used in language study, terms such as *noun* and *verb*. When you later study another language you can apply many of the concepts you learned in studying your own language.

A second advantage to studying your own language is that it helps you understand more of how you think. Since thinking normally involves language, it is clear that thought patterns must be intimately connected with the structure of the language spoken. Understanding that structure is of help in understanding the thinking process.

Studying your own language will also help you learn how to use it more effectively. It is important to be able to communicate well. If you are involved in such things as writing reports, you will have to be able to express yourself clearly, utilizing the resources of your own language.

Since many Yapese do not have occasion to write very much in their own language, it might seem that it is not so important to be able to use written Yapese efficiently. I do not think this is a correct conclusion, however. Language is not only, or even primarily, a written form of communication. Everyone learns to speak, and becomes a capable user of his own language at an early age, at about six. Some people do not begin to learn to write until much later, and of course some never learn to write, and do not need to do so. All people use language constantly in all human relationships, yet not everyone is as good at using language as everyone else. For example, some people are much more skilled at telling traditional Yapese stories, history, and other types of oral literature than are other people. The ability to communicate effectively varies from one person to another and can be developed by study and practice.

This book does not attempt to teach how to use Yapese well, but it is certain that understanding the structure of Yapese will be helpful. It is likely that Yapese will remain the first language of people in Yap for a long time, and also that the importance of written Yapese will increase. With bilingual education a reality in the Trust Territory, Yapese literature will increase. Knowledge of the structure of the Yapese language is a good basis for any practical use of that language.

This book is not written only for the native speaker of

Yapese, however. There are two other groups of people who will be interested: the first is those who are interested in Pacific languages from the point of view of the linguist, and the second is those who are not native speakers but who wish to learn to use the language.

There is presumably no need to justify to linguists the writing of this book. Some, however, might wish that the book had been written with less assumption that the reader is a native speaker of Yapese, and with a more analytical outlook. However, I felt that it would be possible for the interested linguist to use the book in its present form, basically descriptive (rather than theoretical), but if it had been written in the full panoply of linguistic terminology it would have been inaccessible to most Yapese readers. I have attempted to index it in such a way that it will be usable as a linguistic reference on Yapese. The linguistic reader is moreover urged to consider the fact that the book is sponsored by the Department of Education in the Trust Territory and that its first audience is the Yapese reader.

There may be those who are studying Yapese as a second language who will wish to use this book. They are encouraged to do so. It is my feeling that an analytical knowledge of a language is of great practical value to the language learner. However, this book cannot by itself suffice for learning Yapese; it should be accompanied by experience in hearing the language, as in Peace Corps training, or by living in Yap and speaking it daily. I wish such students success, as I too am a struggling student of Yapese.

1 Introduction

Language is a code. A code is a system of symbols used to represent meaning. For example, if we want to send secret messages to someone, we may agree with him that we will let numbers stand for letters, so that *1* stands for *a*, *2* stands for *b*, and so forth. Then if I send him a message:

13 5 5 20 13 5 1 20 5 9 7 8 20

and if he knows the code he can write letters under the numbers:

13 5 5 20 13 5 1 20 5 9 7 8 20
m e e t m e a t e i g h t

So this system of numbering the letters of the alphabet is a code, although a very simple one. The numbers are a system of symbols to convey a certain meaning, the meaning "meet me at eight."

Now language is a code in this same sense. The sounds that we make when we say a sentence like "meet me at eight" are a set of symbols which convey a certain meaning.

In order to use our simple number code, we had to know how the code worked, what the symbols were, how they were to be arranged, and so forth. In the case of the number code, the rules involved were very simple. We just said, "Write *1* for *a*, *2* for *b*, and so forth until the whole alphabet is numbered," and the structure of the code was obvious. In the case of language, the rules involved are very complex indeed. However, the same basic problem is involved. The structure of a code is its **grammar**, and when we use the word grammar in this book we shall use it with this meaning: the grammar of a language is a complete description of its structure and how it works.

There are three parts to the grammar of a language. The

basic part is called its **syntax**. Syntax is a word that just means the way things are put together. The syntax of a language like Yapese has to tell us two things: what the symbols are that are used to convey meaning, and what the rules for combining these symbols are. In other words, we need to know what the **words** of Yapese are (these are the symbols), and what the rules are for combining these words into whole messages, called **sentences**.

You might think that it would be enough to know just what the words of Yapese are. If someone wanted to learn Yapese, he might ask you what the words are for 'I', 'am' and 'hot'. You might tell him that 'I' is *gaeg*, that 'am' is *baey* (as in *Gu baey u tafnaag* 'I am at my place'), and that 'hot' is *gaweal*. All these answers would be correct, but if he then put them together into a string that he thought meant 'I am hot', like this:

> **Gaeg baey gaweal* (the * in front of something means that it is not correct)

he would not have a Yapese sentence at all.

Thus, part of syntax, in many ways the most complex part, is the rules for putting words together to make sentences.

The syntax of any language is enormously complex, and although it is easy enough to learn the syntax of a language (every child does it by the time he is six or seven years old), it is a very difficult task to write it all down in a book. This book, and the Yapese dictionary which goes with it, are only a very limited sketch of Yapese syntax.

We will (somewhat artificially) divide the syntax of Yapese into several parts. The **dictionary** is basically a list of words. One section of the grammar, called **morphology**, discusses the syntax of words. This means, for example, the way in which you add a bit to the end of *paaq* 'his arm' to make it into *paqag* 'my arm', or a different bit to make it into *paqam* 'your arm', and so forth. These bits are called suffixes, and there are other similar processes that will be discussed under the heading morphology. Other sections of the book will discuss the syntax of phrases (like *rea piin neey* 'this woman', or *bin ni ba feal' ea baebiy* 'the good pig [not the bad one]'), and of whole sentences.

The other two major parts of the grammar of a language are called **phonology** and **semantics**. Phonology is basically the study of the sound system of a language. Phonology includes not only the way the language is pronounced, but also certain sound changes that take place in pronouncing the language. For example, when we wrote *paaq* 'his arm' we wrote a double *aa* in the middle of the word, after the *p*; but when we added the suffix to it to make *paqag* 'my arm' we wrote only a single *a* after the *p*. All of these things come under the heading of phonology.

Semantics means the study of meaning. For example, the words *buulyal* 'little girl', *rugood* 'woman of childbearing age', and *puweelwol* 'woman past childbearing age' all refer to different kinds of *bpiin* 'woman'. English does not have separate words for these concepts. Such meaning relationships between different words as these are part of the study of semantics.

Another part of the study of semantics is the study of the meaning of syntactic relationships. For example, in the sentence *Kea languy fa rea gaetuw fa rea boroq* 'The cat ate the rat', we know that it was the cat that did the eating and the rat that got eaten and not the other way around. We know this because, for example, *fa rea gaetuw* 'the cat' comes before *fa rea boroq* 'the rat' in the sentence. The study of the meaning of syntactic relationships like the above is also part of semantics.

There is a special section at the beginning of this book concerned specifically with phonology, but there is no section specifically concerned with semantics. Of course, part of the semantics of Yapese is discussed in the definitions of the words in the dictionary. Some semantic facts about particular syntactic constructions will be mentioned at the appropriate time in the sections on syntax. But there is no specific section included about semantics.

2 Phonology

INTRODUCTION

2.1 The basic form of every language is speech. Sometimes it might seem as if the basic form of language was writing. It is in this sense that we sometimes speak of "pronouncing letters" instead of "writing sounds." But, in fact, everybody learns to speak before he learns to write. Many people never learn to write at all, and yet they use their language just as well as those who can write. Some languages are never written, but they are just as normal and good languages as those languages that are written. Writing is just a way of representing speech on paper. If language is a code, as we said in chapter 1, then writing is a code for a code. Writing is a code for representing speech sounds.

The fact that languages are basically spoken, and that writing is secondary, does not mean that writing is of little importance. Writing is of very great importance to people. It is one of the most important tools men have. At the time that this book is being written, in 1974, there are a number of different opinions that different people have concerning the right way to write Yapese. There is an official writing system proposed by the Yapese Orthography Committee in 1972, and for most purposes this is the system that will be used in this book. However, other proposals exist concerning the best way to write Yapese. Regardless of whether one agrees with a particular writing system or not, the best basis for understanding and developing a good writing system for Yapese is a knowledge and understanding of the sound system (or phonology) of Yapese. This is the subject of this chapter. In several places in this book various facts about Yapese phonology will be discussed regarding the question of how to write the language.

PHONOLOGY

2.1.1 The sound system, or phonology, of any language is a patterned usage of the sounds that are possible for any human language. The study of these sounds that are possible for all human beings to use in languages is called the study of **phonetics**. This is the subject matter of section 2.2 of this chapter.

All languages divide these phonetically possible sounds into a number of different kinds or sound units (like *p*, *a*, *w*, etc.) called **phonemes** or **phonemic segments**. Not all possible sounds are used by all languages, and the sounds which are used by a particular language are arranged in a system particular to that language, called its **phonemic system**. The study of the phonemic system of Yapese is the subject of section 2.3 of this chapter.

The phonemes of a language are organized into meaningful units called **morphemes**. *P'aaw* 'banana' is a morpheme. So is the *-g* at the end of the word *paqag* 'my hand'. The word *paqag* 'my hand' itself consists of two morphemes, one meaning 'hand' and one meaning 'my'.

Phonemes may not be simply scrambled together in any way whatsoever to make morphemes. For example, you could make a morpheme of the form *yood*, and use it (for example) to refer to a new type of banana. But you could never make a new morpheme like *kdtbre*. You couldn't pronounce it. There are definite rules that govern the way in which phonemes can be put together in each language to make morphemes. These are called **morpheme structure rules**. Section 2.4 of this chapter is a brief description of some of the important facts about morphemes, and a discussion of some of the morpheme structure rules of Yapese.

When phonemes are put together in speech, it sometimes happens that their pronunciation is affected by the phonemes that they come in contact with. For example, there is a morpheme *ka* meaning something like 'past time', as in *ka mu maruweel* 'you worked', *ka da maruweel gow* 'we (you and I) worked', *ka ra maruweel gaed* 'they all worked' and so forth. But when this morpheme comes before *gu* 'I' its pronunciation changes to *ku*, as in *ku gu maruweel* 'I worked'. Changes of this sort, called **morphophonemic changes**, are produced when phonemes come into contact with each other. These are discussed in section 2.5 of this chapter.

PHONETICS

2.2 All languages use the same set of organs of the body to produce the sounds that they use. These organs are the **speech organs**, or **vocal apparatus**, as they are sometimes called. In our discussion we will refer to the diagram in figure 1.

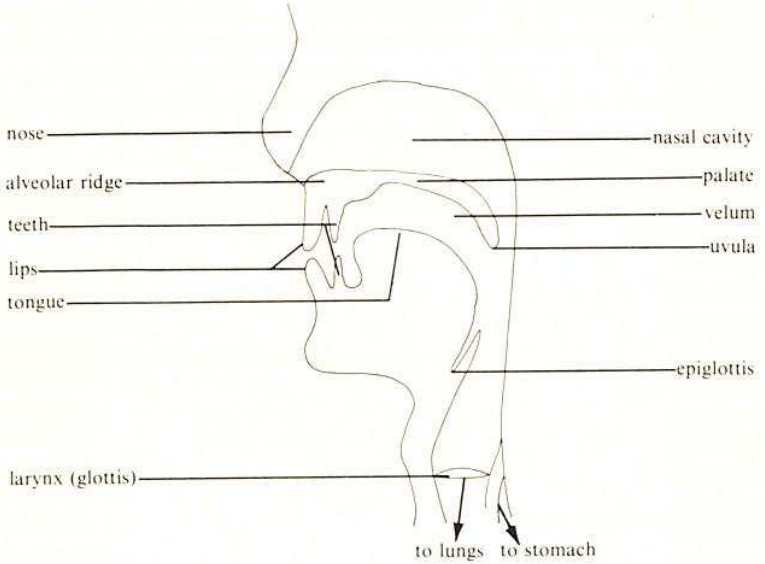


Figure 1: Human Vocal Apparatus

The Vocal Tract

2.2.1 The **vocal tract** is the channel leading from the lungs through the throat and out through the mouth and nose. All the processes of speech involve various parts of the vocal tract (for example, the tongue, lips, etc.) to modify the flow of air as it goes from the lungs through the vocal tract. This process of modification is called **articulation**. The different organs that are used in articulation (tongue, lips, etc.) are called **articulators**. The study of sound production is called **articulatory phonetics**. The following discussion will consider some of these articulators and very briefly describe some of the ways they are used to produce speech sounds.

The Glottis

2.2.2 The sounds of speech are produced by using various portions of the vocal tract to modify the flow of air as it comes from the lungs. The first organ that the air flow meets coming up from the lungs is a small organ in the throat which is labeled on the diagram in figure 1 as the **larynx**, or **glottis**. This organ is the "Adam's apple" or voice box which you can see from the outside of a person's throat. Inside of the larynx are two bands of muscle stretched tightly across the windpipe. These bands of muscle are called the **vocal cords**, or **vocal bands**. They may operate in several different ways.

One way in which the vocal cords may be used is to be held very tightly together so as to completely prevent the air from the lungs from passing them at all. This happens for just a moment in the middle of the sound written *q* in a word like *paqag* 'my hand'. Pronounce this word and notice the silence for a moment in the middle of the word. This sound (or, rather, absence of sound) is called a **glottal stop**. It is a *stop* because the flow of air (and thus also the sound) is completely stopped for a moment. It is glottal because this stopping is produced at the glottis, or larynx.

The vocal cords may be held closely together, so that when the air passes through them they buzz, or vibrate, producing a humming sound. This sound is called **voiced**. When a sound is not accompanied by this humming sound, it is called **voiceless**. Pronounce the words *maad* 'cloth, clothing' and *maath* 'touch'. While you pronounce them alternately—*maad, maath, maad, maath*—listen to the *-d* and *-th* sounds. In the *-d* sound you will hear this humming sound in the larynx. In the *-th* sound the humming cannot be heard. *d* is thus called a voiced sound, while *th* is voiceless.

Another position that the vocal cords may take is to be fairly wide open, producing a breathy, whispering *h*-like sound. This is the sound of *h*, as in *kaahool* 'box'. This sound is called **aspiration**. It may be heard by itself, as in the pronunciation of *h*. It may also be heard following another sound. Pronounce the word *saap* 'to face towards'. If you listen carefully, you can hear a short puff of breath after the *p*. This is aspiration. Such a *p* sound with a puff of breath following it is called an aspirated *p*. We could write it p^h, to indicate that it is followed by an *h*-like sound.

We noted above that the vocal cords could be closed completely for a moment, producing silence. This silence is the glottal stop, the *q* sound in *paqag* 'my hand'. The vocal cords may also close in connection with the pronunciation of some other sound, just as *h* may accompany *p* as aspiration, to produce the aspirated p^h at the end of *saap*^{h} 'to face towards'. Pronounce the word *p'aaw* 'banana'. The sound represented by *p'* at the beginning of the word is a *p* accompanied by a glottal stop. The way the sound is made is like this. First, the vocal cords and the lips are shut tightly. Then the whole larynx, with the vocal cords still shut, is raised. Raising the larynx in this way compresses the air which is trapped between the larynx and the lips, so when the lips are suddenly released, a popping sound is heard. Only then are the vocal cords opened, and the *aa* sound is pronounced. This *p'* sound, consisting of a *p* pronounced with an accompanying glottal stop, is called a **glottalized** *p*, and other such sounds pronounced with an accompanying glottal stop are called glottalized sounds.

The Epiglottis

2.2.3 Moving up from the larynx, we pass the **epiglottis**. This organ is not directly involved in speech sounds, but it is very important to being able to speak. When you speak, the epiglottis is held high against the front of the inside of the throat (see figure 1), making a clear passage for the air coming from the lungs. When you swallow, the epiglottis comes down like a valve and covers the top of the trachea (the pipe leading to the lungs), so that food or liquid will not get down into your lungs. When you choke on water or something which has gone down the "wrong way," it has gotten past the epiglottis into the lungs.

The Uvula and Nasal Cavity

2.2.4 The next thing that is reached is the **uvula**. The uvula is the flap of skin hanging down from the back of the roof of your mouth, which you can see by looking in a mirror if you open your mouth very wide and lay the tongue flat. The uvula has a very important function. As you can see in the diagram, when the air from the lungs reaches this point, it can go two different ways. It may go up behind and above the uvula through the **nasal cavity** (the open space behind your nose), and out through the nose. Or it may go

out through the mouth. If the mouth is closed, for example, and the uvula is in the position shown in figure 1, that is, not pressed back against the back wall of the nasal cavity, then the air will escape through the nose. Pronounce the sound *m*. The mouth is closed, and the air is coming out through the nose. This is because the uvula is open, allowing the air to pass through the nose. Such a sound is called a *nasal* sound.

The Oral Cavity

2.2.5 In contrast with nasal sounds are **oral sounds**. Pronounce the word *feek* 'to take'. During the pronunciation of the *f*, all of the air goes out through the mouth. This is because the uvula is pressed up and back against the back wall of the nasal cavity, closing the nasal cavity off so no air can go through it. *f* is called an oral sound ("oral" means "pertaining to the mouth").

Moving forward through the mouth, we come to the **oral cavity**, the region including the tongue, the roof of the mouth, and the teeth. Various sounds may be produced by interrupting the flow of air using the tongue against the different parts of the roof of the mouth or the teeth.

Velar Sounds

2.2.6 The back of the tongue may be pressed against the back part of the roof of the mouth, as for *k* in *kaay* 'to eat'. The part of the roof of the mouth where the back of the tongue touches in pronouncing *k* is called the **velum**, and for this reason *k* is called a **velar sound**.

Dental Sounds

2.2.7 The tip of the tongue may touch the back of the upper teeth. Examples of sounds produced in this way are the *t* in *taey* 'to touch', or the *d* in *daey* 'salt water', called **dental sounds.**

Retroflexed Sounds

2.2.8 The tip of the tongue may touch somewhat behind the upper teeth, as in the sound *ch* of *chaaq* 'someone'. Such sounds are called **retroflexed sounds**.

The tongue and the roof of the mouth interact in other

ways in Yapese. Not all the possibilities have been discussed here. Some further possibilities will be left for the discussion of the individual sounds themselves in section 2.3 of this chapter.

Labial Sounds

2.2.9 Finally, moving forward through the mouth we come to the lips. The upper and lower lips may come together, as in the *p* sound in *paaq* 'his hand'. This type of sound is called a **bilabial sound**. The lower lip may also touch against the upper teeth, as in the *f* sound of *feek* 'to take, carry'. This type of sound is called a **labio-dental sound**.

Vowels and Consonants

2.2.10 There are two other words we will need to use that pertain to the way the organs of speech are used. These are the words **vowel** and **consonant**. Vowel and consonant are ideas many people have some familiarity with. Vowels are sounds written as *ee*, *aa*, *oo*, *ii*, *uu*, *ae*, *ea*, *u*, *ë*. Sounds such as *p*, *t*, *ch*, *k*, *f*, *th*, *p'*, *th'*, *ng* are consonants. Vowels are sounds in which the air stream can pass freely through the mouth. Consonants are sounds in which the air stream is obstructed at some point in the mouth. A few sounds (only *y*, *w*, *y'* and *w'* in Yapese) are sometimes called **semivowels** because they have some characteristics of both vowels and consonants.

Vowels

2.2.11 What differentiates the sound of different vowels like *ii* (as in *miil* 'run'), *aa* (as in *maal* 'type of taro') and *uu* (as in *muul* 'to fall') is the position of the tongue in the mouth and the shape of the lips. Pronounce *miil* and *maal* in succession like this: *miil*, *maal*, *miil*, *maal*. Notice that when you pronounce the *ii* of *miil* your mouth is only open a little bit, and the position of your tongue is quite close to the roof of the mouth. When you pronounce the *aa* of *maal* the mouth is open quite a bit and the tongue is much lower in the mouth. Thus, *ii* is called a **high vowel**, because the tongue is in a high position in the mouth, and *aa* is called a **low vowel**.

If you pronounce *miil* and *muul* alternately, you will notice that two things change in going from *ii* to *uu*. In pronouncing *uu* the lips are rounded into a circle, whereas they are not rounded in pronouncing *ii*. Thus, *ii* is called an **unrounded vowel**, and *uu* is a **rounded vowel**. At the same time, the position of the tongue in the mouth when pronouncing *ii* is closer to the front of the mouth than when pronouncing *uu*. When you go from *miil* to *muul* you can feel the tongue moving back in the mouth. *ii* is thus called a **front vowel**, because the tongue is in the front of the mouth, while *uu* is called a **back vowel**. Since *ii* is unrounded, and *uu* is rounded, *ii* is a **front unrounded vowel**, and *uu* is a **back rounded vowel**. *aa* is low, unrounded, and, as we shall see in section 2.3 of this chapter when discussing the vowel phonemes of Yapese, *aa* is also a back vowel, so it is a **low back unrounded vowel**.

We see that there are three different characteristics that vowels can have. One is the frontness or backness of the position of the tongue in the mouth. One is the height of the tongue in the mouth. One is whether or not the lips are rounded. For example, some front vowels in Yapese are *ii*, *ee* (as in *meel* 'certain rope on a sail'), and *ea* (as in *meal* 'rotten'). These vowels are also unrounded. Some back vowels are *uu*, *oo* (as in *mool* 'sleep'), and *aa*. *uu* and *oo* are also rounded vowels, while *aa* is unrounded.

ii and *uu* are both high vowels. *ee* is a **mid vowel** (that is, the tongue is midway between high and low position). *ea* and *oo* are **lower mid vowels**. That is, they are lower than mid position, but higher than true low vowels. *aa* is a low vowel.

One more way in which vowels may be different is in length. Some vowels are long while others are short. Compare the words *riich* 'type of plant, *ti* plant' and *rich* 'to go between, go through, like a fish through seaweed'. The only difference in pronunciation between the two words is that in *riich* the vowel is longer than in *rich*. All the vowels we have been discussing so far have been long vowels. Some words with short vowels are *rich* 'to go between or through', *pil* 'to break or shatter', *yog* 'to be enough' (as in *kea yog* 'that's enough'), *path* 'full of food, satiated'.

PHONEMICS

2.3 If you pronounce the word *saap* 'to face toward' and listen carefully to the *p* at the end, you will notice that it is followed by a little puff of breath. Try pronouncing *saap* with a bit of

light paper held in front of your lips and notice how the paper jumps away from your lips when you pronounce the *p*. This kind of *p*, which we could write p^h, is called aspirated *p*.

Now pronounce *paan* 'grass, underbrush'. This *p* is pronounced with much less of a puff of breath after it. If you hold the piece of paper to your lips while you pronounce *paan* you will notice that it does not blow out as it does in pronouncing the *p* at the end of *saap*. The *p* in *paan* is unaspirated.

The difference between aspirated p^h and unaspirated *p* may not seem very great to you. But actually in many languages (though not in Yapese or English) this difference is very important. For example, in Chinese the word *pa*, pronounced with unaspirated *p*, means 'eight', but the word p^ha, pronounced with an aspirated p^h, means 'afraid'. These two different kinds of *p* in Chinese are two different phonemes, but in Yapese these two different kinds of *p* are just different ways of pronouncing the same phoneme *p* under different conditions: at the end of a word in Yapese, *p* is aspirated p^h, but anywhere else in a word *p* is not aspirated.

This example illustrates the fact that the Yapese language organizes the possible sounds of human language into a special set of sounds of its own. These are the phonemes of Yapese. Even although all people have the same kind of vocal apparatus, and therefore they have available to them the same set of possible sounds as do all other human beings, each language organizes the possible sounds into a set of sounds which are the phonemes of that language. In Yapese, some possible sounds are not used at all. Sometimes more than one different kind of sound (as aspirated and unaspirated *p*) are classified together as a single kind of sound. Some phonemes, like *p*, are pronounced differently in different environments, or surroundings.

Yapese Vowels: The Long Vowels

2.3.1 We will now discuss the phonemes of Yapese one by one. First we will discuss the vowels, and then the consonants.

Consider the following eight words:

miil 'to run'
meel 'certain rope on a sail'
meal 'rotten'
mael 'war'

maal 'type of taro'
mool 'to sleep'
moel 'handle of an adze'
muul 'to fall'

These eight words illustrate the eight long vowel phonemes of Yapese (there are eight short vowels also which will be discussed below). Some other examples of each of these eight long vowel phonemes are:

ii

miil	'to run'	*qiim*	'wrapper'
piig	'magic spell'	*niing*	'to close'
riiq	'to taste'	*qiir*	'he'
th'iib	'pot'	*liith*	'to cook'
thiin	'language'	*riiw*	'type of tree'
riich	'ti plant'	*yiiy*	'type of mangrove'
liif	'to anoint'	*biid*	'type of tree'

ee

meel	'rope on sail'	*yeen*	'bamboo fibers'
leeb	'food basket'	*feeng*	'to look for'
geech	'to move over'	*theeq*	'to hang up'
k'eef	'type of net'	*keer*	'to scrape, dig'
k'eeg	'to ignite'	*pees*	'to float'
feek	'to carry'	*peeth*	'to stick together'
geel	'strong'	*n'eew*	'wave'
leem	'seaweed'	*theey'*	'to hang up'

ea

meal	'rotten'	*n'ean*	'thing'
weach	'white; lime'	*reang*	'turmeric'
dead	'to reach to'	*geap*	'type of fish'

ae

mael	'war'	*baen*	'to lie, trick'
th'aeb	'to cut'	*maen'*	'to float'
naech	'type of tree'	*l'aeng*	'to string'

aa

maal	'type of taro'	*taang*	'song'
qaab	'dust'	*saap*	'to face towards'
laach	'type of tree'	*yaap'*	'paddle'

oo

roob	'beard'	*fool*	'to obey'

ngooch	'short'	*poom*	'pump'
mool	'to sleep'	*choon*	'member of'

oe

moel	'adze handle'	*soep*	'soap'
t'oeb	'young coconut'	*moeq*	'type of chicken'
yoech	'few, little'	*yoer*	'to weep'

uu

muul	'to fall'	*chuum*	'pig pen'	*buut'*	'ground'
yuub	'type of plant'	*luum'*	'bamboo wall'	*yuuw*	'coconut leaf'
buuch	'to happen'	*nguun*	'bunch (nuts)'		

Classification of the Long Vowels

2.3.1.1 As we mentioned in section 2.2.11 vowels may be classified according to the position of the tongue in the mouth during the pronunciation of the vowel, and according to whether the lips are rounded or not. Using such a classification, we may classify these vowel phonemes of Yapese as follows:

	front	central	back
high	*ii*		*uu* (rounded)
mid	*ee*	*oe* (rounded)	
lower-mid	*ea*		*oo* (rounded)
low		*ae*	*aa*

Spelling the Long Vowels

2.3.1.2 Notice that although these long vowel phonemes are written with two letters each, the pair of letters represents only a single long vowel sound in each word. In *paag* 'to let go of, to drop', although two *a*'s are written, the sound is just a single long *a* sound, a single, long, low back, unrounded vowel sound.

When two letters are used to represent a single sound in a language it is called a **digraph**. All of the long vowel phonemes in Yapese are written with digraphs. (Some consonant sounds are written with digraphs, also. These are discussed beginning with section 2.3.5. Examples of single consonant phonemes that are written with digraphs are *ng* as in *ngaan* 'to where?', *th* as in *thaaq* 'fiber, connection', and the glottalized consonants such as p' in *p'aaw* 'banana', *t'* in *t'aer* 'to break, snap', and so forth. There are also **trigraphs**, single sounds written with three letters, such as *th'* in *th'aeb* 'to cut'.)

The long vowels in Yapese are written as digraphs to differentiate them from the short vowels which are made in the same position in the mouth. These are discussed in section 2.3.2. The short vowels are all written with a single vowel letter.

Some of the long vowels are not written with a pair of the same vowel letters (as *ii* in *miil* 'to run', *ee* in *meel* 'rope on a sail') because there are eight different long vowel phonemes but only five vowel letters available on normal typewriters. In order to distinguish words with *ae*, as in *mael* 'war' from those with *aa* as in *maal* 'type of taro', a pair of *a*'s was used for one vowel, but *ae* was used for another. To distinguish *ee*, as in *meel* 'rope on a sail', from *ea* as in *meal* 'rotton', *ee* was used for one and *ea* for the other. Likewise, *oe* as in *moel* 'adze handle' is distinguished from *oo* as in *mool* 'to sleep' by writing the vowel in *mool* 'to sleep' as double *o*, but the vowel in *moel* 'adze handle' as *oe*.

There are other possible ways to write these vowels. We could have used a special mark after a vowel, for example:, to indicate that it is long. Then we could have written *maal* 'type of taro' as *ma:l*. *Mool* 'to sleep' could have been written *mo:l*. *Muul* 'to fall' would be *mu:l*. *Meel* 'rope on a sail' would be *me:l*. And *miil* 'to run' would *mi:l*. Then in order to write *meal* 'rotten', *moel* 'adze handle', and *mael* 'war' we could have put a special mark (called a **diacritic mark**, which will be discussed a bit more later in section 2.3.2 on the short vowels) on the *e*, *o* and *a* in these words, and we could then have written them as *më:l* 'rotten', *mö:l* 'adze handle' and *mä:l* 'war'. There were a number of reasons why the orthography committee did not choose to recommend this method of writing Yapese long vowels—not least of which was that it would be difficult to write such a system on a typewriter. However, for some kinds of purposes in this book we will write these vowels in this way. The long vowel phonemes discussed above written this other way would be *i:*, *e:*, *ë:*, *ä:*, *a:*, *o:*, *ö:*, and *u:*. These long vowels may be put in a chart as follows (compare this with the chart in section 2.3.1.1):

	front	central	back
high	*i:*		*u:*
mid	*e:*	*ö:*	
lower-mid	*ë:*		*o:*
low		*ä:*	*a:*

Whenever words or sounds are written using the system in this book, they will be written between slanted lines (//).

to indicate that this special spelling system is being used. For example, the words beginning with *m* and ending in *l* that we have been using as examples so far would be spelled using this system in the following way:

/mi:l/ 'to run'	/mu:l/ 'to fall'
/me:l/ 'rope on a sail'	/mö:l/ 'adze handle'
/më:l/ 'rotten'	/mo:l/ 'to sleep'
/mä:l/ 'war'	/ma:l/ 'type of taro'

Care must be taken in reading words with long vowels written with digraphs. Since no words in Yapese are pronounced with two vowels together without a consonant between them, when you see two vowel letters together these should always be read as a long vowel. This rule is important to remember, because in the past the consonant that is written as *q* in this book, and which is called glottal stop, was often not written at all. Someone writing the word *raqean* 'its color' would sometimes write it as *raen*. In the orthography (writing system) used in this book, *ae* is a digraph for a long vowel, and thus *raen* is the spelling of the word for 'fresh water'. The word meaning 'its color' would be spelled *raqean*. *Raen* should never be read as *raqean* (or /raqë:n/ in the alternative spelling system mentioned) but always as /rä:n/. This question of how to write long vowels in Yapese will be discussed further in section 2.5.

Yapese Vowels: The Short Vowels

2.3.2 As mentioned above, corresponding to these eight long vowels are eight short vowel phonemes. The following words illustrate these eight short vowels. In some of these words, different individuals may use a long vowel, as there is considerable variation from one person to another in Yap as to whether a particular word is pronounced with a short or long vowel. Nevertheless, most of these words will be pronounced with a short vowel by most people:

i

pil	'to shatter'	*riy*	'of it'
lib	'to ripen'	*lik'*	'its root'
thib	'wood chips'	*yik'*	'to burn'
mich	'certain'	*fil*	'to learn'
rich	'to go through'	*bin*	'that one near you'
yig	'gums (in mouth)'	*gin*	'to be surprised'

thig	'to topple'	*thir*	'to knock chips off'
nik	'taboo animal'	*fith*	'section of cane'
piy	'hair'	*siy*	'to leave out, ignore'

e

chep	'parable'	*deq*	'a span in length'
leq	'coconut shell'	*teth*	'younger brother'
chey	'in case . . .'	*rey*	'dancing stick'
tey	'type of dance'		

ë

gasëy	'hard-hearted'	*qëch*	'fish-trap'
tarëg	'to sail'	*qël*	'hard'
qët'	'type of fish'	*n'ëy*	'to shampoo the hair'
lëy	'stick (classifier)'		

ä

gädgäd	'type of fish'	*qän*	'to pound'
gär	'to curse'	*yäqäl*	'ghost'

a

thab	'to sink'	*tab*	'to reach, connect'
pach	'to hide'	*taf*	'tough guy'
t'ag	'to bounce, ricochet'	*thag*	'to arrive at the top'
n'ag	'cooked'	*mak'*	'full of'
dak'	'type of fish'	*yal*	'belly, stomach'
llaq	'mucus'	*thar*	'to fall into'
fas	'alive'	*ngat*	'engrossed'
pat	'to find, come upon'		

o

woch	'dawn'	*qod*	'to wake up'
kof	'enough for all'	*lof*	'to get loose from shell'
pof	'to cool down'	*qog*	'to jump'
rog	'pierced'	*yog*	'enough'
wok	'behavior'	*bol*	'tree-stump'
gol	'canoe cross-bars'	*t'on*	'to shiver, tremble'
loq	'unguarded space'	*sor*	'to be pointed'

ö

chöb	'to make a sound'	*wöl*	'type of fish'
gör	'dear'	*töng*	'to perch'
bötböt	'to jiggle, like fat'		

u

sug	'full'	*chug*	'head'
mus	'finished'	*rus*	'afraid'

pul	'to gather (betel nuts)'	*pum*	'to bump against'
sum	'to be created'	*qun*	'to follow'
wup	'chicken trap'	*wuth*	'foam'
lub	'to be complete'	*wul*	'feathers'
kur	'to be pierced'	*kuq*	'to say bad things'
puw	'small bamboo'	*quw*	'where?'
puth	'to cave in'	*thung*	'to get mad'
bung	'good enough'		

These eight short vowels may also be arranged in a chart according to the position of the tongue in the mouth. When this is done the following chart is produced:

	front	central	back
high	*i*		*u*
mid	*e*	*ö*	
lower-mid	*ë*		*o*
low		*ä*	*a*

Uncertainty in the Pronunciation of Short Vowels

2.3.2.1 You will have noticed in the above examples of short vowels that most of the words used as examples were only one syllable long (i.e., they only contained one vowel). Consider the following words (Alternate pronunciations are given parentheses):

waqngis 'to sneeze' (*wäqngis*)
gap'luw 'blackbird' (*gäp'luw*)
qayuw 'help' (*qäyuw*)
bachaan 'cause of' (*bächaan*)

In each word, the first syllable contains a short vowel which may sound either like *a* (as in *yal* 'belly'), or like *ä* (as in *gär* 'to curse'), and often it seems impossible to decide whether the vowel is *a* or *ä*. *e* and *ë* are often also confused in this way when they are not at the end of a word. *ë* and *a*, *a* and *o*, and *o* and *ö* are also confused in this way when they are not in the last syllable of a words. However, this confusion of vowels does not happen in syllables at the ends of words, which is why words of one syllable were used as examples of the short vowels. This confusion of vowels will be discussed in greater detail in section 2.5. It is only necessary to realize that if you become confused as to how to write a short vowel in a word when the short vowel is not at the end of the word, this does not necessarily

mean that Yapese does not have all of these different short vowel phonemes. The first vowel of *marweel* 'to work' may sound like *a* or *ä*, and thus you may not be sure whether to write *marweel* or *märweel* (or even *murweel*). This confusion is a natural fact about short vowels in this position, and will be discussed in section 2.5 under the heading of **morphophonemics**.

Spelling the Short Vowels

2.3.2.2 Notice that the orthography committee chose to recommend the use of the diacritic mark ¨ above three of the short vowel letters in order to differentiate all eight Yapese short vowel phonemes, even though it is somewhat troublesome to type this mark on a typewriter. This problem was felt not to be too serious as the difference between *a* and *ä*, between *e* and *ë*, and between *o* and *ö* is less often important for distinguishing words of different meaning than is the difference between *ae* and *aa*, between *oe* and *oo*, and between *ea* and *ee*. This question will be discussed again in section 2.5.

Correspondences between Long and Short Vowels

2.3.3 We may place the long and short vowels into corresponding pairs. *ii* and *i* differ only in that the first is long while the second is short. Both are high front vowels. We may refer to them as "long *i*" and "short *i*" respectively. In this way we may pair up the long and short vowels as follows:

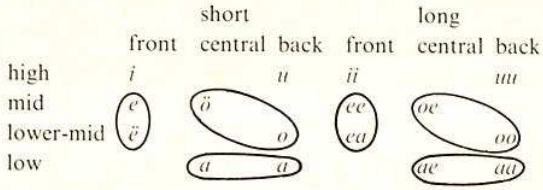
SHORT AND LONG VOWELS

official spelling		alternative spelling	
short	long	short	long
i	*ii*	/i/	/i:/
e	*ee*	/e/	/e:/
ë	*ea*	/ë/	/ë:/
ä	*ae*	/ä/	/ä:/
a	*aa*	/a/	/a:/
o	*oo*	/o/	/o:/
ö	*oe*	/ö/	/ö:/
u	*uu*	/u/	/u:/

Another fact must be noted about vowels here, which will prove to be important when we discuss the effects of different

vowels on the pronunciation of consonants. Consider again the sixteen vowel phonemes (eight short and eight long) of Yapese diagrammed according to the position of the tongue in the mouth:

SHORT AND LONG VOWELS



Notice that of the non-high vowels, there are two written with the letter *e*, two with the letter *o*, and two with the letter *a*. The charts are purposely drawn so that these pairs of vowels come close together, and circles are drawn around each of the pairs mentioned. The reason for this will become apparent in a moment. Consider the two kinds of long *a*—*aa* and *ae*. Pronounce the following pairs of words containing *aa* and *ae*:

ae		*aa*	
mael	'war'	*maal*	'type of taro'
yaer	'knife'	*yaar*	'date, appointment'
baer	'mud'	*baar*	'bar'
waer	'weak'	*waar*	'great rock'
yaen	'to go'	*yaan*	'level (classifier)'
raen	'fresh water'	*rraan*	'day'
yael	'nut (classifier)'	*yaal*	'sun'
k'aed	'to bite something'	*k'aad*	'to bite'

When you pronounce these pairs of words, notice that the consonant that follows the vowel is slightly different in sound depending on whether the vowel is *ae* or *aa*. In other words, the *l* of *mael* 'war' is slightly different in sound from the *l* of *maal* 'type of taro'. Likewise the *r* of *yaer* 'knife', *baer* 'mud', and *waer* 'weak' is different from the *r* of *yaar* 'date, appointment', *baar* 'bar' and *waar* 'great rock'. This difference in pronunciation is called **palatalization** (a term which will be explained below in section 2.3.18). *Mael* 'war' has a palatalized *l*, compared to *maal* 'type of taro', which has a plain *l*. *Yaer* 'knife', *baer* 'mud', and *waer* 'weak' have palatalized *r*; contrast the words with *aa* (*yaar* 'date', *baar* 'bar' and *waar* 'great rock') which have plain *r*. Likewise *yaen* 'to go', *raen* 'fresh water', *yael* 'nuts (classifier)' and *k'aed* 'to bite something' have palatalized *n*, *l* and *d*, respectively, whereas *yaan* 'date', *rraan* 'day', *yaal* 'sun' and *k'aad* 'to bite' have plain *n*, *l* and *d*.

This same palatalizing effect is produced by *oe* (in contrast with *oo*), and by *ee* (in contrast with *ea*). Compare the *l*'s and *r*'s in the following pairs of words:

palatalized l and r		*plain l and r*	
meel	'rope on a sail'	*meal*	'rotten'
ngeer	'part of reef'	*ngear*	'to there (near you)'
qeer	'part of lagoon'	*qear*	'there (near you)'
moel	'adze-handle'	*mool*	'to sleep'
foer	'to uncover'	*foor*	'to go up'
moermoer	'to stoop'	*moor*	'large bamboo'

The vowels *oe*, *ae* and *ee* (by contrast with *oo*, *aa* and *ea*) have a palatalizing effect on consonants that occur next to them. There are many more details yet to be described about this phenomenon which we will reserve until the discussion in section 2.3.18. Nevertheless, what we have said to this point will suffice to illustrate the contrast between these two types of vowels. Vowels that cause such a palatalizing effect on adjacent consonants are called **palatalizing vowels** or **light vowels**. Thus *oe* may be called light *o* while *oo* is plain *o*; *ee* is light *e*, in contrast with *ea*, which is plain *e*; and *ae* is light *a*, in contrast with *aa*, plain *a*.

The short vowels which correspond to these long vowels just discussed may also be classified as light versus plain. So *ä* is light compared with *a*, because *ä* has a palatalizing effect on adjacent consonants. *ö* is light in contrast with *o*; and *e* is light in contrast with *ë*.

ii, *i*, *uu* and *u* also have a palatalizing effect on adjacent consonants. There is no set of plain vowels contrasted with *ii*, *i*, *uu*, and *u*. Nevertheless, the palatalizing effect of these vowels may be illustrated by pronouncing the three words *muul* 'to fall', *moel* 'adze handle' and *mool* 'to sleep'. It is clear that the *l* of *muul* is palatalized, as the *l* of *moel*, rather than being plain as the *l* of *mool*. Thus *uu* has a palatalizing effect, as do also *u*, *ii* and *i*. Therefore, *ii*, *i*, *uu* and *u* are also called light vowels.

Vowel Summary

2.3.4 In summary, Yapese vowels may be diagrammed in the fol-

lowing way, according to whether they are light or plain, long or short:

SUMMARY OF YAPESE VOWELS

	long, light		long, plain	
	front	back	front	back
high	*ii*	*uu*		
mid	*ee*	*oe*	*ea*	*oo*
low		*ae*		*aa*

	short, light		short, plain	
	front	back	front	back
high	*i*	*u*		
mid	*e*	*ö*	*ë*	*o*
low		*ä*		*a*

Notice that in these tables we have not used the terms "lower mid or "central," which were used in previous tables. Both central *oe* and *ö*, *ae* and *ä* are diagrammed as back vowels in the summary above, along with back *oo*, *o*, *aa* and *a*. Lower mid *ea* and *ë*, *oo* and *o* are here simply called mid, along with mid *ee*, *e*, *oe* and *ö*.

The reason the terms "lower mid" and "central" are put together with the terms "mid" and "back" respectively is that these terms are being used in this summary of Yapese vowels in a relative rather than an absolute way. In other words, although the position of the tongue in pronouncing *oe* is in fact central in the mouth compared with its position for *oo*, we have now put *oe* in a different chart than *oo*. *oe* is now contrasted with the other long light vowels *ii*, *uu*, *ee* and *ae*. Relative to *ii* and *uu*, *oe* is not high, and relative to *ae* it is not low, so we enter it in the table as mid. Relative to *ee* it is not front, so we enter it in the table as back. *ae* is likewise not front, so we enter it as back.

This simplified way of diagramming these vowels, using only the terms "high," "mid," "low," "front," and "back" illustrates more clearly the relationships between the plain and light vowels. Both *ee* and *ea* are considered as mid front vowels, and the difference between them is not that one is lower mid while the other others is mid, but the more important fact that *ee* is light while *ea* is plain. Then, we must simply point out that a light mid front vowel (*ee*) is slightly higher than a plain mid front vowel (*ea*). Similar comments must be made about the short

e vowels, and about the *o* vowels and the *a* vowels. Note that there are no plain high vowels in Yapese. The high vowels *i* and *u*, *ii* and *uu* are all light (i.e., they are all palatalizing vowels).

Many of these complex facts about light and plain vowels will be discussed in section 2.5. Some of the complications will be simplified there and will be shown to be a result of certain other facts about Yapese phonology.

Yapese Consonants: Plain Voiceless Stops at the Beginnings of Words

2.3.5 Now we must discuss the consonants of Yapese. First consider the consonants at the beginnings of the following words:

p		*t*	
paan	'grass, brush'	*taan*	'underneath'
paer	'to stay'	*tael*	'rope, string'
peal	'to cross one's view'	*teang*	'tank'
pees	'to float'	*teel*	'to pull'
piiq	'to give'	*tiir*	'young; child'
puul	'moon'	*tuug*	'to punch'
poeng	'to call'	*toey*	'to build'
pooq	'to burst open'	*tooq*	'friend, buddy'
ch		*k*	
chaaq	'person, someone'	*kaan*	'demon, evil spirit'
chael	'stripes on canoe'	*kaet*	'playing cards'
cheag	'skilled, expert'	*keal*	'peanut tree'
cheen	'chain'	*keer*	'to dig'
chiich	'drinking-straw'	*kiim*	'giant clam'
chuur	'journey'	*kuur*	'hole'
choek	'chalk; choke on ear'	*koel*	'to grasp, take, hold'
choon	'member of'	*ko*	'for, of'
q			
qaab	'dust'	*qiir*	'he'
qaer	'deep; cloudy water'	*quuf*	'proud'
qeal	'hard'	*qoeng*	'grass skirt'
qeeb	'part of sea bottom'	*qool*	'betel nut sheath'

These five consonants—*p*, *t*, *ch*, *k* and *q*—are of a type called **voiceless stops**.

The term "voiceless" was discussed briefly in section

2.2.2. It means that the vocal cords do not make the humming or buzzing sound known as voice during the pronunciation of these sounds.

These sounds are called "stops" (section 2.2.2) because the flow of air through the mouth is completely stopped, or cut off, during their pronunciation.

p is pronounced by stopping the flow of air at the lips, and is called a **voiceless bilabial stop**. The term "bilabial" was discussed in section 2.2.9, and means "with the two lips."

t is pronounced by stopping the flow of air with the tip of the tongue just behind the upper front teeth. It is therefore called a **voiceless dental stop**. Recall that the term "dental" was discussed in section 2.2.7 and means "pertaining to the teeth."

ch is pronounced by stopping the flow of air with the tip of the tongue against the roof of the mouth a considerable distance back from the position for *t*. *ch* is a **voiceless retroflexed stop**. The term "retroflexed" was discussed in section 2.2.8, and means that the tongue in pronouncing *ch* is in a position similar to that for *t*, but somewhat turned back towards the roof of the mouth rather than towards the teeth. *ch* is called a stop here, meaning that the flow of air through the mouth is totally stopped in pronouncing *ch*. A further term is sometimes applied to *ch*. *ch* is sometimes called a **voiceless retroflexed affricate**. An affricate is a type of stop, and it consists of a stop sound which is followed by a short sound of a type called a **fricative**. Fricatives are sounds like *s*, *th*, and so forth, and will be discussed in section 2.3.8. The sound *ch* may sometimes sound like a type of *t* sound followed by a sound something like the English *sh* sound, as in *shark*. We will generally refer to it, however, as a stop.

To see what is meant by calling *ch* retroflexed, or having the tongue bent back, pronounce the two words *cheel* 'to turn' and *teel* 'to pull', and note how the tongue feels. The tip of the tongue is pulled back in pronouncing *cheel* by comparison with *teel*. Note, incidentally, that *ch* is a single consonant sound even though two letters (that is, a digraph) are used to write it.

k is pronounced by stopping the flow of air with the back of the tongue against the velum, which is the back part of the roof of the mouth (compare the discussion in section 2.2.6). *k* is therefore a **voiceless velar stop**.

q is pronounced by stopping the flow of air at the glottis, and hence is called a glottal stop. *q* is, of course, a voiceless

glottal stop. But voice is produced by the glottis vibrating, and the glottis clearly cannot be vibrating and stopped at the same time. Glottal stops are therefore necessarily voiceless. We may therefore omit the term "voiceless' in speaking of *q* and just call it a glottal stop.

The Spelling of the Glottal Stop at the Beginning of Words

2.3.5.1 Words such as *qaab* 'dust', *qiir* 'he, she', *qaer* 'muddy or deep water', *quw* 'where?', *qool* 'betel nut sheath', and so forth have, in the past, usually been written with a vowel letter at the beginning, as *ab*, *ir*, *ar*, *uw* and *ol*. It may seem that they do not begin with a consonant since people have not been in the habit of writing a consonant at the beginnings of these words. Nevertheless, these words do begin with a consonant, the glottal stop, which we write as *q*.

It is easy to see that these words begin with a consonant by pronouncing them in a phrase where a word ending in a vowel precedes them. So, for example, the *q* of *qod* 'to wake up' is easy to hear in a sentence such as:

Kea qod.
'He woke up.'

Note that not all words that have been spelled with a vowel at the beginning have a glottal stop in front of the vowel. Certain words do actually begin with a vowel. In the sentence:

Baey i feek.
'He will take it.'

no *q* is heard between the *y* at the end of *baey* and the *i* that follows. But in the sentence:

Baey qii feek.
'He will be taking it (continously, for a period of time).'

the *q* must be pronounced because a different word is involved. Similarly, *u* 'at, in' does not have a *q* at the beginning. Most words in Yapese, however, do not begin with a vowel.

The reason that it was felt necessary to write a glottal stop and not to leave it unwritten was that if no letter was used for glottal stop, then two vowel letters in a row might mean either a long vowel, or else two short vowels with a glottal stop in between them, and there would be no way of knowing from

the spelling alone which was intended. So, for example, *paag* could either be read with long *aa*, thus being pronounced /pa:g/, meaning 'to drop, to let go of', or else it could be read with two short vowels with a glottal stop between, as /paqag/, meaning 'my hand'. If double vowel letters (digraphs) are used to represent long vowels, we must have some letter for a glottal stop. Note also that if no actual letter is used for the glottal stop, then a word like *baequud* 'light in weight' (pronounced /bä:qu:d/) would be written *baeuud*, with four vowel letters in a row, which is somewhat confusing. Therefore, *q* was proposed for writing glottal stop.

The apostrophe (') was also considered for a glottal stop, but it was felt that since the tendency has been in the past to omit the writing of the apostrophe for the glottal stop, that it was better to introduce the use of *q* because it is a more noticeable letter. It was also felt that once *q* had become usual in the spelling of words like *paqag* 'my hand', that the word would look "funny" if the *q* were left out, and so people would not leave it out.

The letter *q* (rather than some other letter) was proposed because it has been used by certain other languages for writing the glottal stop, and thus is somewhat traditional as a letter for glottal stop (for example, certain Philippine languages use *q* for glottal stop). This letter is not used for any other sound in Yapese. In the Dyen writing system which was used in Yap for a short time after the Second World War *q* was used for the glottal stop.

q also has the advantage of being easier to use on a typewriter than is the apostrophe.

Yapese Consonants: Plain Voiceless Stops at the Ends of words

2.3.6 The following words contain the same voiceless stops as the ones just discussed, but they appear at the ends of words rather than at the beginnings:

p		*naech*	'type of pine tree'
saap	'to face, turn towards'	*weach*	'lime; white'
theap	'type of yam'		
thiip	'canoe steering oar'	*q*	
		paaq	'his hand, arm'
ch		*fitaeq*	'to fish'
laach	'type of tree'	*feaq*	'stone money'

t		*k*	
baat	'to slap'	*thuuk*	'roof thatching needle'
Goot	'God'	*choek*	'chalk'
miit	'stuck in something'	*look*	'locked'

In pronouncing these words, notice that the stop at the end of the word in each case is followed by a little puff of breath. Consider the two words *baat* 'to slap' and *baat'* 'ball'. The first ends in a plain *t*, the second in glottalized *t'* (glottalized consonants are discussed below in section 2.3.7). In pronouncing these two words alternately—*baat*, *baat'*, *baat*, *baat'*—you can easily hear the puff of breath which follows the plain *t* of *baat* but not the glottalized *t'* of *baat'*. This puff of breath is called **aspirated**. In Yapese, plain voiceless stops at the ends of words are **aspirated**. This aspiration is like a short *h* sound after the consonant. For example, we could (in a sense) write the words *saap* 'to face', *baat* 'to slap', *laach* 'type of tree', *faak* 'his child' and *paaq* 'his arm' as *saap-h*, *baat-h*, *laach-h*, *faak-h* and *paaq-h*.

The spelling of the glottal stop as *q* at the ends of words after vowels is also new to Yapese spelling, as is the use of *q* at the beginnings of words. Similar comments to those made in section 2.3.6 apply here as well.

Yapese Consonants: Glottalized Stops

2.3.7 The following words all contain a **glottalized stop**. The words in the first column begin with a glottalized stop, and those in the second column end with a glottalized stop:

p'			
p'aaw	'banana'	*maap'*	'spilled'
p'uul	'magic spell'	*yaap'*	'paddle'
p'angiin	'top (of plants)'	*neap'*	'night'
t'			
t'aer	'to break something'	*qët'*	'type of fish'
t'ag	'to bounce off'	*maat'*	'carrying-pole'
t'aybil	'hot pepper'	*yit'*	'to step on'
k'			
k'aad	'to bite'	*leak'*	'to probe in a hole'
k'eeg	'to light a fire'	*lik'*	'its root'
k'iy	'straight; hungry'	*yik'*	'to burn'

These words illustrate the glottalized stops *p'*, *t'* and *k'*.

p' is bilabial, like *p*; *t'* is dental, like *t*; and *k'* is velar, like *k*.

The difference between glottalized stops and plain voiceless stops may be illustrated with a discussion of the way *p'* is pronounced. During the pronunciation of *p'* the flow of air through the mouth is stopped by the closed lips, and the glottis is not vibrating. Thus far the pronunciation of *p'* is the same as *p*.

However, for *p'*, in contrast with *p*, while the lips are closed the glottis is also closed. With the lips still closed, the closed glottis is raised very rapidly and suddenly. This motion compresses the air which is trapped in the mouth between the closed glottis and the closed lips so that when the lips are suddenly opened, a popping sound is made. This popping sound is characteristic of glottalized consonants. Only then is the closed glottis opened. The little popping sound is the difference between the *p* of *paaw* 'provisions for a journey' and the *p'* of *p'aaw* 'banana'.

The other glottalized stops are made in the same way, except that for *t'* the mouth is closed at the teeth and the glottis; for *k'* at the velum and the glottis, rather than at the lips and the glottis as for *p'*.

Notice that we did not explicitly say that the glottalized stops were voiceless. It was not necessary to say so for the same reason that it was not necessary to say that the glottal stop *q* is voiceless. Glottalized stops are produced with the closed glottis being raised to make the popping sound; and the glottis cannot be closed (to make the popping sound) and open (to produce the vibration known as voice) both at the same time. So glottalized stops are necessarily voiceless.

Notice that there are five positions in the mouth where plain voiceless stops are produced: bilabial (*p*), dental (*t*), retroflexed (*ch*), velar (*k*) and glottal (*q*), whereas glottalized stops are only labial (*p'*), dental (*t'*) and velar (*k'*). Of course a glottalized glottal stop would be impossible because such a stop has the air stream stopped at two places in the mouth, at the glottis and at some other place in the mouth, such as at the lips (*p'*), at the teeth (*t'*), or at the velum (*k'*). However, a glottal stop has the air stopped only at the glottis.

The fact that there is no glottalized retroflexed stop (which we could write as *ch'*) is an important fact to note about Yapese. As we shall see, no retroflexed consonant in Yapese may be glottalized. The absence of glottalized retroflexed consonants in Yapese is not due to any fact about the way glottalized sounds

are produced; a glottalized *ch'* sound is perfectly possible phonetically, and does occur in some languages of the world. But Yapese, for some reason, does not permit glottalized *ch'*; likewise (to look ahead a bit) Yapese permits the glottalized dental *th'* but not the glottalized retroflexed *s'*, the glottalized dental *l'* but not the glottalized retroflexed *r'*. The reason for this fact is not known.

Yapese Consonants: Plain Voiceless Fricatives

2.3.8 The following words illustrate the **plain voiceless fricatives**. Each word in the first column begins with a plain voiceless fricative, and each word in the second column ends in one:

f			
faan	'its meaning'	*saaf*	'sheep'
fael	'to open something'	*k'eef*	'type of net'
feal'	'good'	*noef*	'sprout'
th			
thaam	'canoe outrigger'	*faath*	'scar'
theap	'type of yam'	*geath*	'coconut tree stump'
thiig	'post'	*thoeth*	'type of plant'
s			
saath	'to steal'	*taas*	'foot rope for climbing'
sear	'to scrape bottom'	*paes*	'calm'
siif	'dancing skirt'	*pees*	'to float'
h			
haang	'seal, stamp'	[*h* does not occur at the ends of Yapese words]	
kaahool	'box'		

A **fricative** is a consonant sound (like *f*) in whose pronunciation the flow of air is not stopped completely (as for *p*), but it is constricted at a certain point in the mouth so that a hissing sound is produced. This hissing sound is called **friction**, and so these sounds (*f*, *th*, *s* and *h*) are called fricatives. The vocal cords do not vibrate in the pronunciation of *f*, *th*, *s* and *h*, so these are called **voiceless fricatives**. The point where friction is produced in pronouncing *f* is between the lower lip and the upper teeth, so *f* is called a **voiceless labiodental fricative (labiodental** means "pertaining to the lips and the teeth"). In pronouncing *th*, friction is produced between the upper teeth and the tip of the tongue. *th* is therefore called a **voiceless dental**

fricative. In pronouncing *s*, friction is produced with the tip of the tongue against the roof of the mouth somewhat behind the teeth. Therefore *s* is called a **voiceless retroflexed fricative**. *h* is a **voiceless glottal fricative**; the friction in pronouncing *h* is produced at the glottis.

f may be said to correspond in position of pronunciation to *p*. *p* is bilabial and *f* is labiodental, so they are not pronounced in exactly the same place in the mouth. However, they are both pronounced using the lips, or at least the lower lip. Therefore we may call them both **labial**. *th* corresponds to *t*; both are dental. *s* corresponds to *ch*; both are retroflexed. (There are some differences in the position of *s* versus the position of *ch* which are discussed in section 2.3.18 on palatalization.) And *h* corresponds to *q*, both being glottal. However, there is in Yapese no vocieless fricative corresponding to *k*. This lack is not because such a **voiceless velar fricative** is not possible phonetically. Such a sound occurs in many languages. It is simply a fact that Yapese, although it has velar sounds (e.g., *k*, *k'*) and voiceless fricatives (*f*, *th*, *s* and *h*), does not have a voiceless velar fricative.

It should be noted that *h* is not a native Yapese sound. It only occurs in a very few words borrowed from other languages, such as *haang* 'seal, stamp' (borrowed from Japanese) and *kaahool* 'box' (borrowed from Spanish into Ulithian, and then from Ulithian into Yapese). *h* does not occur at the ends of words in Yapese at all.

Yapese Consonants: Glottalized Voiceless Fricatives

2.3.9 The following words contain **glottalized fricatives**, those in the first column at the beginning of the word, and those in the second column at the end:

f'			
f'oeth	'to divide, share'	*yif'*	'to take a step'
f'aang	'type of eel'		
f'ooth	'to divide, share'		
th'			
th'aeb	'to cut'	*maath'*	'cut, severed'
th'aag	'to eat meat'		
th'iib	'pot'		

f' is a **glottalized labiodental fricative,** corresponding to *f*. *th'* is a **glottalized dental fricative**, corresponding to *th*.

Glottalized fricatives are pronounced in a similar way to glottalized stops. In pronouncing p', we noted that the popping sound that is heard in pronouncing p' was produced by raising the closed glottis suddenly, holding the lips shut. Then when the lips are suddenly opened the air in the mouth between the closed glottis and the closed lips escapes with a popping sound. In pronouncing f', the lips are not closed completely. Rather, the lower lip is pressed against the upper teeth in such a way as to restrict the flow of air. So when the closed glottis is raised (as for p'), the air is forced out between the lower lip and the upper teeth, making a hissing (friction) noise. Then the glottis is opened. th' is pronounced in the same way, except that the restriction (and therefore the friction sound) is produced at the teeth.

Just as there was no glottalized retroflexed *ch'* corresponding to the plain retroflexed stop *ch*, so there is no glottalized *s'* sound corresponding to the plain retroflexed *s*. It was noted above that Yapese apparently does not permit glottalized retroflexed sounds.

Of course there can be no glottalized *h* sound. *h*, being a glottal fricative, requires that the glottis be open enough to allow air to pass through it, whereas a glottalized sound requires that the glottis be closed. Since the glottis clearly cannot be open and closed at the same time, a glottalized *h* is not possible.

We did not say that the glottalized fricatives were voiceless. It was not necessary to do so because, since the glottis is closed in pronouncing glottalized fricatives, it cannot be vibrating (producing voice) at the same time.

Not many examples of words with f' and *th'* are listed. This is because these sounds do not occur in very many words in Yapese. Nevertheless, though rare, they are just as important as more common sounds, and these sounds (f' and th') occur in some very common and important words such as *th'aeb* 'to cut' and *f'oeth* 'to divide, share'.

Yapese Consonants: Voiced Obstruents

2.3.10 The following words contain *voiced obstruents*, those in the first column appear at the beginning of the word, and those in the second column appear at the end:

b			
baen	'to lie, trick someone'	*maab*	'door'
baat'	'ball'	*leeb*	'basket for cooked food'
beaq	'someone'	*th'iib*	'pot'

d

daan	'sea urchin'	*maad*	'cloth'
dael	'type of yam'	*yaed*	'they'
dear	'to separate'	*tead*	'hills'

j

juboeng	'trousers'

g

gaaq	'big'	*m'aag*	'to tie'
gael'	'to shine'	*cheag*	'skilled, expert'
geel	'strong'	*l'eeg*	'to hook'

The term **obstruent** means something which obstructs, or gets in the way of, the flow of air. This term applies to both stops and fricatives. *b*, *d* and *g* have been called obstruents, rather than stops or fricatives, because they are stops next to certain sounds and fricatives next to certain other sounds.

Pronounce the words *barandaa* 'verandah' and *kadaay* 'old, worn out'. In *barandaa* the *d* is pronounced as a stop, whereas in *kadaay* it is a fricative. The *d* in *barandaa* is a **voiced dental stop**, just like *t* but voiced. The *d* in *kadaay* is a **voiced dental fricative**, just like the *th* in *qaath* 'smoke', but voiced. In English, these two sounds are quite distinct in function. The stop sound *d*, as in *barandaa*, is used in an English word such as *dare* (as in "I dare you to do it"), whereas the fricative *d* sound, as in *kadaay*, is used in an English word such as *there* (although in English this sound is spelled *th*). However, in Yapese these two sounds cannot make a difference in the meaning of two words, as they can in English. These two different sounds are just different pronunciations of the same phoneme in Yapese, while in English they are two separate phonemes. The stop *d* pronunciation occurs after *n*, as in *barandaa*, and the fricative *d* pronunciation occurs everywhere else (although people from certain parts of Yap may use the stop *d* also in other positions, such as at the beginnings of words). Thus the *d* in *doel'* 'to get hurt' is pronounced as a fricative in the sentence:

Kea doel'.
'He got hurt.'

but as a stop in the sentence:

Ka ni doel'. (pronounced *kan doel'*)
'Someone has gotten hurt.'

Like *d*, *b* and *g* have both stop and fricative pronunciations. After *m*, as in *simbuung* 'newspaper' *b* is pronounced as a stop. Elsewhere *b* is a fricative, as for example in *dabaq* 'today'. After *ng*, as in *manggaa* 'mango', *g* is a stop, but elsewhere, as in *tagaan* 'to ruin, destroy' it is a fricative.

j is also a voiced obstruent. It only occurs in a very few borrowed words, like *juboeng* 'trousers'. In *juboeng*, where it does not occur after *n*, it is a fricative, pronounced like *s* but voiced. *j* after *n* is pronounced as a stop (something like a voiced version of *ch*), as in *beenjoo* 'outside toilet'.

As is discussed in section 2.3.11 below, the consonants *m*, *n* and *ng* are all of a type called nasals. We may summarize the above discussion of the pronunciation of the voiced obstruents *b*, *d*, *j*, and *g* by saying that voiced obstruents are pronounced as voiced stops when following a nasal, but they are pronounced as voiced fricatives elsewhere.

As has been mentioned several times above, *b*, *d*, *j* and *g* are voiced. This means that the vocal cords vibrate during the pronunciation of these sounds. Compare the words *maath* 'extinguished, as a fire' and *maad* 'cloth'. In *maad* you can hear the humming or buzzing sound called voice in the pronunciation of the *d* if you draw the *d* out: *maad-d-d-d*. In *maath* no such voicing sound is heard during the pronunciation of the *th*. *b* is a **voiced bilabial obstruent**; *d* a **voiced dental obstruent**; *j* a **voiced retroflexed obstruent**; and *g* a **voiced velar obstruent**. *b*, *d*, *j*, and *g* correspond in the position of their pronunciation to *p*, *t*, *ch* and *k*.

There is no voiced glottal obstruent. The reason is that for voicing the glottis must be vibrating (and thus not obstructing the free flow of the air), while for an obstruent it must be either closed (for a stop) or sufficiently closed to produced friction (for a fricative). It cannot be vibrating and obstructing the flow of air at the same time. Thus there cannot be a voiced glottal obstruent.

For the same reason there are no voiced glottalized obstruents *b'*, *d'*, and so forth, corresponding to *p'*, *t'* and so forth. The glottis must be closed for a glottalized sound, and cannot be closed for voicing.

YAPESE CONSONANTS: NASALS

2.3.11 The following words contain **nasal** consonants, those in column

one are placed at the beginnings of the words, those in column two at the ends:

m			
maal	'type of taro'	*laam*	'fishhook'
mael	'war'	*thaem*	'to feel'
meel	'rope on a sail'	*leem*	'seaweed'
n			
naam	'land, country'	*daan*	'sea urchin'
naech	'type of pine tree'	*raen*	'fresh water'
neel	'six'	*yeen*	'fibers on bamboo'
ng			
ngaan	'to where?'	*maang*	'what?'
ngael	'flute'	*l'aeng*	'to string together'
ngeel	'red dye'	*neeng*	'mosquito'

In pronouncing *m*, the flow of air is stopped at the lips, as for *p*. The difference between *p* and *m* is that in pronouncing *p* the uvula (the back part of the velum; see figure 1 and section 2.2.4) is pressed against the back of the throat, so that the air cannot flow out through the nose. In pronouncing *m*, though the air is stopped at the lips as for *p*, the uvula is not pressed against the back of the throat, and the air escapes through the nose. For this reason *m* is called a *nasal* consonant (nasal means "pertaining to the nose"). In pronouncing *m* the flow of air through the mouth is stopped at the lips. Thus *m* is a **bilabial nasal**, *n* is a **dental nasal**, and *ng* is a **velar nasal**. In Yapese, nasals are always voiced. Since there are no voiceless nasals, we will simply refer to them as nasals.

Notice that there is no retroflexed nasal. That is, *m*, *n* and *ng* correspond to *p*, *t* and *k* in the position in the mouth where they are pronounced. However, there is no nasal corresponding to *ch* in position.

Yapese Consonants: Glottalized Nasals

2.3.12 The following words contain **glottalized nasals**, those in the first column appear at the beginning of each word, those in the second column are at the end of each word.

m'			
m'aag	'to tie'	*thuum'*	'to cut'
m'ing	'to break'	*yaam'*	'corpse, dead body'
m'oeng	'type of plant'	*yiim'*	'to die'
m'oon	'first'		
m'uug	'to appear'		
n'			
n'aeg	'to throw away'	*yaan'*	'sand'
n'eew	'wave'	*maen'*	'to float'
n'ean	'thing'	*riin'*	'to do'
n'uw	'rain'	*manuun'*	'type of eel'
ng'			
ng'uung'uuy	'white chicken'	*gang'*	'huge'
		mangiing'	'strong, of medicine'
		mangang'	'swollen glands'

Glottalized nasals are pronounced like plain nasals, with the air escaping through the nose. However, in the pronunciation of glottalized nasals the flow of air is interrupted momentarily by a glottal stop. For example, in the pronunciation of the man's name *Mar* the voicing of the *m* begins rather gradually. However, in pronouncing the word *m'aar* 'sick' the m' begins with a glottal stop, giving it a very sharp beginning.

Glottalized nasals at the ends of words end in a glottal stop (rather than beginning in one, as do glottalized nasals at the beginnings of words). For example, in pronouncing *yaan'* 'sand' the n' is cut off sharply by the glottal stop at the end. Compare this with the word *yaan* 'layer, level, as of bananas on a stalk' in which the *n* at the end of the word ends gradually.

In the middle of the word the glottalized nasals are interrupted by a glottal stop in the middle of the nasal. In pronouncing *wun'uug* 'my feeling, mind' the glottis closes in the middle of the n' for a moment and then opens again while the n' is still being pronounced. We might write *wun'uug* as *wun-q-nuug*.

m' and n', the **bilabial** and **dental glottalized nasals**, are quite common in Yapese words, although they are both relatively rare at the ends of words. However, ng', the **velar glottalized nasal**, is extremely rare, and apparently occurs only in three or four words in the Yapese language.

Yapese Consonants: Liquids

2.3.13 The sounds *l* and *r* are sometimes called **liquids**, perhaps because when we pronounce them we do not obstruct the flow of air through the mouth; thus the sounds have a "flowing" quality, like a liquid such as water. Such sounds are illustrated by the following words:

l

laam	'hook'	*maal*	'type of taro'
laek'	'type of taro'	*mael*	'war'
look	'locked'	*mool*	'to sleep'
loel	'ripe'	*moel*	'adze handle'

r

raat	'bicycle'	*laar*	'type of fish'
raen	'fresh water'	*yaer*	'knife'
reeb	'one'	*keer*	'to dig'
reang	'turmeric plant'	*wear*	'to separate'

l is pronounced with the tip of the tongue at, or just behind, the teeth. However, *l* is not an obstruent. Instead, the air escapes around the sides of the tongue. For this reason *l* is called a **dental lateral** (**lateral** means "pertaining to the sides of something"). *l* is a voiced sound, and could be called a **voiced dental lateral**. However, since there is no voiceless *l* in Yapese, it is sufficient to call it a dental lateral.

r is pronounced with the tongue in a retroflexed position, that is, somewhat behind the teeth against the roof of the mouth. The tip of the tongue lightly taps the roof of the mouth a few times. Such a sound is called a **trill**. *r* is thus a **voiced retroflexed trill**, or simply a **retroflexed trill**.

Yapese Consonants: Glottalized *l'*

2.3.14 The following words contain the glottalized *l'*:

l'

l'aaw	'moss'	*gaal'*	'hibiscus tree'
l'aeng	'to string together'	*gael'*	'to shine'
l'eeg	'to hook'	*neel'*	'six'
l'oeg	'to send someone'	*feal'*	'good'
l'ood	'to choke'	*doel*	'to get hurt'
l'uud	'firewood'	*wol'*	'its road'
l'iil	'hermit crab'	*giil'*	'its place'
		luul'	'stream'

l' is, like the glottalized nasals, a plain *l* interrupted by a glottal stop. Words beginning with *l'* have a glottal stop at the beginning of the *l'*. The *l'* of *l'iil* 'hermit crab' begins very sharply compared with the *l* of *liiq* 'to kill, beat'. The *l'* at the end of a word like *gaal'* 'hibiscus tree' ends in a glottal stop. The *l'* in the middle of a word like *fal'eag* 'to fix' has a glottal stop in the middle of the *l'*.

Notice that there is no glottalized *r'*. This absence is expected since the other retroflexed consonants *ch* and *s* cannot be glottalized either.

Yapese Consonants: Semivowels

2.3.15 Finally in the consonant system of Yapese there are two sounds (and also their glottalized counterparts) called semivowels. These, as mentioned in section 2.2.10, have characteristics of both vowels and consonants. Examples of these are contained in the following words:

w

waar	'large rock'	*p'aaw*	'banana'
waer	'weak'	*n'eew*	'wave'
weel	'turtle'	*luweaw*	'ring'
wool	'lines on hand'	*roow*	'red'

y

yaar	'date, appointment'	*daay*	'sea water'
yaer	'knife'	*seey*	'to split'
yeeng	'to chew'	*poey*	'to recognize'
yoer	'to weep'	*yiiy*	'type of mangrove'

w may be considered as a consonant form of *u*. *u* is pronounced with the lips rounded, and with the tongue high and back in the mouth. *w* is also pronounced with rounded lips and high, back tongue position. *w*, however, functions as a consonant rather than as a vowel. For example, two vowels are not permitted one after the other in Yapese. A consonant must come between the vowels. So *-uaa-* is impossible in Yapese, but *-uqaa-* permitted (as in *luqaag* 'my tears'), with the consonant *q* in between the *u* and the *a*. In a similar way, *-uwaa-* is permitted, as in *luwaag* 'my place', with *w* between the *u* and the *aa*. Thus *w* functions as a consonant, as *q* and other consonants do.

y likewise may be considered as a consonant form of *i*. Both are pronounced with the lips unrounded and the tongue high and front in the mouth. However, *y* functions as a consonant rather than as a vowel.

Yapese Consonants: Glottalized Semivowels

2.3.16 Both *w* and *y* may be glottalized. Glottalized *w'* and *y'* occur only at the ends of syllables. The following words end in *w'* and *y'*:

w'		*y'*	
faaw'	'stamen of flower'	*chooy'*	'pandanus'
daaw'	'shredder'	*buuy'*	'rotten (meat)'
marfaaw'	'woman's necklace'	*maegrey'*	'back of seat'
moqmaaw'	'difficult'	*rachlooy'*	'type of plant'
ruliiw'	'twenty'	*puruuy'*	'to discuss'
misiiw'	'noon'	*yuuy'*	'to string'

w' and *y'* are pronounced like *w* and *y*, but end with a glottal stop. So *faaw'* 'stamen of flower', for example, could be written as *faaw-q*, and *chooy'* 'pandanus' as *chooy-q*.

Note that some people do not use glottalized *w'*. In the words with glottalized *w'* listed above these people use the glottal stop instead. Instead of *misiiw'* such people say *misiiq* 'noon', and instead of *moqmaaw'* they say *moqmaaq* 'difficult'.

Yapese Consonants: Summary

2.3.17 We have discussed all the consonants of Yapese according to the different ways of pronouncing them (such as plain voiceless stops, glottalized stops, plain voiceless fricatives, etc.), and within each type of consonant according to where in the mouth the consonants are pronounced (such as labials, dentals). In summary, all the consonants of Yapese are arranged according to these types and positions of pronunciation in table 1.

Table 1. THE CONSONANTS OF YAPESE

	labials	dental	retroflexed	velar	glottal
plain voiceless stops	*p*	*t*	*ch*	*k*	*q*
glottalized stops	*p'*	*t'*		*k'*	
plain voiceless fricatives	*f*	*th*	*s*		*h*
glottalized fricatives	*f'*	*th'*			
voiced obstruents	*b*	*d*	*j*	*g*	
plain nasals	*m*	*n*		*ng*	
glottalized nasals	*m'*	*n'*		*ng'*	
plain liquids		*l*	*r*		
glottalized liquids		*l'*			
	high front		high back rounded		
plain semivowels	*y*		*w*		
glottalized semivowels	*y'*		*w'*		

Palatalization

2.3.18 In the discussion of vowels (sections 2.3.1 through 2.3.4) it was said that next to certain vowels, called light vowels, some consonants are pronounced in a way called palatalized. We must now examine this phenomenon called palatalization in greater detail.

Consider the two words *mael* 'war' and *maal* 'type of taro'. *Mael* has light *ae* and *maal* has plain *aa*, and consequently the *l* of *mael* is palatalized, while the *l* of *maal* is not. Both *l*'s (that of *mael* and that of *maal*) are dental (that is, pronounced with the tip of the tongue against the roof of the mouth at the upper front teeth). The difference between the *l* of *mael* and the *l* of *maal* is that, in pronouncing the palatalized *l* of *mael* the front and top of the tongue is flattened against the roof of the mouth. In pronouncing the plain (unpalatalized) *l* of *maal* only the tip of the tongue touches the roof of the mouth. This flattening of the tip of the tongue in pronouncing the *l* of *mael* is also accompanied by a raising of the main body of the tongue. Pronouncing *mael*, you can feel the sides of the tongue being raised so that they almost touch the upper side teeth. This raising of the tongue does not happen in pronouncing the *l* of *maal*. Pronounce the two words alternately, paying attention to the position of the tongue in pronouncing the *l* of each word: *mael, maal, mael, maal*. This general raising of the tongue (including both flattening of the tip of the tongue against the roof of the mouth and raising of the body of the tongue) is called palatalization.

Palatalization in Yapese applies only to the consonants that are pronounced using the tip of the tongue—the dental consonants and the retroflexed consonants. The fact that labials and velars are not palatalized is a fact peculiar to Yapese. It is phonetically possible to have languages with palatalization of labials and velars. However, in Yapese only dental and retroflexed consonants may be palatalized.

Palatalization of consonants is easier to hear next to certain vowels than next to others because palatalization is a process phonetically connected with one particular vowel quality, namely that of the high front unrounded vowel *i*. In pronouncing *i* the body of the tongue is raised very close to the roof of the mouth, just as it is in pronouncing palatalized *l* in *mael*. Palatalized consonants may be thought of as being produced by pronouncing the consonant while the tongue is in the position for the vowel *i*.

Thus in pronouncing *mael* the body of the tongue in moving from the *ae* to the *l* rises from a low central position (for *ae*) to a high front position (for the palatalized *l*, as if for *i* since the vowel *i* is in a sense being pronounced at the same time as the palatalized *l*). In fact, if you pronounce *mael* slowly you may hear a short *i*-like vowel inserted between the *ae* and the *l*. This is because the body of the tongue reaches the *i*-position an instant before the tip of the tongue reaches the teeth for the *l*. Thus *mael* might in a certain sense be written *mae-i-l*.

Therefore, the reason why palatalization is easier to hear next to certain light vowels than it is next to certain other light vowels is that the tongue has farther to move from certain vowels to reach the *i*-position than from other light vowels. For example, in *mael* the tongue must move from a low central position to a high front position. In other words, the vowel *ae* sounds very different from the vowel *i*, and so a considerable contrast is heard between the vowel quality of the *ae* of *mael* and the vowel quality of the palatalized *l* of *mael*.

On the other hand, in pronouncing *meel* 'rope on a sail', which also has a palatalized *l* (since *ee* is a light vowel), the tongue moves from a mid front position for the *ee* to the high front position for the palatalized *l*. Thus there is not a very great contrast between the vowel quality of the *ee* and of the palatalized (*i*-colored) *l*. In general, palatalization is less noticeable following front vowels (*ee*, *e*, *ii* and *i*) than following back vowels (*ae*, *ä*, *oe*, *ö*, *uu* and *u*).

Palatalization is in general less noticeable in consonants that precede light vowels than in consonants that follow them. The *l* in *muul* 'to fall' is quite noticeably palatalized, but the *l* in *luum* 'to cook' is less so. I do not know why this is so.

Palatalization is more evident with certain types of consonants than with others. Non-obstruent consonants (such as *l*, *r* and *n*) change more when palatalized than do obstruents (stops, such as *t* and *ch*, and fricatives such as *th* and *s*). For example the *l* in *loet* 'boil on skin' is more evidently palatalized than is the *t* in the same word.

Palatalized consonants are not considered to be different phonemes from their unpalatalized counterparts. For example, palatalized *l* and plain *l* are considered to be just different pronunciations of the same phoneme. The difference in the pronunciation of these two *l*'s is simply a result of the fact that the *l* phoneme is palatalized next to a light vowel, but when it occurs next to a plain vowel it is not palatalized. For example, in *mael* 'war' the *ae* is a light vowel, and so the *l* is palatalized, while in *maal* 'type of taro' the *aa* is not a light vowel, and so the *l* is not palatalized.

We could look at these facts in a different way. We could suggest that there are two different *l* phonemes, a palatalized one, could be written as *lj* using a digraph, and a plain *l*, which could be written as *l*. Then, we could say that there was only one long *aa* phoneme and that it was pronounced in a somewhat more front position next to palatalized *lj* (as in *mael* 'war', which we would now write *maalj*) and in a slightly more back position next to plain *l* (as in *maal* 'type of taro'). In a similar way we could say that there was a palatalized and unpalatalized pair of phonemes for all the dentals, such as *t* and *tj*, *d* and *dj*, *n* and *nj*, and for the retroflexed consonants, such as *r* and *rj*, *s* and *sj*, and so forth.

There are actually certain facts about Yapese pronunciation which might in principle be said to support such an idea as the above. We will not go into detail about the issue of the phonemic status of palatalized consonants in Yapese. Suffice it to say that such an idea was indeed put forth in the so-called Dyen orthography in the late 1940s for *l*, *r* and *l'*, and in some books written at that time (some children's books, written for use in schools, apparently) you can find the spellings *lj*, *lj'*, and *rj*. (The question of the phonemic status of palatalized consonants will be raised again in section 2.5. A different writing system will be discussed in that section which does not treat palatalized consonants as separate phonemes, and does not treat light vowels as separate phonemes, either.)

MORPHEMES

2.4 In order to use a language to actually communicate, we must string together the sounds we have been discussing into meaningful units. So we talk about **words**, like *baebiy* 'pig', **phrases**, like *rea tiir neey* 'this child', and **sentences**, like *Kea miil ea rea tiir neey nga taanggiin ea naqun*, 'This child ran under the house'.

It is obvious that longer units, like phrases, sentences, and so forth, are composed of smaller parts which are themselves also meaningful. So *rea tiir neey* 'this child' consists of *rea*, which means something like 'the one', *tiir*, which means 'child', and *neey*, which means 'this'.

What is the smallest string of sounds which has meaning? It may seem to be the word. Thus, at least if we do not attempt to be too precise regarding the meaning of the term "word," we may say that *rea tiir neey* consists of three words. However, consider a word like *paqag* 'my hand'. According to most people this would certainly be considered a single word. Yet *paqag* has two different meaningful parts to it. Compare the following words:

paqag	'my hand'
paqam	'your hand'
paaq	'his hand'
paqay	'one's hand'
paqdow	'our hands (you and I)'
paqmow	'our hands (he and I)'
paqmeew	'your hands (you two)'
paqrow	'their hands (they two)'
paqdaed	'our hands (you all and I)'
paqmaed	'our hands (they and I)'
paqmeed	'your hands (you all)'
paqraed	'their hands (they all)'
luqaag	'my tears'
mitaeg	'my face'
qayig	'my foot'
qädiig	'my liver'
tamaag	'my father'

By comparing the words in the first section of the above list with each other you can see that each one begins with *paq-* (or *paaq* in the case of 'his hand'). We can say that this part of each word means 'hand'. All the words in the second section have in common the meaning 'my', and they all end in *-g*. So we can say that the word *paqag* 'my hand' consists of two parts, the first *paq-* (or perhaps *paqa-*) meaning 'hand', and the second *-g* (or perhaps *-ag*) meaning 'my'. Yet neither of these parts (or certainly at least not the part *-g* meaning 'my') is a word by itself. Therefore the smallest string of sounds which has meaning is not the word. Rather it is something smaller than a word. We will call such a string of sounds a **morpheme**.

A morpheme is the shortest string of sounds which has a meaning but is not itself composed of shorter meaningful strings of sounds. The term morpheme is traditional for this concept.

In the following list the separate morphemes within individual words are separated from one another by hyphens. Notice that every word is at least one morpheme, but some words contain more than one morpheme. All sentences and other linguistic units which have meaning may be broken up into morphemes.

paqa-g	'my hand'
chuwq-iy	'to buy' (compare *chuwaay'* 'to buy')
ma-rungaqg-ean	'about it' (compare *rungqag* 'to hear' and *char-ean* 'beside it')
ka ra marweel gow	'they two worked'
ka ra bing-ee-w	'they two opened it'

Morphemes are made up of strings of sounds. So *buw* 'betel nut' is made from the sounds *b*, *u*, and *w*. However, it is clear that the sounds of Yapese cannot be simply put together in any arbitrary way. Consider the word *kadaay* 'old, worn out'. It is made up of the sounds *k*, *a*, *d*, *aa* and *y*, strung together in that order. It would also be possible to string them together in the order *y*, *a*, *k*, *aa*, and *d*. The resulting string *yakaad* is not a meaningful word or morpheme in Yapese. However, it is possible to pronounce this string of sounds in a normal way as if it were a Yapese word. Furthermore, if you wanted to assign a meaning to this string of sounds *yakaad* and use it, for example, to refer to a new kind of potato, you could do so, and this could become a perfectly normal Yapese morpheme. The string *yakaad* is said to be permitted by the **phonological structure** of Yapese. On the other hand, if the same five sounds are strung together in the order *d*, *k*, *aa*, *y*, *a*, the resulting string *dkaaya* is not pronounceable in a normal way because this string of sounds is not properly formed according to the rules of Yapese phonological structure. We may say that *dkaaya* is not a possible morpheme in Yapese. There are various principles—which we will call morpheme structure rules—which determine what is a possible Yapese morpheme.

There is more than one kind of morpheme in Yapese. We will first consider the structure of the large body of morphemes that includes **nouns** (names of things, as *pumoqon* 'man', *niig* 'fish', *nifeeng* 'wind', *taang* 'song'), **verbs** (names of actions and relationships, as *guy* 'to see', *qadaag* 'to like, want', *mool* 'to sleep'), and **adjectives** (names of qualities of things as *gaaq* 'big', *maenigil* 'good', *n'uw* 'long'), and a few other types of morphemes. This large body of the morphemes includes most of the mor-

phemes in Yapese. Such morphemes we will call **major morphemes**. The only morphemes which are not in this group are the so-called **grammatical morphemes**, like the *-g* of *paqag* 'my hand' which means 'my', or the *u* of the phrase *u Donguch* 'from Donguch'. These grammatical morphemes will be discussed in section 2.4.5.

One Syllable Morphemes

2.4.1 We will first consider the phonological structure of morphemes consisting of a single syllable. Consider the following words:

taang	'song'	*baat'*	'ball'
mael	'war'	*rean*	'wood'
laay	'sail'	*moem*	'easy'
yaer	'knife'	*yuub*	'type of plant'

Each of these words begins with a single consonant which is followed by a single long vowel which is followed by another single consonant. If we use the letter C to represent a consonant, and the letter V: to represent a long vowel, we may represent the structure of the words in this list by the formula CV:C. Each of these words consists of only one morpheme. Thus this formula represents one of the basic morpheme types of Yapese.

Consider the words in the following list:

pil	'to break, shatter'	*pat*	'to find something'
yal	'belly'	*rich*	'to go between'
chug	'head'	*thig*	'to fall over'
yog	'enough'	*rus*	'afraid'
qer	'there near you'		

These words are just like the words in the first list in this section, except that these have a short vowel. Using V to represent a short vowel we may represent the structure of these words by the formula CVC. Yapese morphemes may be of the form CV:C or CVC.

A morpheme with only one vowel is said to have one *syllable*. All one-syllable major morphemes are either of the type CVC or CV:C. In Yapese, no major morpheme with only a single syllable may either begin or end with just a vowel. One-syllable major morphemes must all begin and end with a consonant. (This rule does not apply to grammatical morphemes, whose structure is discussed in section 2.4.5 below.)

Here a note about Yapese spelling must be made. As was

pointed out in section 2.3.6 and 2.3.7, words beginning or ending with the glottal stop *q* have usually been written in the past with no letter to represent the glottal stop. Nevertheless, the consonant *q* is really pronounced. When we say that no major morpheme with only a single syllable may begin or end with a vowel, we are not speaking of the various traditional ways of writing, but of the actual pronunciation. For example, *beaq* 'someone' is sometimes written *bee*, or even *be*. In this spelling the word ends in a vowel letter. However, in pronunciation the word ends in the consonant *q*.

Likewise, the word *qiir* 'he' is often written *ir*. Thus this word, like other words beginning with *q* in Yapese, is often written without initial consonant letter. Nevertheless, the word does begin with the consonant *q* in pronunciation, as may be easily seen by pronouncing *qiir* with a grammatical morpheme in front which ends in a vowel, such as in the phrase *i qiir* 'he'. Thus words beginning or ending in *q* do not violate our rule, though their common spelling might lead one to believe they do.

The statement that one-syllable morphemes must begin and end with a consonant applies only to major morphemes. Grammatical morphemes do not fit into this pattern. They may freely begin or end with a vowel, and may consist of just a vowel. Examples are *u* 'from', as in *u Donguch* 'from Donguch', or *raa* 'future', as in *raa yib* 'he will come'. The rules we have discussed apply only to major morphemes.

Two Syllable Morphemes

2.4.2 Not all words contain only a single syllable, of course. Consider the following words:

kadaay	'old, worn out'	*qadaag*	'to like, want'
rabaaq	'side'	*bureey*	'hillside'
damaen	'type of fish'	*danoop*	'the world'
puruuy'	'to discuss'	*chuwaay'*	'to buy'
dilaek	'war spear'	*ruliiw'*	'twenty'
rugood	'woman'		

These morphemes all are of the same structure. They begin with a consonant which is followed by a short vowel, a consonant, a long vowel, and another consonant. Thus the structure of these words may be expressed by the formula CVCV:C. These words are thus structured like the **monosyllables** (words of one syllable)

above of the form CV:C, but with a short syllable of form CV- added to the front.

Now consider the following words:

garik	'stinging jellyfish'	*fanow*	'to direct a dance'
faraf	'floor'	*magad*	'lime container'
pilig	'to take down'	*thagith*	'land spirit'
lukur	'stick to pick up food'	*rumug*	'darkness'
langab	'to embrace'		

These words are all of the form CVCVC. Thus they are of the same structure as the monosyllables of the form CVC but with a short syllable of form CV- added to the front.

If we use parentheses in a syllable formula like the ones we have been writing to mean that part of the formula is optional, we may abbreviate the two formulas for monosyllables into a single one: CV(:)C. This formula means that vowel may be either long—V:—or short—just V. CV(:)C is thus an abbreviation for the two formulas CVC and CV:C.

We may now extend this abbreviation procedure to write the following formula: (CV)CV(:)C. This formula states that a major morpheme consists of one of the following four structures:

CVCV:C	*rabaaq*	'side'
CVCVC	*garik*	'stinging jellyfish'
CV:C	*raan'*	'its leafy part (of a tree)'
CVC	*pil*	'to break, shatter'

Consider now the following two syllable morphemes:

paalog	'far'	*gaeyuch*	'crocodile'
tooluul	'to bark, shout'	*maak'eef*	'deep hole in reef'
daawoch	'outrigger boom'	*leekaeg*	'to investigate'
geethiith	'living room'	*l'ooböch*	'to tangle'

These words all end in the same way as the words discussed so far—in CVC or CV:C. We may thus write CV(:)C as the formula for the ends of these words. However, all of the words in this list begin with CV:. Thus the formula for these words is CV:CV(:)C. Since the formula for two syllable words such as *garik* 'stinging jellyfish' or *rabaaq* 'side' was seen to be CVCV(:)C, we see that the only difference between these two formulas is that one represents words with a long vowel in the first syllable while the other represents words with a short vowel in the first syllable. We may abbreviate these two formulas as CV(:)CV(:)C.

Now consider the following morphemes:

gargeal	'to give birth'	*taamdaag*	'to be afraid'
qudluf	'to pile up'	*qalqath*	'type of coconut'
garngaab	'type of fish'	*gilföw*	'ten coconuts'
tilgiy	'eyeglasses'	*taawreeng*	'homesick'

These words are all of the form consonant + vowel (long or short) + consonant + consonant + vowel (long or short) + consonant, which we may represent by the formula CV(:)-CCV(:)C.

Summary of Syllable Types

2.4.3 In summary, we have seen that the following types of morphemes occur in Yapese:

> Those of one syllable: CV(:)C; and those of two syllables: CV(:)CV(:)C; CV(:)CCV(:)C

One generalization that may be made about these words is that they all end in a syllable which ends in a consonant. A syllable ending in a consonant is called a **closed syllable**. A syllable ending in a vowel is called an **open syllable**. We may say that all of the morphemes whose structure we have discussed so far end in a closed syllable. It is in fact a rule about Yapese that all major morphemes, other than certain borrowed morphemes such as *doomaa* 'checkers', end in a closed syllable. We have so far looked at most types of major morphemes of one and two syllables in Yapese other than borrowed words. If we were to look at many more morphemes than the above, including those of more than two syllables, we would not find any exceptions to this rule. All major morphemes would consist of groups of open or closed syllables, but the last syllable of the word would always be a closed syllable.

Exceptions: Consonant Clusters, Words Ending in a Long Vowel

2.4.4 So far we have seen that morphemes are made up of strings of syllables, provided that the last syllable is a closed syllable, that is, one which ends in a consonant. Syllables all begin with a consonant, followed by a single long or short vowel, and may optionally be closed (ended) by a single consonant. In other words, syllables are all of the form CV(:)(C). Now consider the

following morphemes, which seem to indicate that we must change our formula for the syllable:

rchaq	'blood'	*rchib*	'nail'
llug	'head'	*mbooq*	'jerked out'
ggaan	'food'	*lldow*	'body killed in battle'
bpiin	'woman'	*llraq*	'ditch'

All of these morphemes begin with more than one consonant. Since our formula for the syllable states that every syllable (and thus every major morpheme) must begin with exactly one consonant, the words in this list begin with more than one consonant, and thus contradict the formula.

We may modify our formula for the syllable to state that the syllable must begin with one or more consonants. However the great majority of syllables begin with only a single consonant. In section 2.5, when certain facts about morphophonemics are presented, it will be suggested that the words in this list are only apparent contradictions to the general rule about Yapese syllable structure. In any case, we may note now that syllables beginning with **consonant clusters** (groups of consonants) are quite rare, and apparently only occur at the beginnings of words. Most syllables in Yapese do fit the formula given. Note that some of the above words may alternately be spelled with a vowel between the first two consonants of the initial consonant cluster. For example, *rchaq* 'blood' is also sometimes spelled *rachaq*. With this spelling, *rachaq* is no longer an exception to the general rule. This spelling indicates something of the type of facts that will be discussed in section 2.5 when an alternative approach to the problem of consonant clusters is discussed.

Like all languages, Yapese has taken words from other languages. Such words are called **borrowed words**. Examples are:

from Ulithian:

gaafgow	'pitiful, poor'
chiliilig	'sliced tobacco'

from Palauan:

gaeyuch	'crocodile'
piliis	'dog'

from Spanish:

gaetuw	'cat'
koebreq	'copper, tin'

from German:

raat	'bicycle'
maag	'half-dollar'

from Japanese:

deengkii	'flashlight'
sikoekii	'airplane'

from English:

doolaa	'dollar'
qaawaa	'hour'

These borrowed words meet most, but not all, of the conditions already discussed on major morpheme structure. In borrowed morphemes, as in "native morphemes," the syllables all begin with a single consonant (with a few exceptions parallel to *rchaq* 'blood', *llug* 'head', etc.) followed by a long or short vowel, which may optionally be followed by a single consonant. However, it is at the ends of words that borrowed morphemes differ from native ones. All native major morphemes must end in a consonant. However, borrowed major morphemes must either end in a consonant or a long vowel, but not a short vowel. No major morpheme in Yapese ends in a short vowel.

The following borrowed words all end in a consonant, like native words:

maag	'half dollar'
piliis	'dog'
gaetuw	'cat'
wiik	'week'
kaahool	'box'

However, the following borrowed words, unlike native Yapese words, end in a long vowel:

deengkii	'electricity'
qaawaa	'hour'
kaeyruu	'toad'
sikoekii	'airplane'
baatee	'cotton tree, kapok'

One other difference between borrowed and native words occurs only in a very few words. The words *beench* 'bench' and *beank* 'bank' end in a nasal consonant plus a stop rather than just ending in a single consonant. There are very few words that violate the rule that closed syllables end in a single consonant.

To summarize, Yapese major morphemes consist of syllables. Syllables may be open, consisting of a consonant plus a vowel, or they may be closed, consisting of a consonant, a vowel, and another consonant. All native Yapese major morphemes must end in a closed syllable. Borrowed words may end in an open syllable ending in a long vowel and a very few borrowed words end in a sequence of a nasal plus a stop. No word may end in a short vowel. Some words which apparently begin with a consonant cluster will be discussed in section 2.5.

Grammatical Morphemes

2.4.5 The above rules apply to major morphemes. So-called grammatical morphemes do not necessarily obey these rules. For example, grammatical morphemes may end in a long vowel, unlike native Yapese major morphemes. Examples are:

raa 'future' as in:

Gu raa yaen nga tafnaag.
'I will go to my place.'

Raa chibiy ea booch roog.
'He will lift my boat.'

and *rea* 'the one' as in *rea chiyae neey* 'this chair', *rea pumoqon neey* 'this man'.

Grammatical morphemes may begin with a vowel, unlike native Yapese morphemes. Examples are *ea* as in *boech ea niig* 'some fish', *ba yael' ea buw* 'one betel nut', and *u* 'at, from' as in:

Baey u Donguch.
'He is in Donguch.'

Baey u l'aay.
'He is at the seashore.'

Grammatical morphemes may consist of just a single consonant, as for example *-g* 'me' in *ngoog* 'to me' and *-m* 'you' in *ngoom* 'to you'. However, no grammatical morpheme contains two or more vowels in sequence. This fact is also true of syllables in major morphemes, which cannot have two vowels in a row without a consonant in between. Likewise, with exceptions like the *rchaq* 'blood' type, no grammatical morpheme contains a consonant cluster. In other words, grammatical morphemes consist of syllables or parts of syllables, in contrast with major morphemes, which must consist of whole syllables. Recalling

that syllables consist of consonants and vowels in the formula CV(:)(C), we see that grammatical morphemes may leave off the first consonant of this formula, or also the first consonant and the vowel (provided, of course, that it is a closed syllable). Thus, although grammatical morphemes do not completely obey the morpheme structure rules we have discussed so far, note that grammatical morphemes may not consist of any arbitrary string of phonemes. They may consist only of syllables and parts of syllables, with syllable defined in the same way as for major morphemes.

We have so far divided all morphemes into two different kinds—major morphemes and grammatical morphemes. A few helpful terms will be introduced now (which will be used in later chapters) to talk about different kinds of grammatical morphemes.

Bound morphemes are grammatical morphemes which are always so closely tied to other morphemes that they cannot normally even be pronounced alone. Examples are the *-g* 'me' in *ngoog* 'to me', or the *ma-* (which has no meaning) at the beginning of *marungaqag* 'news, information' (compare this with *rungaqag* 'to hear').

Bound morphemes may be of two types. Some, like the *-g* 'me' in *ngoog* 'to me' or the *-iy* of *richibiy* 'to nail' occur following another morpheme. These are called **suffixes**. When suffixes are written alone, they are written with a hyphen in front to indicate that another morpheme must be written in front of them.

Other bound morphemes, like the *ma-* of *marungaqag* 'news, information', or the *si-* of *siminmin* 'to smile' occur before another morpheme, and are called **prefixes**. When prefixes are written alone, they are written with a hyphen after them, to indicate that another morpheme must follow them.

Other grammatical morphemes which are not bound morphemes may be divided into **particles** and **free morphemes**.

Particles are morphemes such as the *ea* in *boech ea niig* 'some fish', or the *neey* in *rea piin neey* 'this woman'. They are grammatical morphemes that may be pronounced alone, and therefore are not bound morphemes, but which are not separate words. In fact, particles are not usually pronounced alone. People often have difficulty in knowing what particle is referred to if one is pronounced by itself.

Free morphemes are morphemes which are also separate words, like major morphemes. This category includes all major

morphemes, and also certain grammatical morphemes as *yael'* in *ba yael' ea buw* 'a betel nut', which are separate words and are easily recognized when pronounced alone. Words like *yael'* are grammatical morphemes because they are not members of the major part of speech classes such as noun and verb.

Parts of Speech

2.4.6 The words noun, verb, adjective, adverb, pronoun, preposition may be familiar to you. These terms are sometimes called **parts of speech**. The terms suffix and prefix, bound morpheme and free morpheme, which were discussed in section 2.4.5, had primarily to do with the phonological nature of different morphemes, that is, with facts about their pronunciation, such as whether they could be pronounced alone. The words noun, verb, adjective, and so forth on the other hand, classify morphemes not in terms of their phonology (that is, how their pronunciation is affected when they interact with other morphemes), but in terms of their **grammatical function**.

Grammatical function is not easy to define, and in part the rest of this book is concerned with the definition of the term "grammatical function." However, in a general sense, grammatical function means the interaction of morphemes on the level of meaning. This definition is not completely satisfactory but will do for the present. We will define the words noun, verb, adjective, adverb, pronoun and preposition here so that you will have some familiarity with them in reading the following sections.

A **noun** is the name of a thing. It may name just one thing in the whole world, such as, for example, *Waab* 'Yap', *Guam*, *Tamag*, *John*: These nouns are called **proper nouns**. A noun may name a whole class of physical objects in the world, as for example *niig* 'fish', *qarcheaq* 'bird', *m'uw* 'canoe', *nifeeng* 'wind'. These words are called **common nouns**. A noun may name other less physical things, like *mak'iy* 'hunger', or *naambaa* 'number'. Nouns like these are called **abstract nouns**. Notice that many words may be used as nouns and also as some other part of speech. For example, *taang* is a noun in *taang roog* 'my song', but it is a verb in:

Ku qu gu taang.
'I have been singing.'

Other parts of speech may likewise be used sometimes as one part of speech and sometimes as others. For example, there are some words which are only verbs, but many other words may be used as a verb and also as an adjective.

A note must be made about the spelling of proper nouns. The orthography committee recommended that proper nouns that have a traditional spelling continue to be spelled in the traditional way, and not according to pronunciation. This group of nouns includes place names and personal names of people, such as *Waab* 'Yap' (actually pronounced *Waqab*), *Tamag* (actually pronounced *Tamaag*), and so forth. The reason for this is to avoid confusion particularly in legal matters and on maps. This practice is followed in this book.

A **verb** is a word naming an action, or a relationship between two things. Examples of verbs naming actions are *miil* 'to run', *chaam* 'to fight', *yaen* 'to go', *gireeng* 'to pull', *noeng* 'to swim', *fitaeq* 'to fish'. Sometimes the verb names an "action" which is actually rather inactive. Examples are *mool* 'to sleep', *paer* 'to stay'. Sometimes the "action" is totally mental, as *lik'aey* 'to dream', *leam* 'to think'.

Some verbs name the relationship between two things. The relation may be a very active one, as in the sentence:

Kea liiq Tamag walaagean.
'Tamag beat his brother.'

Here *liiq* 'to beat' is a verb expressing a relation between Tamag and his brother. In this case it is a very active relation. However, a verb like *guy* 'to see' expresses a purely psychological relation, as in:

Raa guyeeg Tamag.
'Tamag will see me.'

which expresses a relation between Tamag and me. Even less active is a verb such as *qadaag* 'to like, want', as in:

Gu ba qadaag ea nimeen.
'I like chicken.'

Adjectives are words that describe someone or something. Adjectives name qualities of things. An example is *gaaq* 'big', as in:

Ba gaaq ea naqun rook' Paedreey
'The priest's house is big.'

In this example, *gaaq* names a quality of the priest's house.

Some adjectives describe the physical characteristics of things, such as *gaaq* 'big', *roowroow* 'red', *toomaal* 'heavy'. Some adjectives describe more abstract qualities of things. Examples are *feal'* 'good', *kireeb* 'bad', *yuul'yuul'* 'honest, true'. So in the sentence:

Ba feal' pangiin.
'His behavior is good.'

feal' names a quality of his behavior.

Adverbs are words which tell things such as when, where, and how something happened. An example is *chiineey* 'now' as in:

Bea fil ea thiin nuu Mariken ea chiineey.
'He is studying English now.'

Some other adverbs are *qaraay* 'here', *gabuul* 'tomorrow'. There are not many single words in Yapese which are adverbs.

Pronouns are a kind of noun with very broad meaning. An example is a word such as *chaqneey* 'this person'. The word itself tells very little about who it refers to. A noun like *pumoqon* 'man' at least differentiates between males and females; to know the meaning of *chaqneey* you have to know something about the situation the word is used in. Such words are called pronouns. Examples of other pronouns are *guur* 'you', *qiir* 'he', *qaneey* 'this person'. The concept of pronoun is not easy to define, but it will become clearer as examples of pronouns are discussed.

The word **preposition** refers to the Yapese words *u* 'at, from', *nga* 'to, for' and *ko* 'for'. There are not many of these morphemes, but they are very important in Yapese. They will not be discussed further here, but when the term preposition is used in this book it refers to these three morphemes.

MORPHOPHONEMICS

2.5 When morphemes are grouped together into words and phrases, we find that their pronunciation does not always remain the same as when they are pronounced alone. For example, the word *marungqag* 'news, information' does not have a vowel letter written between the *ng* and the *q*. However, when this word is pronounced in a normal way, you can hear a very short, indistinct vowel in that position which is not definitely *a*, *e*, *i* or any of the other short vowels of Yapese. Such an "almost-vowel" is called an **excrescent vowel**.

Now consider the word *marngaqgean* 'about him'. In normal pronunciation, there is a normal short *a* between the *ng* and the *q*, where there is only an excrescent vowel in that position in *marungqag*. On the other hand, in *marngaqgean* 'about him' there is actually only an excrescent vowel (that is, an indistinct, indefinite, very short vowel) between the *r* and the *ng*, while there is a *u* in that position in *marungqag*. Similarly, in *marngaqgean* there is only an excrescent vowel between the *q* and the *g*, whereas in *marungqag* there is a normal short *a* between the *q* and the *g*.

The word *marungqag* contains as part of itself the word *rungqag* 'to hear'. Thus *marungqag* contains the morpheme *ma-* (which does not have any real meaning of its own. Morphemes like *ma-* and other "meaningless' morphemes are discussed in chapter 3) and *rungqag*. *Marngaqgean* is itself composed of *marungqag* and *-ean* 'his, her'.

If we use the symbol ə to represent the indistinct excrescent vowel between the *ng* and the *q* in *marungqag*, we may represent these complex facts by spelling the three words *rungqag* 'to hear', *marungqag* 'news, information' and *marngaqgean* 'about him' in the following way:

rungəqag
marungəqag
marəngaqəgean

Using the fact that *marngaqgean* contains *marungqag* as part of itself, and that *marungqag* contains *rungqag*, we might spell *rungqag* as **rungaqag** everywhere, when it is used alone as a separate word, and also when it is used in **marungaqag** and in **marungaqagean**. The *u* between the *r* and the *ng* is pronounced as a normal short *u* in **rungaqag** and in **marungaqag** (pronounced *rungəqag* and *marungəqag*), but it represents the excrescent vowel *ə* in **marungaqagean** (pronounced *marəngaqəgean*). The *a* between the *ng* and the *q* represents the excrescent vowel *ə* in **rungaqag** and **marungaqag** (pronounced *rungəqag* and *marungəqag*), but in **marungaqagean** (pronounced *marəngaqəgean*) it represents a normal short *a*. The *a* between the *q* and the *g* represents a normal short *a* in **rungaqag** and **marungaqag**, but it represents an excrescent vowel in **marungaqagean**. Writing **rungaqag** with all of its possible vowels, we can spell it the same in all of these three words. We thus avoid the necessity of spelling **rungaqag** in different ways when it occurs next to different morphemes.

However, in that case note that the spelling **rungaqag** does not precisely represent the pronunciation of this morpheme. Next to the morpheme *ma-* the *u* and the second *a* of **rungaqag** are pronounced as full vowels, while the first *a* is an excrescent vowel. Next to *-ean* the *u* and the second *a* are excrescent vowels, while the first *a* is a full vowel. Thus the spelling **rungaqag** is an abstract form, or **underlying form** as we will call it. An underlying form is a way of spelling a morpheme in an unchanging spelling even though its pronunciation changes next to different morphemes. We will then need rules to tell us what the different pronunciations of the morpheme are next to various other morphemes. Thus for **rungaqag** we need rules to tell us when certain vowels are excrescent vowels and when they are pronounced as full vowels. Rules of this sort are called **morphophonemic rules**, and the processes whereby morphemes vary in pronunciation are called morphophonemics, or **morphophonemic processes**. In this book, abstract, or underlying, forms will always be written in bold face type in order to distinguish them from forms written in other ways.

We have said that one reason for using underlying forms is that it permits us to spell each morpheme in only one way everywhere it occurs. There are, however, two more important reasons for using underlying forms. One reason is that the use of these forms enables us to make a simpler description of the structure of morphemes (Yapese morpheme structure was discussed in section 2.4). The other reason is that using underlying forms enables us in many cases to avoid having to make a difference in spelling between light and plain vowels, and between long and short vowels. In this way we may be able to eliminate in certain cases the necessity of deciding between writing plain versus light vowels or writing palatalized consonants as discussed in section 2.3.19 above. Underlying forms also enable us to simplify the writing of morphemes in certain other ways which are discussed in sections 2.5.4 and 2.5.5.

A further reason for using underlying forms is that it enables us to make a simpler description of the grammar of Yapese. This simplification will be discussed in chapter 3.

Underlying Forms and Final Short Vowels

2.5.1 In order to understand how underlying forms can enable us to simplify the description of morpheme structure and the way we write morphemes, consider the following examples:

luub	'breath'
lubaag	'my breath'
lubaam	'your breath'
lubaan	'his breath'
qaed	'liver'
qadiig	'my liver'
qadiim	'your liver'
qadiin	'his liver'
qamiith	'pain'
qamthuug	'my pain'
qamthuum	'your pain'
qamthuun	'his pain'

Consider the first set of words, the forms of *luub* 'breath'. Note that *luub* changes pronunciation to *lub-* next to suffixes meaning 'my', 'your' and 'his'. What is the underlying form of *luub*? If we say that the underlying form of the morpheme meaning 'breath' is **luub**, and that the morphemes meaning 'my', 'your' and 'his' are **-aag**, **-aam** and **-aan**, then we only need a morphophonemic rule to make the vowel of **luub** short (i.e., to change it into **lub-**) before these suffixes. Then we would write:

luub	'breath'
luubaag	'my breath'
luubaam	'your breath'
luubaan	'his breath'

but we would automatically pronounce **luubaag** as *lubaag* according to our rule, which says to shorten the vowel of **luub** to *lub-* before the suffix.

However, when we attempt to apply the same methods to the second case, the morpheme *qaed* meaning 'liver', we run into difficulties. We may say that the underlying form of the morpheme is **qaed**, and modify our vowel-shortening rule to say that it makes the vowel of the noun (**qaed** or **luub**) short before a suffix, and changes a light **ae** into a plain *a*. We may now account for the vowel of *qaed*/*qad-*. But the suffixes meaning 'my', 'your' and 'his' are, with **qaed**, not *-aag*, *-aam*, *-aan*, but *-iig*, *-iim*, *-iin*. In a similar way, we could say that the underlying form of

qamiith 'pain' is **qamiith**, and our vowel-shortening rule (modified to drop the vowel before the suffix in nouns of two syllables) would convert *qamiith* to *qamth-* before the suffixes. But with *qamiith* the suffixes are pronounced *-uug*, *-uum* and *-uun*. If we apply this method of analysis to these forms, we would have to say that the underlying forms of the possessive suffixes were, for example, **-aag**, **-aam** and **-aan**. Then we would have to have a rule to change each to these suffixes into *-iig*, *-iim* and *-iin* just after the morpheme *qaed*, and after a few others, such as *miriig* 'my force', *teeliig* 'my ear', *nifangiig* 'my wind, the wind from me, as when I'm running'. These morphemes do not have any common factor in pronunciation, so the rule would just have to list the different morphemes after which **-aag** becomes *-iig*, **-aam** becomes *-iim*, and so forth. Likewise, we would need a rule to change each of these suffixes into *-uug*, *-uum* and *-uun* just after **qamiith** 'pain', and a few other morphemes, such as *lunguug* 'my voice', *p'eethnguug* 'my nose', which would have to be listed. These rules are so complicated and so arbitrary that we would seem not to have gained anything at all by the decision to write using underlying forms. Also, *qadiig* 'my liver' would then be written with an underlying form **qaedaag** but pronounced *qadiig*, for no reason but that it was the morpheme *qaed* and not (for example) *luub* that had the suffix attached to it.

A different approach to underlying forms for these words is necessary. To understand this approach, let us recall here a fact discussed in section 2.4. Yapese major morphemes or words may end in a consonant (as *qaed* 'liver', *pil* 'to break, shatter', *buw* 'betel nut'), or in a long vowel (as *deengkii* 'electricity', *kaarroo* 'car'), but no Yapese word or major morpheme may end in a short vowel. For example, there cannot be a word like **qadi* with a short *i* at the end (the asterisk * is used to indicate a form which one might think of but which is not actually correct). Suppose, therefore, we suggest that the underlying forms of the morphemes for 'liver', 'breath' and 'pain' be spelled:

qadi 'liver'
luba 'breath'
qamithu 'pain'

and that the morphemes meaning 'my', 'your' and 'his' be spelled:

-gu 'my'
-mu 'your'
-na 'his'

Now suppose we have three rules:

RULE 1: when a short vowel is written at the end of a word, do not pronounce the short vowel, but pronounce the vowel immediately before it as a long vowel.

RULE 2: a short *i* dropped by rule one not only lengthens a preceding vowel, but if the preceding vowel is **a**, and the consonant after the **a** is dental or retroflexed, then make the **a** into long light *ae*.

RULE 3: drop a short vowel which has a syllable on its left and another syllable on its right.

These rules may not seem much simpler than the other ones we said we would need. However, let us examine the way in which these rules coupled with the proposed underlying forms would actually work. Consider the underlying form **luba**. When it does not have any possessive suffix, we write: **luba**

Now since it has a short vowel at the end of the word, according to rule one we do not pronounce this short vowel, but we make the preceding vowel long. Thus the form becomes: *luub*.

Rule 2 does not have any effect at all, because rule 2 only applies when the short vowel which was dropped was **i**, the preceding vowel was **a** and the consonant between them was a dental or retroflexed consonant. Likewise, rule 3 does not apply since we do not have a short vowel between two syllables. So we end up with **luub**, which is the correct pronunciation of the word when no possessive suffix follows.

Now consider **luba** plus the possessive suffix **-gu** 'my'. When writing words containing more than one morpheme in underlying forms we will put a plus sign (+) between the morphemes, to show where the boundary between different morphemes is. Thus **luba** plus **-gu** will be written in underlying form as: **luba + gu**

Now rule 1 does not lengthen the **u** of **luba** because the short **a** of **luba** is no longer at the end of the word. Instead, the **u** of **-gu** now fulfills the conditions of rule 1, since it is a short vowel at the end of a word. So following rule 1 we do not pronounce the **u** of **-gu**, but we lengthen the vowel in front of it, this time the **a** at the end of **luba**, and the result is: *lubaag*.

Again rule 2 does not apply because its conditions are not met; rule 3 does not apply either, and so we have the correct pronunciation of *lubaag* by starting with our proposed underlying forms and applying the rules to them.

In a similar fashion, applying rule 1 to the form **luba + mu**,

we drop the **u** of **-mu** and lengthen the **a** to give *lubaam*. Again, rules 2 and 3 do not apply because *lubaam* does not meet the conditions of these rules. Likewise, applying rule 1 to **luba+na**, we drop the **a** of **-na** and lengthen the **a** of **luba** to give *lubaan*. Rules 2 and 3 again do not apply.

Now let us see how these rules would apply to the words for 'liver'. Applying rule 1 to **qadi**, we drop the **i** and lengthen the **a** and we would thus end up with **qaad**. However, rule 2 applies, since the short vowel which was dropped is **i**, the preceding vowel is **a**, and the consonant between them, **d**, is dental. Thus we make the preceding long *aa* into light *ae*, and the result is *qaed*. Rule 3 does not apply in this case, since we do not have a short vowel between syllables. This is the correct pronunciation. Rule 1 applies to **qadi + gu**, dropping the **u** and lengtheing the preceding **i**, to produce *qadiig*. The **a** of *qadiig* does not now become light *ä* by rule two because rule two only applies when a short **i** is dropped by rule one. Rule 3 does not apply, as its conditions are not met. *Qadiim*, from underlying form **qadi + mu**, and *qadiin*, from **qadi + na**, are derived in the same way by rule one.

Now consider the underlying form **qamithu** by itself without any suffixes. Rule 1 applies (since the word ends in a short vowel, namely short **u**) to drop the final short vowel and lengthen the preceding vowel. Thus it becomes *qamiith* 'pain'. Rule 2 does not apply, since its conditions are not met (that is, the underlying form does not end in **a** plus a dental consonant plus **i**). Rule 3 likewise does not apply, since we do not have a short vowel between syllables, and we have the correct form *qamiith*. Now consider **qamithu+gu**. Rule 1 drops the **u** of **-gu** and lengthens the preceding **u**, giving us *qamithuug*. Now rule 2 does not apply, since its conditions are not met, but rule 3 does apply, since the short *i* in *qamithuug* is between the two syllables *qam-* and *-thuug*. Thus this *i* is dropped by rule 3, giving us the correct form *qamthuug* 'my pain'. In the same way we derive *qamthuum* 'your pain' from underlying form **qamithu+mu**, and *qamthuun* 'his pain' from underlying form **qamithu+na**.

The underlying forms suggested satisfactorily accomplish the function of enabling us to write each morpheme the same way no matter what other morphemes it occurs next to, and to know how to pronounce the word concerned. The fact that a different vowel is used in the possessive suffix is not mentioned in the rules at all. Rather, the different suffix vowels are considered as short

vowels at the ends of the underlying forms of the morphemes that are possessed. Rule one tells us that the second to last vowel of **luba**, **qadi** and **qamithu** will be long when these morphemes are pronounced alone, but short when they have a possessive suffix added. Rule two tells us that the **a** of **qadi** will be a light *ä* when the morpheme is pronounced alone, but plain *a* when it has a possessive suffix added. Rule three tells us that the *ii* of *qamiith*, when the word is possessed, will be dropped because it is between two syllables.

Note that by using underlying forms with short vowels we avoid the necessity of saying that in Yapese all major morphemes, and all words, must end in a consonant or a long vowel, but not a short vowel (see section 2.4). Written in these underlying forms, words will be able to end in a short vowel, and thus we will not need to make a special morpheme structure rule stating that morphemes cannot end in short vowels. We may simply say that a syllable may be CV(:)(C), that is, a consonant followed by a long or a short vowel, followed optionally by a consonant, and that all words consist of syllables. No special rule need be made about syllables at the ends of words.

Underlying Forms and Light Vowels

2.5.2 By using these underlying forms and these rules we will also, at least in many cases, avoid the necessity of differentiating between light and plain vowels. *Qaed* has light *ae* in the unpossessed form, but this *ae* becomes plain *a* when it is possessed, as *qadiig*, for example. This alternation of *ae* with *a* corresponds to those morphemes which have *i* in the suffix when possessed (also, as we shall see later, those with *u* in the suffix, as, for example, *waen'* 'his mind, feeling' versus *wun'uug* 'my mind, feeling', *wun'uum* 'your mind, feeling'). By writing *qaed* with an underlying form **qadi** (and *waen'* 'his mind' with an underlying form **wan'u**) we not only account for the fact that when they are possessed they have the suffix vowels *i* and *u* respectively, but also for the fact that when they are not possessed the *a* in each word is light *ae* rather than plain *a*. Therefore, by using these underlying forms we simplify, at least in some cases, the writing of Yapese vowels. As we shall see later in this section, we will be able to deal with a large number of light vowels in ways parallel to this.

Using underlying forms of this sort also enables us to avoid deciding whether to write palatalized consonants as different

phonemes. Recall that next to a light vowel a dental consonant is palatalized. An example is *d* in *qaed* 'liver', which is palatalized because the *ae* in front of it is a light vowel. We may add to our version of rule 2 the phrase: "and when an **a** gets changed into *ae* by this rule dropping short *i*, the dental or retroflexed consonant which is between the **a** and the **i** gets palatalized, and if the consonant before the **a** is dental or retroflexed (as in *raen* 'fresh water') it also gets palatalized."

If we do this, then both the "lightening" of the **a** of *qaed* and also the palatalization of the *d* in the word are results of the same process, namely the dropping of the **i** at the end of the word.

Naturalness of Underlying Forms

2.5.3 Yet another fact to be noted about these rules is that they are relatively natural. To illustrate the significance of this statement, consider the first set of underlying forms and rules suggested. If the underlying form for the suffix meaning 'my' is **-aag**, and the underlying form for the word for 'liver' is **qaed**, then the underlying form of *qadiig* 'my liver' will be written as **qaed + aag**.

We will then need a rule to shorten the vowel of **qaed** (and change the vowel to plain *a*), and also a rule to change the vowel of the suffix to *ii*. A rule to shorten a vowel of a syllable when another syllable follows it is quite common among the languages of the world, and is not a very unlikely thing to happen. But a rule to change **aa** to **ii** just after a certain list of major morphemes is entirely arbitrary.

On the other hand, in the system we are suggesting, *qadiig* 'my liver' would have the underlying form **qadi + gu**; and *qaed* 'liver' would have the underlying form **qadi**.

The rule dropping a short vowel at the end of a word and lengthening the preceding vowel is quite natural. Similar rules apply to other Micronesian languages, such as Trukese and Ponapean. The vowel of the suffix is actually considered not to be part of the suffix but part of the major morpheme itself. The fact that the suffix has a particular vowel, say *ii*, only after a particular list of major morphemes, is accounted for by spelling each major morpheme on that list with the vowel peculiar to it when it takes a suffix.

The second rule, which says that if the short vowel dropped was **i**, and the consonant in front of it was dental or retroflexed, then making the consonant palatalized and changing a preceding

a into light **ä**, is also very natural. The naturalness of this process may be seen by referring to the discussion of palatalization in section 2.3.18. There it was pointed out that a palatalized consonant was like a consonant that was pronounced with the tongue in the position of *i*. A palatalized consonant has an *i*-quality about it. Therefore, a rule which palatalizes a consonant based on the presence of an *i* would be a natural process. Likewise, the light vowels have a palatalizing effect on consonants, and this is explained if they are derived from underlying forms with *i*.

The third rule is also a natural rule, although it is less easy to explain why briefly. This third rule drops a short vowel when it has a vowel in a syllable on its left and another in a syllable on its right. In other words, a short vowel is dropped in the situation:

V C ___ C V

This sort of process is common in languages of the world. Furthermore, note that this rule is similar to another rule in Yapese, namely rule one which drops a short vowel at the ends of words. Dropping of short vowels in various conditions is a common linguistic process, and one which occurs in a number of different circumstances in Yapese.

Thus, we see that a third argument in favor of writing abstract underlying forms of the kind we are discussing is that these forms enable us to write rules which are descriptive of relatively natural processes.

Introduction to the Morphophonemic Rules of Yapese

2.5.4 The remainder of this section will be spent in describing some of the morphophonemic processes to be found in Yapese. These will be described in terms of underlying forms and the type of rule that we have been discussing thus far.

The particular underlying forms used will not always be fully explained. Certain aspects of some of the underlying forms will not always be completely described. Sometimes the process is too complex to warrant description, but more often it is because I do not fully understand the process. In some cases I have assumed the underlying form of a morpheme to have certain vowels, for example, when a slightly different underlying form might have worked as well. Some of these instances where an arbitrary decision had to be made will be discussed at the point they occur.

Not all of the rules that may be found in Yapese will be described. Some rules are limited in their application to only a particular small set of morphemes. These are sometimes called **nonproductive rules**. Most of these rules will be omitted, or mentioned only briefly. Sometimes we will simply state that a particular vowel change or similar effect is the result of a rule not mentioned. Some nonproductive rules will be illustrated by listing some of the morphemes involved in their different forms, but the rule itself will not be mentioned in any formal sense. Only the most important of Yapese morphophonemic rules will be discussed.

As will become clear, these underlying forms could, in principle, form the basis of a writing system for Yapese. This possibility will be mentioned at appropriate places in the discussion, with respect to particular types of underlying forms.

It should be realized that these rules are not what someone thinks you ought to do when you speak Yapese, but an attempt to describe the things that actually take place when you speak Yapese. If you conduct an experiment of lifting a stone and letting it fall, you will discover that every time you do so, the stone will drop to the ground rather than rise in the air. Thus, you can make a rule about stones: "When a stone is lifted up above the ground and let go, it drops." This statement is not a rule telling the stone what it should do, but a rule saying what stones actually do. In the same way, these morphohonemic rules of Yapese are not rules telling you how you ought to talk, but rules attempting to describe how you actually do talk. If you find that in certain respects your own speech differs from the rules in this book, this may be taken as evidence that it is the rules in the book which are incorrect, not your speech, and the fact is that there are no doubt a significant number of errors in this book.

The system of rules that will be described is very complex. This complexity is due to the fact that Yapese happens to have very complex morphophonemic processes. Probably of all the languages spoken in Micronesia, Yapese has the most complicated phonology. There is no way to simplify these rules while still remaining true to the facts of Yapese. You should realize this, and not be discouraged by the complexity of the rules involved.

It is also worth repeating that the underlying forms are abstract. That means that they do not correspond directly to

pronunciation. Recall the discussion of **rungaqag**. The **a** between the **ng** and the **q** represents the excrescent vowel ə in the morpheme when it is pronounced alone, but when it is pronounced in **marungaqagean**, the **a** represents a normal short *a*. This **a** is an abstract way of writing. It does not always represent the same sound. Sometimes it represents *a* and sometimes ə. For example, if we write **qadi** for *qaed* 'liver', the **i** on the end of the word represents an *i*-vowel when the word has a possessive suffix, as in **qadi+gu**, pronounced *qadiig* 'my liver'. In **qadi**, pronounced *qaed*, the **i** is not pronounced at all; but on the other hand its presence signals the fact that the *d* is palatalized and the vowel in front of the *d* is long light *ae*.

These rules are presented in a certain order. This order is not accidental. This order is not simply the clearest for understanding the rules. Rather, the order of the rules corresponds to the order in which they must be applied to underlying forms. An example will make this clearer. In discussing the underlying form of *qaed* and the rules necessary to describe its pronunciation, we stated two rules (rule 3 was not relevant to *qaed* and thus will not be mentioned here). Rule one stated that a word ending in a short vowel lost the short vowel and the preceding short vowel became long. In the form of a formula, we could write this rule as:

$$\text{-VCV\#} \rightarrow \text{-V:C\#}$$

In the formula, # marks the end of a sentence, or the place in a sentence where one may pause, as in pronouncing *qaed* by itself. We will use: to mark long vowels in formulas. V by itself will indicate a short vowel, and C will indicate a single consonant.

The second rule says that if the vowel that was lost is **i**, if the preceding consonant was a dental or retroflexed consonant, and if the vowel in front of that was **a**, then when the **i** is dropped the preceding consonant becomes palatalized and the **a** becomes light *ae*. In the form of a formula the rule is:

$$\text{-aDi\#} \rightarrow \text{-ä:D\#}$$

In the formula, D stands for any dental or retroflexed consonant. Note that we are using: rather than digraphs to represent long vowels.

Notice, however, that these rules are in the wrong order. They were described in the order given in the introductory part of this section because the first rule is more general and easier

to understand than the second. However, if the rules apply in this order to the underlying form **qadi**, we will not get the correct result. Starting with the form: **qadi#**, if we apply the first rule as it literally stands, we will get: /qa:d/.

This is not yet the correct form because the /a:/ is plain /a:/, not light /ä:/. But now the second rule cannot apply to /qa:d/ (which is the result of the first rule having applied to **qadi**), because the second rule applies only to morphemes ending in **-adi#**, whereas we now have a different form than this. The short **i** at the end of the word, which is required for the second rule to be able to apply, was removed by the first rule.

Suppose we simplify the second rule so that it says, "if you have a morpheme occurring just before pause, as at the end of a sentence or when pronounced alone, and it ends in **a** plus a dental or retroflexed consonant plus short **i**, then make the **a** into light /ä/, and palatalize the consonant." In formula form, the rule would be:

-**a**Di# → /-äDi#/ (the palatalization of the consonant represented by D is not indicated)

Now suppose that this rule applies first before the vowel-dropping rule. In other words, suppose that the two rules are ordered as follows:

Rule 1: -**a**Di# → /-äDi#/
Rule 2: -VCV# → -V:C#

and suppose we apply these two rules to the underlying form **qadi**. Applying the first rule to: **qadi#**, we have: /qädi#/; and then by applying the second rule to this form we have: /qä:d/, which is the correct form. Thus we see that by putting the rules in the correct order we are able to start with the underlying form and end up with the correct pronunciation; in addition, the form of the rules is also simpler when applied in the correct order. When the rule that palatalizes the **d** and lightens the **a** of **qadi** was applied second, it had to also mention the fact that the **a** in front of the **d** became long as well as light. Now that the palatalizing rule comes first, the lengthening of the **a** is taken care of by the second rule.

Therefore, the rules that will be discussed are considered to be ordered rules. However, in certain cases which will be pointed out, the correct ordering of the rules is not very clear. It should be realized that we are not suggesting that these rules

are actual mental processes that you perform in talking. These rules are not intended to describe the process by which you speak, but rather to describe the regularities in how you speak.

It deserves special mention at this point that the rules to be presented are largely taken from Dr. Robert W. Hsu's Ph.D. thesis, "Phonology and Morphophonemics of Yapese." It is with gratitude that I acknowledge this very important work and I am grateful to Dr. Hsu for his permission to use his system of rules. The primary exception between this book and Dr. Hsu's study is that Dr. Hsu does not analyze Yapese stress in any very complete way. (Stress refers to the loudness of a vowel, as in *marweel* 'work', where the last vowel is louder than the first. Stress is discussed in section 2.5.4.15.) For that reason, the discussion of stress in the rules which follow is less well worked out than the description of other processes.

The rules will be put into formulas such as those used above in describing the vowel lengthening rule and the palatalization/vowel lightening rule. This formula format is often helpful in seeing at a glance how a particular rule works.

The rules will be discussed in blocks of rules. All of the rules in a block have similar effects, some operating in different conditions than others. The rules in a block will be assigned a number. The number will be preceded by a capital letter, such as B, to indicate to which block the rule belongs. The numbering system corresponds to that used in Dr. Hsu's thesis, and there are some gaps in numbering, as I have left out some of his rules.

Note that in the underlying forms to be used it will sometimes happen that an underlying form will have two different vowel letters in a row, to be treated as a combination of vowels. Also, sometimes a grammatical morpheme ending in a vowel will be followed by a grammatical morpheme beginning with a vowel. In order to avoid the confusion that using digraphs (double vowel letters to represent long vowels) might cause, long vowels in this section will be written using the alternative writing system with a short vowel letter and the length mark :. Thus the pronounciation form (sometimes called the **surface form**) of **qaed** 'liver' will be written as /qä:d/.

The fact that some underlying forms have two vowels in a row illustrates the fact that the morpheme structure conditions which were discussed in section 2.4 will need to be modified slightly to describe the morpheme structure of underlying forms. The primary modification necessary to the morpheme structure

rules is that in underlying forms some major morphemes may have syllables containing two (but no more than two) vowels in a row, and in some cases syllables may end in a pair of consonants rather than just a single consonant. These cases will all be discussed more fully at the point they arise.

It may be briefly pointed out here that, since the new morpheme structure rules permit two vowels in a row, we could say that long vowels (except those which are derived from short vowels by a rule) could be derived from underlying forms with a double vowel, that is with two occurrences of the same vowel in a row, and we might then do away completely with the idea of long vowels in underlying forms. For example, a word like *baequud* 'light (in weight)' might have an underlying form **baaqudu**, where now the two **a**'s in a row are not simply a digraph for writing a long *a*, but represent the short vowel *a* occurring twice. This possibility will not be discussed further, however, because it has not been adequately studied in detail.

Morphophonemic Rules of Yapese: Vowel-Vowel Rules

2.5.4.1 The first group of rules to be discussed is that group that has to do with cases where two vowels come together. These rules will all have numbers beginning with the letter A, and will be called vowel-vowel rules, because they are rules having to do with the case when two vowels come together. (Not all cases of vowels coming together are covered by these rules. Some cases are described later in the semivowel rules in section 2.5.4.10)

RULE A1. The first rule, rule A1, is illustrated by the following sentences. The sentence:

Ka mu noeng.
'You swam.'

illustrates the fact that the underlying form of the morpheme *ka* meaning something like 'past tense' is **ka**; likewise, the underlying form of *nga* that means something like 'future tense' is **nga**, as in:

Nga mu noeng.
'You're going to swim.'

The following sentences illustrate the fact that the underlying form of the morpheme meaning 'he, she' is just the vowel **i**:

Baey i noeng.
'He will swim.'

Daah i noeng.
'He will not swim.'

However, when **ka** 'past tense' or **nga** 'future tense' come together with **i** 'he, she', the result can be illustrated by the following sentences:

Kea noeng. pronounced /ke: nö:ng/
'He swam.'

Ngea noeng. pronounced /nge: nö:ng/
'He's going to swim.'

Thus we see that when **a** plus **i** come together, they merge into one vowel, which is long /e:/ in the above examples. These two vowels also merge into long /ë:/ under certain conditions, as in the sentence:

Kea yaen. pronounced /kë:yä:n/
'He went.'

However, these latter cases will be treated as coming from /e:/ by the application of a later rule (one of the E rules in section 2.5.4.4) which lowers /e:/ to /ë:/.

Rule A1 may be written in formula form as:

A1 **ai-** → /e:/

The hyphen at the end of the **ai-** means that this rule applies when the **ai** does not come before the pause. When the **ai** is before the pause the result is different, and this difference is described in the L rules (section 2.5.4.10).

Another example of this rule operating is *feeng* 'to find something' from underlying form **fai+ng**. There are not many examples of this rule. Another possible example is the word which in some people's speech is pronounced *dayif*, while other people say *deef* 'house foundation'. We could say that the underlying form of this word is **daif**, and that different people use different rules for pronouncing it. Some people would have a rule putting a *y* between the **a** and the **i**, and say *dayif*, while others would follow the rule given here as rule A1 and say *deef*. Alternatively, we could say that the underlying form of the word was **dayif**, and that some people follow a rule which would come before rule A1 and which would drop **y** between **a** and **i**. Then rule A1 would merge the **a** and the **i** to give /e:/.

Even though rule A1 applies to only a few cases, we have listed it because the cases it applies to are very common words. Yet another example is the word **ma** 'then', as in:

Gu waarow nga Donguch, ma gamow guy.
'We (he and I) went to Donguch and saw him.'

The word **ma** combines with **i** to give /me:/ (or /më:/—compare the discussion of /ke:/ versus /kë:/ above), as in:

I yaen nga Donguch, mea guy. (*mea* pronounced /me:/)
'He went to Donguch and saw him.'

The *mea* in this sentence is derived from **ma** plus **i**.

RULE A2. The second A rule also does not apply to many morphemes, but those morphemes to which it does apply are very common ones. Rule A2 is illustrated by the following examples:

Ku mu marweel.
'You also worked.'

Ku ra marweel gow.
'They (two) also worked.'

Kii marweel.
'He also worked.'

Qu mu marweel.
'You used to work.'

Qu ra marweel gow.
'They (two) used to work.'

Qii marweel.
'He used to work.'

The rule is that short **u** plus short **i** before a consonant combine to make long /i:/. This rule can be expressed in formula form as:

uiC → /i:C/

It is necessary to state that this happens only before a consonant because the L rules (described in section 2.5.4.10) change **i** into /y/ after a vowel before a pause. Thus **u** plus **i** becomes /i:/ only before a consonant.

There are a few other processes of this type which will not be discussed because they are nonproductive—that is, they do not apply to many morphemes, nor do they apply to any common morphemes.

Ka to **ku**—Rule B

2.5.4.2 The B rule is a single rule that also applies to very few morphemes, but to very common ones. It is a vowel rule and may be illustrated by the following sentences:

Ka mu marweel.
'You worked.'

Ka ra marweel gow.
'They (two) worked.'

Ka da marweel gow.
'We (you and I) worked.'

Ku gu marweel.
'I worked.'

The last sentence above shows that **ka** changes to /ku/ before **gu** 'I'. This process depends in part on how fast you speak. In slow, careful speech you may actually pronounce this sentence as /ka gu marwe:l/, with a normal short *a* in *ka* and a normal short *u* in *gu*. However, in normal speech **ka** plus **gu** becomes /kug/, and some people sometimes actually spell this sentence as: *Kug marweel.*

The B rule, then, changes **a** into /u/ just before the morpheme **gu** 'I'. In formula form the rule is expressed as:

a+**gu** → /u+gu/

Sometimes also, in slow speech, the sentence:

Ngu gu marweel.
'I'm going to work.'

is pronounced /ngug marwe:l/, although usually it is pronounced /nggu marwe:l/, because the vowel of **nga** 'future tense' (which becomes /u/ by rule B) is dropped by one of the N rules (section 2.5.4.12).

a-Lightening Rules

2.5.4.3 The next set of rules are called **a-lightening rules**. That is, they are rules which change plain **a** into light /ä/ under certain conditions. These rules are designated by the letter D. These rules include the rule discussed in sections 2.5.1 through 2.5.4 which changes the **a** of the underlying form **qadi** into light *ae* in *qaed* 'liver'.

RULE D1. The first of the D rules may be illustrated by the following examples:

qaed	'liver'	*qadiig*	'my liver'
maen	'closed' from underlying form **ma+ni**—compare *niing* 'to close'		
waen'	'his mind'	*wun'uug*	'my mind'
qaer	'stirred up'	*qaruy*	'to stir up'

If we say that the underlying forms of the morphemes being discussed are:

qadi	'liver'
ma+ni	'closed'
wan'u	'mind'
qaru	'stirred up'

then we require a rule that states that a preceding **a** is lightened, and a dental or retroflexed consonant after the **a** is palatalized, when a word ends in short **u** or **i**. We will not state that the short **u** or **i** at the end of the word is dropped, or that the light /ä/ which results from this rule is made long at this point. A later rule, one of the F rules (section 2.5.4.5), will drop the final **i** or **u** and lengthen the preceding vowel.

In formula form this rule is:

aD(**i**, **u**)# → /äD(i, u)#/

We have stated in this rule that **a** is lightened. The fact that the intervening dental or retroflexed consonant (represented by D in the rule) is palatalized must be stated also, but for simplicity we will not do so in the spellings here.

This rule changes the above underlying forms as follows:

qadi	becomes /qädi/
ma+ni	becomes /mä+ni/
qaru	becomes /qäru/
wan'u	becomes /wän'u/

Note that the rule requires that the **-i** or **-u** which lightens a preceding **a** must be at the end of the word. This condition on the rule explains the fact that the *a* in *qadiig* 'my liver' is plain *a*, not light *ä*. The derivation of *qadiig* is as follows:

underlying form	**qadi+gu**	
Rule D1		does not apply, since the **-i** is not now at the end of the word
Later rules	**qadiig**	

Actually, it is difficult to decide if the *a* of *qadiig* is actually plain *a* or light *ä*. If it is light *ä*, then we do not need the # at the end of the formula version of this rule. In other words, we need not require that the rule only apply when the **-i** or **-u** is at the end of the word.

Given this rule, we will also be able to write a number of other words with underlying forms ending in **i** or **u**, and not write the *a*-vowel in these words as light *ae*. Then this rule predicts how to pronounce them. We do not know whether many of these forms should be written with a short **i** or a short **u** on the end. Some of them do not take possessive suffixes (like *qadiig* 'my liver') or other forms (like *qaruy* 'to stir up') which permit us to see the proper final vowel to write, whether **i** or **u**. Since **u** appears to be more common as a final vowel than **i**, when it is necessary to make an arbitrary decision between **u** and **i** as a final vowel, we will write **u**. However, in particular cases you may know that the word has, for example, a possessed form with *i* in the suffix (like *qadiig* 'my liver'), and then you will know that the underlying form of that particular word should be written with a final short **i** rather than **u**. Some examples of words like this in underlying forms and surface pronunciation are:

malu	'war'	pronounced *mael*
yal'u	'counter for bétel nut'	pronounced *yael'*
yaru	'knife'	pronounced *yaer*
yadu	'they (all)'	pronounced *yaed*

RULE D2. The second D rule, rule D2, is similar to the first one, except that here the **u** or **i** must come in the syllable before the **a** to be lightened, not after it as in D1. Examples of the effect of this rule are:

wulaeg	'my feather'
tinaeg	'my mother'
mitaeg	'my face'
mithaeg	'to hide'
binaew	'land'
buraeg	'butterfly'
fasiiraen	'the evening star'

The rule may expressed in formula form as:

(**u**, **i**)(:)D**a**C → /(u, i)(:)DäC/

Several things should be noted in the rule. It makes plain **a** into light /ä/ when **u** or **i** is in the syllable preceding the **a**. The **u** or **i**

may be either long or short, and this is the reason for the length mark (:) in parentheses after the **u**, **i**. The consonant between the **u** or **i** and the following **a** must be a dental or retroflexed consonant, represented by the D. And the **a** must be followed by a consonant. The reason that **a** must be followed by a consonant is to express the fact that the **a** must not be followed by the length mark :. The **a**'s in the above words are all long, it is true, but they are made long by the F rules (section 2.5.4.5). The underlying forms of all these words are:

wula+gu	'my feather'
tina+gu	'my mother'
mita+gu	'my face'
mitha+ge	'to hide'
binawa	'land'
burage	'butterfly'
fasi:rane	'evening star'

In each case the **a** which is lightened is short **a** in the underlying form. Some words have long **a**: in the underlying form, such as *finaath* 'to weave', *finaathiy* 'to weave', underlying forms **fina:th** and **fina:th+y**. We know that this *aa* is long in the underlying form because it does not become short *a* when it is not at the end of the word. Thus in *finaathiy* it is long *aa*. The word is not pronounced **finathiy* or **finthiy*. Recall that the words with a short vowel at the end of the underlying form, like *binaew* 'land', underlying form **binawa**, are pronounced with a short vowel when something else follows (as in *binuwaag* 'my land'—the **a** before the **w** has become *u* by a later rule). Such words are pronounced with a long vowel before pause. But *finaath* has long *aa* no matter what conditions it is pronounced in. The invariability of the length of the *aa* of *finaath* is explained on the basis of the fact that it has a long **a:** in its underlying form. Now note that although this **a:** is preceded by a dental consonant **n**, and that the **n** is preceded by **i**, nevertheless the **a:** of **fina:th** does not become light *ae*. That is, the word is not pronounced **finaeth*. This is the reason why rule D2 is restricted to apply only to short **a**'s.

A further restriction must be made on rule D2, and that is that the process only applies if the **a** to be lightened is not followed by an **a** in the next syllable at the end of the word. To illustrate this, consider the words *wulaeg* 'my feather' and *wulaan* 'his feather, its feather'. *Wulaeg* is derived from an underlying form

wula+gu. The word meets the conditions for rule D2. The **a** is preceded by a **u** with a dental consonant (**l**) intervening. The **a** is not followed by **a** in the next syllable. So rule D2 lightens it to *ä*, giving /wulä+gu/. Later rules change this to *wulaeg*.

Wulaan is derived from an underlying form **wula+na**. If we did not restrict rule D2 to operate only on an **a** that is not followed by **a** in the next syllable, then the first **a** of the word (which is preceded by **u** with a dental consonant between) would be lightened to give us /wulä+na/, and later rules would give us the incorrect form **wulaen*. With the restriction that rule D2 may not lighten an **a** that is followed by **a** in the next syllable, D2 will not apply to **wula+na**, and thus later rules will give us the correct form *wulaan*. Similar comments apply to *tinaeg* 'my mother' versus *tinaan* 'his mother'.

e-Lowering Rules

2.5.4.4 The following forms illustrate the operation of the E rules, called the **e**-lowering rules:

Kea feek. pronounced /ke: fe:k/
'He took it.'

Kea yaen. pronounced /kë: yä:n/
'He went.'

In the first example, *kea* (from **ka+i** with the application of rule A1 as described in section 2.5.4.1 above) is pronounced with light /e:/ before *feek*, which has light /e:/, whereas in the second example *kea* is pronounced /kë:/, with plain /ë:/, before *yaen*, which has *ae*, a low vowel. Another example of the operation of this rule is:

walaageeg	'my brother'
walaagean	'his brother'

from underlying forms:

wala:g+e+gu
wala:g+e+na

In *walaageeg* the suffix *-g* 'my', underlying form **-gu**, ends in **u**, and the **e** in front of it is pronounced as light /e:/. In the second form the suffix *-n* 'his' has underlying form **-na**, ending in **a**, and the **e** in front of it is pronounced as plain /ë:/.

RULE E1. Rule E1 changes light **e** into plain /ë/ when the

next vowel after the **e** is a low or lower mid vowel, that is **a**, **ä**, **o** or **ë**. This rule applies to some very common morphemes, such as the morpheme *ea* in:

boech ea mareaw pronounced /bö:ch ë: marë:w/
'some copra'

boech ea neeng pronounced /bö:ch e: ne:ng/
'some mosquitoes'

In the first example above the *ea* comes before *mareaw* which has *a*, a low vowel, in the first syllable, and so rule E1 states that the morpheme is pronounced /ë:/. In the second example *ea* comes before *neeng*, with the mid vowel /e:/ in the first syllable, and so the morpheme *ea* is pronounced as /e:/. In normal writing *ea* is always written *ea*, not *ee*, so that it can be written the same way in every instance; but *ea* actually is pronounced in these two different ways, depending on the following vowel.

No formula will be given for rule E1 since it is clear how it works. For various technical reasons the precise formula that would have to be given is somewhat complicated.

RULE E2. Rule E2 is like rule E1 in that it lowers light **e** to plain /ë/. However, whereas E1 lowered **e** when the following vowel was a low or lower mid vowel **a, o, ä** or **ë,** rule E2 lowers **e** when the preceding vowel is one of these four low or lower mid vowels. Examples are:

chaefeag 'to turn something'
gargealeag 'to give birth'
m'areag 'my vehicle, canoe'

Again, the exact formula for this rule will not be given as it is rather complicated. For example, the rule must not apply to *walaag* 'friend, brother', underlying form **wala:g**, before **e+gu**, to give the incorrect pronunciation **walaageag*. The reason that it does not apply to this form, *walaageeg*, is that the underlying form of *walaag*, namely **wala:g**, does not end in a short vowel. We must restrict rule E2 to conditions in which the low vowel which lowers a following **e** is not long. Conditions like this are complicated and make the formula for the rule complicated. Basically, this rule changes **e** to /ë/ when the vowel in front of the **e** is a low or lower mid vowel.

Loss of Final Short Vowels

2.5.4.5 The three F rules are the rules that do the work of ensuring that

the vowel of a word such as *qaed* 'liver' is long when it is pronounced alone, but that it is short when some other morpheme follows it. Thus *qaed* has a long vowel, but in *qadiig* 'my liver' the *a* has become short. More examples of the results of this very common and important process are:

feal' 'good' from **fël'e**
fal'eag 'to fix' from **fël'e+e+ge**

yangaar 'age' from **yangare**
yangrean 'his age' from **yangare+e+na**

mool 'to sleep' from **mole**
maleag 'to put to sleep' from **mole+e+ge**

In the above examples, the words *feal'* 'good', *yangaar* 'age' and *mool* 'to sleep' all end in a syllable with a long vowel. However, when they have a suffix added to them, as in *fal'eag* 'to fix', *yangrean* 'his age' and *maleag* 'to put to sleep' then the vowel that was long becomes short (in *feal'*/*fal'eag* and *mool*/*maleag* the vowel also changes to *a*. This change will be explained in a later rule). All of these words have an underlying form with a short vowel in the first syllable and a short vowel at the end of the word. *Qaed* 'liver'/*qadiig* 'my liver', *luub* 'breath'/*lubaag* 'my breath', and *qamiith* 'pain'/*qamthuug* 'my pain', discussed in section 2.5.4, are also examples of this same phenomenon.

Other words have a long vowel when they are pronounced alone, and the long vowel does not become short when another morpheme follows the word. Examples are:

yiil 'bone' from **yi:l**
yiilean 'his bone' from **yi:l+e+na**
meel 'rope on sail' from **me:l**
meeliy 'to pull on rope' from **me:l+y**
walaag 'brother' from **wala:g**
walaageeg 'my brother' from **wala:g+e+gu**

All of these words have an underlying form with a long vowel. This vowel is thus long everywhere, whether it is followed by another morpheme or not.

RULE F1. Three rules are needed to describe these facts. One rule, F1, drops a short vowel at the end of a morpheme before another morpheme which begins with a consonant followed by a vowel followed by another consonant. These expressed in formula form as:

V(:)CV + CV(:)C → V(:)C + CV(:)C

For example, this rule applies to *luub* 'breath', underlying form **luba**, with suffix *-daed* 'our (I and you all)', underlying form **-dadu**. This combination has the underlying form **luba + dadu**. First, rule D1 described above lightens the **a** of the suffix, because it is followed by a dental consonant (**d**) which is followed by **u**. Applying D1 thus gives us:

underlying form	**luba + dadu**
Rule D1	/luba + dädu/

Next rule F1, the rule being discussed, applies to the **a** of **luba**, dropping this **a**. Thus our form becomes: /lub + dädu/.

However, there is still the *u* remaining at the end of the suffix. This *u* will be taken care of by rule F3, to be described shortly, and the result will be the correct form: /lubdä:d/

RULE F2. Rule F2 drops a short vowel at the end of a morpheme if another vowel follows. This is shown in formula form as:

-CV + V → -C + V

An example is the word *fal'eag* 'to fix'. The underlying form of this word is: **fël'e + e + ge**.

(The morphemes **e** and **ge** will be discussed in chapter 3.) The **e** at the end of **fël'e** 'good' now comes before a vowel, and so it is dropped by rule F2, and the form becomes: /fël' + e + ge/.

Rule E2, discussed above in section 2.5.4.4, now lowers the /e/ which follows /fël'/ to /ë/, because /fël'/ has a lower-mid vowel (/ë/), giving: /fël' + ë + gë/.

Rule F3, which is about to be discussed, will then drop the /ë/ from the end of /gë/, and lengthens the /ë/ in front of it, and gives us: /fël'ë:g/.

Finally, rule G3 to be discussed in section 2.5.4.6, changes the short /ë/ at the beginning of /fël'ë:g/ to short /a/ in this position, giving us: /fal'ë:g/, which is the correct form.

RULE F3. Rule F3 has already been mentioned twice. It drops a short vowel at the end of a word and makes the vowel in front of it long. In formula form it is expressed as:

-VCV# → -V:C#

A brief word should be said about words with underlying forms ending in short **e**. This is the vowel I have chosen to write in the underlying forms such as **mile** for *miil* 'to run' because it

is a neutral vowel. The vowels **u** and **i**, as has been seen in connection with the D rules (section 2.5.4.3), have a palatalizing effect on dental and retroflexed consonants next to them, and they cause **a** to be lightened to /ä/. As we saw in the E rules (section 2.5.4.4), **a** has a lowering effect on **e**, as in *walaageam* 'his brother', from underlying form **wala:g + e + na**. As will be discussed in the J rules (section 2.5.4.8), o causes **a** to become /o/, as in *moqoloy* 'to peel', underlying form **ma + qoloi**. But **e** is a neutral vowel and does not seem to affect vowels near it. So in cases like *miil* 'to run' when we do not have any direct evidence for what the final short vowel should be, I have chosen to write it as **e**.

Vowel Reduction

2.5.4.6 The G rules are those for vowel reduction. These are rules which change the short vowels /e/, /ä/, /ö/, /ë/ and /o/ into /i/, /u/ and /a/ under various conditions. They are called reduction rules because they reduce all eight short vowels to just three under the appropriate conditions.

RULE G1. The first rule, G1, changes **e** to /i/ before **q** which is followed by **i**. An example is *pardeq* 'to pound', with underlying **e** in the second syllable, which becomes /i/ in *pardiqiy* 'to pound something'.

RULE G2. Rule G2 changes **e** to /u/ before **w** which is followed by a vowel. An example is *cheew* 'type of net', with underlying form **chewa**, but possessed form *chuwaag* 'my net'. These two pronunciations are derived in the following way:

underlying forms	**chewa**	**chewa + gu**
Rule F3	/che:w/	/chewa:g/
Rule G2		/chuwa:g/

RULE G3. Rule G3 changes **e** or **ë** into /a/ before a consonant and a following vowel. An example is *nifeeng* 'wind' compared with its possessed form *nifangiin* 'its wind, wind caused by it'. These two pronunciations are derived in the following way:

underlying forms	**nifengi**	**nifengi + na**
Rule F3	/nife:ng/	/nifengi:n/
Rule G3		/nifangi:n/

An example of the same rule G3 applying to **ë** is *feal'* 'good' compared with *fal'eag* 'to fix something', which are derived in the following way:

underlying forms	**fël'e**	**fël'e+e+ge**
Rule E2	/fël'ë/	/fël'ë+ë+gë/
Rule F2		/fël'+ë+gë
Rule F3	/fë:l'/	/fël'ë:g/
Rule G3		/fal'ë:g/

RULE G4. Rule G4 changes **o** to /a/ before a consonant followed by a vowel. An example is *k'oong* 'throat' compared with its possessed form *k'angaag* 'my throat'. It is derived in the following way:

underlying forms	**k'onga**	**k'onga+gu**
Rule F3	/k'o:ng/	/k'onga:g/
Rule G4		/k'anga:g/

RULE G5. Rule G5 changes **ö** to /a/ before a consonant followed by **ë**. An example is *qupoeng* 'cover' compared with *qupangean* 'its cover', derived in the following way:

underlying forms	**qupönge**	**qupönge+e+na**
Rule E1		/qupöngë+ë+na/
Rule F2		/qupöng+ë+na/
Rule F3	/qupö:ng/	/qupöngë:n/
Rule G5		/qupangë:n/

RULE G6. Whereas Rule G5 changed **ö** to /a/ before a consonant followed by **ë**, rule G6 changes all other **ö** 's followed by a consonant followed by a vowel other than **ë** into /u/. An example is *qoeng* 'grass skirt' compared with its possessed form *qunguun* 'her grass skirt', which is derived as follows:

underlying forms	**qöngu**	**qöngu+na**
Rule F3	/qö:ng/	/qöngu:n/
Rule G6		/qungu:n/

RULE G7. Rule G7 changes **a** into /u/ when the **a** has **w** on its left and is followed by a consonant and a vowel. An example of this rule is *waen'* 'his mind' compared with *wun'uug* 'my mind', which is derived as follows:

underlying forms	**wan'u**	**wan'u+gu**
Rule D1	/wän'u/	

Rule F3	/wä:n'/	/wan'u:g/
Rule G7		/wun'u:g/

RULE G8. Rule G8 (the last of the G rules) changes **ä** into /i/ before a consonant and a vowel. An example is *fael* 'to open' compared with the pronunciation of this word in the sentence:

Ka ra fäleed. pronounced /kar file:d/
'They all opened it.'

We do not give a derivation of this phrase since, being a phrase and not a single word, it would be rather complicated. However, all the rules necessary have already been given. The vowel of *fael* is derived from the underlying form **fäle**, and is changed to /i/ by rule G8.

Final Consonant Clusters

2.5.4.7 The H rules are rules for words whose underlying forms end in a group of two consonants. Some examples of words to which the H rules apply are:

rogon	'its way'
rogog	'my way'
suwon	'his authority'
gösög	'my work'
gasag	'my mistake, my trespass'

Notice that in all of these possessed words, the vowel before the **-g** suffix meaning 'my' or the **-n** suffix meaning 'his' or 'its' is short. This is in contrast with the great majority of possessed nouns, which have a long vowel in this position, as for example:

lunguun	'his voice'
walaagean	'his brother'
mitaeg	'my eye'
wun'uug	'my mind'
qamthuun	'his pain'

In the usual case, as for example *lunguug* 'my voice', the underlying form of the noun ends in a short vowel. Thus *lunguug* is derived from the underlying form **lungu** with the suffix **-g** 'my', underlying form **-gu**, added. The fact that all these forms end in a syllable with a long vowel is because the nouns themselves have underlying forms ending in a short vowel, and the suffixed

-gu 'my' or **-na** 'his' end in a short vowel. Rule F3 drops the short vowel of the suffix and makes the short vowel at the end of the noun into a long vowel. Thus *lunguug* 'my voice' is derived from **lungu** 'voice' and **-gu** 'my'. Rule F3 drops the **u** of **-gu** and makes the **-u** at the end of **lungu** into long /u:/, and thus we have /lungu:g/.

Words like *walaag* 'friend, brother' have underlying forms not ending in a short vowel. However, this word, when it is possessed, has a short morpheme **-e-** inserted between the word *walaag* and the suffix, such as **-gu** 'my'. This morpheme **-e-** will be discussed from a grammatical point of view in chapter 3. For now, however, it is enough to say that when *walaag* is possessed it does have a short vowel, namely this short **-e-** morpheme, between the consonant at the end of *walaag* and the possessive suffix. The underlying form of *walaageeg* 'my brother' is **wala:g**+**e**+**gu**. Rule F3 drops the u at the end of **-gu**, and makes the **e** in front of it into long /e:/, and so we have *walaageeg*.

In summary, we see that most possessed nouns, when they are possessed, have a long vowel in the last syllable and this long vowel derives from a short vowel at the end of the underlying form of the noun. The words listed above which have a short vowel in the last syllable when possessed must therefore not be derived from words with underlying forms ending in a short vowel. For example, suppose that the underlying form of *rogog* 'my way' were: **rogo**+**gu** then Rule F3 would drop the **u** at the end of the word, and would change the **o** in front of it to long /o:/, and we would have the incorrect form: */rogo:g/, with a long /o:/.

What we do to solve this problem is to suggest that the underlying form of *rogog* does not have a short vowel at the end of the noun, but rather that the underlying form of *rogog* is: **rog**+**gu**. Now rule F3 (in a slightly modified form) drops the final **u** of this word, but there is no preceding short vowel to lengthen, so it just leaves us with: /rog+g/. However, you cannot pronounce /rogg/, so a rule (rule H3 below) inserts a short /o/ between the two /g/'s, giving us: /rogog/, which is the correct form. Likewise, *rogon* 'its way' is derived from the underlying form **rog**+**na** in following way:

underlying form	**rog**+**na**
Rule F3	/rogn/
Rule H3	/rogon/

RULE H1. The first of these rules to be discussed is H1, which inserts short /u/ between two consonants at the end of a word when a **u** precedes the first of the two consonants, and the last consonant is not a dental or retroflexed consonant. This rule can be shown in formula form as:

u(:)CC# → /u(:)CuC#/

provided that the second C is not a dental or retroflexed consonant

An example of H1 is *bug* 'to bend' compared with *buguy* 'to bend something'. If the underlying form of *bug* is **bugu**, then we expect it to be pronounced not *bug* (with short /u/) but *buug*, with long /u:/, which is incorrect. On the other hand, if the suffix ending in *y* has underlying form **-uy**, we cannot explain why the same suffix is pronounced **-iy** in, for example, *chibiy* 'to lift something'. We could say that the underlying form of the suffix is **-iy**, and then have a rule to change **i** into /u/ when the preceding syllable contains **u**. However, then we would not be able to explain why the *i* in *quchif* 'coconut sheath' does not change to /u/. Therefore, we say that the underlying form of *buguy* is **bug**+**y**. Then rule H1 inserts /u/ between the **g** and the **y**.

Another example of a form resulting from rule H1 is *guruf* 'to stir'. *Gurfiy* 'to stir something' does not have a vowel between the *r* and the *f*. If we say that the underlying form of *guruf* is **gurf**, then, since **f** is not a dental or a retroflexed consonant, rule H1 will correctly insert /u/ between the **r** and the **f** of the word when it is pronounced alone. On the other hand, in *gurfiy*, from underlying form **gurf**+**y**, the pair of consonants **r** and **f** do not come at the end of the word and so rule H1 does not insert a /u/ between the **r** and the **f**. A later H rule, rule H7, will insert /i/ between the **f** and the **y** in **gurf**+**y** to give *gurfiy*.

RULE H2. Rule H2 inserts /o/ between two consonants at the end of a word under the following conditions:

(1) The vowel before the two consonants is **u** and
either (a) the first consonant is a velar consonant or **w** and the second consonant is any consonant at all; or
(b) the first consonant may be any consonant, but the second consonant must be a dental or retroflexed consonant.

In formula form, rule H2 is:

u(:)CC# → /u(:)CoC#/

provided that either the first C is a velar consonant or **w** or else the second consonant is a dental or retroflexed consonant

One example of this rule is the word *suwon* 'his authority', which is derived from the underlying form **suw+na** in the following way:

underlying form	**suw+na**
Rule F3	/suw+n/
Rule H2	/suwon/

RULE H3. Rule H3 inserts /o/ between two consonants at the end of a word when the vowel preceding the two consonants is **o**. An example is *rogog* 'my way', derived from the underlying form **rog+gu** in the following way:

underlying form	**rog+gu**
Rule F3	/rog+g/
Rule H3	/rogog/

RULE H4. Rule H4 inserts light /ö/ between two consonants at the end of a word when the preceding vowel is light **ö**. An example is *gösög* 'my work', derived from the underlying form **gös+gu** in the following way:

underlying form	**gös+gu**
Rule F3	/gös+g/
Rule H4	/gösög/

RULE H5. Rule H5 inserts /a/ between two consonants at the end of a word when the preceding vowel is **a**. An example is *gasag* 'my error, my trespass', derived from the underlying form **gas+gu** in the following way:

underlying form	**gas+gu**
Rule F3	/gas+g/
Rule H5	/gasag/

RULE H6. Rule H6 inserts /i/ between a consonant and **y** at the end of a word if the preceding vowel is a front vowel (**i**, **e** or **ë**, long or short) or light **ä**, long or short. In formula form this rule would appear as:

V(:)Cy# → /V(:)Ciy#/

provided that the V is **i**, **e**, **ë** or **ä**

An example of H6 is *chaef* 'to turn' compared with *chaefiy* 'to turn something'. *Chaefiy* is derived from the underlying form **chä:f+y** in the following way:

underlying form	**chä:f+y**
Rule H6	/chä:fiy/

RULE H7. Rule H7 inserts /i/ before **y** at the end of a word if there are two consonants in front of the **y**. An example is *gurfiy* 'to stir', derived from the underlying form **gurf+y** in the following way:

underlying form	**gurf+y**
Rule H7	/gurfiy/

Vowel Agreement Rules

2.5.4.8 The J rules are vowel agreement rules. That is, they are rules that cause a vowel to agree with (that is, to be pronounced more like) a vowel in the next syllable. In many of these cases the consonant between the two vowels is the glottal stop **q** or a semivowel **y** or **w**.

RULE J1. J1 states that a short **u** becomes /i/ when it is before glottal stop followed by **i**. The rule in formula form is expressed as:

uqi → /iqi/

An example is the sentence:

Ki qii marweel.
'He used to work.'

derived from the underlying form:

ka + qu + i + marwele

in the following way:

underlying form	**ka + qu + i + marwele**
a rule not discussed	/ku + qu + i + marwele/
Rule A2	/ku + qi: + marwele/
Rule F3	/ku + qi: + marwe:l/
Rule J1	/ki + qi: + marwe:l/

RULE J2. Rule J2 changes a short **a** into /e/ before a glottal stop followed by **e**. An example is the following sentence:

Ke qea miil. pronounced /keqe: mi:l/
'He ran first.'

which is derived from the underlying form **ka + qa + i + mi:l** as follows:

underlying form	**ka + qa + i + mi:l**
Rule A1	/ka + qe: + mi:l/
Rule J2	/ke + qe: + mi:l/

RULE J3. Rule J3 is like rule J2 but changes **a** into /ë/ before a glottal stop followed by **ë**. An example is the sentence:

Ke qea noon. pronounced /kë që: no:n/
'He talked first.'

derived from the underlying form **ka + qa + i + nona** as follows:

underlying form	**ka + qa + i + nona**
Rule A1	/ka + qe: + nona/
Rule E1	/ka + që: + nona/
Rule F3	/ka + që: + no:n/
Rule J3	/kë + që: + no:n/

RULE J4. Rule J4 changes **a** into /o/ before **w**. An example of the results of this rule is in the words *mat'aaw* 'right' and its possessed form *mat'owaag* 'my right'. These words are derived as follows:

underlying forms	**mat'awa**	**mat'awa+gu**
Rule F3	/mat'a:w/	/mat'awa:g/
Rule J4		/mat'owa:g/

RULE J5. Rule J5 changes **ö** into /o/ when the preceding syllable contains **a** followed by a stop or a glottalized consonant. In formula form the rule is expressed as:

aCö → /aCo/
provided that the C is a stop or a glottalized consonant

Some examples of words resulting from this rule are *mokool* 'a catch, as of fish', from the underlying form **ma+kö:l** (compare *koel* 'to catch'), and *mol'oog* 'to take a step' from underlying form **ma+l'ö:g** (compare *l'oeg* 'to take a step').

Some other J rules are necessary to explain the /o/'s in words like *moqoloy* 'to peel' from *qoloy* 'to peel something', *mogochoth* 'torn' (compare *guchthiy* 'to tear'), *moqoruf* 'burnt' (compare *quruf* 'to burn'). These are rules changing **a** into /o/ under certain conditions, and they will not be explained here as they are somewhat complicated and apply to only a small number of forms.

Semivowels at Ends of Words

2.5.4.9 The K rules are connected with the pronunciation of **y** and **w** at the ends of words. Some words ending in **y** or **w** lose the **y** or the **w** when a word beginning with a consonant follows them. When this happens, the vowel in front of the **y** or **w** becomes long. Some examples of this are:

niiw neam 'that coconut tree'	pronounced /ni: në:m/
lay neam 'that half'	pronounced /lë: në:m/
waey neam 'that basket'	pronounced /wä: në:m/

Some other words ending in **y** and **w** do not lose the **y** or **w** before another word beginning with a consonant. Examples of these words are:

riiw neam 'that mangrove'	pronounced /ri:w në:m/
yalay neam 'that vine'	pronounced /yalay në:m/
raay neam 'that whale'	pronounced /ra:y në:m/

These classifications are not perfect, and certain words are pronounced by some people without their final **y** or **w** before consonants, and by other people with their final **y** or **w**. An example is *k'aay* 'octopus'. Some people would say *k'aay neam* as /k'a:y në:m/ while others would pronounce it as /k'a: në:m/ 'that octopus'. Nevertheless, the majority of words ending in **y** or **w** belong to one or the other of the two groups.

In order to explain the difference in behavior of **y** and **w** in these two groups of words, we write those words that do drop final **y** or **w** with underlying forms ending in **y** or **w**, respectively. But those words that do not drop the final **y** or **w**, we write with the underlying forms ending in **i** or **u.** In other words, for example,

the *w* of *niiw* 'coconut' is dropped when a consonant follows. One says *niiw neam* 'that coconut' as /ni: në:m/. So the underlying form of *niiw* is **niwa**, with *w*. *Riiw* 'type of mangrove', on the other hand does not lose its /w/ before a consonant. *Riiw neam* 'that mangrove', is pronounced /ri:w në:m/. Therefore its underlying form is **ri:u**. The K rules then explain the dropping of **y**'s and **w**'s with lengthening of the preceding vowel, while the L rules explain the change of underlying forms like **ri:u** into a surface form /ri:w/, with a /w/ on the end that does not drop before a consonant.

RULE K1 AND K2. Rule K1 changes **a** into /ë/ before **y** followed by a consonant. Rule K2 drops **y** or **w** between a vowel and a consonant, making the vowel long if it is short in the underlying form.

In formula form these two rules are:

K1 **ay**C → /ëyC/

K2 V(:)(*y*,*w*)C → V:C

Some examples of these two rules in operation are the following. The first example is the derivation of *binaew* 'land, village' and of *binaew roog* 'my village', pronounced /bine: rö:g/:

underlying forms	**binawa**	**binawa + ro + gu**
Rule D2	/binäwa/	/binäwa + ro+gu/
Rule F1		/binäw + ro+gu/
Rule F3	/binä:w/	/binäw + ro:g/
Rule K2		/binä + ro:g/
Rule Q2 (not yet given)		/binä: + rö:g/
Rule S1 (not yet given)		/bine: + rö:g/

A second example is the word *paalay* 'coconut leaf' compared with the phrase *paalay roog* 'my coconut leaf', pronounced /pa:lë:ro:g/, derived as follows:

underlying forms	**pa:lay**	**pa:lay + ro+gu**
Rule F3		/pa:lay + ro:g/
Rule K1		/pa:lëy + ro:g/
Rule K2		/pa:lë: + ro:g/

Semivowel Rules

2.5.4.10 The L rules insert /y/ and /w/ under various conditions. Some

L rules are necessary to explain the *y* in words like *yoeg* 'to say', as in the sentence:

kea yoeg.
'He said it.'

compared with a sentence such as:

Ka moeg.
'You said it.'

in which *moeg* 'you said it' is derived from an underlying form **mu+ö:g**. The L rules also explain the *w* in *soeweeg* 'to split something' compared with *seey* 'to split'. These rules apply only to a few forms and are somewhat complicated, and will not be described formally here. The few verbs like *yoeg* 'to say' and *yoen*^{1} 'to throw' (compare *muun*^{1} 'you threw it') will be discussed in chapter 3.

RULES L1 AND L2. The two L rules which will be described here are rules L1 and L2. As mentioned in section 2.5.4.9, some words drop a *y* or *w* at the end of a word before a consonant, while lengthening the vowel (like *niiw neam* 'that coconut tree', pronounced /ni: në:m/). Some other words, such as *raay* 'whale' do not drop *y* or *w* before a word beginning with a consonant follows (for example, *raay neam* 'that whale', pronounced /ra:y në:m/). Words of the latter type have an underlying form ending in **i** or **u**, for example **ra:i** 'whale' and **ri:u** 'type of mangrove'. Rule L1 then changes **i** into /y/ when it is after a vowel and before a following consonant, or at the end of a word before a pause. Rule L2 changes **u** into /w/ under the same conditions. These rules are expressed in formula form as:

L1 V(:)**i**# → /V(:)y#/

L2 V(:)**u**# → /V(:)w#/

Examples of these two rules in operation are:

underlying forms	**ra:i**	**ra:i + nema**
Rule E1		/ra:i + nëma/
Rule F3		/ra:i + në:m/
Rule L1	/ra:y/	/ra:y + në:m/

underlying forms	**n'e:u**	**n'e:u + nema**
Rule E1		/n'e:u + nëma/
Rule F3		/n'e:u + në:m/
Rule L2		/n'e:w + në:m/

Vowel Insertion Rules

2.5.4.11 The M rules, like the H rules, insert vowels between certain pairs of consonants under certain conditions. These rules will not be discussed here because they apply only to a few words, and there are certain difficulties connected with them and their formulation. These would be the rules which would explain, for example, the first vowel in *gamow* 'we (he and I)', *gimeew* 'you two' and *gadow* 'we (you and I)'. These pronouns will be discussed in chapter 3.

Vowel Loss between Homorganic Consonants

2.5.4.12 Two consonants are said to be **homorganic** if they are pronounced in the same position in the mouth. For example, *p*, *p'*, *b*, *f*, *f'*, *m* and *m'* are all homorganic with one another, being all labial. Dentals and retroflexed consonants are all considered to be homorganic with each other because they are all made with the tip of the tongue. And velar consonants are all homorganic with each other.

The N rules cause certain short vowels to be dropped between homorganic consonants under certain conditions.

RULE N1. N1 causes a short vowel to be dropped between two consonants at the beginning of a word if the first of the two consonants is a voiced obstruent (**b**, **d**, **j** or **g**), a nasal (**m**, **n** or **ng**) or a liquid (**l** or **r**) and the second consonant is homorganic to the first. In formula form this rule would appear as:

(**b**,**d**,**j**,**g**,**m**,**n**,**ng**,**l**,**r**)VCV → / # (b,d,j,g,m,n,ng,l,r)CV/
if the C after the first V is homorganic with the first C

Examples are:

Ba puw. pronounced /bpuw/
'It's a bamboo.'

Ba maab. pronounced /bma:b/
'It's a door.'

Gaeg ea gu feek. pronounced /gge: gufe:k/
'I'm the one who took it.'

Mu feek. pronounced /mfe:k/
'Take it.'

Ni teel. pronounced /nte:l/
'It was pulled.'

radaan pronounced /rda:n/
'its width'

It is this rule which enables us to write words such as *rchaq* 'blood' as *rachaq*, *ggaan* 'food' as *gagaan*. These words always begin with pairs of consonants that match the conditions of rule N1, and so if the underlying form of *rchaq* is **rachaq**, rule N1 automatically tells us how to pronounce it.

RULE N2. Rule N2 is similar to rule N1 except that rule N2 applies to short vowels between pairs of consonants in the middle of words rather than at the beginnings of words. Under these conditions, a short vowel is dropped between two consonants if the two consonants: (1) Meet the conditions of being homorganic in the sense of N1, or (2) If the first of the two consonants is a semivowel and the second consonant is any consonant at all. In formula form, rule N2 is:

V(:)CVCV → /V(:)CCV/
provided that the two consonants meet one of the two conditions above.

Some examples of rule N2 in operation are as follows:

k'uynguug 'my fingernail'

underlying form	**k'uyungu + gu**
Rule F3	/k'uyungu:g/
Rule N2	/k'uyngu:g/

qalangngeeg 'my headache'

underlying form	**qalangenge + e + gu**
Rule F2	/qalangeng + e + gu/
Rule F3	/qalangenge:g/
Rule N2	/qalangnge:g/

qalitean 'its dirt' pronounced /qaltean/

underlying form	**qalit + e + na**
Rule E1	/qalit + ë + na/
Rule F3	/qalit + ë:n/
Rule N2	/qaltë:n/

Consonant Agreement in Rapid Speech

2.5.4.13 The P rules explain the fact that, at least in speech at normal rates of speed, some consonants are made to agree with other consonants next to them. Some examples are:

Nga da cheeleegeew. pronounced /ngachche:le:ge:w/
'We (you and I) are going to turn it.'

Ka da tal gow, pronounced /kattalgow/
'We (you and I) stopped.'

piyaan loelugean pronounced (piyallö:lgë:n/
'the hair of his head'

In other words, in the first example above the *d* of *da* 'we' has changed into *ch* before the *ch* of *cheeleeg* 'to turn something'. In the second example, the *d* of *da* 'we' has changed into *t* before the *t* of *tal* 'to stop'. And in the third example the *n* at the end of *piyaan* 'its hair' has changed into *l* before the *l* of *loelugean* 'his head'. These rules apparently apply only in moderately rapid speech. The rules themselves will not be given as they are not of great importance, but it may be seen from the examples what rules would be necessary.

o-Lightening Rules

2.5.4.14 The Q rules change plain **o** into light /ö/ when it is separated from one of certain light vowels by a dental or retroflexed consonant. Q1 lightens **o** when light **ö** follows, and Q2 lightens **o** when **i**, **ä** or **u** precedes the **o**. In formula form these rules are:

Q1 **oDö** → /öDö/ (D represents a dental or retroflexed consonant)

Q2 **(i,ä,u)** (:) (D) **Do** → /(i,ä,u) (:) (D) Dö/

RULE Q1. An example of the use of rule Q1 is *qoloey* 'to peel something', pronounced /qölo:y/, with the underlying form **qoloi + y**. The second o in the word is made into light /ö/ by a rule which will not be discussed (because its conditions are not understood), and then the first **o** is made into light /ö/ by rule Q1.

An example of rule Q2 is *wael roog* 'my boxfish', pronounced /wä:l rö:g/, derived from the underlying form **wä:l ro + gu**. The word **ro + gu** becomes /ro:g/ by rule F3, and then rule Q2 lightens the /o:/ of /ro:g/ to /rö:g/ because it follows the light **ä**: of **wä:l**, with the dental consonant **l** and the retroflexed consonant **r** between.

Stress

2.5.4.15 In the word *chibiy* 'to lift something', the second syllable is louder and easier to hear than the first syllable. The loudest and most noticeable syllable of a word is called the **stressed syllable** of the word. Stress in Yapese is not well-understood. Words ending in a syllable with a long vowel, followed by a syllable with a short vowel are stressed on the long vowel. An example is *sáalap* 'expert', where the accent mark is placed over the stressed syllable. (This mark is called an **acute** accent.) Words ending in a long vowel, such as *deengkii* 'electricity', are stressed on the syllable before the final long vowel. Thus *déengkii* is stressed, as indicated, on the first syllable. Other words in Yapese are stressed on the last syllable of the word. These words all have stress on the last syllable of the word, as indicated by the acute accent mark:

chibíy	'to lift'
paqág	'my hand'
moeróes	'savage'
	'to press'
m'agpáaq	'wedding'
rogón	'its way'

Words with more than two syllables may have what are called **secondary stresses** (vowels that are more prominent than their neighbors but not as loud as the main stressed vowel in the word) on vowels other than the vowel of the main stressed syllable. That is, one syllable will have the main stress (marked with an acute accent) according to the above rules, and then another syllable earlier in the word will be not quite as loud as this main stressed syllable, but louder than the other syllables next to it. This syllable earlier in the word is said to have secondary stress and is marked with the mark ` (called a grave accent). An example is the sentence:

Màa marwéel.
'He (usually) works.'

Long vowels generally get such secondary stress. So *moeroes* 'savage' actually has a secondary stress on the first syllable: *mòeróes*. Closed syllables also receive secondary stress. Thus *m'àgpáaq* 'wedding' has a secondary stress on the first syllable, and primary stress on the last syllable. A word may have more than one secondary stress. An example is *marungaqgean* 'about it', pronounced /màrngàqgé:n/.

Stress in phrases and sentences is not well understood. For example, in the sentence:

Ka ra chibiyeew.
'They two lifted it.'

which is pronounced:

/kårchì byé:w/

the stresses are as indicated. However, in the sentence:

Ka ra marweel gow, pronounced /kårmàrwélgow/
'They two worked.'

the stress is as indicated. Note that in the first sentence the suffix *-eew* (meaning 'two') is stressed, receiving the main stress, but in the second sentence the particle *gow* (also meaning 'two') is unstressed. This fact, indeed, is one of the reasons that *gow* (and *gaed*, referring to more than two people) is written as a particle rather than as a suffix to the verb, as *-eew*. Some other stressless particles are *neey*, *niir* and *neam* 'this', 'that (near you)' and 'that (over there)', as in the phrases:

rèa téebel neey
'this table'

rèa téebel niir
'that table (near you)'

rèa téebel neam
'that table (over there)'

However, in the words *binéey*, *biniir*, *binéem* 'this one', 'that one (near your)', 'that one (over there)', *chaqnéey*, *chaqniir*, *chaqnéam* 'this person', that person (near you)', that person (over there)' *-neey*, *-niir* and *-neam* are written as suffixes rather than as separate particles because here they are stressed. It is not known how many stressless particles such as these exist in Yapese.

Summary of Morphophonemic Rules

2.5.5 For ease of reference, a list of the morphophonemic rules is given in Table 2. The rules are listed in the order that they should be applied. Some rules are given in summary form, rather than as a formula. The section in which each group of rules is discussed and explained is indicated. In the rules, C is an abbreviation for consonant, V for vowel, and D for a dental or retroflexed consonant.

TABLE 2 SUMMARY OF MORPHOPHONEMIC RULES OF YAPESE

SECTION	RULE NO.	RULE	EXAMPLE
2.5.4.1	A1	**ai-** → /e:/	*kee feek* 'he took it'
	A2	**uiC** → /i:C/	*kii guy* 'he saw it again'
2.5.4.2	B	**a+gu** → /u+gu/	*ku gu guy* 'I saw it'
2.5.4.3	D1	**aD(i,u)** → /äD(i,u)/	*qaed* 'liver'
	D2	**(u,i):DaC** → /(u,i):DäC/ if the next syllable does not contain **a**	*binaew* 'land, village'
2.5.4.4	E1	**e** → /ë/ when the next syllable contains a low vowel (*a, ä, aa, ae*) or a lower-mid vowel (*ë, ea, o, oo*)	*kea yaen* 'he went'
	E2	**e** → /ë/ when the preceding syllable contains a low or lower-mid vowel	*m'areag* 'my canoe'
2.5.4.5	F1	**V(:)CV+CV(:)C** → *V(:)C+CV(:)C*	*lubdaed* 'our breath'
	F2	**-CV+V** → *-C+V*	*fal'eag* 'to fix'
	F3	**-VCV#** → *-V:C#*	*lubaag* 'my breath'
2.5.4.6	G1	**eqi** → *iqi*	*pardiqiy* 'to pound'
	G2	**ewV** → *uwV*	*chuwaag* 'my *cheew*'
	G3	**(e, ë)CV**→*aCV*	*nifangiin* 'it's wind, caused by it'
	G4	**oCV** → *aCV*	*k'angaag* 'my throat'
	G5	**öCë** → *aCë*	*qupangean* 'its cover'
	G6	**öCV** → *uCV* if the V is not **ë**	*qunguun* 'her *qoeng*'
	G7	**waCV** → *wuCV*	*wun'uug* 'my opinion'
	G8	**äCV** → *iCV*	*ka ra fäleed* 'they opened it' pronounced *karfileed*
2.5.4.7	H1	**u(:)CC#** → *u(:)CuC#* if the second C is not a dental or retroflexed consonant	*bugug* 'my knee'

	H2	**u(:)CC#** → *u(:)CoC#* if the second consonant is a dental or retroflexed consonant, or if the first consonant is *w* or a velar consonant	*suwon* 'his authority'
	H3	**oCC#** → *oCoC#*	*rogon* 'its way'
	H4	**öCC#** → *öCöC#*	*gösög* 'my work'
	H5	**aCC#** → *aCaC#*	*dabaq* 'today'
	H6	**V(:)Cy#** → *V(:)Ciy#* if the V is **i**, **e**, **ë** or **ä**	*chibiy* 'to lift'
	H7	**VCCy#** → *VCCiy#*	*gurfiy* 'to stir'
2.5.4.8	J1	**uqi** → *iqi*	*ki qii maruweel* 'he used to work'
	J2	**aqe** → *eqe*	*ke qee miil* 'he ran first'
	J3	**aqë** → *ëqë*	*kë qea noon* 'he talked first'
	J4	*aw* → *ow*	*lubrow* 'their (two) breath', cf. *lubraed* 'their (pl) breath'
	J5	**aCö** → *oCo* if C is a stop or a glottalised consonant	*moqoloy* 'to peel'
2.5.4.9	K1	**ayC** → *ëyC*	*paalay roog* 'my coconut leaf', pronounced *paalearoog*
	K2	**V(:) (y,w)C** → *V:C*	*paalay roog* 'my coconut leaf', pronounced *paalearoog*
2.5.4.10	L1	**V(:)i#** → *V(:)y#*	*raay roog* 'my stone money'
	L2	**V(:)u#** → *V(:)w#*	*rea n'eew neam* 'that wave'
2.5.4.11	M1	**#CCV** → *#CiCV* if the vowel is a front vowel (**i**, **e** or **ë**)	*gimeew* 'you two'
	M2	**#CCV** → *#CaCV* (if the V is not a front vowel)	*gamow* 'we (two), you and I'
2.5.4.12	N1	**#CVC** → *#CC-* (if the first C is a voiced obstruent (**b**, **d**, **g**, **j**), a nasal (**m**, **n**, **ng**), or a liquid (**l** or **r**) and the second C is homorganic to the first, that is pronounced in the same place in the mouth	*ba puw* 'it's bamboo' pronounced *bpuw*

	N2	**-V(:)CVC-** → *-V(:)CC* if the two C's are as described for N1, or if the first consonant is a semivowel (**y**,**w**) and the second consonant is any consonant whatsoever	*k'uynguun* 'his fingernail'
2.5.4.13	P	Consonant agreement in rapid speech	*ka da tal gow* 'we (two have stopped', pronounced *kattalgow*
2.5.4.14	Q1	**oDö** → *öDö*	*qöloey* 'to peel'
	Q2	**(i,ä,u) (:) (D) Do** → *(i,a,u) (:) (D) Dö*	*wael roog* 'my boxfish', pronounced *waelroeg*
2.5.4.15		Stress rules	

Sound Changes in Yapese

2.5.6 There is one alternation in pronunciation of a sound in Yapese which cannot come under the heading of morphophonemics, but is called **sound change**. This phenomenon is illustrated by the word *daangaay* 'no, not', which is often, perhaps usually, pronounced *daangaq*. The *-y* at the end of this word is a pronoun of some sort meaning 'it' (compare *ngaay* 'to it', *riy* 'from it'). Apparently all words which end in this pronoun may change the pronoun to *-q* (and shorten the vowel in front of the *-q* if it was long). Furthermore, verbs of a type called **transitive** (discussed in chapter 3 and again in chapter 5) that end with the transitive suffix *-y* with a vowel other than short /i/ in front of the *-y* may also change the *-y* to *-q*. The following words are examples of this process:

-y	*-q*	
daangaay	*daangaq*	'no, not'
riy	*riq*	'of it'
ngaay	*ngaq*	'to it'
guy	*guq*	'to see'
taey	*täq*	'to put'

But this process may not apply to transitive verbs ending in *-iy*. Thus *chibiy* 'to lift' may not be pronounced **chibiq*.

This process has been described as not basically a morphophonemic process. The reason it is not a morphophonemic process is because the change from *-y* to *-q* does not depend on morphemes coming together, as do other morphophonemic processes (although it may be that this process is more common at the end of sentences than in words in the middle of sentences). This process is an on-going historical change in the Yapese language. Eventually the *-y* pronoun (and the *-y* transitive suffix when not after /i/) will be pronounced as *-q* in Yapese under all circumstances. It is noteworthy that the change is apparently more frequent with younger people than with older people.

In this book all of these words will be written with their *-y* form. But it should be kept in mind that all of them may also be pronounced with *-q*.

One word ending in *-r* may also be pronounced with final *-q*. This word is *daawor* 'not yet' which may also be pronounced as *daawoq*.

Dialects of Yapese

2.5.7 Like all languages, Yapese is spoken differently in one area than in another. Thus, you can tell from the way a person speaks whether he is from Gagil, from Map', from Nimgil, and so forth. The different forms that a language takes in different areas are called **dialects** of that language. In this book we will not attempt any complete discussion of the dialects of Yapese. However, it should be pointed out that dialect differences do exist. They affect words used for particular items and the way in which all words containing particular sounds are pronounced. Sometimes dialect differences affect the syntax, or grammar of the language. The dialect upon which the orthography committee based its spelling is basically that of the area near Donguch, the dialect of a village such as Nimar. The reason for this choice is that the dialect of this area is reasonably typical of Yapese. Also, as more and more people live near Donguch, their speech comes to be relatively more similar to that of the Donguch area; thus this dialect is in some ways becoming "metropolitan Yapese."

However, in one respect the dialect of this book differs from that of Donguch. This difference is in the writing of words as *misiiw'* 'noon', which end in glottalized *-w'*. In Donguch, such words are pronounced with *-q*. People in Donguch generally say *misiiq* instead of *misiiw'*, *moqmaaq* instead of *moqmaaw'* for

'difficult'. In this book we write the forms with the glottalized *-w'*. The reason for this is that if *-w'* is written it may always be pronounced as *-q*, but if *-q* is written it may only be pronounced as *-w'* if some other dialect (such as that of Gagil) uses *-w'* in that word. Thus *misiiq* 'noon' (Donguch pronunciation) may be pronounced *misiiw'*, but *paaq* 'his hand' may not be pronounced **paaw'*. If we write *misiiw'* with *-w'* but *paaq* with *-q*, then it is clear which one may end either in *-w'* or *-q*, and which one ends only in *-q*.

For similar reasons, words like *qayig* 'my leg', which is pronounced *qeeg* in Donguch, are written with *-ayi-* rather than with long *-e:-*. This is because all words with *-ayi-* in certain dialects may be pronounced *-e:-* in Donguch, but many words (such as *feek* 'to take') must be pronounced with *-e:-* everywhere.

There is probably a great deal more which could be said in a chapter on the sound system of Yapese. You can certainly discover more facts about Yapese phonology for yourself that are not even mentioned in this chapter. However, this chapter is a summary of the main features of the sound system of Yapese and how it works, with some examples.

3 Morphology

INTRODUCTION

3.1 Morphology is the study of the way in which morphemes (see section 2.4 for a discussion of the idea of the morpheme) are put together to make words. Some words, as *naqun* 'house', are composed of just a single morpheme. Many words, however, as *marungaqag* 'news, information', are composed of more than one morpheme. The processes by which words are formed from morphemes are called **morphological processes**. *Marungaqag* is composed of the prefix *ma-* (which does not have much meaning of its own) and *rungaqag* 'to hear'.

Marungaqag illustrates one type of morphological process, that of **prefixation**. Grammatical morphemes like *ma-* which are added to the beginnings of words to make new words are called **prefixes**. Prefixation is one of the morphological processes used in Yapese. Sections 3.1.1 to 3.2.9 which follow give brief definitions and discussions of the meanings of the morphological processes used in Yapese.

PREFIXATION

3.1.1 Prefixation is the process of adding a morpheme, called a prefix, like *ma-* in *marungaqag*, to the beginning of a word to make a new word.

SUFFIXATION

3.1.2 Suffixation is the process of adding a morpheme, called a **suffix**, to the end of a word to make a new word. An example is *chuwqiy* 'to buy', which has the suffix *-iy* (or **-y** in underlying form) added to the morpheme *chuwaay'* 'to buy'.

REDUPLICATION

3.1.3 Reduplication is the process of repeating all or part of a morpheme or word to make a new word. There are different kinds of reduplication, depending on what part of the morpheme or word is repeated. Sometimes reduplication is coupled with prefixation. An example of complete reduplication, that is, reduplication of the whole word, is in words like *roowroow* 'red' and *ngochngooch* 'short'. An example of reduplication of part of a word, coupled with prefixation on the same word, is *saqadqadaag* 'to like a little bit', derived from *qadaag* 'to like' by reduplication of the first part of *qadaag* and the addition of the prefix *sa-*.

ABLAUT

3.1.4 **Ablaut** is the process of changing the vowel of a word to a different vowel to make a new word. This process only applies to a few words in Yapese. An example is *k'aed* 'to bite something' (underlying form **k'ade+i)** from *k'aad* 'to bite' (underlying form **k'ade**).

REDUCTION

3.1.5 *Reduction* means cutting off part of a word to make a new word. This process is used in Yapese to make words for calling out to people called **vocatives**. An example is *Taa* from the name *Tamag*, as in:

> *Ga bea diqiy, Taa?*
> 'What are you doing, Tamag?'

COMPOUNDING

3.1.6 Compounding is the process of putting two separate words together to make a new word. There are two types of compounding in Yapese. One is compounding of particles (grammatical morphemes that are not prefixes or suffixes but which nevertheless are not fully separate words). An example is *bineey* 'this one', compounded from *bii* (as in *bii roog* 'mine') and *neey* 'this' as in *rea kaarroo neey* 'this car'. The other type of compounding consists of putting two major morphemes together to make a single new word. An example is *m'agpaaq* 'wedding' compounded from *m'aag* 'to tie' and *paaq* 'his hand'.

Roots and Stems

3.1.7 In discussing certain kinds of morphological processes we will sometimes use the terms **root** and **stem**. A good example of the use of these words would be with possessed nouns such as *qadiig* 'my liver' and *walaageeg* 'my brother'. *Qadiig* is derived from the underlying form **qadi+gu**, while *walaageeg* is derived from **wala:g+e+gu**. **Qadi** and **wala:g** are the major morphemes being possessed, and they are called **roots**. A root is a major morpheme which is involved in some morphological process.

Note that in **wala:g+e+gu** there is an extra morpheme with the underlying form **e** between the root and the suffix. This morpheme has no meaning of its own, and its only function is to connect **wala:g** to **-gu**. This morpheme is called a **stem-forming morpheme**, and the unit thus formed, namely **wala:g+e**—which may undergo the same morphological processes as bare roots like **qadi**—is called a stem. A stem is thus a string of morphemes consisting of a major morpheme plus a stem-forming morpheme. The combination, a stem, may then undergo other morphological processes such as having possessive suffixes such as **-gu** added.

A stem is formed from a root plus a stem-forming suffix. A stem is itself a form which can have suffixes as the possessive suffixes added to it. So roots are stems as well. That is, **qadi** 'liver' is a root, but it is also a stem, since it can have possessive suffixes added to it, as in **qadi+gu** 'my liver'. Thus roots are stems, but not all stems (such as **wala:g+e**) are roots.

Productive and Non-productive Processes

3.1.8 Some morphological processes are used to form a large number of words, and new words entering the language may often freely undergo such processes if they meet all the necessary grammatical requirements. Such processes are called **productive processes**. Other processes are only used to form a small number of words, and generally new words may not undergo such processes. These are called **nonproductive processes**. An example of a productive process is the addition of possessive suffixes. For example, the word *kiil* 'keel' borrowed from English may take possessive suffixes and one can say *kiilean ea booch roog* 'the keel of my boat'. On the other hand, there is a nonproductive process operating between the words *k'aad* 'to bite' and *k'aed* 'to bite something', between *f'ooth* 'to divide' and *f'oeth* 'to divide something'. This process applies to very few words, perhaps only these two pairs

of words. No one would take the word *mool* 'to sleep', for instance, and form a word from it **moel* (on the pattern of *f'ooth/f'oeth*) meaning 'to put someone to sleep'. Instead, you say *maleag* (or perhaps *mool naag*) for this meaning. This process of vowel change, or ablaut (see definition in section 3.1.4) is not productive in Yapese.

Inflection and Derivation

3.1.9 Some processes are basically for the purpose of relating words to other words in the sentence. An example is the addition of possessive suffixes. For example, the suffix *-n* in *kiilean* 'its keel' in the phrase:

kiilean ea booch roog
'the keel of my boat'

connects the word *kiil* 'keel' to the word *booch* 'boat'. Such processes are sometimes called **inflectional processes**. Inflectional processes are usually also productive processes.

Other processes are basically for the purpose of forming new words with modifed meanings, but not for the specific purpose of relating words to other words in the sentence. For example, the morpheme *ta-* in *tafean* 'his place' (derived from *fean* 'his property') means 'place of, place for'. *Tafean* is a new word derived from *fean*, but in the two sentences:

Baey tafean?
'Does he have a place?'

Baey fean?
'Does he have possessions?'

the relationship of the two words *tafean* and *fean* is roughly the same. Processes for forming new words in this way are called **derivational processes**.

DERIVATIONAL PROCESSES IN YAPESE

3.2 Section 3.2 will discuss various derivational processes in Yapese, and section 3.3 will discuss various inflectional processes.

Derivational Prefixes

3.2.1 There is a small number of prefixes which are used to derive new words in Yapese. The ones that will be discussed here are:

p'ee- 'locative'
ta- 'locative'
too- 'locative'
maa- 'resultative'
pi- 'human'
taa- 'usual action'
sa- 'diminutive'

p'ee-. The prefix *p'ee-* is found in words as the following:

p'eebaay 'public meeting house'
p'eebgul 'tip of something' from *bugul* 'tip'
p'eebuuk' 'tail of' from *buuk'* 'its tail'
p'eegaathiith 'front porch of a house'
p'eel'aay 'shore line' from *l'aay* 'shore'
p'eem'oon 'in front' from *m'oon* 'first'
p'eenfiy 'cook house' from *nifiy* 'fire'
p'eethnguun 'nose'

This prefix is also sometimes written as *peq-*, as in:

peqowchean 'in front of him' from *qowchean* 'his face'
peqchabag 'a bank of earth, levee'
peqnaqun 'back of the house' from *naqun* 'house'

It seems that *peq-* in these words has the same meaning as the *p'ee-* in the first list. It may be the case that all of the words can be pronounced either with *peq-* or *p'ee-*, and that these are just alternate ways of pronouncing the same morpheme, but I have not been able to check this. We might say that the underlying form of the prefix was **peqe-**. We would then need a morphophonemic rule to change **peqe-** into /p'e:-/. In other words, it may be that there is a rule:

peqe- /p'e:-/

that individual speakers may choose to apply.

The meaning of this prefix is something like 'place of, place for, place where'. For example, in *p'eenfiy* the root word *nifiy* means 'fire', and so *p'eenfiy* is the 'fire place', that is, the cooking house. In some cases the prefix *p'ee-* is added to a word which already has the idea of 'place' inherent in its meaning and therefore the prefix does not really add much distinctive meaning. For example, *p'eebuuk'* means 'its tail', and so does *buuk'*. In some cases the *p'ee-* is obligatory. That is, the root word does

not occur without the prefix. For example, *p'eethnguug* means 'my nose', and so far as I know there is no word in Yapese pronounced something like **thunguug* meaning 'my nose'.

It is not clear whether this prefix is productive in Yapese or not. If it would be possible, for example, to create new words using it, such as **p'eenfeeng*, derived from *nifeeng* 'wind', to describe a place where the wind was strong, then this could be considered a productive prefix.

The term "locative" is sometimes used to describe the meaning of a morpheme which refers to place, or location. Hence, this and other such morphemes will often be referred to as "locative prefixes."

Ta-. The prefix *ta-* is locative, that is, it means something like 'place of'. Examples of words with *ta-* are:

tabärbaer 'muddy place' from *baer* 'mud'
tabgul 'back of house' from *bugul* 'tip'
tabnaew 'home, estate' from *binaew* 'land'
taboelngiin 'beginning of'
tabthung 'corner, as of a house'
tabugbug 'corner' from *bug* 'to bend'
tafarthog 'uphill place'
tafean 'his home' from *fean* 'his possessions'
taflaay 'medical clinic' from *falaay* 'medicine'
tagiil' 'place of' from *giil'* 'place of'
tagluul' 'shade'
tagpaes 'flat' from *gapaes* 'calm, of sea'
tagusgus 'mast step in boat'
taliiw 'sacred place' from *liiw* 'place'
talmar 'black' from *limar* 'dark'
tathiil 'landmark; enemy' from *thiil* 'different'
taqathqaath 'hazy, dim' from *qaath* 'smoke'
tan'eewn'eew 'wavy, curly' from *n'eew* 'wave'

The difference in meaning between *p'ee-* and *ta-* is very slight, but there is some genuine difference. They both are locative, but *ta-* makes words that often only indirectly contain the meaning 'place'. For example, *talmar* 'black' from *limar* 'dark' contains the meaning 'place' only in that something which is black is a dark place. But the word is not used normally as a noun, to mean literally a dark place, but as an adjective, to describe something which is dark. *P'eel'aay* 'seashore', on the other hand, clearly contains the meaning 'place of'.

Words derived using *p'ee-* are always nouns. Words derived using *ta-* are often nouns (for example, *taliiw* 'sacred place, cemetery', *tafean* 'his home', *tagreeng* 'name of a canal in Yap', etc.), but may also be adjectives (like *talmar* 'black', *tagpaes* 'flat').

Too-. The prefix *too-* is also locative, but it only occurs with a limited number of words. All the ones known to me are:

tooqaer	'deep' from *qaer* 'murky, of water'
toobuut'	'low' from *buut'* 'earth, ground'
toelaeng	'high' from *laang* 'sky'
toeluk'	'in the middle' from *luk'-* 'middle'
toomm'oon	'first' from *m'oon* 'first'
toomur	'last'

These words all begin with *too-* (or *toe-*, by the action of the **o**-lightening rules Q1 and Q2 described in section 2.5.4.14. The underlying form of the prefix is **to:-**) and all words clearly have the meaning 'location, place'. There is another larger group of words beginning with *too-/toe-* in which the *too-* in some cases is evidently a prefix. In other cases it may be a prefix, simply because Yapese words do not often begin with syllables with long vowels, but the remainder of the word after cutting off the *too-* does not have any meaning. Some of these words are:

toochuuch	'magic altar'
tooffaan	'to rest' compare *faan* 'his breath'
toogaaf	'handle, rope for hanging' from *gaaf* 'rope'
toolmal	'farm, garden'
toelqor	'garbage dump'
tooluub	'to dive' from *luub* 'breath'
tooluul	'to bark, shout'
toomaal	'heavy'
toom'iiqaath	'smoky' from *qaath* 'smoke'
toonnung	'pole for hanging things'
t oruw	'an eating rank' compare *ruw* 'two'
tooym'aer	'deep' compare *qaer* 'murky, of water'

Some of these words probably do not contain any prefix at all. For example, *toomaal* 'heavy' may simply be a word that just happens to begin with the syllable *too-*, but this *too-* need not be a morpheme. It just happens to be pronounced the same as the prefix *too-*.

In other cases it seems more likely that the *too-* is a prefix.

In *toogaaf* 'handle or hanger made from rope' derived from *gaaf* 'rope' there is some trace of locative meaning.

Another set of words begins with *taa-*. This *taa-* prefix may possibly also have some locative meaning, but in most cases it is not clear, and in some cases it is not clear whether it is really a prefix or not. Examples are:

Taabuywol	'name of a mountain in Yap'
taafaar	'shallow'
taalaang	'uphill' compare *laang* 'sky'
taaquum	'one of the pillars in a house'
taawoq	'ladder' compare *woq* 'road, way'

These words should not be confused with those beginning with another prefix *taa-* 'usual action', pronounced just like the *taa-* we are discussing, but meaning something entirely different. An example of this other *taa-* prefix is *taaftaeq* 'fisherman', derived from *fitaeq* 'to fish'. This prefix will be discussed later.

In short, there may be a prefix *taa-* meaning something like 'place of' along with the *too-/toe-* prefix we have been discussing. It is not clear which of the above words contains a prefix and which simply begins with the sound *taa-* or *too-* but does not contain a prefix.

Maa-. The following words contain the prefix *maa-* (or *mae-* by rule D1, section 2.5.4.3 , underlying form **ma:-**) 'result':

maagur	'scratched' compare *guruy* 'to scratch'
maen	'closed' compare *niing* 'to close'
maab	'open' compare *biing* 'to open'
maap'	'spilled' compare *puqög* 'to spill'
maath	'extinguished' compare *thaeng* 'to extinguish'
maath'	'cut off' compare *th'aeb* 'to cut'

These words are all adjectives and describe a state of affairs resulting from an action which is described by the related verbs listed above. Thus *maa-* is called a **resultative** prefix.

Maa- is added to verbs, or verb roots, to make resultative adjectives. It is apparently not a productive prefix. New words are not made using it. Notice that in all the cases listed only the first consonant, or consonant plus vowel plus consonant, of the verb is used with *maa-*.

There is another prefix *maa-* with a different meaning from *maa-* 'resultative'. This prefix *maa-* is used to form a certain type of verb called an **intransitive** verb from verbs or verb roots.

An example is *maeluk* 'to wash' from the root *luk-* 'to wash' (compare *lukuy* 'to wash something'). This prefix *maa-* which forms intransitive verbs will be discussed below in section 3.3.1

Pi-. *Pi-* is used to form nouns which contain as part of their meaning the idea of 'person, people'. Its underlying form is **p-**, with /i/, /u/ or /a/ inserted by the M rules (see section 2.5.4.11). These rules were not discussed in full detail there. They insert vowels between pairs of consonants occurring at the beginnings of words according to the following vowel. Some examples of this prefix are:

palabthir or *pilbithir* 'old person' from *labthir* 'old'
pimilngaey 'low caste person' from *milngaey* 'low caste'
piqlal 'adult person' from *qilal* 'adult'
pumthaaw 'outer islander' from *mathaaw* 'open ocean'

Some other words which may or may not contain this prefix are:

paleelwol 'woman past child-bearing age' (also pronounced *pileelwol* or *puweelwol*)
pichoeqaey 'handsome' compare *Choay* 'man's name'
pidooraang 'beautiful' compare *Dorang* 'woman's name'
pumoqon 'man' compare *Moon* 'man's name'

and consider also the names:

Pitmag compare *tamaag* 'my father'
Pitin compare *tinaeg* 'my mother'
Pugurwag compare *guruwngiig* 'my sister-in-law'

Another word that may be related to the words with the *pi-* prefix is *piiluung* 'chief', compare the root *lung-* 'voice', underlying form **lungu**. However, the *pii-* in this case has a long vowel and therefore may not be related to *pi-* 'person'.

Taa-. The prefix *taa-* means something like 'usual action'. Examples are:

taabyuul	'redeemer' from the root *buyuul* 'to redeem'
taaftaeq	'fisherman' from *fitaeq* 'to fish'
taagosgoos	'toys, playthings' from *gosgoos* 'to play'
taamaen	'beggar' from *maen* 'to beg'
taaqadaaw	'prosecutor' from *qadaaw* 'to accuse'
taawqath	'gift' from *waqath* 'good fortune'

The following are less clear examples of this prefix:

Taabuywol	'name of a mountain' compare *buywol* 'type of tree'
taafnaey	'to think' from *finaey* 'to think'
taeluurean	'cry-baby'

This prefix is apparently reasonably productive. For example, one might call a person who likes to study all the time *taaskuul*, from *sukuul* 'school'.

Note that, as mentioned above when discussing the prefix *toe-/too-*, certain other words begin with *taa-*. Examples are:

taafaar	'shallow'
taalaang	'uphill' from *laang* 'sky, up'
taaquum	'house pillar'
taawoq	'ladder' compare *woq* 'road, way'

These words may actually be derived from the prefix *taa-* 'habitual', and thus may not be related to the words with *too-/toe-*. Note that one can say both *taalaang* 'uphill' and also *toelaeng* 'high'. Thus this same root *laang* (with a change in its vowel) 'sky, up' may occur either after *taa-* or *toe-*.

Sa-. The prefix *sa-* means 'a little bit, somewhat'. A morpheme with such a meaning is called **diminutive**, and thus *sa-* is a diminutive prefix. Its underlying form is **s-**, and therefore (by the M rules, section 2.5.4.11) its vowel changes from /a/ to /i/ to /u/ depending on the following vowel and consonant.

Sa- is normally added only to morphemes that have been reduplicated. Reduplication is discussed in section 3.2.2.

Some examples of this prefix are:

sababaequud	'somewhat light' from *baequud* 'light'
sababiqech	'somewhat new' from *biqech* 'new'
sababiqeg	'to read a little' from *biqeg* 'to read'
sabalbaalyaang	'to be a little bit crazy' from *baalyaang* 'crazy'
sabugbug	'somewhat bent' from *bug* 'to bend'
safal'feal'	'somewhat good' from *feal'* 'good'
sal'ool'ooboch	'somewhat tangled' from *l'ooboch* 'to tangle'
sumoermoer	'to stoop down' from *moermoer* 'to bend down'
sibilbiliig	'to grind somewhat' from *biliig* 'to grind'
siminmin	'to smile' from *minmin* 'to laugh'

This prefix does not usually change the word class of the word it is added to. In other words, if it is added to an adjective, the word resulting is an adjective. An example is the adjective

sabugbug 'somewhat bent' from the adjective *bugbug* 'bent'. If *sa-* is added to a verb, the result is a verb. An example is the verb *saqadqadaag* 'to like somewhat' derived from the verb *qadaag* 'to like'. The prefix *sa-* is not normally added to nouns.

Sa- is a productive prefix, and, in general can be added to a reduplicated form of any verb or adjective to mean 'to do or be something a little bit'.

Reduplication

3.2.2 **Reduplication** is the repetition of all or part of a word or morpheme to make a new word. Examples are *th'eeth'aeb* 'to cut in slices', from *th'aeb* 'to cut', *roowroow* 'red' from *roow* 'red', *qathibthib* 'sweet' from *qathib* 'sweet'.

Forms of Reduplication: R1

3.2.2.1 There are three different types of reduplication in Yapese. The first, which we will call R1, is the commonest, and involves the repetition of the first consonant plus vowel plus second consonant of a word. If the word consists of just a single closed syllable (CVC), then this type of reduplication repeats the whole word. Examples are:

qärqaer	'murky' from *qaer* 'stirred up'
roowroow	'red' from *roow* 'red'
pelpeeleeg	'to hide repeatedly' from *peeleeg* 'to hide'

Forms of Reduplication: R2

3.2.2.2 The second type of reduplication involves the repetition of just the first consonant and vowel, and lengthening the vowel which is repeated. This type of reduplication will be called R2, and it is very common. Examples are:

chuuchgur	'near' from *c..ugur* 'near'
soosoowaath	'slow' from *soowaath* 'slow'

Forms of Reduplication: R3

3.2.2.3 A third type of reduplication, which we will call R3, repeats the last consonant, plus vowel, plus consonant of the word. This type of reduplication is very rare. Examples are:

qathibthib	'sweet' from *qathib* 'sweet'
maqthukthuk	'mixed up' from the root *qathuk-* 'to mix'

There is also one word which appears to have reduplicated part of the word in the middle of the root. This word is *qathuthukuy* 'to mix up' from root *qathuk-* 'to mix'. I do not know of any other examples of this reduplication of a syllable in the middle of a word.

Morphophonemics of Reduplication

3.2.2.4 When reduplication of type R2 (reduplication of just the first consonant and vowel, as in *chuuchugur* 'near') occurs, it normally is the case that the vowel which is repeated is made long, even when it was not long in the original unreduplicated morpheme. In a few cases, however, the reduplicated vowel remains short. When the vowel becomes long, the various morphophonemic rules must apply to it, and sometimes modify its pronunciation. Examples of some of the results of the application of morphophonemic rules will be discussed below.

Examples of R2 reduplication with the reduplicated vowel remaining short are:

thithiqeeg	'to count' from *thiqeeg* 'to count'
thothow	'swollen' from *thow* 'to swell'
gagaan	'food' (pronounced /gga:n/), compare *gaan* 'his food'
k'uk'weeg	'to tear into bits' which appears to be a reduplicated word from a word **k'uweeg*
qaqayweeg	'to help' from *qayweeg* 'to help'

Examples of R2 reduplication with the reduplicated vowel becoming long (the normal pattern) are:

saasaalap	'to cheat' from *saalap* 'expert'
saasagqal	'slow' from *sagqal* 'slow'
sik'eek'eeg	'to make a fire hotter' from *k'eeg* 'to light a fire'
taatarëg	'to sail around' from *tarëg* 'to sail'
chaachngar	'to look around' from *changar* 'to look at'
chaachngëg	'to fly around' from *changëg* 'to fly'
chiichngeeg	'to swing with force' from *chingeeg* 'to swing something'
chuuchgur	'near' from *chugur* 'near'
kaakadbuud	'early' from *kadbuud* 'morning'
k'aak'ling	'raw, of vegetables' appears to be from a word **k'aling*

l'ool'ooböch	'tangled' from *l'ooböch* 'to tangle'
naanaang	'to feel the effect of 'from *naang* 'to know'
th'eeth'aeb	'to slice' from *th'aeb* 'to cut'
t'eet'aer	'to break into bits' from *t'aer* 'to break'
faafeal	'to play' from *fayil* 'friend'

Notice that when part of a word or major morpheme is reduplicated, the various morphophonemic rules must aply to it. For example, compare the words *qärqaer* 'muddy, cloudy, of water' and *roowroow* 'red'. The underlying form of *qärqaer* is **qaruqaru** (compare *qaruy* 'to stir up, make cloudy, of water'), while that of *roowroow* is **ro:uro:u**. In the derivation of *qärqaer* the **u** between the **r** and the **q** is dropped by rule F1 (section 2.5.4.5). Thus *qärqaer* does not have a long vowel in the first syllable. The underlying form of *roowroow* has a long vowel in each syllable, and thus the first syllable is long in the reduplicated portion. Rule L2 (2.5.4.10) changes the **u** at the end of each syllable of the underlying form into /w/, and thus we have *roowroow*.

Note that the short *ä* in the first syllable of *qärqaer* is light *ä* rather than plain *a*. The **a**-lightening rule D1 (2.5.4.3) as it is now written only lightens **a** in a syllable before a following **i** or **u** which is at the end of the word. We expect **qarqaer*, but instead this word is pronounced *qärqaer*. The fact that the first syllable of this word has light *ä* may mean that rule D1 ought to lighten **a** before a following **i** or **u** at the boundary between a reduplicated syllable and the body of the morpheme being reduplicated.

Meaning of Reduplication

3.2.2.5 Reduplication is used in Yapese with a number of varying meanings, but most of them may be summarized under two rough headings. One of the two functions of reduplication is, when applied to adjectives, to make what are called **attributive adjectives**. The other main function of reduplication is to modify the meaning of verbs in certain ways to be described.

When an adjective like *roow* 'red' or *roowroow* 'red' is used in sentences like the following:

Kea roow qowchean.
'His face became red.'

Kea roowroow qowchean.
'His face became red.'

there is a slight difference in meaning between the reduplicated and the unreduplicated form of the adjective. The first sentence above means something as 'His face became red', but with emphasis on the process, as a change from not red to red, while the second sentence means 'His face became red', but with emphasis on the resulting state of redness rather than on the process of change. Thus *roow* may be translated as 'to become red', whereas *roowroow* means 'to be red'. This difference in meaning is confirmed by the fact that one says:

Ba roowroow ea kaarroo rook' walaageeg.
'My brother's car is red.'

but one does not normally say:

**Ba roow ea kaarroo rook' walaageeg.*

The reason the second sentence above is impossible is because *ba* means 'to be' but the unreduplicated form of the adjective seems to contain the meaning 'to become'. Adjectives used with the meaning 'to be' rather than 'to become' are sometimes called **attributive** adjectives, while those with the meaning 'to become' are called **inchoative** adjectives. Thus *roowroow* 'to be red' is an attributive adjective, and *roow* 'to become red' is an inchoative adjective. In this book adjectives will normally be translated without the words 'to be' or 'to become', but these meanings are contained in the meaning of all adjectives in Yapese.

One important function of reduplication in Yapese is to form attributive adjectives from inchoative adjective stems. Examples of this process are:

attributive adjectives	*inchoative adjectives*	
ngochngooch	*ngooch*	'short'
wëchweach	*weach*	'white'
chuuchugur	*chugur*	'near'
qathibthib	*qathib*	'sweet'

Sometimes attributive adjectives are formed from nouns by this same process. In this case, the use of reduplication not only produces an attributive adjective, but it makes an adjective whose meaning is 'to be like, to be similar to' the thing to which the noun refers. For example, one may say *but'buut'* 'brown' from *buut'* 'earth, dirt'. Other examples are the color terms *wëchweach* 'white' from *weach* 'lime', *rangreang* 'orange' from *reang* 'turmeric'.

In certain cases both the unreduplicated and reduplicated forms of an adjective are used as attributive adjectives, but with a slight difference in meaning. For example, consider the sentences:

Ba m'uuth ea yaer roog.
'My knife is sharp.'

Ba m'uthm'uuth ea yaer roog.
'My knife is pointed.'

Another slightly different example is the difference between the unreduplicated adjective *mogchoth* 'torn' and the reduplicated form *mogchothchoth* 'all torn up'.

Some reduplicated attributive adjectives contain the meaning 'a little bit'. Examples are *qärqaer* 'somewhat murky, of water' from *qaer* 'murky, of water' and *qathibthib* 'somewhat sweet' from *qathib* 'sweet'.

With verbs one of the main functions of reduplication is to express the meaning 'somewhat, a little bit'. In this function reduplication is usually accompanied by the prefix *si-* 'diminutive':

saqachuychuy	'to shake a little' from *qachuy* 'to shake'
sitoeytoey	'to chop a little' from *toey* 'to chop'

Reduplication is a productive process in Yapese. It requires a great deal more study than has been made so far. It may in fact prove that the functions of reduplication are such that the subject of reduplication should be described under the heading of inflection rather than here under the heading of derivation, but at the present state of knowledge it does appear to be a derivational process.

Vocatives

3.2.3 From anyone's name in Yapese, which is more than a single short syllable in length, it is generally possible to form a short version of the name to be used in addressing the person. Thus, from a name like *Giltamag* one can make the short form *Gal*, pronounced /gäl/, as in the sentence:

Nga mu maen ngaan, Gal?
'Where are you going, Giltamag?'

Short forms used to address someone in this way are called

vocatives, and they are formed by a process of reduction (section 3.1.5).

The normal reduction process used to form vocatives from names is to use the first consonant, vowel and consonant of the name, as in the following examples:

name	*pronunciation*	*vocative*
Luag	/luqag/	/luq/
Bayad	/bayaed/	/bay/
Mangefel'	/mangë:fë:l'/	/mang/

However, in some cases, the vocative of a name is different than what one would expect, often being based on the underlying form. Examples are:

/gäl/ the vocative of all names beginning with /gil/, as *Giltamag* (pronounced /giltama:g/).

/day/ the vocative of men's names beginning with /de:-/, such as *Defeg* (pronounced /de:fe:g/). These names are related to the word *deaf* 'house foundation', underlying form **daif**, which is pronounced in some dialects of Yapese as /dayif/.

/bay/ the vocative of names beginning with /bë:n/, such as *Benemang* (pronounced /bë:ne:ma:ng/). These names are related to the word *bay* (or *bëy*), underlying form **bai**, 'to tell the future with coconut leaf knot-tying'

The vocatives from men's names beginning with /tam/ from the underlying form **tama-** 'father' (such as *Tamag*, pronounced /tama:g/, or *Tamngin*, pronounced /tamngi:n/), and from women's names beginning with /tin/ from the underlying form **tina-** 'mother' (such as *Tinag*, pronounced /tinä:g/, or *Tiningmed*, pronounced /tiningme:d/) are not usually, as would be expected, /tam/ and /tin/, respectively, but rather are /ta:/ and /tiy/ (or /ti:/). The reason is that *tam* and *tin* are special words used as vocatives not derived from names. These vocatives are used to address younger boys and girls, and therefore might not be considered polite when used to address someone whose name was *Tamag* or *Tinag*.

The following special vocatives not derived from people's names are commonly used:

tam—usually used when speaking to a man or boy younger than yourself. Derived from **tama-** 'father'

tin—usually used when speaking to a woman or girl younger than yourself. Derived from **tina-** 'mother'

teth—used to address your younger brother. Derived from **tethi-** 'younger brother', as in *tethngiin* 'his younger brother'

n'ean, chaaq—these seem to be used by younger people among themselves, and perhaps are rather colloquial. *N'ean* is the same as the word *n'ean* 'thing', and *chaaq* means 'person'

tooq—used to address a personal friend, someone with whom one is intimate. This word may possibly only be used between men.

galichaaq, galiyoo—used for addressing two people

dapichaaq, dapiyoo—for more than two people

All of these vocatives may be preceded by *oo* or *aa*. Apparently one can also make up a whole vocative phrase from almost any demonstrative pronoun phrase referring to people (see section 4.5.6). These types of usage will not be discussed in this book. The words described above, however, are special vocatives, not normally used for any other function. Vocatives derived from names are likewise never used in other ways. You cannot say:

**Tam ea ka mu noon ngaak'?*

but rather only:

Tamag ea ka mu noon ngaak'?
'Is it Tamag that you talked to?'

Demonstratives

3.2.4 Demonstratives are words which point to something. For example, *neey* 'this' is a demonstrative in the phrase:

rea chiyae neey
'this chair'

Neey in this phrase serves the function of pointing to the chair near the person speaking, and singling it out from other possible chairs. It tells us something about the location of the chair (it is near the speaker), and it also tells us that a specific chair is meant, not just any chair located near the speaker. Thus in the phrase:

ba chiyae ni ba qaraay
'a chair here'

we have the information that the chair is near the speaker, just as in the phrase:

rea chiyae neey
'this chair'

but we are not concerned with a specific chair. Thus *qaraay* is not a demonstrative (it is a **locative** and will be discussed in section 3.2.6), while *neey* 'this' is a demonstrative. Demonstratives are words that have the characteristics of being both locational (they tell where a thing is) and definite (they indicate a particular thing).

The three demonstratives in Yapese are *neey* 'this', *niir* 'that (near you)' and *neam* 'that (over there)'. Thus, you can say:

rea chiyae neey
'this chair'

rea chiyae niir
'that chair (near you)'

rea chiyae neam
'that chair (over there)'

These demonstratives appear to consist of two morphemes each, a morpheme *n-* at the beginning and morphemes *-eey*, *-iir* and *-eam* at the end. It is not clear what the underlying forms of these words should be. However, as we shall see in section 3.2.6 on locatives, the morphemes *-eey*, *-iir* and *-eam* are related to the locative morphemes, as contained, for example, in the words *qaraay* 'here', *qear* 'there (near you)' and *qaraam* 'over there'.

In place of the demonstrative *niir* 'that (near you)' some dialects add the suffix *-n* (with vowel inserted by a morphophonemic rule—see section 2.5.4.7) to the word. For example, instead of saying:

yael' niir
'that one (such as a betel nut) near you'

certain dialects of Yapese say: *yäl'in* and instead of saying: *chaqniir* 'that person (near you)', these dialects say: *chaqan*. The underlying form of this suffix is just **-n**, and the vowel inserted before it is inserted by the H rules in section 2.5.4.7.

Demonstrative Pronouns

3.2.5 The demonstratives *neey* 'this', *niir* 'that (near you)' and *neam* 'that (over there)' are combined with certain other morphemes to make words called **demonstrative pronouns**. A pronoun is a word that stands for another word, and these demonstrative pronouns are pronouns containing the demonstratives. An example is *bineey* 'this one', which consists of a **demonstrative pronoun stem** *bi-* and a demonstrative. The demonstrative pronoun stems are:

bi- 'one, speaking of non-human objects'

ti- 'more than two non-human objects'
chaq- 'one person'
qa- 'one person'
kea- 'one tree or tree-like object'

These may all combine with the demonstratives to produce demonstrative pronouns, such as:

bineey 'this one'
tineem 'those ones (over there)'
chaqniir 'that person (there near you)'
qaneey 'this person'
keaneam 'that tree or tree-like object over there'

These demonstratives may also be used with certain other words, called classifiers, such as *yael'* 'classifier for lines, ropes, betel nuts, mangoes, and certain other things' to form phrases as *yael' neey* 'this one (a betel nut, for example)'. These are apparently phrases rather than single words, and will be discussed in section 4.5. Also, certain words expressing number may be used with demonstrative pronouns to form phrases such as *pi chaqneey* 'these people'. Phrases such as this will also be discussed in section 4.5.

The demonstrative pronoun stems may also be used with a special suffix *-n* to make forms which are used in phrases like:

bin ni ga ba qadaag
'the one that you want'

This usage is also discussed in section 4.5. These five demonstrative pronoun stems all combine with this suffix *-n* to give the forms:

bin 'one'
tin 'several'
chaqan 'one person'
qan 'one person'
kean 'one tree'

Bin and *tin* are also used to mean the same thing as *biniir* and *tiniir*. Thus one may say either:

Ga ba qadaag ea bin?
'Do you like that one (near you)?'

or

Ga ba qadaag ea biniir?
'Do you like that one (near you)?'

Finally, at least *bi-* and *ti-* have forms with long vowels which are used as separate words before the possessive pronoun words with *roo-*, as for example:

bii roog
'mine (a thing)'
tii roog
'mine (several things)'

Locatives

3.2.6 Locatives are words such as *qaraay* 'here' that describe the location of something. There are three locative morphemes in Yapese, which are used in different combinations with other morphemes. Some examples of these three locative morphemes in different combinations are:

Ba qaraay ba teebel.
'Here is a table.'

Ba qear ba teebel.
'There is a table (near you).'

Ba qaraam ba teebel.
'There is a table (over there).'

Baey ba teebel u roey.
'There is a table here.'

Baey ba teebel u wur.
'There is a table there (near you).'

Baey ba teebel u roem.
'There is a table there (over there).'

Qiir ea raay ba teebel.
'Here there is a table.'

Qiir ea yer ba teebel.
'There (near you), there is a table.'

Qiir ea raam ba teebel.
'Over there, there is a table.'

Ngea yib nga raay.
'He is going to come here.'

Ngea yaen ea ngear.
'He's going to go there (near you).'

Ngea yaen nga raam.
'He's going to go over there.'

These four sets of sentences illustrate the four usages of

locatives. The morphological relationships between the different locative words is somewhat complex. The underlying forms of the locative morphemes is apparently something like **ra** + **ye** 'here', **ra** + **me** 'over there' and **ir**. In the first set of words:

qaraay 'here'
qaraam 'over there'
qear 'there near you'

these morphemes have combined with a morpheme *qa-*, with underlying form **qa-**.

In the second set of locative words:

u roey 'here'
u roem 'over there'
u wur 'there near you'

these morphemes are used after the preposition *u* 'at'. The morphemes have a special form with a rounded vowel, and the morpheme **ir** 'there near you' has a /w/ added to the front. This is a special morphophonemic process apparently applicable only to these locative morphemes.

In the third set of forms:

qiir ea raay 'this here'
qiir ea raam 'that over there'
qiir ea yer 'that there near you'

these locative morphemes again have a special set of forms which involves adding a /y/ to the beginning of **ir** 'there near you'. This /y/ must be added by a special morphophonemic process when **ir** is used after *ea*.

In the fourth set of forms:

nga raay 'to here'
nga raam 'to over there'
ngear 'to there near you'

the locative morphemes occur after *nga* 'to', and here **ir** combines with *nga* to give *ngear*. Note that no special rule is needed to describe this process. This is the same process as that accounting for the pronunciation *kea* from **ka** + **i** in a sentence as:

Kea yaen.
'He went.'

This vowel combination rule is described as rule A1 in section 2.5.4.1

Evidently the *-y* (underlying form **-ye**) 'here', *-m* (underlying form **-me**) 'over there' and *-r* (underlying form **-ir**) 'there near you' morphemes of the locatives are the same as the *-y*, *-m* and *-r* at the end of *neey* 'this', *neam* 'that over there' and *niir* 'that near you', described in section 3.2.4.

Compounds and Miscellaneous Topics

3.2.7 Compounds are combinations of major morphemes that are put together to make single words. A good example of a compound is the word *m'agpaaq* 'wedding', derived from *m'aag* 'to tie' and *paaq* 'his hand, her hand'.

There are a number of different patterns used in Yapese for making compounds. One common pattern is illustrated by the following words:

toelngaen' 'proud' from *toelaeng* 'high' and *waen'* 'his mind'
geelyuwaan 'stubborn' from *geel* 'strong' and *yuwaan* 'its leaf'
fal'fal'l'ugun 'deceitful' from *feal'* 'good' and *l'ugun* 'his mouth'
qëlmäriin 'forceful' from *qël* 'hard' and *märiin* 'his power'
kirbaen' 'sad' from *kireeb* 'bad' and *waen'* 'his mind'
ngochaen' 'bored, tired of something' from *ngooch* 'short' and *waen'* 'his mind'

All of these words are formed from an adjective followed by a possessed noun. Their meaning is as if they were derived from sentences as:

Ba toelaeng waen'.
'His mind is high.'

Ba geel yuwaan.
'His leaf is strong.'

Ba fal'feal' l'ugun.
'His mouth is nice.'

A second pattern for making compounds is illustrated by the following words:

qaawaen' 'envious' from *qaaw* 'to fall' and *waen'* 'his mind'
sull'ugun 'to vomit' from *suul* 'to return' and *l'ugun* 'his mouth'

gabälmalaang 'barnacle' from *gabael* 'to stick to' and *malaang* 'stone'

These compounds are all derived from a verb of a type called intransitive (see section 3.3.1 and chapter 5) followed by a noun. The meaning of this pattern is as if these words were derived from sentences such as the following:

Kea qaaw waen'.
'His mind fell.'

Kea suul l'ugun.
'His mouth has returned.'

Kea gabael ea malaang.
'The stone has stuck, adhered.'

A few compounds are formed like the ones above, but with the addition of a long /e:/ or /ë:/ vowel between the two parts of the compound. The best examples I know are *litheayaal'* 'sunset', from *liith* 'to dive' and *yaal'* 'the sun'.

A third pattern for making compounds is illustrated by the following examples:

faraaboen 'to smell' from *faraay* 'to sniff, kiss' and *boen* 'his smell'
pagtaliin 'to forget' from *paag* 'to let go of' and *taliin* 'its equipment, things for it'
maaqqaaw 'coconut husk pounder' from *maaq* 'to pound' and *qaaw* 'coconut husk fiber'
m'agpaaq 'wedding' from *m'aag* 'to tie' and *paaq* 'his hand'

These compounds all consist of a verb of a type called transitive (section 3.3.1 and chapter 5) followed by a noun. The meaning of these compounds is as if they were derived from sentences like:

Kea faraay boen.
'He sniffed its smell.'

Kea paag taliin.
'He dropped its equipment.'

Kea m'aag paaq.
'He tied his hands.'

A few compounds are formed like the ones above, but they have a long /o:/ vowel inserted between the two members of the compound. The best examples are:

m'agoochug 'topknot of hair on head' from *m'aag* 'to tie' and *chug* 'head'
pugoofaay 'to confess' from *puug* 'to lift up' and *faay* 'net weights'

A fourth pattern for making compound words is illustrated by the following words:

faakl'uud 'worm' from *faak* 'child of, offspring of' and *l'uud* 'rotten wood, firewood'
tamanchep 'preacher, teacher' from *tamaan* 'his father' and *chep* 'parable, history with a lesson'
taanrraan 'dawn' from *taan* 'underneath it' and *rraan* 'day'
laenmiit 'his eye' from *laen* 'inside it' and *miit* 'his eye, face'

These compounds all consist of a noun with the possessive suffix *-n* 'his, its' followed by another noun. The meaning of the pattern is as if the words were derived from phrases such as the following:

faak ea l'uud
'child of rotten wood'

tamaan ea chep
'father of parables'

taan ea rraan
'underneath the day'

The following compounds are of a type that is closely related to the above type, but with one of the vowels long /e:/ or long /ë:/, long /i:/ or long /a:/ inserted between the two members of the compound:

dabp'aadaay 'seashore' from *dabap'* 'its edge' and *daay* 'the sea'
ganeayakooq 'type of banana' from *gaan* 'its food' and *yakooq* 'storm'
m'ooreamagael 'torch-fishing canoe' from *m'oor* 'its vehicle' and *magael* 'torch'
gil'iiggaan 'intestine' from *giil'* 'its place' and *ggaan* 'food'
buguliipaaq 'his finger' from *bugul* 'end of something' (*bugul* is a classifier rather than a possessed noun—see chapter 4) and *paaq* 'his hand'

There are other processes of compounding in Yapese, and other ways of forming new words (i.e., other derivational processes). The ones described are the most important ones, and include apparently all the productive ones. The remaining ones are not productive, and it is often not clear how they operate. When a new word is formed by one of the derivational processes, it then becomes subject to the usual inflectional processes to be described in section 3.3. For example, *taliiw* 'taboo place', which is a word formed from *liiw* 'taboo place' by adding the locative prefix *ta-*, may then have the possessive suffix *-n* added to it (with the stem-forming morpheme *-ea-*—see section 3.3.6) to become *taluwean* 'its cemetery, sacred place' in the same way that a word that has not been formed by a derivational process may also have the possessive suffixes added.

INFLECTIONAL PROCESSES IN YAPESE

3.3 This section discusses the inflectional processes of Yapese.

Transitive and Intransitive Verbs

3.3.1 Consider the following two sentences:

Gu waen nga Donguch ni ngu gu chuwaey'.
'I went to Donguch to buy things.'

Gu waen nga Donguch ni ngu gu chuwqiy boech ea chuguum roog.
'I went to Donguch to buy some things for myself.'

In the first sentence *chuwaey'* means 'to buy, to shop'. In the second sentence *chuwqiy* also means 'to buy'. *Chuwaey'* is a form of the verb which is called intransitive. It is used when the thing you are going to buy is not expressed in the sentence. In other words, you cannot say: **Gu waen nga Donguch ni ngu gu chuwaey' boech ea chuguum roog*.

In these sentences, the phrase *boech ea chuguum roog* 'some things for myself' is called the **object**, or sometimes the **direct object**, of the verb. A verb like *chuwqiy*, which may have a direct object, is called a transitive verb.

In a special type of sentence intransitive verbs may have a direct object. An example of this type of sentence is:

Gu waen nga Donguch ni ngu chuwaey' chuguum.
'I went to Donguch to go shopping.'

However, this is a special type of sentence called an **incorporated object sentence** in which intransitive verbs are used with direct objects. In this type of sentence, the combination of intransitive verb plus its object—that is, in the above sentence, the phrase *chuwaey' chuguum*—acts as if it were an intransitive verb itself. Compare the following three sentences:

Qu ra chuwaey' gow.
'They two were buying.'

Qu ra chuwaey' chuguum gow.
'They two were shopping.'

Qu ra chuwqiyeew fa pi chuguum.
'They two were buying those things.'

Notice that in the first two sentences, the morpheme *gow* 'two' is used. In the first sentence *gow* follows the verb *chuwaey'*, and in the second sentence it follows the object *chuguum*. In the third sentence the morpheme *-eew* 'two' follows the verb, and the direct object follows *-eew*. The morpheme *gow* is not used after transitive verbs, and *-eew* is not used after intransitive verbs. Furthermore, *gow* or *-eew* normally follow the verb directly, but in the second sentence above *gow* follows the object *chuguum*. The combination *chuwaey' chuguum* acts as an intransitive verb. Thus we will say that an example like *chuwaey' chuguum* does not contradict the statement that intransitive verbs do not have objects.

We have also said that transitive verbs do have objects. However, consider the sentence:

Kea chuwqiy.
'He bought it.'

In this sentence there is no object expressed. However, there is an object implied in the meaning. If someone uses this sentence, you know that he has something definite in mind that someone bought. He means 'he bought *it*', and not just that he did some buying. On the other hand, if he says:

Kea chuwaey'.
'He bought.'

then no definite direct object is implied. Although transitive verbs as *chuwqiy* 'to buy something' are sometimes used without any expressed direct object, they always imply a definite direct object.

In chapter 5 transitive and intransitive verbs and their usage will be discussed in greater detail. It was necessary here to say enough to explain the difference between the two kinds of verbs in order to describe the ways in which transitive verbs and intransitive verbs are related morphologically.

Most intransitive verbs have a transitive counterpart, and vice versa. Some transitive verbs are derived from adjectives (such as *quthum* 'to sharpen', from *m'uuth* 'sharp'), and some are derived from nouns (such as *walguy* 'to sweep' from *walguw* 'broom'). However, the majority are derived from intransitive verbs. Some examples of transitive verbs and the intransitive verbs, nouns or adjectives which are related to them are:

TRANSITIVE VERB		INTRANSITIVE VERB, NOUN OR ADJECTIVE	
chuwqiy	'to buy'	*chuwaey'*	'to buy'
k'aring	'to tease'	*k'ar*	'to tease'
feeng	'to find'	*fay*	'to find'
lithaeg	'to dive with something'	*liith*	'to dive'
mithaeg	'to hide'	*miith*	'to hide'
ruuruug	'to shake'	*ruur*	'to shake'
girngiy	'to pull'	*gireeng*	'to pull'
seey	'to split'	*say*	'to split'
languy	'to eat raw meat'	*laang*	'to eat raw meat'
gathay	'to destroy'	*mogooth*	'to destroy'
poey	'to recognize, read'	*pow*	'to recognize, read'
fooleeg	'to measure'	*fool*	'to measure'
fil	'to measure'	*fool*	'to measure'
seereeg	'to scrape bottom'	*sear*	'to scrape bottom'
thilyeeg	'to differentiate'	*thiil*	'different'
qafweeg	'to transfer'	*qaaf*	'to cross'
suulweeg	'to return'	*suul*	'to return'
thingeeg	'to turn over'	*thig*	'to topple'
roowroow naag	'to make red'	*roowroow*	'red'
kaay	'to eat'	*qabiich*	'to eat'
qunum	to drink'	*maquun*	'to drink'
lukuy	'to wash'	*maeluk*	'to wash'
quthum	'to sharpen'	*m'uuth*	'sharp'
kunuy	'to collect'	*moekun*	'a pile'

qachay	'to paint'	*maqchaaw*	'paint'
l'oeg	'to send someone'	*mol'oog*	'to send someone'
guchthiy	'to tear'	*mogchoth*	'torn'
l'eeg	'to hook'	*lum'eag*	'to hook'
liith	'to cook'	*luum*	'to cook'
liith	'to boil'	*ligiil*	'to boil'
niing	'to ask for'	*maen*	'to ask for'
walguy	'to sweep'	*walguw*	'broom'
k'aed	'to bite'	*k'aad*	'to bite'

These words illustrate the fact that there are a number of different ways in which transitive verbs may be formed from intransitive verbs, from nouns, and from adjectives. Furthermore, in certain cases intransitive verbs are derived from the transitive verb. In some cases the transitive verb and the intransitive verb are both derived from a common root which does not occur alone without some prefix or suffix. For example there is the transitive verb *qachay* 'to paint', the intransitive verb *maqchaaw* 'paint, to paint (intransitive)', but no word exists pronounced something like **qaach* or **qachaaw* which would be just the bare root without prefix or suffix.

We will discuss the following types of relationship between transitive verbs and their sources:

1. The suffix *-y*, as in *chuwqiy* 'to buy'
2. The suffix *-g*, as in *lithaeg* 'to dive with something'
3. The suffix *-eeg*, as in *qayweeg* 'to help'
4. Certain other minor processes

We will discuss the following types of relationship between intransitive verbs (and, in some cases, adjectives and nouns) and their sources:

1. The prefix *ma-* (sometimes pronounced *m-*, *moo-* or *maa-*), as in *maqchaaw* 'paint, to paint (intransitive)'
2. The suffix *-w*, as in *gow* 'to look for'

The Transitive Suffix -y

3.3.1.1 Examples of the transitive suffix *-y* (underlying form **-y**) are numerous:

TRANSITIVE VERB		ROOT OR SOURCE	
chuwqiy	'to buy'	*chuwaey'*	'to buy'
girngiy	'to pull'	*gireeng*	'to pull'
languy	'to eat raw meat'	*laang*	'to eat raw meat'
dilqiy	'to press'	*diloey'*	'to press'
buguy	'to bend'	*bug*	'to bend'
cheagiy	'to add something'	*cheag*	'to join to'
gaweeliy	'to make hot'	*gaweal*	'heat'
meeliy	'to pull on rope'	*meel*	'rope on sail'
pathuy	'to join together'	*peeth*	'to join to'
lukuy	'to wash'	*-luk*	'wash' cf. *maeluk* 'to wash (intransitive)'
gathay	'to destroy'	*-gooth*	'destroy' cf. *mogooth* 'to destroy (intransitive)'
qathkuy	'to mix'	*-qathuk*	'mix' cf. *maqthuk* 'to mix (intransitive)'
qaruy	'to stir'	*qaer*	'murky, of water'

The underlying form of the suffix is just **-y**. When the suffix is added to a root whose underlying form ends in a short vowel, that vowel appears before the *-y* of the suffix. When it is added to a root ending in a consonant, the appropriate H rule (section 2.5.4.7) inserts the correct vowel between the consonant at the end of the root and the *-y* of the suffix. For example, *qaruy* 'to stir', derived from *qaer* 'murky, of water', under lying form **qaru**, has the *u* before the *-y* of the suffix which is simply the final short vowel of the root. *Buguy* 'to bend', derived from *bug* 'to bend', underlying form **bug**, has /u/ inserted by rule H1 into the underlying form **bug + y**.

The Transitive Suffix -g

3.3.1.2 The suffix *-g* (underlying form **-ge**) occurs with relatively few words. Examples are:

lithaeg 'to dive with something' derived from *liith* 'to dive', underlying form **litha + ge**

mithaeg 'to hide something', derived from *miith* 'to hide', underlying form **mitha + ge**

ruuruug 'to shake something', derived from *ruur* 'to shake', underlying form **ru:ru + ge**

In all the above cases, the underlying form of the root ends in a short vowel. Rule F3 (section 2.5.4.5) drops the final **e** of the suffix **-ge** and lengthens the root-final vowel.

The Transitive Suffix -eeg

3.3.1.3 The suffix *-eeg* is very productive and occurs with a large number of words. This suffix can be viewed as having an underlying form consisting of two morphemes, one the stem-forming morpheme **-e-**, and the other the same **-ge** 'transitive suffix' morpheme as discussed above in section 3.3.1.2. The underlying form of the suffix *-eeg* is **-e + ge**. Note that the stem-forming morpheme is the same as that used with possessed nouns, such as *walaageeg* 'my brother', underlying form *wala:g + e + gu*. Possessed nouns with stem-forming morpheme **-e-** are discussed below in section 3.3.6.

The transitive suffix *-eeg* sometimes has the special meaning of 'to cause to'. An example is *seereeg* 'to cause to scrape bottom', from *sear* 'to scrape bottom', underlying form **së:r**, or *maleag* 'to put to sleep, cause to go to sleep' from *mool* 'to sleep', underlying form **mola**.

Some roots have a special pronunciation before the *-eeg* suffix. So, for example, in *pingeeg* 'to turn over (transitive)', derived from *piig* 'to turn over (intransitive)', the final *-g* of the root changes to *-ng* when the *-eeg* suffix is added. Such processes will not be discussed explicitly.

Examples of transitive verbs containing this suffix are:

mak'eag 'to swamp, cause to sink' from *mak'* 'to become swamped, of a canoe or boat'

madqeag 'to meet someone' from *madaq* 'to meet'

qafweeg 'to transfer, cause to cross' from *qaaf* 'to cross'; note the special addition of *-w* to the root. This *-w* may be related to the noun/intransitive verb forming suffix *-w* to be described later in this section.

qayweeg 'to help (transitive)' from *qayuw* 'help (noun)'

qathpeag 'to hope for' from *qathap* 'hope (noun)'

thilyeeg 'to differentiate, to change' from *thiil* different'; note the *-y* which is added to the root.

qurfeeg 'to burn' from *quruf* 'to burn (intransitive)'

Miscellaneous Transitive Verb Forming Processes

3.3.1.4 There are a few other processes which apply to only a small number of transitive verbs.

First, there are a few transitive verbs which appear to contain a suffix *-ng* or *-ing*. Examples are:

qiring 'to steal', compare *moroqroq* 'thief'
k'aring 'to tease' from root *k'ar* 'to tease', compare *mak'rang* 'to tease'
biing 'to open', compare *mab* 'open'
niing 'to close', compare *maen* 'closed'
niing 'to ask for', compare *maen* 'to ask for'
feeng 'to find' from *fay* 'to find (intransitive)'
pining 'to call (transitive)', compare *poeng* 'to call (intransitive)'

Second, there are two words which seem to contain a suffix *-um*. These are the transitive verbs *qunum* 'to drink' and *quthum* 'to sharpen'. Compare these with the corresponding intransitive forms *maquun* 'to drink' and *m'uuth* 'sharp' (perhaps from underlying form **m+quthu**).

A third minor pattern is the derivation of transitive verbs by means of ablaut (vowel change—see section 3.1.4). This applies to only a very few words, such as:

k'aed 'to bite (transitive)' from *k'aad* 'to bite (intransitive)'
f'oeth 'to divide (transitive)' from *f'ooth* 'to divide (intransitive)'

Note that in these two cases the vowel of the transitive verb is a light vowel (either light *ae* or light *oe*) while the vowel of the intransitive verb is plain (*aa* or *oo*).

Fourth, there is a small number of transitive verbs which appear to contain the suffixes *-g* or *-y*, but for which there is no certain evidence whether the *-g* or *-y* is a suffix or is just part of the verb root. Examples are:

paag 'to let go of, drop'
l'eeg 'to hook'
l'oeg 'to send on an errand'
rungqag 'to hear'
qadaag 'to like, love'

taey 'to put or place' (compare *taaw* 'to arrive', and the locative prefix *ta-*)
guy 'to see'
kaay 'to eat'

Finally, there are a number of words that contain no prefix or suffix but are inherently transitive verbs. Some of these verbs have a corresponding intransitive verb and some do not, and in some cases the corresponding intransitive verb does not bear any phonological resemblance to the transitive verb at all. Examples are:

naang 'to know'
n'uuf 'to erect something', compare intransitive *man'uuf* 'to erect (intransitive)'
pathig 'to untie', compare intransitive *puuf* 'to come untied, to blossom'
t'aer 'to break, snap', compare intransitive *m'ing* 'to break, snap'
liith 'to cook or boil', intransitives *luum* 'to cook' and *ligiil* 'to boil'
feek 'to take or carry'
piiq 'to give, push'
riin' 'to do'

For many words, especially adjectives, there is no transitive verb derived by any morphological means. However, the basic idea of a transitive form of these words is needed, and this is supplied in Yapese by the use of a special particle *naag* which is a special word used to make a transitive out of an intransitive verb, a noun, or an adjective. This process is discussed in section 5.4.7. An example is:

Ku gu gaaq nageed ea naqun roomaed.
'We made our house bigger.'

where the phrase *gaaq naag* 'to make big' functions as a transitive verb form of *gaaq* 'big'.

The Intransitive Prefix *ma-*

3.3.1.5 Examples of intransitive verbs (or in some cases adjectives or nouns) formed by using the prefix *ma-* (or in some cases *m-*, *moo-* or *maa-*) are numerous. Some of these are:

man'uuf 'to erect' from *n'uuf* 'to erect (transitive)'
marungqag 'news, information' from *rungqag* 'to hear'
mal'eag 'to hook' from *l'eeg* 'to hook (transitive)'
moqloy 'to peel' from *qöloey* 'to peel (transitive)'
mogchoth 'torn' from the root *guchth-* 'tear' as in *guchthiy* 'to tear (transitive)'
moqruf 'burnt' from *quruf* 'to burn (intransitive)'
maeluk 'to wash' from root *luk-* 'wash' as in *lukuy* 'to wash (transitive)'
moekun 'pile' from root *kun-* 'assemble' as in *kunuy* 'to collect'

The Intransitive Suffix *-w*

3.3.1.6 A very small number of intransitive verbs, nouns, and adjectives are formed using the suffix *-w*, sometimes with the prefix *ma-* simultaneously added to the same word. Some examples are:

seew 'to split' from underlying form **sai + w**, compare *say* 'to split (intransitive)' from underlying form **sai**, and *seey* 'to split (transitive)' from underlying form **sai + y**
taaw 'to arrive', compare *taey* 'to put (transitive)' and the locative prefix *ta-*
walguw 'broom', compare *walguy* 'to sweep', underlying form **walgu + y**
maqchaaw 'paint, to paint (intransitive)', compare *qachay* 'to paint (transitive)'

Of course many roots are themselves intransitive verbs, nouns or adjectives without any morphological process being applied to them.

INDEPENDENT PRONOUNS

3.3.2 As was explained in section 2.4.6, pronouns are a special type of noun which may stand for another noun. There is a special set of pronouns in every language that are called the **personal pronouns** of that language. These are words as *gaeg* 'I', *guur* 'you', and so forth. Some other pronouns (*chaqneey* 'this person') are called demonstrative pronouns. These were discussed in section 3.2.5, and will be discussed further in sections 4.5–6.

Some personal pronouns in Yapese are joined to other words, as suffixes to these other words, for example, the possessive pronoun suffix *-g* 'my' in *qadiig* 'my liver'. These pronouns are discussed in section 3.3.5–7. Some pronouns are particles. That is, they are not prefixes or suffixes but are nevertheless not normally used as separate words either. For example, *gu* 'I' in a sentence such as is a particle:

Baey gu riin' gabuul.
'I will do it tomorrow.'

These pronouns are discussed in sections 5.2–3.

Some pronouns, however, are major morphemes or independent words and may be used independently of other words in the sense that they are not prefixed or suffixed to other words, and they are not particles tied phonologically to nearby words. These are the **independent pronouns**.

Some pronouns or nouns in Yapese refer to just a single person or thing. *Gaeg* 'I', for example, only refers to a single person, namely the one who is speaking. These pronouns and nouns are called **singular** in number, as they refer to just a single person or thing. Some pronouns or nouns refer to exactly two persons or things. Thus *yow* 'they two' only refers to two people. Such pronouns and nouns are called **dual** in number (dual is a word meaning 'having to do with two of anything'). Some pronouns or nouns refer to more than two people or things. Thus *yaed* 'they all' must refer to at least three people. These pronouns and nouns are called **plural** (meaning 'having to do with many of anything') in number.

All pronouns (with one exception to be discussed in section 5.2) are either singular, dual or plural. Crosscutting the categories of singular, dual, and plural is what is known as the **person** or a pronoun. Consider the singular independent pronouns of Yapese:

gaeg 'I'
guur 'you (singular)'
qiir 'he, she'

The first of these refers to whoever is speaking, the second refers to whoever is being spoken to, and the third refers to anyone else other than the speaker or the hearer. The traditional terms for these three different kinds of pronouns are **first person** (for those pronouns which, like *gaeg* 'I', refer to the speaker), **second person** (for those pronouns which, like *guur* 'you', refer to the hearer) and **third person** (for those pronouns which, like *qiir* 'he, she', refer to someone other than the speaker or hearer). Thus

gaeg 'I' is **first person singular**, *guur* 'you' is **second person singular** and *qiir* 'he, she' is **third person singular**.

Now consider the dual independent pronouns of Yapese:

gadow	'we (you and I)'
gamow	'we (he and I)'
gimeew	'you two'
yow	'they two'

Gadow refers to two people, and so does *gamow*. Both are first person pronouns, as both refer to the speaker ('I'). However, *gadow* refers to the person spoken to as well, while *gamow* excludes the person spoken to, but rather refers to the speaker and some third person other than the person spoken to. Thus *gadow* is both first person and second person, while *gamow* is first person and third person. A pronoun which refers to first and second persons (that is 'I' and 'you') at the same time is called **first person inclusive** (inclusive, because it includes the person spoken to), while pronouns referring to first and third persons at the same time (that is, 'I' and 'he') are called **first person exclusive** (exclusive, because they exclude the person spoken to). Thus *gadow* is first person dual inclusive, *gamow* is first person dual exclusive, *gimeew* is second person dual, and *yow* is third person dual. These terms are rather cumbersome, but once learned they are a handy and precise way of referring to the different kinds of pronouns in Yapese, and we will use them regularly in this book.

Now we can add the plural independent pronouns of Yapese to our lists:

	singular	dual	plural
1st inclusive		*gadow*	*gadaed*
1st exclusive	*gaeg*	*gamow*	*gamaed*
2nd	*guur*	*gimeew*	*gimeed*
3rd	*qiir*	*yow*	*yaed*

There is no first person singular inclusive pronoun, of course, since a singular pronoun only refers to one person and thus cannot refer to both 'you' and 'me' at the same time.

It is easy to see that many of these forms are morphologically related. For example, apparently a suffix *-w* means 'dual', and other such relationships may be seen. The relationship is primarily between the various dual and plural forms. These relationships

may be seen by listing the dual and plural pronouns in their underlying forms (note that the underlying form of the plural suffix could be either **-du** or **-di** and the morphophonemic rules we have would yield the correct pronunciation):

	dual	plural
1st inclusive	**g+da+w**	**g+da+du**
1st exclusive	**g+ma+w**	**g+ma+du**
2nd	**g+me:+w**	**g+me:+du**
3rd	**ya+w**	**ya+du**

We see that the dual suffix has the underlying form **-w**, and the plural suffix has the underlying form **-du**. All the pronouns except the third person ones have a prefix **g-**, which really has no meaning of its own. It is just used in these independent pronouns (although it is also used before the third person pronouns in the expressions *bagyow* 'one of them two', *bagyaed* 'one of them (plural)', underlying form **ba+g+ya+w**, **ba+g+ya+du**. These expressions will not be discussed). Rule D1 changes **a** to light /ä/ in the plural forms, because of the presence of the **u** at the end of the words, and the intervening **d**. The F rules then drop the final **u** and lengthen the preceding /ä/ to long /ä/ in the usual way. Rule J4 changes the short /a/ to short /o/ in the dual forms before the **w**. The M rules insert /a/ (or /i/ before the front vowel in **me:**) after the **g-**. Thus we derive the required pronunciations from these underlying forms.

Subject Pronoun Number Markers

3.3.3 In a certain type of verb phrase construction (discussed in section 5.3), the number of the pronoun expressing the **subject** of the sentence (this term will be discussed in section 5.1) is expressed by means of a particle of suffix added after the verb. Consider the following sentences:

Kea chuwqiy ea chuguum rook'
'He bought things for himself.'

Ka ra chuwqiyeew ea chuguum roorów.
'They two bought things for themselves.'

Ka ra chuwqiyeed ea chuguum rooraed.
'They all bought things for themselves.'

Kea chuwaey'.
'He bought.'

Ka ra chuwaey' gow.
'They two bought.'

Ka ra chuwaey' gaed.
'They all bought.'

In the first three sentences above the person doing the buying is called the **subject** of the sentence. The subject of a sentence is the person who does the thing described by the verb. In this case *chuwqiy* or *chuwaey'* is the verb, and the subject is the person who does the buying. This concept is discussed in section 5.1 and again in section 7.1. In the first three sentences above the subject is in the third person. It is 'he' in the first sentence, 'they two' in the second, and 'they (plural)' in the third. In the first sentence the first word *kea* is a contraction of the two morphemes *ka* 'past time' and *i* 'he' (compare rule A1, section 2.5.4.1). We see that when the subject is 'he' the morpheme *i* is used to express the subject in this type of verb phrase. When the subject is 'they' the morpheme *ra* is used to express the subject. However, what distinguishes 'they two' from 'they (plural)' is the suffix *-eew* at the end of the verb expressing the fact that the subject is dual, and the suffix *-eed* expressing the fact that the subject is plural. These are known as the **subject pronoun number suffixes**.

In the second three sentences the subject is expressed in the same way as in the first three sentences, except that instead of a subject number suffix, the number of the subject is expressed by the particles *gow* 'dual' and *gaed* 'plural'. The difference is that in the first three sentences a transitive verb *chuwqiy* is used, while in the second three sentences an intransitive verb *chuwaey'* is used. Thus the subject number markers are:

	transitive verbs	intransitive verbs
dual	*-eew*	*gow*
plural	*-eed*	*gaed*

The underlying forms of these morphemes are apparently:

	transitive verbs	intransitive verbs
dual	**-e:+w**	**ga+w**
plural	**-e:+du**	**ga+du**

Thus we see that the same morphemes are used here for dual and plural (namely **-w** and **-du**) as were used in the independent pronouns (section 3.3.2).

The morphemes *i* and *ra*, and the other **subject pronoun particles** are discussed in section 5.3.

A very small number of verbs have subject number suffixes without the **-e:-** or **ga-** morphemes. An example is *noon* 'to talk', underlying form **nona**. Consider the following sentences:

Ka ra nonow. pronounced /karannow/
'They two talked.'

Ka ra nonaed. pronounced (karannä:d/
'They (plural) talked.'

In this case the dual suffix **-w** and the plural suffix **-du** is simply added directly to the root, so that the underlying forms of the above sentences are:

ka + ra + nona + w
ka + ra + nona + du

The vowel before the *-w* or *-d* of the suffix is simply the vowel at the end of the underlying form of the root. The correctness of this view is shown by other verbs which have a different vowel here. Compare the following examples:

Ka ra bow. underlying form **ka + ra + ba + w**
'They two have come.'

Ka ra baed. underlying form **ka + ra + ba + du**
'They (plural) have come.'

Ka ra suulow. underm **ka + ra + su:lo + w**
'They two returned.'

Ka ra suuloed. underlying form **ka + ra + su:lo + du**
'They (plural) returned.'

Note that the **a** at the end of the underlying forms such as **nona** 'talk' is changed to /o/ before **w** by rule J4 (section 2.5.4.8), giving *nonow*. Before **-du** the **a** at the end of the root is lightened to /ä/ by rule D1 (section 2.5.4.3), and then lengthened to /ä/ by F3 (section 2.5.4.5), which also drops the final **u** of **-du**. Similar comments apply to the root-final **o** of **su:lo**.

A partial list of these verbs is:

yaen 'to go' (*raanow* 'they two went', *raenoed* 'they (plural) went', underlying form **ano** or **aro** (compare *daarow* 'we (you and I) went'))

yib 'to come' (*ra bow*, *ra baed*, underlying form **(i)ba**)
yim' 'to die' (*ra m'ow*, *ra m'aed*, underlying form **(i)m'a**)
suul 'to return' (*ra suulow*, *ra suuloed*, underlying form **su:lo**)
noon 'to talk' (*ra nonow*, *ra nonaed*, underlying form **nona**)

Various other aspects of the phonological variation of these verbs is discussed more fully in 5.5.

Finally, note that one intransitive verb, *paer* 'to stay, remain', although it is intransitive, nevertheless takes the subject number suffixes with the **-e:-** element, as if it were a transitive verb:

Ka ra päreew.
'They two stayed.'

Ka ra päreed.
'They (plural) stayed.'

Note that we cannot simply say that the underlying form of *paer* ends in **e** because the **e** would not be lengthened before the dual suffix **-w** by any morphophonemic rule (since the **-w** suffix does not have a final short vowel in its underlying form). Thus we would expect a pronunciation such as: **Ka ra pärew* with short /e/ in the last syllable if the underlying form of *paer* ended in short **e**. However, a long /e:/ is actually used here, and therefore the underlying form cannot end in short **e**. On the other hand, the underlying form of *paer* cannot end in long **e:**, since this long vowel would not be dropped by the F rules (section 2.5.4.5) and thus the word by itself would be pronounced **paree*, which is also incorrect. Therefore it is necessary to assume that the underlying form of the sentence: *Ka ra päreew*. is: **ka** + **ra** + **päre**+**e:**+**w** and that of: *Ka ra päreed*. 'They (plural) stayed.' is: **ka** + **ra** + **päre**+**e:**+**du**

You may wonder why *gow* 'dual intransitive' and *gaed* 'plural intransitive' are treated as particles rather than as suffixes, as *-eew* 'dual transitive' and *-eed* 'plural transitive'. There are two main reasons for this. One reason is th t *gow* and *gaed* may follow not only intransitive verbs, but other elements that are themselves not merely single words but whole phrases, as, for example:

Qu ra chuwaey' mareaw gow.
'They two were buying copra.'

Suffixes are morphemes which are tied to particular words, whereas *gow* and *gaed* just follow the element of the sentence

which is called the predicate (section 5.1 and 5.4). If *gow* and *gaed* were suffixes one might expect something like the incorrect sentence:

**Qu ra chuwaey' gow mareaw.*

parallel to the transitive sentence, with true subject number suffix:

Qu ra chuwqiyeew ea mareaw.
'They two were buying copra.'

Another reason that *gow* and *gaed* are particles rather than suffixes is that *gow* and *gaed* do not receive main stress. Recall that in 2.5.4.15 it was pointed out that words are normally stressed on the last syllable of the word, if the word ended in a consonant. Note that the stress on *chuwqiyéew* is not on the syllable *-qiy* (as it is in *chuwqiy* pronounced alone), but is on the syllable *-yéew*. The position of the stress on *chuwqiyéew* indicates that this syllable is the last syllable of the word, since main stress is normally placed on the last syllable of a word. Hence *-eew* and *-eed* are suffixes, since they are part of the same word as the verb. However, *gow* and *gaed* have no such effect. In the phrase *chuwáey' gow* the main stress is on the syllable *-wáey'* as indicated, exactly as it is when the word *chuwáey'* is pronounced alone, and *gow* is unstressed. If *gow* and *gaed* were suffixes, we would expect the following incorrect stress pattern: **chuway' gów*. Thus we conclude that *gow* and *gaed* are stressless particles rather than suffixes.

Object Pronoun Suffixes

3.3.4 Consider the sentences:

Kea guyeeg.
'He saw me.'

Kea guyeem.
'He saw you (singular).'

In each sentence the person who did the seeing is 'he'. 'He' is the subject of the sentence. The person who was seen is 'me' in the first sentence and 'you' in the second sentence. We defined the subject of a sentence as the person or thing which does the action described by the verb. The direct object of a sentence is the person or thing that the subject does something to (recall

also the discussion of direct objects in section 3.3.1 and see section 7.2). Thus 'me' in the first sentence above, and 'you' in the second, are the direct objects of the two sentences.

In the above two sentences we see that the direct object is expressed by a suffix to the verb. This is the way a pronoun direct object of a transitive verb is expressed in Yapese. The suffixes used are illustrated by the following sentences:

Kea guyeeg.
'He saw me.'

Kea guyeem.
'He saw you (singular).'

Kea guy.
'He saw him.'

Kea guydow.
'He saw us (you and me).'

Kea guymow.
'He saw us (him and me).'

Kea guymeew.
'He saw you two.'

Kea guyrow.
'He saw them two.'

Kea guydaed.
'He saw us (me and you all).'

Kea guymaed.
'He saw us (me and them).'

Kea guymeed.
'He saw you (plural).'

Kea guyraed.
'He saw them (plural).'

These suffixes may be arranged as in the following table. (Note that no suffix is used if the direct object is third person singular, that is 'him, her'.)

OBJECT PRONOUN SUFFIXES OF YAPESE—PRONUNCIATION FORMS

	singular	dual	plural
1st inclusive		*-dow*	*-daed*
1st exclusive	*-eeg*	*-mow*	*-maed*
2nd	*-eem*	*-meew*	*-meed*
3rd	—	*-row*	*-raed*

These suffixes may be written in their underlying forms as follows:

OBJECT PRONOUN SUFFIXES OF YAPESE—UNDERLYING FORMS

	singular	dual	plural
1st inclusive		**-da + w**	**-da + du**
1st exclusive	**-e + gu**	**-ma + w**	**-ma + du**
2nd	**-e + mu**	**-me: + w**	**-me: + du**
3rd	—	**-ra + w**	**-ra + du**

Note that these object pronoun suffixes are incompatible with the subject number suffixes. In other words, to say something like 'They two saw me' you must say:

Ka ra guyeew gaeg.
'They two saw me.'

with an independent pronoun functioning as the direct object 'me', and not the incorrect sentence:

**Ka ra guyeeweeg.*

The rules for the usage of verbs with independent pronouns as direct objects are discussed in section 5.3.

After certain transitive verbs the direct object pronoun is optionally expressed using a separate stressless particle beginning with *n-* instead of the direct object pronoun suffixes. This usage is illustrated by the following sentences:

Kea qayweeg neeg.
'He helped me.'

Kea qayweeg neem.
'He helped you.'

Kea qayweeg nidow.
'He helped us two (you and me).'

Kea qayweeg nimow.
'He helped us two (me and him).'

Kea qayweeg nimeew.
'He helped you two.'

Kea qayweeg nirow.
'He helped them two.'

Kea qayweeg nidaed.
'He helped us (me and you all).'

Kea qayweeg nimaed.
'He helped us (me and them).'

Kea qayweeg nimeed.
'He helped you (plural).'

Kea qayweeg niraed.
'He helped them (plural).'

This form of direct object pronoun using *n-* is optional. One may also say:

Kea qaywegeeg.
'He helped me.'

Kea qaywegeem.
'He helped you.'

Kea qaywegdow.
'He helped us (you and me).'

Object pronouns with this *n-* element are only used after verbs with the transitive suffix *-eeg* (underlying form **-e+ge**). This *n-* element may not be used after other verbs which end in *-g*. For example, one cannot say:

**Ngea paag neeg ni ngu gu qun ngaak'.*

instead of:

Ngea pageeg ni ngu gu qun ngaak'.
'He is going to let me go with him.'

Likewise, the *n-* element may not be used after the word *naag*, for example:

** Yaed bea puruuy' naag neeg.*

instead of the correct sentence:

Yaed bea puruuy' nageeg.
'They (plural) are discussing me.'

These direct object pronoun particles may not be used after any verbs which do not end in *-g* at all.

Possessive Pronoun Suffixes: Directly Suffixed Pronouns

3.3.5 These are the suffixes which have been used as examples of many morphophonemic rules, such as, for example, the suffix *-g* 'my' in *qadiig* 'my liver' and the suffix *-m* 'your' in *qadiim* 'your liver'.

These suffixes may be joined to a noun directly, or by means of a stem-forming morpheme. First let us look at an example of a noun which has the suffixes joined directly to it:

qadiig	'my liver'
qadiim	'your (singular) liver'
qadiin	'his liver'
qadiy	'anyone's liver'
qaddow	'our (your and my) livers'
qadmow	'our (his and my) livers'
qadmeew	'your (two) livers'
qadrow	'their (two) livers'
qaddaed	'our (your and my) livers'
qadmaed	'our (their and my) livers'
qadmeed	'your (plural) livers'
qadraed	'their (plural) livers'

We see in the above examples that there is an additional pronoun that we have not spoken of in the preceding sections on pronouns. This new pronoun is the pronoun represented in the word *qadiy* 'one's liver, anyone's liver'. This pronoun cannot be translated 'someone', because 'someone' has its own pronoun in Yapese:

qadiin beaq
'someone's liver'

This same pronoun as in *qadiy* 'one's liver' occurs also as a subject pronoun particle in two different forms in the following two different kinds of sentences:

Ka ni feek.
'It was taken, one took it.'

Yi raa feek.
'It will be taken, one will take it.'

This pronoun has no counterpart among the independent pronouns, nor among the object pronoun suffixes. It is not possible to say something like:

**Kea qaywegiy.*
'He helped one.'

The *ni* subject pronoun particle and the *yi* subject pronoun particle are different ways of expressing the same pronominal meaning, used with different types of verb phrases (which are

discussed in sections 5.2 and 5.3). Even though the two particles *yi* and *ni* are quite different in pronunciation, this should not be surprising. Similar situations apply to other pronouns in Yapese. Compare the sentences.

Ka mu feek.
'You took it.'

Ga raa feek.
'You will bring it.'

In these two sentences the pronoun meaning 'you (singular)' has the pronunciation *mu* in one sentence but *ga* in the other. The difference in pronunciation between these two forms of the pronoun is because the two sentences are of two different types.

The pronoun expressed by the suffix *-y* (underlying form **-y**) when it is a possessive suffix (as in *qadiy*), and by the particles *ni* and *yi* with the two different types of verb phrase illustrated above, is called the **indefinite pronoun**. It is third person (that is, it does not refer to the speaker or the hearer, but to some third person), but it is apparently not singular, plural or dual, but rather says nothing about number. It means something like the English 'one' or 'anyone'.

We may now put these pronoun suffixes into the following table:

POSSESSIVE PRONOUN SUFFIXES OF YAPESE

	singular	dual	plural
1st inclusive		*-dow*	*-daed*
1st exclusive	*-g*	*-mow*	*-maed*
2nd	*-m*	*-meew*	*-meed*
3rd	*-n*	*-row*	*-raed*
indefinite	*-y*		

The underlying forms of the dual and plural possessive pronoun suffixes are the same as the underlying forms of the dual and plural object pronoun suffixes (given previously) and therefore they will not be repeated here. The underlying forms of the singular and the indefinite pronouns are **-gu**, **-mu**, **-na** and **-y**.

As was explained in chapter 2 (see particularly sections 2.5.4 and 2.5.4.5), the vowel that appears before these suffixes (such as the *ii* of *qadiig* 'my liver', for example) is determined by the underlying form of the root and by the morphophonemic rules which apply to the word. There are two kinds of cases. Either

the underlying form ends in a short vowel (as is the case with *qaed* 'liver', underlying form **qadi**), or else it ends in a consonant (as is the case with *puluw* 'straight', underlying form **puluw**, possessed forms *pulwog* 'opposite me', *pulwom* 'opposite you', etc.). Roots like **qadi** whose underlying form ends in a short vowel have a long vowel before all the possessive suffixes, except the indefinite possessive suffix, by the operation of rule F3 (section 2.5.4.5), which drops a final short vowel and lengthens the preceding vowel. Thus *qadiig* 'my liver' is derived from underlying **qadi**+**gu**. Rule F3 drops the **u** and makes the **i** into long /i:/, yielding /qadi:g/. Of course the vowel before the suffix (sometimes called the **stem vowel**) is short in the indefinite possessed form *qadiy* 'one's liver' because the indefinite possessive suffix has an underlying form with no final short vowel. The underlying form of *qadiy* is **qadi**+**y**. Since no vowel follows the **y** suffix, rule F3 does not apply.

Those roots whose underlying form ends in a consonant, and thus have no stem vowel, have a short vowel before all the possessive suffixes, inserted by the H rules (section 2.5.4.7). For example, *rogog* 'my way' is derived from underlying **rog**+**gu**. Rule F3 drops the **u** at the end of the word yielding /rog+g/. Rule H3 now inserts *o* between the two *g*'s, yielding /rogog/. The possessed forms of *rogon* 'his way' are as follows:

	singular	dual	plural
1st inclusive		*rogodow*	*rogodaed*
1st exclusive	*rogog*	*rogomow*	*rogomaed*
2nd	*rogom*	*rogomeew*	*rogomeed*
3rd	*rogon*	*rogorow*	*rogoraed*
indefinite	*rogoy*		

Qadi, the underlying form of *qaed* 'liver', has stem vowel **i**. Most nouns in Yapese which, as *qaed*, may have the possessive suffixes added directly to the noun, have underlying forms which end in one of the three vowels **i**, **a** or **u**. Some roots whose underlying forms end in **i** are *qaed* 'liver' (*qadiig* 'my liver'), *teel* 'ear' (*teeliig* 'my ear'), *nifeeng* 'wind' (*nifangiig* 'my wind, wind caused by me'). Roots ending in **u** are *lung-* 'voice' as in *lunguug* 'my voice', *qamiith* 'pain' (*qamthuug* 'my pain'), *waen'* 'his mind' (*wun'uug* 'my mind'). Roots ending in **a** are *luub* 'breath' (*lubaag* 'my breath'), *wuul* 'feather' (*wulaeg* 'my feather'), *miit* 'eye'

(*mitaeg* 'my eye'). Note that if the underlying form of the root ends in **a** preceded by a dental or retroflexed consonant preceded by **i** or **u**, as **wula** and **mita**, the **a** is fronted to /ä:/ when suffixes are added by rule D2 (section 2.5.4.3).

At least one root has the stem vowel **o**. This is the word for the dorsal (back) fin of a fish. 'Its dorsal fin' is *thaloon*. Presumably if a fish were to talk (for example in a story) it would say *thaloog* 'my dorsal fin'. The underlying form of this root is **thalo**. This is the only root known to me which has the stem vowel **o**.

No root has stem vowel **e** due to the existence of the stem-forming morpheme **-e-**, as in *walaageeg* 'my brother', underlying form **wala:g+e+gu**. This morpheme will be discussed in 3.3.6.

A few roots, instead of taking the suffix *-n* 'his', do not take any suffix at all with the meaning 'his, her'. Examples are:

faak 'his child'	*faakaag* 'my child'
waen' 'his mind'	*wun'uug* 'my mind'
qaay 'his leg'	*qayig* 'my leg' (in some dialects *qeag*)
paaq 'his arm'	*paqag* 'my arm'

It is not possible to add the *-n* third person singular suffix to these words. One cannot say **faakaan*, **wun'uun*, **qayin* or **paqan*. These words are always possessed. One cannot say in Yapese simply 'hand', but must always say either *paaq* 'his hand', *paqag* 'my hand', *paqay* 'one's hand', and so on.

Paaq 'his hand' and *qaay* 'his leg' present a particular problem. They both have long vowels in the third person singular (suggesting underlying forms with stem vowels), and yet appear to have short vowels before the possessive suffixes (suggesting underlying forms with final consonants). It is not known why this is so.

All of these nouns which are possessed by directly suffixing pronoun suffixes have a very close or intimate relationship to the person or thing which possesses them. The words in this class include most parts of the body. This type of possession is sometimes called **inalienable possession**, that is possession of things that are necessarily related to their possessor. Note that most words in Yapese are not possessed using suffixed pronouns. To say, for example, 'my boat' you do not say something like **boocheeg* but *booch roog*. This method of possession is discussed in section 4.2.

Possessive Pronoun Suffixes: Stem-forming Suffixes

3.3.6 Some nouns are possessed in what appears to be the same pattern as that discussed in section 3.3.5 preceding, but with the long vowel /e:/ (or /ë:/) inserted before the suffix in the singular. An example is:

	singular	dual	plural
1st inclusive		*loelugdow*	*loelugdaed*
1st exclusive	*loelgeeg*	*loelugmow*	*loelugmaed*
2nd	*loelgeem*	*loelugmeew*	*loelugmeed*
3rd	*loelgean*	*loelugrow*	*loelugraed*
indefinite	*loelgey*		

The unpossessed form of the word is *loelug*. It might be suggested that this is simply a case of a root whose underlying form ends in the stem vowel **e**, just as other roots end (in their underlying forms) in **i**, **u**, **a** and **o**, which then appears in surface form before the possessive suffixes. However, this will not do. Suppose that the underlying form of this word is **lö:luge**. The rule F3 (section 2.5.4.5) will, in the usual way, drop the final **e** from the underlying form, when this word is pronounced without any suffix, and lengthen the preceding vowel, giving us the incorrect pronunciation **loeluug*. However, this word does not end in a long vowel but in a short vowel. Other such words, which have a short vowel in the last syllable when unpossessed, but which may be possessed with the vowel **e** in front of possessive suffixes, are *doonguch* (*doonguchean* 'its island') and *rachaq* 'blood' (*rachaqean* 'its blood').

Another reason that we do not wish to consider words which have **e** before the possessive suffixes as having underlying forms ending in short **e** is that some words which normally have a vowel other than **e** before the suffixes are sometimes used by people with the vowel **e** before the suffixes. An example is *mat'owaan* 'his right', which is also sometimes pronounced *mat'owean*. If we say that the **e** is a stem-forming suffix which may be added to words to which the possessive suffixes are then added, then it makes sense that people might sometimes add it to certain words and sometimes not. Thus if the underlying form of *mat'aaw* 'right' is **mat'awa**, and if the suffix **-na** 'his' is added, we end up with the pronunciation *mat'owaan*. If the stem-forming suffix **e** is added, and then the suffix **-na**, we end up with *mat'owean*, in the following way:

underlying forms	**mat'awa+na**	**mat'awa+na**
Rule E1		/mat'awa+ë+na/
Rule F2		/mat'aw+ë+na/
Rule F3	/mat'awa:n/	/mat'awë:n/
Rule J4	/mat'owa:n/	/mat'owë:n/

On the other hand, no one would substitute **i**, **u** or **o** for the **a** in the suffix of *mat'owaan* to make a word **mat'owiin*, **mat'owuun* or **mat'owoon*. We see that there is a basic difference in the behavior of the stem vowel **e** by contrast with that of the other stem vowels. I propose to explain this difference by saying that the vowel before the suffix in words with possessive suffixes is part of the underlying form of the root if the vowel is **i**, **u**, **o** or **a**; but if it is **e** we will say that this **e** is a separate stem-forming morpheme which is added to the root and which then has the possessive suffixes added to it.

Another stem-forming morpheme is *-ngi-*. This morpheme is illustrated by the following forms:

	singular	dual	plural
1st inclusive		*gaqngidow*	*gaqngidaed*
1st exclusive	*gaqngiig*	*gaqngimow*	*gaqngimaed*
2nd	*gaqngiim*	*gaqngimeew*	*gaqngimeed*
3rd	*gaqngiin*	*gaqngirow*	*gaqngiraed*
indefinite	*gaqngiy*		

Gaqngiin 'its size' (derived from *gaaq* 'big') is derived from underlying form **gaqe+ngi+na**.

A fairly large number of nouns are possessed using the stem-forming suffix *-ngi-*, and in some cases the suffix seems to add a meaning of its own. For example, *paaq* 'his arm' with suffixes directly added to the root means 'arm', as of a person, as for example *paqag* 'my arm', *paqam* 'your arm'. However, with the stem-forming suffix *-ngi-* added, *paꞌngiin* means 'its branch', as of a tree.

Possessive Pronoun Suffixes with Prepositions and Relational Nouns

3.3.7 These suffixes may also be added to certain words which are not nouns. For example, they may be added to the preposition *roo-* 'of, from' as in the words *roog* 'of me', *room* 'of you'. When they are added to prepositions, the suffix for 'he, she' is no longer *-n* (underlying form **-na**) but rather *-k'* (underlying form **-k'**). Thus 'of him' is *rook'*. This preposition and the preposition *nga* 'to' with the possessive suffixes added are as follows:

	singular	dual	plural
1st inclusive		*roodow*	*roodaed*
1st exclusive	*roog*	*roomow*	*roomaed*
2nd	*room*	*roomeew*	*roomeed*
3rd	*rook'*	*roorow*	*rooraed*
indefinite	*rooyiy*		
impersonal	*riy*		
1st inclusive		*ngoodow*	*ngoodaed*
1st exclusive	*ngoog*	*ngoomow*	*ngoomaed*
2nd	*ngoom*	*ngoomeew*	*ngoomeed*
3rd	*ngaak'*	*ngoorow*	*ngooraed*
indefinite	*ngooyiy*		
impersonal	*ngaay*		

Notice that in addition to the special suffix *-k'* 'him, her', there are several other peculiarities about the way possessive suffixes are added to prepositions. First, the vowel of *nga* is changed to long /o:/ before all of the possessive suffixes except the third singular *-k'*, where it is long /a:/ (excluding for the moment the form labelled "impersonal" *ngaay* 'to it'). Second, notice that the suffix *-y* 'one, indefinite personal' has the special form *-yiy* when used with prepositions. Finally, notice that each of these two prepositions occurs in a special form—*riy* 'of it' and *ngaay* 'to it'—to indicate that something non-human is the goal or object of the preposition (the term "object" used with prepositions is discussed in section 6.3). That is, in the word *rook'* 'of him' we know that it is a person that is meant, as in the sentence:

Ku gu chuwqiy rook'.
'I bought it from him.'

But in the word *riy* 'of it' something other than a person is meant, as in the sentence:

Ku gu feek riy.
'I took it from it.'

Likewise, compare the sentences:

Ku gu piiq ngaak' Tamag.
'I gave it to Tamag.'

Ku gu taey ngaay.
'I put it on it.'

These special forms do not exist for possessed nouns.

Another special set of words that are somewhat like prepositions and somewhat like nouns are certain words which refer to the location of something or similar concepts. These are called **relational nouns**. An example is *taan* 'under it'. By itself *taan* has the meaning of 'its under part', and is used as if it were already possessed. But it may also occur in the form *taanggiin* 'under it', *taanggiig* 'under me', and so forth. One may say either:

u taan Tamag
'under Tamag'

or

u taanggiin Tamag
'under Tamag'

and there is no difference in meaning. However, when the suffix is other than *-n* 'his' the form of the word may only be *taanggii-*, as in *taanggiig* 'under me'.

The number of words which follow this pattern is small. I know of *laen/laanggiin* 'inside it', *taan/taanggiin* 'underneath it'. Another word which is almost identical to this pattern is *choon* 'member of'. However, the alternate way of saying 'member of' is not **choenggiin* but *choengiin*, and of course *choengiig* 'member of me', *choengiim* 'member of you' follow the same pattern.

Relational nouns and prepositions with possessive suffixes are discussed in greater detail in section 6.3.

4 Noun Phrases

INTRODUCTION

4.1 Morphology, the study of the way in which morphemes are combined into words, was the subject of chapter 3. With this chapter we begin the study of syntax, the study of the way in which words are combined to make phrases and sentences. The first type of phrase to be studied is the noun phrase. Some examples of noun phrases are:

rea piin neey
'this woman'

gadow
'we (you and I)'

Tamag
'Tamag'

bin ni ba qaraay ea naqun
'this house here'

waey roog
'my basket'

ba kaarroo ni dea feal' ea maesiin riy
'a car with a broken engine'

As is easy to see, there are many different kinds of noun phrases. What they have in common is that they all name something (recall the definition of a noun as the name of something).

SIMPLE NOUN PHRASES

4.2 The simplest form of noun phrase is a noun used by itself, as for example *quchub* 'drinking coconut', as in the sentence:

Dabuug ea quchub.
'I don't like drinking coconuts.'

Note that even in this simple example the noun is not, strictly speaking, used entirely by itself. One does not say:

**Dabuug quchub*

Rather, the particle *ea* is used before the noun.

This particle *ea* does not have any apparent meaning of its own. Rather, it is simply grammatically necessary in certain types of noun phrase in Yapese. The conditions under which it is obligatory (that is, must be used), the conditions under which it is optional (may be used but need not be), and the conditions under which it is impossible (may not be used) are complex, and much of the discussion of this chapter will be involved with the use of this particle.

This particle will be called the noun phrase connector *ea*, or sometimes just the particle *ea*.

The particle *ea* is not used when a noun phrase such as *quchub* is used absolutely alone, that is, not as part of a larger complete sentence, but, for example, in answer to a question, as in the conversation:

Maang ea ga ba qadaag?
'What do you want?'

Quchub.
'Drinking coconut.'

The particle *ea* may never be used at the beginning of a sentence.

While the simplest type of noun phrase is a noun used by itself, most noun phrases are not of this type. The basic type of noun phrase, which we will call the **simple noun phrase**, contains three parts, called the **determiner**, the **head** and the **attribute**. In formula form we may write:

noun phrase = determiner + head + attribute

In its simplest form this type of noun phrase is represented by just three morphemes: one to express the determiner, one to express the head, and one to express the attribute. An example is:

rea booch neey
'this boat'

In this phrase *rea* 'singular number' is the determiner, *booch* 'boat' is the head, and *neey* 'this' is the attribute.

Both the determiner and the attribute parts of the noun phrase may be expressed by phrases themselves. For example:

Mu feek fa gäl yael' ii buw roog.
'Take those two betel nuts of mine.'

The noun phrase in this sentence is:

fa gäl yael' ii buw roog
'those two betel nuts of mine'

This noun phrase may be divided into four parts:

fa gäl yael'	*ii*	*buw*	*roog*
'those two'		'betel nut'	'of me'
determiner		head	attribute

The morpheme *ii* used here is a noun phrase connector, in some respects similar to the noun phrase connector *ea* discussed briefly earlier. But there are significant differences between *ii* and *ea*.

The head of this noun phrase is *buw* 'betel nut'. *Roog* 'of me' is the attribute. The determiner consists of the three morphemes *fa*, *gäl*, and *yael'*. These three morphemes form the **determiner phrase**, and illustrate its three parts. They are the **article**, the **number** and the **classifier**. In this phrase the article is *fa* 'definite article', *gäl* 'dual' is the number, and *yael'* 'classifier for lines, betel nuts, and so forth' is the classifier. The formula for the determiner phrase may be written:

determiner phrase = article + number + (classifier)

In this formula, the classifier portion is written in parentheses to indicate that it is optional. A classifier is not used with every noun. Thus one may say:

rea yael' ii buw neey
'this betel nut'

using the classifier *yael'*. But many nouns do not normally take a classifier. An example is *naqun* 'house' in the noun phrase:

rea naqun neey
'this house'

The Definite Article fa

4.2.1 The particle *fa* is called the **definite article**. Its meaning is approximately that of English *the*, but there are differences. *Fa* often

conveys the idea of something that is not actually present, or which was present in the past but is no longer so. It may not be used in the same noun phrase with the demonstratives *neey*, *niir* or *neam*. You cannot say:

**fa rea booch neey*
**fa rea booch niir*
**fa rea booch neam*

Fa cannot be used with these demonstratives because the demonstratives point out the position of something (see the discussion in section 3.2.4), and thus imply that the thing is present at the moment. *Fa* speaks of something which both the speaker and the hearer know about but which is no longer present, and thus its meaning is contradictory to that of the demonstratives.

Noun phrases beginning with *fa* are never preceded by the noun phrase connector *ea*. Thus one may say:

Daa mu naang fa rea tiir?
'Don't you know that child?'

and

Daa mu naang ea rea tiir neey?
'Don't you know this child?'

but one may not say:

**Daa mu naang ea fa rea tiir?*

nor may one say:

**Daa mu naang rea tiir neey?*

Noun phrases in which the demonstratives are used require *ea* before them, but noun phrases in which the definite article *fa* is used may not be preceded by the noun phrase connector *ea*.

Number Morphemes

4.2.2 There are several different types of number elements. The basic types are the number morphemes *rea* 'singular', *gäl* 'dual' and *pi* or *yuu*, both meaning 'plural'. *Pi* is used in noun phrases without classifiers, and *yuu* is used before classifiers. These number morphemes are illustrated in the following sentences. The first three sentences contain unclassified noun phrases, and the second three contain classified noun phrases:

Da chuwqiyeew ea rea kaarroo neey.
'Let's buy this car.'

Da chuwqiyeew ea gäl kaarroo neey.
'Let's buy these two cars.'

Da chuwqiyeew ea pi kaarroo neey.
'Let's buy these cars.'

Nga mu yuung ea rea kea niiw neey?
'Are you going to plant this coconut tree?'

Nga mu yuung ea gäl kea niiw neey?
'Are you going to plant these two coconut trees?'

Nga mu yuung ea yuu kea niiw neey?
'Are you going to plant these coconut trees?'

After *fa gäl* 'the two', when used before unclassified nouns (but not when used before classifiers) the noun phrase connector *ii* may optionally be inserted, apparently with no change of meaning. One may say either:

fa gäl kaarroo
'those two cars'

or

fa gäl ii kaarroo
'those two cars'

and it apparently makes no difference. On the other hand, while one may say:

fa gäl yael' ii buw
'those two betel nuts'

one may not say:

**fa gäl ii yael' ii buw*

Numerals

4.2.3 Numerals may also be used as expressions of the number element of noun phrases:

dalip ea kaarroo
'three cars'

fa dalip ii kaarroo
'those three cars'

fa ragaag ngea neel' ii kaarroo
'those sixteen cars'

qaningeeg yael' ii buw neey
'these four betel nuts'

meeruk kea niiw roog
'my eight coconut trees'

The numbers for 'one' and 'two' are used in a normal fashion:

taqreeb ea kaarroo
'one car'

l'agruw ea kaarroo
'two cars'

However, there are short forms of these numerals that may also be used:

reeb ea kaarroo
'one car'

ruw ea kaarroo
'two cars'

However, neither the normal forms of the numerals meaning 'one' and 'two' nor the special short forms may be used after the definite article *fa*. Only the number morphemes *rea* and *gäl* may be used to express the ideas 'one' and 'two' after *fa*. Numbers other than 'one' or 'two' may be used freely after *fa*, however.

Quantifiers

4.2.4 There are several other words which are neither numerals nor number morphemes that may also function as the number portion of a determiner phrase in a noun phrase. These words are called **quantifiers**. Some examples of these are *gubiin* 'all', *qiin* 'a few', *boech* 'some, a few', *qurngiin* 'the whole quantity of', *qorean* 'the whole quantity of', *buukum* 'several', and perhaps others. Noun phrases containing these quantifiers are:

gubiin ea kaarroo
'all the cars, all cars'

gubiin yael' ea buw
'all the betel nuts'

qiin ii chiyae
'a few chairs'

qiin nguun ea mareaw
'a few bunches of (ripe) coconuts'

boech ea n'ean
'some things'

buukum kean ea thow
'several breadfruit trees'

qurngiin ea girdiiq
'all of the people, the whole quantity of people'

qorean ea niig
'the quantity of fish'

qorean lëy ea puw
'the quantity of sticks of (small) bamboo'

The Noun Phrase Connector ea

4.2.5 The noun phrase connector *ea* is always used before the number morphemes *rea* 'singular', *gäl* 'dual' and *pi/yuu* 'plural', as in various examples given in this chapter. Before numerals, however, *ea* is not normally used. Thus the sentence:

Qa mu piiq dalip ea koolaa ngoog.
'Please give me three colas.'

is correct, but not the sentence:

**Qa mu piiq ea dalip ea koolaa ngoog.*

Ea is likewise not normally used before the quantifiers *gubiin* 'all', *qiin* 'a few', *boech* 'some, a few', *buukum* 'several', *qurngiin* 'the quantity of', *qorean* 'the quantity of'. Notice that the morphological form of these words (except *buukum* 'several' and *boech* 'some') is that of possessed nouns. Since, as is discussed in 4.4 *ea* is not normally used before possessed nouns, this may explain why it is not used before these quantifiers. *Boech* and *buukum* may possibly be considered to contain the morpheme *ba* 'indefinite article' (section 4.2.8), and since the noun phrase connector *ea* is not used before the indefinite article *ba*, this may explain why *ea* is also not used before *boech* and *buukum*.

Since, as was pointed out in section 4.2.1, *ea* is not used before the definite article *fa*, and since it is also not used before the indefinite article *ba*, it is possible to consider *ea* as a type of article itself. This possibility will not be explored here, but it may easily be seen that if there are three different words of the type called "article," we could simply say that an article must be used with a noun phrase, and that the article is either *fa*, *ba* or *ea*.

Ea is always spelled in this book with plain long *ea*. Note, however, that its pronunciation varies between *ea* and *ee*, depending on the following vowel (compare rule E1, discussed in section 2.5.4.4). According to its actual pronunciation we would spell *ea* as *ea* or *ee* in the following noun phrases:

boech ee niig
'some fish'

boech ea mareaw
'some copra'

Since the pronunciation of *ea* depends entirely on the following vowel, it will change its pronunciation depending on the noun used with it, and thus it will be inconvenient to write it according to its pronunciation wherever it is used. Rather, a single spelling *ea* is used for the particle, bearing in mind that its actual pronunciation depends on the following vowel. The same is done with the particle *rea* 'singular', and with certain other grammatical morphemes ending in *ea*, such as *kea* 'classifier for trees', *ngea* 'and'.

The Definite Article fa with Number Morphemes, Numerals and Quantifiers

4.2.6 The definite article *fa* may be used before different types of number elements. It may be used before the number morphemes *rea* 'singular', *gäl* 'dual' and *pi*/*yuu* 'plural' as in examples already given. It may also be used before all numerals except *taqreeb* 'one', *reeb* 'one', *l'agruw* 'two' and *ruw* 'two', as discussed in section 4.2.2. However, it may not be used before the quantifiers *gubiin*, *qurngiin*, and so forth, as for example:

**fa gubiin ea kaarroo*

The Diminutive Morpheme chi

4.2.7 The particle *chi* 'diminutive' is used following the number element of the noun phrase. Examples of its use are:

Ka mu guy ea chi tiir niir?
'Have you seen that child (near you)?'

Baey gu feek ea gäloechi nimeen neey ngu gu piiq ngaak'.
'I'm going to take these two little chickens here and give them to him.'

Chi means something like 'little one, dear one', and it is called 'diminutive' (compare the diminutive prefix *si-* discussed in section 3.2.1). It normally follows the number element in the noun phrase, and in certain cases combines with certain number morphemes to produce special contracted words (such as *gäloechi* in the example above).

Chi may not be preceded by the singular morpheme *rea*. Rather, *chi* when used by itself is singular in meaning. Thus one says:

Ri gu ba qadaag ea chi kaarroo roog.
'I really like my little car.'

but one cannot say:

**Ri gu ba qadaag ea rea chi kaarroo roog.*

Chi combines with *gäl* 'dual' to make a single word *gäloechi*, as in the example above.

Chi combines with *pi* 'plural' to produce the contracted word *poechi*:

fa poechi niig
'those little fish'

poechi niig neey
'these little fish'

Chi combines with *yuu* 'plural' to form a word *yoechi* which is used before classifiers:

yoechi yael' ii buw neey
'these little betel nuts'

fa yoechi yael' ii buw
'those little betel nuts'

There is also a word *noechi* which seems to be a contraction of *chi* with some other morpheme (although it is not known what morpheme might be involved). *Noechi* may be used either before unclassified noun phrases (as *poechi*) or before classified noun phrases (as *yoechi*).
Examples are:

noechi niig neey
'these little fish'

noechi yael' ii buw neey
'these little betel nuts'

However, *noechi* apparently may not be used after *fa* 'definite article'. That is, one may not say:

**fa noechi niig*
**fa noechi yael' ii buw*

Chi combines with the indefinite article *ba* 'a, a certain' (section 4.2.8) to produce the contraction *boech*:

boech kea thow
'a little breadfruit tree'

However, *boech* may only be used with this meaning in classified noun phrases. When *boech* is used before a noun with no classifier it is interpreted to mean 'some', that is, it is the quantifier *boech* discussed in section 4.2.4. For this reason, it may be supposed that *boech* is morphologically a combination of *ba* 'indefinite article' and *chi* 'diminutive'.

Chi combines with numerals by adding a form pronounced *-oechi* to the numeral. Examples are:

dalipoechi niig neey
'these three little fish'

qaninggoechi niig neey
'these four little fish'

The noun phrase connector *ea* is normally used before *chi*:

Ka mu guy ea chi gaetuw neam?
'Have you seen that little cat?'

Chi is also used after the definite article *fa*:

Ka mu guy fa chi gaetuw roomaed?
'Have you seen that little cat of ours?

The Indefinite Article ba

4.2.8 There is one word that combines in itself the functions of both the article and the number elements of the determiner phrase. This word is *ba* 'indefinite article', as in:

ba kaarroo
'a car'

ba yael' ea buw
'a betel nut'

Ba is an article, the so-called 'indefinite article'. It is contrasted with *fa*, the definite article, in that *fa* implies a definite object or objects, corresponding to the English word *the*, while *ba* refers

to an indefinite object somewhere, or a certain object which is not being pointed out, or which the person being spoken to does not know about. *Ba* is similar in meaning to English *a*.

Like the definite article *fa*, *ba* may not be used with the demonstratives *neey*, *niir*, *neam*. One cannot say:

**ba kaarroo neey*

The impossibility of such a phrase is because the demonstratives point to something and thus they are inherently definite in meaning, while *ba* is indefinite in meaning.

Ba is inherently singular in number. *Fa* does not imply any particular number, and thus *fa* may be added to a number morpheme or a numeral to form a determiner phrase:

fa rea kaarroo
'the car'

fa gäl kaarroo
'the two cars'

fa pi kaarroo
'the cars'

fa dalip ii kaarroo
'the three cars'

Ba, however, is singular and is never used with number morphemes. You cannot say, for example, something like:

**ba dalip ii kaarroo*

Ba is an article, like *fa*, and like *fa* the noun phrase connector *ea* may not be used before it. Thus you may say:

Baey gu fanaay ba kaarroo ni ba roowroow.
'I'm going to get a red car.'

but you cannot say:

** Baey gu fanaay ea ba kaaroo ni ba roowroow.*

Note that the indefinite article *ba* is pronounced the same as another word *ba*, as in the sentence:

Ba maegchoel ea biniir ea n'ean.
'That thing (near you) is yellow.'

This particle *ba*, called the 'stative marker', means something like 'to be', as in the phrase *ba maegchoel* 'it is yellow'. It is used in verb phrases, not in noun phrases, and is discussed in section 5.2. It should not be confused with *ba* 'indefinite article'.

Classifiers

4.2.9 The classifier element of the noun phrase is represented by the word *yael'* in the noun phrase:

ba yael' ea buw
'a betel nut'

Classifiers are words that follow the number element of noun phrases, and are somewhat similar to pronouns. They "stand for" nouns, in a certain sense, and they may be used in forming pronouns of a certain type, as is discussed below in section 4.5. They are only used in noun phrases with certain nouns. Most nouns are used in noun phrases without any classifier, as for example *naqun* 'house', *qarcheaq* 'bird', *kaarroo* 'car', and very many others. However, some nouns are normally used with a classifier, and some may be used with different classifiers to express different meanings. One may say:

ba yael' ea buw
'a betel nut'

ba kea buw
'a betel nut tree'

ba nguun ea buw
'a bunch of betel nuts'

Certain classifiers express the quantity of something, and some words which are not normally used with classifiers may be used with a quantifier type of classifier. Examples are:

ba lëy ea garbaaw
'a can of beef' literally, 'a stick of beef'

Compare

ba garbaaw
'a cow'

A few classifiers that begin with /y/ in pronounciation frequently combine with *ba* 'indefinite article' by dropping the /y/ of the classifier, and dropping the /a/ of *ba*, and simply prefixing the /b/ of *ba* onto the remainder of the classifier. One may say:

bael' ea buw
'a betel nut'

baang ea falowaa
'a piece of bread'

instead of:

ba yael' ea buw
ba yaang ea falowaa

Two classifiers end in a vowel (unlike most major morphemes in Yapese). After these classifiers the noun phrase connectors *ea* and *ii* disappear in pronunciation. Thus one says:

l'agruw kea niiw
'two coconut trees'

fa rea gii binaew
'that piece of land'

There is a fairly large number of classifiers in Yapese. A list of some of them, and the types of words with which they are normally used, follows:

yael' 'classifier for lines, string, rope, and for certain types of fruit such as betel nuts, mangos, bananas, but not for round fruits such as oranges, guavas'

yaang 'flat piece of anything, sheet of anything; classifier for pieces of land, ground, paper, cloth, and so forth'

lëy 'stick of something; can of something; half of something'

rabaaq 'side of something; half of something like fish which is cut into two sides'

kea, also pronounced *kean* 'classifier for trees, for crabs and lobsters, for grass skirts, for clans of people, for any object which has a central stem and branches. Note that *ba kea baabyoer* 'a tree of paper' means 'a book''

gii 'flat sheet, area—same as *yaang*'

nguun 'bunch of coconuts, betel nuts'

gaaf 'classifier for leaves of *gabuuy* 'pepper leaf for chewing betel nut''

quw 'mouthful'

yaan 'level, stage; hand of bananas'

There are probably other classifiers as well. Probably most words that indicate a quantity of something could also be used as classifiers.

The Noun Phrase Connector ii

4.2.10 Between the determiner phrase and the head noun of a noun phrase one of the two morphemes *ea* or *ii*, called **noun phrase connectors**, is normally used. Examples are:

dalip ea kaarroo
'three cars'

dalip ii kaarroo
'three cars'

It is difficult to state precisely the difference in meaning between these two morphemes. They do differ in meaning, and there is at least one case where the difference produced by using *ea* or *ii* is very great. This difference is shown in the example:

dalip ii kalook
'three clocks'

dalip ea kalook
'three o'clock'

In other cases the difference in meaning between *ea* and *ii* is less marked. For example, consider the two noun phrases:

dalip ii kaarroo
'three cars'

dalip ea kaarroo
'three cars'

The first of these two noun phrases is said by some people to be in some sense "more definite" than is the second, but it is not clear in what sense the first is more definite.

One of the two noun phrase connectors must normally be used after the determiner element of the noun phrase, with certain exceptions. After determiner morphemes ending in a vowel, the noun phrase connectors disappear. Noun phrase connectors are not used following *rea* 'singular', *pi* 'plural', *ba* 'indefinite article', as well as after the classifiers which end in a vowel, namely *kea* 'classifier for lines' and *gii* 'classifier for areas and flat things'.

The noun phrase connector *ea* is not normally used after the morpheme *gäl* 'dual' either, but *ii* may optionally be used after *gäl* before a noun, although not before a classifier. An example is:

gäl ii chiyae neey
'these two chairs' or

gäl chiyae neey
'these two chairs'

However, one cannot say:

**gäl ea chiyae neey*

nor can one say:

**fa gäl ii rabaaq ii niig*
**fa gäl ea rabaaq ea niig*

Note that *ea* is the only noun phrase connector that may be used in front of the noun phrase as a whole. One may say:

Daeriy ea kaarroo roog.
'I don't have a car.'

Dabuug ea rea yael' ii buw neey.
'I don't like this betel nut.'

but not:

**Daeriy ii kaarroo roog.*
**Dabuug ii rea yael' ii buw neey.*

Thus *ii* may occur only inside of the noun phrase, following the determiner. *Ea* may also occur in this position inside the noun phrase. But only *ea* may occur in front of the noun phrase as a whole. This is a fundamental difference between *ea* and *ii*.

Ea may not normally be used before a possessed noun. One may say:

Ku gu guy walaageau.
'I saw his brother.'

but not:

**Ku gu guy ea walaageau.*

This fact is discussed in section 4.4

Ea may also not be used before proper nouns. Thus one says:

Ku gu guy Tamag.
'I saw Tamag.'

but not:

**Ku gu guy ea Tamag.*

This fact is discussed in section 4.3.

The Head of the Noun Phrase

4.2.11 The head of a noun phrase is normally a noun. If it is a possessed noun or a proper noun, special considerations apply, which are discussed in sections 4.3.4.

An intransitive verb may be the head of a noun phrase. An example is:

Dabuun ea fitaeq.
'He doesn't like fishing.'

In this sentence, *fitaeq* 'to fish' is acting as a noun meaning 'fishing'. Verbs used as nouns do not usually occur with determiners.

In the same way a verb plus incorporated construction (section 5.4.6) may be a noun phrase, as for example *thuum' qachif* 'to make coconut toddy, cut coconut toddy', as in:

Kea yib ko thuum' qachif.
'He came for (the purpose of) toddy-making.'

Such a combination of verb with object in this so-called incorporated object construction functions as if the combination were itself an intransitive verb. An example as the above is therefore actually parallel to the example with a simple intransitive verb such as *fitaeq*. Transitive verbs may apparently not be used as nouns.

Adjectives may also be used as nouns. An example is:

Dabuug ea rea roowroow niir.
'I don't like that (shade of) red there.'

Dabuug ea roowroow.
'I don't like red.'

The Attribute Element of Noun Phrases

4.2.12 The attribute element of a noun phrase is the element following the head of the noun phrase, which has three basic parts. These are the **demonstrative**, **prepositional phrases**, and **relative clauses**. The commonest order for these three elements is according to the following formula:

attribute = prepositional phrases + demonstrative + relative clauses

Other orders also occur and will be discussed below.

Normally, at least one of the three parts of the attribute occur. However, there are exceptions to this rule. Three major types of exception are:

1. Nouns with no determiner need not have any attribute:

   Dabrow ea niig.
   'They don't like fish.'

2. Possessed nouns and proper nouns need not have any attribute:

   Gu guy walaagean fowaap.
   'I saw his brother yesterday.'

   Gu guy Tamag fowaap.
   'I saw Tamag yesterday.'

3. Nouns with an article (*fa* or *ba*) in the determiner need not have any attribute, and normally are not permitted to have a demonstrative at all:

   Nga mu kaay fa gäl niig?
   'Are you going to eat those two fish?'

   Ba qaraay ba gaaf ea gabuuy.
   'Here is a leaf of *gabuuy*.'

In other cases an attribute is normally required. That is, one cannot say:

**Dabuug ea rea kaarroo.*

but must rather say:

Dabuug ea rea kaarroo neey.
'I don't like this car.'

The attribute must normally contain a demonstrative if one of the number morphemes *rea* 'singular', *gäl* 'dual' or *pi/yuu* 'plural' is used.

Prepositional Phrases as Attribute

4.2.13 The first element of the attribute is the prepositional phrase. An example is *u qotoobaay* 'on motorbikes', in the sentence:

Dabuug ea rea yaen u qotoobaay neey.
'I don't like this motorbike riding.'

The structure of prepositional phrases is discussed in section 6.3. Prepositional phrases begin with the prepositions *u* 'at, from', *nga* 'to, for', *ko* 'for' or *roo-* 'of, from, for'.

The commonest use of prepositional phrases within noun phrases is to express possession of those nouns which do not ordinarily take possessive pronoun suffixes:

Miniiq ea rea waey rook' neey?
'Whose basket is this?'

Waey 'basket' is not normally possessed by adding possessive pronoun suffixes, and therefore the prepositional phrase *rook'* 'of him' is added. Prepositional phrases with *roo-* are the normal way of expressing what is called **alienable possession** in Yapese. This type of possession is further discussed below in section 4.4.

Alienable possession may also be expressed using a prepositional phrase with *ko* 'for, to':

Ba roowroow ea rea kaarroo ku Tamag niir?
'Is Tamag's car there (by you) red?'

Demonstratives as Attribute Elements.

4.2.14 The demonstratives have already been discussed from several different points of view. The morphology of the three demonstratives is discussed in section 3.2.4. The fact that the demonstratives may not normally be used with the article *fa* 'definite article' or *ba* 'indefinite article' is discussed in sections 4.2.1 and 4.2.8. There is therefore, not much else to say concerning them and their use is relatively uncomplicated. They are not used with proper nouns, but may occur with most other types of nouns. They are normally only used with noun phrases that have a number element.

The demonstrative occurs following the prepositional phrase of a noun phrase, but preceding relative clauses. Thus one normally says:

rea kaarroo roog neey ni ba roowroow
'this red car of mine'

Relative Clauses as Attribute Elements

4.2.15 Relative clauses are actually whole sentences with the particle *ni* 'relativizer' placed in front of them. An example is:

Gu ba qadaag ea girdiiq ni daathii ri ba gaaq lungraed.
'I like people whose voices are not too loud.'

where the element inserted after *ni*:

Daathii ri ba gaaq lungraed.
'Their voices are not too loud.'

is itself a sentence and may be used as such. Any sentence may be used in a relative clause of a noun phrase if the meaning is appropriate. This process of using sentences inside of sentences is sometimes called **embedding**, and the relative clause element of the noun phrase is one of the two main uses of sentence-embedding in Yapese. The other is the use of relative clauses after verbs, as so-called **verb complements**. An example is:

Gu ba qadaag ni ngu gu waen nga Donguch.
'I want to go to Donguch.'

This latter process is discussed in section 7.2.2.11.

Of course the sentence embedded after *ni* in a relative clause may itself have noun phrases in it, and those noun phrases may themselves have relative clauses embedded in them. One could say:

Gu ma naang ba pumoqon ni maa marweel ko fa rea qaspitaal nii toey yu Mariken.
'I know a man who works at the hospital that the Americans built.'

In the above sentence, the following portion is a noun phrase:

ba pumoqon ni maa marweel ko fa rea qaspitaal nii toey yu Mariken
'a man who works for the hospital that the Americans built'

In this noun phrase, *ba* is the determiner, *pumoqon* 'man' is the head, and the attribute element is the whole relative clause:

ni maa marweel ko fa rea qaspitaal nii toey yu Mariken

However, this relative clause consists of the relativizer *ni*, plus the following whole sentence:

Maa marweel ko fa rea qaspitaal nii toey yu Mariken.
'He works for the hospital that the Americans built.'

Now this sentence itself consists of a verb phrase *maa marweel* 'he works' plus a prepositional phrase. The prepositional phrase is:

ko fa rea qaspitaal nii toey yu Mariken

This prepositional phrase consists of the preposition *ko* plus the noun phrase:

fa rea qaspitaal nii toey yu Mariken
'the hospital that the Americans built'

This noun phrase consists of the determiner phrase *fa rea* (definite article *fa* plus *rea* 'singular'), the head noun *qaspitaal* 'hospital' and an attribute, which is the relative clause:

nii toey yu Mariken

Finally, this relative clause consists of the relativizer *ni* plus the sentence:

Toey yu Mariken.
'The Americans built it.'

and this sentence consists of the verb phrase *toey* 'he built it' and the noun phrase *yu Mariken* 'the Americans'.

Thus we see that relative clauses may be embedded in relative clauses which may themselves be embedded in relative clauses and so on. There is no theoretical limit to this process.

PROPER NOUNS

4.3 Proper nouns are names of persons, places, and sometimes of other special things, times, and so forth. Examples are:

Tamag	'a man's name'
Tinag	'a woman's name'
Guam	'an island'
Dr. Jones	'Dr. Jones'
Donguch	'name of the main town on Yap'
Sabado	'Saturday'

Proper nouns are nouns, like other nouns, but they have certain special characteristics.

Proper nouns normally do not occur with any demonstrative following them, and they are used with determiners only under special circumstances. A special determiner is sometimes used before proper nouns that refer to persons. This determiner is the particle *ii* 'personal article'. One may say:

Tamag ea kea guy.
'It was Tamag that saw him.'

or, with no difference in meaning:

Ii Tamag ea kea guy.

But other determiners may not be used with proper names, nor may demonstratives be used with them. This *ii* 'personal article'

morpheme may also be used before personal pronouns, as is discussed in section 4.3.

The noun phrase connector *ea* is not normally used before proper nouns. Thus you say:

Ku gu guy Tamag.
'I saw Tamag.'

but not:

**Ku gu guy ea Tamag.*

There is a special particle *yu* which is used with proper nouns referring to places to make a phrase meaning 'the people of' that place. This particle is exemplified by the sentences:

Maang ea kea yoeg yu Waab?
'What did the Yapese say?'

Maang ea kea yoeg ea pi yu Waab?
'What did the Yapese say?'

Notice that the noun phrase connector is not used before this particle *yu*, as in the first sentence above. However, the plural morpheme *pi* may be used before *yu*. This word *yu* may in fact be a contraction of *i* 'he, she' plus the preposition *u* 'of, from, at'.

The preposition *ko* has a special form when used before proper nouns referring to people. In this case *ko* is pronounced *ku*. An example is:

Bineey ea waey ku Tamag.
'This is Tamag's basket.'

POSSESSED NOUNS IN NOUN PHRASES

4.4 Possessed nouns, when used as head of a noun phrase, are in certain respects similar to proper nouns. First, the noun phrase connector *ea* may not be used before possessed nouns, just as is also true of proper nouns. Thus one says:

Ga ma naang walaagean?
'Do you know his brother?'

but not:

**Ga ma naang ea walaagean?*

The singular number morpheme *rea* may not be used before suffixed possessed nouns, and suffixed possessed nouns may not

be followed by demonstratives. This usage is contrasted with the use of the singular number morpheme *rea* and the demonstratives with alienably possessed nouns (i.e., those possessed using a prepositional phrase with *roo-*). One may say:

Dabuug ea rea waey roog neey.
'I don't like this basket of mine.'

but not:

**Dabuug ea rea walaageeg neey.*

Possessed nouns may not be used with the articles *ba* and *fa*. You cannot say:

**Ku gu guy ba walaageen.*
**Ku gu guy fa walaageen.*

Possessed nouns may be used with numbers and quantifiers. When possessed nouns are used in this way, the noun phrase connector *ea* may not be used between the quantifier or number and the noun, but the noun phrase connector is normally used. One says:

boech ii keenggiin
'some of their stems'

l'agruw ii keenggiin
'two of their stems'

PRONOUN PHRASES

4.5 Consider the phrase *gäl neey* in the sentence:

Gäl neey ea ba feal' ko gäl niir.
'These two are better than those two.'

This phrase (*gäl neey*) is a noun phrase. However, it does not have any head noun. It consists of just the number morpheme *gäl* 'dual' and the demonstrative *neey* 'this'. This phrase is a **pronoun phrase**. Pronouns and pronoun phrases may be used as noun phrases in sentences in all the places where simple noun phrases may be used. One may say:

Waey roog ea ba feal' ko waey room.
'My basket is better than your basket.'

where *waey roog* 'my basket' and *waey room* 'your basket' are two noun phrases in the sentence. In place of these two noun phrases one may use the two demonstrative pronouns *bineey* 'this one' and *biniir* 'that one':

Bineey ea ba feal' ko biniir.
'This one is better than that one.'

The above example illustrates what is meant by saying that pronouns and pronoun phrases may substitute for nouns and noun phrases. *Bineey* in the sentence substitutes for *waey roog* in the previous sentence, and *biniir* substitutes for *waey room*.

Pronouns which may be used as noun phrases are of two types. One type is the pronouns which are independent words, such as the independent personal pronouns (section 3.3.2) or the demonstrative pronouns (section 3.2.5). The other type is the pronoun phrases to be described in this chapter. The separate word demonstrative pronouns actually function as pronoun phrases, and will be discussed along with pronoun phrases in this chapter.

INDEPENDENT PERSONAL PRONOUNS AS PRONOUN PHRASES

4.5.1 When the independent personal pronouns are used as noun phrases they, like proper nouns, are not normally used with any determiner or with demonstratives, nor are they preceded by the noun phrase connector *ea*. Thus one says:

Ka ra guyeew gamow u tafean Paedrey.
'They two saw us (him and me) at the priest's house.'

but not:

**Ka ra guyeew gamow neam.*
**Ka ra guyeew ea gamow.*
**Ka ra guyeew fa gamow.*

On the other hand, independent personal pronouns may be used in the normal way with prepositional phrases and relative clauses. One may say:

gamaed ni gamaed baey u Waab
'we who are in Yap'

gamaed u Waab
'we in Yap'

The personal article *ii* which is used with proper nouns

referring to persons (section 4.3) is also used with singular independent personal pronouns. One may say:

Ii gaeg ea gu guy.
'It was me that saw him.'

parallel to:

Ii Tamag ea guy.
'It was Tamag that saw him.'

The use of *ii* is optional in both cases, however:

Gaeg ea gu guy.
'It was me that saw him.'

Tamag ea guy.
'It was Tamag that saw him.'

One difference between the usage of *ii* 'personal article' with personal names and with singular personal pronouns is that *ii* may be used with personal names when they are placed inside sentences, but *ii* may only be used with personal pronouns when they come at the beginning of the sentence. Thus one may say:

Ku gu guy ii Tamag.
'I saw Tamag.'

but one cannot say:

**Ka ra guyeew ii gaeg.*

The personal article *ii* may not be used at all before non-singular personal pronouns. One cannot say:

**Ii gamaed ea gu guyeed.*
**Ii gamow ea gu guyeew.*

but only:

Gamaed ea gu guyeed.
'It was us that saw him.'

Gamow ea gu guyeew.
'It was us that saw him.'

Demonstrative Pronouns as Pronoun Phrases

4.5.2 Demonstrative pronouns (whose morphology was discussed in section 3.2.5) may be used as noun phrases, and their structure

is parallel to that of simple noun phrases. An example is *bineey* 'this one', as in the sentence:

Bineey ea ga ba qadaag?
'Is this the one you want?'

This demonstrative pronoun is based on the pronoun stem *bi-*, which is here combined with the demonstrative *neey* 'this'.

The pronoun stem may also be used alone with the other two attribute elements (in addition to demonstratives), namely prepositional phrases and relative clauses. When used alone, *bi-* has a form with long /i:/ before the preposition *roo-*, and a form /bi/ elsewhere:

Bii rook' miniiq ea bineey?
'Whose is this one?'

Bin ni baey u quw ea ga ba qadaag?
'Which one do you want?' literally, 'The one which is where do you want?'

Bin is used to mean the same as *biniir* 'that one (near you)', that is the demonstrative pronoun stem *bi-* plus the demonstrative *niir* (compare sections 3.2.4–5). Similarly, *tin* may be used to mean the same as *tiniir* 'those (near you)'. Both of these words are also sometimes pronounced with a short /u/. Thus one may say:

Gu ba qadaag ea bin.
'I want that one (near you).'

Gu ba qadaag ea bun.
'I want that one (near you).'

Gu ba qadaag ea tin tun.
'I want those ones (near you).'

The noun phrase connector *ea* is normally used before demonstrative pronouns, as in the examples above, and the following ones:

Gu ba qadaag ea bineey.
'I like this one.'

Gu ba qadaag ea chaqneey.
'I like this person.'

Gu ba qadaag ea keaneam.
'I want that one (such as a tree).'

The demonstrative pronouns may be combined with determiner

elements of various sorts. The primary exception is that *bi-* and *ti-*, which are inherently singular and plural respectively, may not be combined with number morphemes *rea* 'singular', *gäl* 'dual' and *pi/yuu* 'plural', and of course they may not be used with numerals.

When number elements combine with the demonstrative pronoun stem *qa-* 'person' (as in *qaneey* 'this person'), the pronoun stem is converted into a suffix *-iq* on the number element, and the demonstrative portion becomes a separate word.

Various demonstrative pronouns used with number elements are:

gäl chaqneey
'these two persons'

pi chaqneey
'these people'

dalip ii chaqneey
'these three persons'

gäliq neey
'these two persons'

piq neey
'these persons'

dalipiq neey
'these three persons'

gäl keaneey
'these two (trees)'

yuu keaneey
'these (trees)'

Without the demonstrative portion, but followed by a relative clause, these demonstrative pronoun stems may be used with the definite article *fa*:

fa bin ni ba roowroow
'the red one'

fa tin ni ba roowroow
'the red ones'

fa chaaq ni bea marweel ea chiineey
'the person who is working now'

Demonstrative pronoun stems may not be used with the indefinite article *ba*.

Demonstrative Pronoun Phrases

4.5.3 In addition to the demonstrative pronouns, a demonstrative pronoun phrase may be formed by combining a determiner (except the indefinite article *ba*, and except also the quantifiers such as *gubin* 'all', etc.) with an attribute element. Examples of such demonstrative pronoun phrases are:

gäl neey
'those two'

dalip neey
'these three'

gäl yael' neey
'these two (e.g. betel nut)'

yuu yael' neey
'these ones (e.g., betel nut)'

dalip yael' neey
'these three (e.g., betel nut)'

fa gäl ni dabuun
'the two that he doesn't like'

fa dalip ni dabuun
'the three that he doesn't like'

fa yael' ni dabuun
'the one (e.g., betel nut) that he doesn't like'

fa gäl yael' ni dabuun
'the two (e.g., betel nut) that he doesn't like'

fa yuu yael' ni dabuun
'the ones (e.g., betel nut) that he doesn't like'

gäl roog
'my two'

dalip roog
'my three'

yael' roog
'mine (e.g., betel nut)'

gäl yael' roog
'my two (e.g., betel nut)'

In pronoun phrases, the singular number is not expressed. When classifiers are used in pronoun phrases, if no number element is used with them they are considered to be inherently singular. Thus the noun phrase:

rea yael' ii buw neey
'this betel nut'

has a singular number morpheme in it. But the pronoun phrase corresponding to this noun phrase is:

yael' neey
'this one'

with no number morpheme. On the other hand, other number morphemes of classified noun phrases are preserved in the corresponding pronoun phrase. Compare the following pairs of phrases:

gäl yael' ii buw neey
'these two betel nuts'

gäl yael' neey
'these two'

yuu yael' ii buw neey
'these betel nuts'

yuu yael' neey
'these ones'

dalip yael' ii buw neey
'these three betel nuts'

dalip yael' neey
'these three'

In pronoun phrases corresponding to unclassified noun phrases, the singular number morpheme *rea* is replaced by the singular demonstrative pronoun stem *bi-*, and the plural number morpheme *pi* is replaced by the plural demonstrative pronoun stem *ti-*. Other number morphemes are preserved in pronoun phrases corresponding to unclassified noun phrases. Compare the following pairs of phrases:

rea kaarroo neey
'this car'

bineey
'this one'

gäl kaarroo neey
'these two cars'

gäl neey
'these two'

pi kaarroo neey
'these cars'

tineey
'these ones'

dalip ii kaarroo neey
'these three cars'

dalip neey
'these three'

fa rea kaarroo ni kea kireeb
'the car that broke'

fa bin ni kea kireeb
'the one that broke'

Pronoun Phrases from Determiners

4.5.4 Pronoun phrases that are not demonstrative may be formed using other determiner elements. Corresponding to classified noun phrases with the indefinite article *ba* are pronoun phrases with *ba* and the classifier alone. Examples are:

ba yael' ii buw
'a betel nut'

ba yael'
'one'

Corresponding to unclassified simple noun phrases with *ba* is *reeb* 'one', when the reference is not to persons. Thus one says:

Ku gu guy ba naqun.
'I saw a house.'

Ku gu guy reeb.
'I saw one.'

When people are referred to, the pronoun *beaq* 'someone' is used. This usage is discussed in section 4.5.7 below.

Some quantifiers may be used as pronouns. Examples are:

Gu ba qadaag boech.
'I want some.'

Gu ba qadaag qiin
'I want a few.'

On the other hand, certain quantifiers such as *gubiin* 'all' cannot be used in this way:

**Gu ba qadaag gubiin.*

is not a correct sentence.

The Diminutive Morpheme chi in Pronoun Phrases

4.5.5 *Chi* 'diminutive' may also be used in pronoun phrases, and in the singular it may be used as a pronoun stem, as *bi-*, *ti-*. One may say:

Gu ba qadaag ea chineey.
'I want this little one.'

Gu ba qadaag ea gäloech neey.
'I want these two little ones.'

Gu ba qadaag ea chi yael' neey.
'I want these little ones (e.g., betel nuts).'

The noun phrase connector *ea* is used before pronoun phrases according to the same rules which govern its use before the corresponding determiners. For example, *ea* is required in the first two sentences below, but not permitted in the second two:

Dabuug ea gäl chiyae neey.
'I don't like these two chairs.'

Dabuug ea gäl neey.
'I don't like these two.'

Dabuug fa gäl chiyae roog.
'I don't like those two chairs of mine.'

Dabuug fa gäl roog.
'I don't like those two of mine.'

Vocatives as Pronoun Phrases

4.5.6 Vocatives may be treated as a type of pronoun phrase. Certain determiners may be used with vocatives, as for example:

Gimeew bea diqiy, gäl tam?
'What are you two doing (speaking to younger men)?'

A special plural morpheme *dapi* is used with vocatives:

Gimeed bea diqiy, dapi tam?
'What are you all doing (speaking to younger men)?'

Even normal demonstrative pronouns may sometimes be used as vocatives, as for example:

Gimeew bea diqiy, gäl chaaq?
'What are you two doing?'

Interrogative and Indefinite Pronouns

4.5.7 Finally, there are several special pronouns, including three which are **interrogatives**, which are words that ask a question. These pronouns are:

beaq	'someone'
ban'ean	'something'
boechquw	'a little, few'
maang	'what?'
miniiq	'who?'
qiin	'how many?'

These pronouns are illustrated in the following examples:

Baey beaq u roey.
'There is someone here.'

Baey ban'ean u roey.
'There is something here.'

Baey boechquw u roey.
'There is a little here.'

Maang ea baey u roey?
'What is here?'

Miniiq ea baey u roey?
'Who is here?'

Qiin ea baey u roey?
'How many are here?'

Ban'ean 'something' and *boechquw* 'a little' are morphologically complex. *Ban'ean* is compounded of *ba* 'indefinite article' and *n'ean* 'thing'. *Boechquw* 'a little' is a compound of *boech* 'one small thing' (itself composed of *ba* plus *chi* 'diminutive') and *quw* 'classifier for mouthfuls'.

Qiin 'how many?' is pronounced identically to *qiin* 'a few', and may be related to it.

The noun phrase connector *ea* is used before *maang* 'what?', but not before the other pronouns in this group. If the interrogative pronouns are placed after the verb in the sentence (they

normally are placed before the verb), we will see that *ea* is used only before *maang* of these six pronouns:

Kea guy ea maang?
'He saw *what*?'

Kea guy miniiq?
'He saw *who*?'

Kea feek qiin?
'He took *how many*?'

Kea guy ban'ean.
'He saw something.'

Kea guy beaq.
'He saw someone.'

Kea feek boechquw.
'He took some.'

The personal article *ii* (section 4.3) may optionally be used before *miniiq* 'who?', since *miniiq* refers to a person. One may say:

Ii miniiq ea ka mu guy?
'Who did you see?'

Ka mu guy ii miniiq?
'You saw *who*?'

as well as

Miniiq ea ka mu guy?
'Who did you see?'

Ka mu guy miniiq?
'You saw *who*?'

The pronouns *beaq* 'someone', *ban'ean* 'something' and *boechquw* 'some, a little' are called indefinite pronouns. Notice that each of these three words appears to contain the indefinite article *ba*. As explained above, *ban'ean* is morphologically complex, consisting of *ba* and *n'ean* 'thing'. *Boechquw* contains *boech* which consists of *ba* and *chi* 'diminutive'. *Beaq* is apparently composed of *ba* and some form of the demonstrative pronoun stem *qa*-, as in *qaneey* 'this person'.

The six pronouns being discussed may be put in three pairs of pronouns. There is an interrogative and an indefinite pronoun in each pair. One pair refers to people, one pair to things, and one pair to quantities.

INTERROGATIVE AND INDEFINITE PRONOUNS OF YAPESE

	interrogative	indefinite
persons	*miniiq*	*beaq*
things	*maang*	*ban'ean*
quantities	*qiin*	*boechquw*

Beaq and *ban'ean* may both be used with numerals. When *beaq* is used with numerals, it changes form to *niiq*. Thus, one says *dalip niiq* 'three people, three "someones" '. *Ban'ean* does not change form. One says *dalip ban'ean* 'three things, three "somethings" '.

NOUN EXTRAPOSITION

4.6 *Noun extraposition* means replacing a noun phrase by a pronoun phrase, and repeating the noun. It is illustrated in the following two sentences:

Daa mu guy ea rea naqun neam faraam?
'Haven't you seen that house before?'

Daa mu guy ea bineem ea naqun faraam?
'Haven't you seen that house before?'

In these two sentences the two noun phrases:

rea naqun neam
'that house'

bineem ea naqun
'that house'

both mean the same thing. In the first noun phrase, the singular number marker *rea* is used, and the demonstrative *neam* follows the noun. In the second noun phrase, the singular demonstrative pronoun stem *bi*- is used, followed by the demonstrative *neam*. Aside from the fact that *rea* changes to *bi*- when it takes its pronoun form, the only difference between the above two noun phrases is the position of the noun that is head of each. In the first case the noun is found between the determiner element (*rea*) and the attribute element (*neam*), while in the second case the noun is placed at the end of the noun phrase, and determiner plus demonstrative are converted into a pronoun. This process of placing a portion of a construction (in this case, the head noun of a noun phrase) outside of the construction of which it forms

a part is called **extraposition** (a word which means "placing outside"). The noun *naqun* has been extraposed. Following are some examples of noun phrases illustrating the process of extraposition:

rea yael' ii buw neey
'this betel nut'

yael' neey ea buw
'this betel nut'

gäl yael' ii buw neey
'these two betel nuts'

gäl yael' neey ee buw
'these two betel nuts'

gäl naqun neey
'these two houses'

gäl neey ea naqun
'these two houses'

pi naqun neey
'these houses'

tineey ea naqun
'these houses'

rea pumoqon neey
'this man'

chaqneey ea pumoqon
'this man'

These examples show that noun extraposition involves two steps:

1. Put the head noun of the noun phrase to the right of the whole noun phrase, with *ea* in between
2. Convert the determiner into its pronoun form, if different from the form with simple noun phrases (i.e., *bi-* for singular unclassified noun phrases, *ti-* for plural unclassified noun phrases, drop *rea* in all cases, and insert *chaaq* when the reference is to persons).

For example, beginning with the simple noun phrase:

rea naqun neey
'this house'

step one above gives us:

rea neey ea naqun

and then step two drops *rea* and inserts *bi-* to give us:

bineey ea naqun

For another example, consider the simple noun phrase:

rea pumoqon neam
'that man'

Applying step one gives us:

rea neam ea pumoqon

and applying step two gives us:

chaqneam ea pumoqon

Noun extraposition may also apply to simple noun phrases which are followed by relative clauses and prepositional phrases. Compare the following pairs of noun phrases.

fa rea naqun ni baey u Keng
'that house which is in Keng'

fa bin ni baey u Keng ea naqun
'that house which is in Keng'

pi baabiy roog neey
'these pigs of mine'

tii roog neey ea baabiy
'these pigs of mine'

PRONOUNS IN APPOSITION

4.7 A pronoun followed directly by a noun phrase is said to be in **apposition** to the noun phrase if both pronoun and noun phrase refer to the same people. Consider the following sentence:

Gamow ea rea pagäl neey ea ngu gu waarow.
'This boy and I will go.'

In this sentence, the noun phrase:

gamow ea rea pagäl neey
'I and this boy'

consists of a personal pronoun *gamow* 'we (he and I)' and a simple noun phrase *rea pagäl neey* 'this boy'. This noun phrase is translated as 'I and this boy', yet there is no word in the sentence meaning 'I', and there is no word meaning 'and'. Some other examples of noun phrases of this type are:

gimeew Wag
'you and Wag'

yow walaagean
'he and his brother'

gamaed ea chaqneey
'we (excluding you) and this person'

gimeed ea pi girdiiq neam
'you and those people'

yaed fa pi girdiiq
'they and those people'

Personal pronouns used in this way before a simple noun phrase are said to be in **apposition** to the noun phrase. The pronouns in each of these cases refer to the total number of people referred to by the noun phrase as a whole (including the pronoun). As an example, consider the noun phrase:

gamow ea rea pagäl neey
'I and this boy'

This noun phrase refers to two people. One is 'I', and the other is 'this boy'. The pronoun *gamow* means 'I and he' and thus it refers to both of these two people. The simple noun phrase itself, however, refers to only one of the people, namely 'this boy'.

When pronouns and noun phrases are joined in Yapese, they are normally placed in apposition in the pattern discussed above. The pronoun is a personal pronoun. No word meaning 'and' is used—the pronoun and the simple noun phrase are simply placed side by side (with the noun phrase connector *ea* being used only in those cases where it would normally be found before the particular simple noun phrase in question). The pronoun refers to all the people referred to by the combination of pronoun and simple noun phrase, while the simple noun phrase itself refers to only part of the people referred to by the whole combination.

With a dual personal pronoun, the simple noun phrase used is singular. With a plural personal pronoun, the simple noun phrase may be of any number, but the combination of pronoun and noun phrase always refers to more people than does the simple noun phrase alone. For example, in the noun phrase:

yaed ea pi girdiiq neey
'they and these people'

the simple noun phrase *pi girdiiq neey* refers to 'these people', but the pronoun *yaed* refers to these people and also to some other person or persons as well.

The pronoun *gadow* 'you and I' is not normally used in apposition in this fashion. The reason it is not is that *gadow* refers to two people—you and I—and there is no third person that it refers to which could include a noun phrase. Since pronouns in apposition must refer to *all* the people referred to by the noun phrase as a whole, a pronoun must always have some third person reference in order to be used in apposition. *Gadaed* 'you and I and someone else', on the other hand, may be used in apposition:

gadaed ea chaqneey
'us including this person'

For the same reason that *gadow* is not normally used in apposition, the singular pronouns are not normally used in apposition. They are not used in apposition because pronouns in apposition refer to the person referred to in the simple noun phrase, and in addition they refer to someone else. Thus at least two people are necessarily involved, and so pronouns in apposition must be at least dual in number.

As will be seen in sections 5.2.3 and 7.2, this type of pronoun reference is used in Yapese whenever a noun phrase is used and some additional persons are referred to by a personal pronoun, even when the personal pronoun and the noun phrase are not in apposition. Thus one says:

Ku gu waarow Tamag.
'Tamag and I went.'

in which the verb phrase:

ku gu waarow
'we (he and I) went'

refers to all of the people who went, including Tamag, while the noun *Tamag* refers only to one of the people who went, namely himself.

THE CONSTRUCT CONSTRUCTION

4.8 A possessed noun followed by a noun phrase forms what is called a **construct construction**. Consider the noun phrase:

tafean ea rea piin neam
'that woman's house'

This noun phrase consists of two parts. The first part is the possessed noun *tafean* 'her house', and the second part is a normal, simple noun phrase. This combination of a possessed

noun and a noun phrase is called a construct construction. The second noun phrase expresses the possessors of the first (possessed) noun itself.

The first noun phrase may have the third person singular suffix *-n* 'his' if all of the possessors are expressed by the second noun phrase. However, just as in pronoun apposition, if some of the possessors are to be referred to only by the possessive pronoun suffix on the first noun, then this suffix must refer to all of the possessors, including those referred to by the second noun phrase. This is illustrated by the following examples of construct noun phrases:

walaagean ea rea piin neey
'this woman's brother'

walaagmow ea rea piin neey
'the brother of me and this woman'

walaagmeew ea rea piin neey
'the brother of you and this woman'

walaagrow ea rea piin neey
'the brother of him and this woman'

walaagmaed ea rea piin neey
'the brother of us (not including you) and this woman'

A construct noun phrase may itself be the possessor portion of a construct noun phrase. Thus we may have combinations like the following:

chitinngiin ea chaqneey
'the mother of this person'

walaagean chitinngiin ea chaqneey
'the brother of the mother of this person'

tafënrow walaagean chitinngiin ea chaqneey
'the house of him and the brother of the mother of this person'

As mentioned above, if the possessors in a construct noun phrase are all expressed by the noun phrase portion (i.e., not by the possessive pronoun suffix on the posessed noun), then the possessive pronoun suffix on the possessed noun must be third person singular *-n*. Thus one says:

walaagean fa gäl bitiir
'the brother of the two children'

not:

**walaagrow fa gäl bitiir*

On the other hand, if some of the possessors are expressed only by the possessive pronoun suffix on the possessed noun, then this suffix must refer to all of the possessors including those referred to by the noun phrase possessor. Thus one says:

walaagrow ea rea bitiir neey
'the brother of him and this child'

If one said:

walaagean ngea rea bitiir neey

it would not mean 'the brother of him and this child' but rather 'his brother and this child'.

Relational Nouns in Construct Constructions

4.8.1 There are a number of words that have possessive pronoun affixes, but which actually express a relationship between the possessor and (usually) certain other noun phrases in the sentence. Thus one may say:

m'aag u thiliin ea qaam nuu Mariken ngea United Nations
'an agreement between the American government and the United Nations'

In this noun phrase the word *thiliin* 'between' is a possessed noun in form. Its possessor is *qaam nuu Mariken* 'the American government'. But the noun does not refer to something possessed, but rather is used to connect *m'aag* 'agreement', *qaam nuu Mariken* 'the American government' and *United Nations*. Many relational nouns of this sort refer to the physical location of something. Examples are:

dakean	'its top'
taanggiin	'its underneath'
laanggiin	'its inside'

These relational nouns are used normally in prepositional phrases, and are discussed in section 6.3.

Roo- Prepositional Phrases in the Construct Construction

4.8.2 The preposition *roo-* with possessive pronoun suffixes is used in construct noun phrases. This is the way in which possession of nouns is expressed for nouns which do not take the possessive pronoun suffixes. Examples are:

waey rook' Tamag
'Tamag's basket'

waey rook' ea gäl ii chaqneey
'the basket of these two people'

waey rook' ea pi bitiir neey
'the basket of these children'

gäl waey roomow walaageeg
'the baskets of me and my brother'

waey rooraed gubiin ea pi girdiiq neam
'the baskets of all those people'

As may be seen, pronoun reference with possessive pronouns used with the preposition *roo-* is the same as pronoun reference with possessive pronouns suffixed to possessed nouns.

Determiners and Quantifiers in Construct Construction

4.8.3 Determiners are used before possessed nouns in construct noun phrases. One may say:

fa pi walaagean Tamag
'those brothers of Tamag'

rea m'agean ea rea qulung neey
'the agreement of this group'

l'agruw walaagean Tamag
'two brothers of Tamag'

Various restrictions and special conditions appear to apply to the use of determiners and other noun phrase elements with possessed nouns and construct noun phrases. As these conditions are not well understood, they will not be fully discussed here.

In some cases quantifiers, or quantifiers with classifiers, are used before noun phrases to express the meaning 'of'. One may say:

gubiin yael' ea pi buw neey
'all of these betel nuts'

Expressions of this sort expressing quantity are in certain ways parallel to construct noun phrases, and in certain ways parallel to the use of determiners in noun phrases. The details of such usage are not well understood, and this topic will not be fully discussed. Other examples of quantifiers used in the above way are:

dalip yael' ea pi buw neey
'three of these betel nuts'

laal ea pi kaarroo neey
'five of these cars'

Another type of construction which expresses something similar to the above noun phrases is expressed in the following examples:

bagdow
'one of us (you and I)'

bagmow
'one of us (him and me)'

bagyow
'one of them two'

bagyaed
'one of them (plural)'

5 Verb Phrases

INTRODUCTION

5.1 The two most important components of a sentence are noun phrases and verb phrases. Noun phrases tell what things or people are involved in a situation. These are discussed in chapter 4. **Verb phrases** tell what the things or people named by the noun phrases are doing to each other, what their relationships are to each other, and so forth. The relationships between the various noun phrases in a sentence are discussed in chapter 7. The subject of the present chapter is the structure of verb phrases.

Consider the following sentence:

Kea guy ea rea piin neam walaageeg u Tamil.
'That woman saw my brother in Tamil.'

In this sentence *rea piin neam* 'that woman' is a noun phrase, *walaageeg* 'my brother' is a noun phrase, and *u Tamil* 'in Tamil' is a prepositional phrase (prepositional phrases are discussed in section 6.3). The phrase *kea guy* 'he, she saw him' is a verb phrase.

There are two basically different forms of verb phrases in Yapese. One is exemplified by the verb phrase:

ku gu guyeew
'we (he and I) saw it'

This type of verb phrase, called a **suffixed pronoun verb phrase**, has four parts. The first part, represented by *ka* 'past time' in the above sentence, is called the **tense marker**. Tense markers are morphemes which describe the time of the action of the verb. The second part, represented by *gu* 'I' in the above sentence, is the **subject pronoun**. The third part, represented by *guy* 'to see' in this

sentence, is the **head** of the verb phrase (compare the use of the word head for the noun in a noun phrase, discussed in section 4.1 above). The fourth part is the **subject number marker** *-eew* 'dual'. This type of verb phrase receives its name because of the use of this subject number marker suffix.

The other type of verb phrase is illustrated by the following example:

Gamow bea marweel.
'We (he and I) are working.'

This sentence consists of just a verb phrase. This type of verb phrase is called an **independent pronoun verb phrase**. It consists of three parts. The first part, represented by *gamow* 'we (he and I)' is the subject pronoun. The second part, represented by *bea* 'present progressive' is the tense marker. The last part, represented by *marweel* 'to work', is the head of the verb phrase.

Consider the following two verb phrases:

kea guyeeg
'he saw me'

bea guyeeg
'he sees me'

The suffix *-eeg* on the verb *guy* 'to see' is an **object pronoun suffix** (see section 3.3.4). This suffix represents the direct object of the verb.

Sentences have three basic elements: the verb phrase, the subject, and the object. Verb phrases themselves have three basic elements (other than tense markers), which are the subject pronoun, the verb (or head of the verb phrase), and the object pronoun suffix. Thus verb phrases are, in a sense, like miniature sentences. Both sentences and verb phrases have subjects, and both have objects. Furthermore, the head of the verb phrase (which may be a verb, an adjective, or other elements—see section 5.4 below) may be called the **predicate** of the verb phrase, and the verb phrase itself is called the predicate of the sentence. We will, therefore, use the terms subject, object and predicate both to refer to parts of the verb phrase and to refer to parts of the sentence. Sentence structure is discussed in chapter 7.

INDEPENDENT PRONOUN VERB PHRASES

5.2 Independent pronoun verb phrases are the simplest type of verb phrase in Yapese. Consider the following sentence:

Gamow raa guyeem u Honolulu.
'We (he and I) will see you in Honolulu.'

The verb phrase in this sentence is:

gamow raa guyeem
'we (he and I) will see you'

This verb phrase illustrates the four parts of the independent pronoun verb phrase. They are the subject pronoun (*gamow*), the tense marker (*raa* 'simple future'), the head or predicate of the verb phrase (*guy* 'to see'), and the **direct object pronoun suffix** (*-eem* 'you (singular)').

Subject Pronouns in Independent Pronoun Verb Phrases

5.2.1 In the dual and plural, the normal independent personal pronouns are used as subject pronouns in independent pronoun verb phrases. This usage is illustrated by the following sentences:

Gadow bea marweel.
'We (you and I) are working.'

Gamow bea marweel.
'We (he and I) are working.'

Gimeew bea marweel.
'You two are working.'

Yow bea marweel.
'They two are working.'

Gadaed bea marweel.
'We (you all and I) are working.'

Gamaed bea marweel.
'We (they and I) are working.'

Gimeed bea marweel.
'You all are working.'

Yaed bea marweel.
'They all are working.'

In the singular number, however, there is a special set of subject pronouns which is used in the independent pronoun verb phrase. These are illustrated by the following sentences:

Gu bea marweel.
'I am working.'

Ga bea marweel.
'You (singular) are working.'

Bea marweel.
'He (or she) is working.'

Yi bea marweel.
'One is working.'

These sentences illustrate that the subject pronoun is *gu* for first person singular, *ga* for second person singular, *yi* for the indefinite pronoun (see section 3.3.5 for a discussion of the meaning of the indefinite pronoun). When no subject pronoun is used at all, then the subject is third person singular ('he' or 'she').

When the subject is expressed entirely by a noun phrase following the verb phrase, then no subject pronoun is used, as in the following examples:

Raa muul ea bineey?
'Will this one fall?'

Raa muul ea gäl neey?
'Will these two fall?'

Raa muul ea tineey?
'Will these ones fall?'

When a verb has both a subject pronoun and a noun phrase subject following the verb, the subject pronoun includes the people referred to by the noun phrase subject which follows the verb. The subject pronoun also includes someone in addition to the people mentioned in the noun phrase subject following the verb. One may say:

Yow bea marweel Tamag.
'He and Tamag are working.'

but not:

**Yow bea marweel ea gäl chaqneey.*

Recall that this same type of pronoun-noun phrase combination was discussed in sections 4.7 and 4.8. Pronoun reference in connection with subjects and objects of sentences is discussed in detail in section 7.2.

Tense Morphemes in Independent Pronoun Verb Phrases

5.2.2 Five different tense morphemes are found following the subject pronoun in independent pronoun verb phrases. They are illustrated in the following five sentences:

Gu bea marweel.
'I am working.'

Gu raa marweel.
'I will work.'

Gu maa marweel.
'I work (usually, habitually).'

Gu ba gaaq.
'I am big.'

Gu ma naang.
'I know.'

The tense marker *bea* 'present progressive' indicates an action that is actually taking place at the present time. Examples are:

Yow bea fitaeq ea chiineey.
'They are fishing now.'

Ga bea diqiy?
'What are you doing?'

Raa 'simple future' is illustrated by the following examples:

Raa yaen Tamag nga raam?
'Will Tamag go there?'

Ga raa guy gabuul, fa?
'You'll see him tomorrow, won't you?'

Raa is called 'simple future' by contrast with *baey* 'definite future', which is discussed below in section 5.3.4.3.

Raa is also used in suffixed pronoun verb phrases, as for example in the sentence:

Raa mu maen nga Donguch?
'Will you go to Donguch?'

This usage is discussed in section 5.3.1 below.

Raa is used as a *subordinating conjunction*, as in the sentence:

Raa mu guy, ma goog ngaak' ni ngea yib nga tafnaag.
'If you see him, tell him to come to my house.'

This usage, and the term subordinating conjunction, are discussed in section 7.5.2.

Maa 'present habitual' is present tense and describes an action which is habitual or usual. Examples are:

Maa marweel Tamag ko Education ea chiineey.
'Tamag works for Education now.'

Yaed maa yaen nga Donguch ni gubiin ea rraan.
'They go to Donguch every day.'

Note that *maa* is present tense. You cannot say:

**Maa marweel u qaspitaal fa bineem ea duw.*

but rather must say:

Qii marweel u qaspitaal fa bineem ea duw.
'He worked at the hospital last year.'

The tense marker *qii* (from tense morpheme *qu* 'non-past progressive/habitual' plus *i* 'he') is discussed in section 5.3.1 below.

The 'stative' marker *ba* is used with nouns and adjectives, and often translates as the English verb 'to be'. Examples are:

Ba seensey ea chaqneey.
'This person is a teacher.'

Ba gaaq ea bineey ko biniir.
'This one is bigger than that one.'

Gu ba pumqon.
'I am a man.'

Ga ba maenigil.
'You are good.'

The morpheme *ma* 'stative' is used only with the verb *naang* 'to know'. Examples are:

Ga ma naang ea chaqniir?
'Do you know that person?'

Ma naang Tamag ni ka mu riin'.
'Tamag knows that you did it.'

This tense marker should not be confused with *maa* 'present habitual', which has a long vowel. *Ma* and *maa* are different in meaning as well. Both *maa* and *ma* may be used with *naang*, with a difference in meaning:

Gu ma naang.
'I know it.'

Gu maa naang.
'I usually know it.'

The independent pronoun verb phrase may be used without any tense marker in a certain construction called a **subordinate conjunction**, which is discussed in section 7.5.2. An example of this is:

Mu maen nga tafean, ma ga piiq ea bineey ea waey ngaak'.
'Go to his house and give him this basket.'

In the second part of this sentence is the verb phrase:

ga piiq
'you give'

which contains a subject pronoun and a predicate, but no tense marker. Such verb phrases may not be used alone, but only following the subordinating conjunction *ma* 'and then'. The forms of subject pronoun used after *ma* are different in certain respects from those used with normal independent pronoun verb phrases. These forms are discussed in section 7.5.2.

The head of the verb phrase may be a verb, an adjective, or certain other elements. These are discussed in section 5.4 below. The form of object pronoun suffixes was discussed in section 3.3.4.

SUFFIXED PRONOUN VERB PHRASES

5.3 This type of verb phrase is illustrated by the following example:

Ka da marweel gow.
'We (you and I) worked.'

There are four parts to the suffixed pronoun verb phrase. They are the tense marker (*ka* 'perfect'), the subject pronoun (*da* 'we inclusive'), the head or predicate (*marweel* 'to work') and the subject number marker (*gow* 'dual'). In verb phrases with transitive verbs as head the subject number marker is suffixed to the verb, as in the following example:

ka da rin'eew
'we (you and I) did it'

and it is for this reason that this type of verb phrase is called a suffixed pronoun verb phrase.

Subject Pronouns in Suffixed Pronoun Verb Phrases

5.3.1 In addition to independent pronoun verb phrases, Yapese has a type of verb phrase with pronouns more closely tied to the head of the verb phrase. The name of this type of verb phrase is the suffixed pronoun verb phrase. This type of verb phrase is illustrated by the following sentences:

Gu marweel fowaap.
'I worked yesterday.'

Mu marweel fowaap.
'You worked yesterday.'

Marweel fowaap.
'He worked yesterday.'

Ni marweel fowaap.
'One worked yesterday.'

Da marweel gow fowaap.
'We (you and I) worked yesterday.'

Gu marweel gow fowaap.
'We (he and I) worked yesterday.'

Mu marweel gow fowaap.
'You two worked yesterday.'

Ra marweel gow fowaap.
'They two worked yesterday.'

Da marweel gaed fowaap.
We (you all and I) worked yesterday.'

Gu marweel gaed fowaap.
'We (they and I) worked yesterday.'

Mu marweel gaed fowaap.
'You all worked yesterday.'

Ra marweel gaed fowaap.
'They all worked yesterday.'

These sentences illustrate the subject pronouns that are used in suffixed pronoun verb phrases, as seen in the following:

SUBJECT PRONOUNS FOR SUFFIXED PRONOUN VERB PHRASES

	singular	dual and plural
1st inclusive		*da*
1st exclusive	*gu*	*gu*
2nd	*mu*	*mu*
3rd	*i/0*	*ra*
indefinite	*ni*	

The subject pronouns are only differentiated into two groups, one singular and the other non-singular. The lack of a special column for plural is because the number of non-singular subject pronouns is determined not by the pronoun itself, but by whether the dual or plural subject number marker is used. (Subject number markers are *gow* 'dual' and *gaed* 'plural' with intransitive verbs,

-eew and *-eed* with transitive verbs. They are discussed in section 5.3.2 below.)

The subject pronouns for first person exclusive and for second person are the same in singular and non-singular. *Gu* means 'I' or 'we exclusive' depending on whether a subject number marker is used or not. *Mu* likewise is used for 'you' whether singular, dual or plural.

The third person singular subject pronoun is listed as *i/0*. The expression "i/0" means that in certain cases the third person singular pronoun 'he, she' is of the form *i*, and in other cases it has no pronunciation at all (expressed by the symbol 0). The fact is that morphemes that do not begin with a consonant (such as *i* 'he') are not normally able to be pronounced at the beginning of a sentence or after a pause. The *i* is pronounced in the normal way when a morpheme ending in a consonant precedes it, as in the sentence:

Daab i marweel.
'He will not work.'

Sometimes, however, this morpheme *i* is pronounced at the beginning of a sentence, for clarity, and care must be taken in reading this section not to confuse *i* 'he' with *qii*, which is a combination of *qu* 'non-present progressive/habitual' with *i* 'he'. Compare the following sentences:

Qu gu marweel u roem.
'I used to work there.'

Qu mu marweel u roem.
'You used to work there.'

Qii marweel u roem.
'He used to work there.'

Gu marweel u roem.
'I worked there.'

Mu marweel u roem.
'You worked there.'

Marweel u roem. or *I marweel u roem.*
'He worked there.'

The last two sentences in the list above have the same meaning; and they differ in meaning from the third sentence in the list. However, when the morpheme *i* 'he' is pronounced at the beginning of a sentence it is often pronounced with a preceding *q*, even though the *q* is not "really there" in underlying form. In other words, the morpheme *i* 'he' is not pronounced with *q* when another morpheme precedes.

Subject Number Markers in Suffixed Pronoun Verb Phrases

5.3.2 The following sentences illustrate the subject number markers used with suffixed pronoun verb phrases.

Gu marweel.
'I worked.'

Gu marweel gow.
'We (he and I) worked there.'

Gu maruwliy.
'I worked it.'

Gu maruwliyeew.
'We (he and I) worked it.'

When the head of the verb phrase is a transitive verb (such as *maruwliy* 'to work, do by working'), the subject number markers are represented by the suffixes *-eew* 'dual' and *-eed* 'plural' (the morphology of these suffixes is discussed in section 3.3.3). When the head of the verb phrase is anything but a transitive verb, the subject number markers are represented by the stressless particles *gow* 'dual' and *gaed* 'plural' (also discussed in section 3.3.3).

With a small number of intransitive verbs, the number suffixes *-w* 'dual' and *-d* 'plural' (underlying forms **-w** and **-du**) are added directly to the verb root (this process is discussed in section 3.3.3). Because different verb roots have underlying forms ending in different vowels, and some have underlying forms ending in no vowel at all, the vowel used before *-w* and *-d* is different from verb to verb. Some of the common examples are:

Mu maarow.
'You two went.'

Mu maeroed.
'You all went.'

Mu baow.
'You two came.'

Mu baed.
'You all came.'

Ra m'ow.
'They two died.'

Ra m'aed.
'They all died.'

Ra suulow.
'They two returned.'

Ra suuloed.
'They all returned.'

Ra päreew.
'They two remained.'

Ra päreed.
'They all remained.'

The verb *yoeg* 'to say' is a transitive verb which takes irregular subject number markers. Instead of the normal transitive subject number markers *-eew* and *-eed*, *yoeg* may optionally be used with subject number markers *-neew* 'dual' and *-need* 'plural', as in the following examples:

Doegeew.
'We two (you and I) said it.'

Doegneew.
'We two (you and I) said it.'

Doegeed.
'We (you all and I) said it.'

Doegneed.
'We (you all and I) said it.'

The form *doeg-* is a contraction of the subject pronoun *da* 'we inclusive' and the verb root. Such contracted verbs are discussed below in section 5.5.

Suffixed pronoun verb phrases may be used with nonsingular subject pronouns but without any subject number marker following the verb. In such cases, the verb phrase is interpreted as having a dual subject. An example is:

Ra marweel.
'They two worked.'

Object Suffixes with Suffixed Pronoun Verb Phrases

5.3.3 Object suffixes were discussed in section 3.3.4. They may be added to verbs only if the verb is not followed by a subject number suffix. Thus, they may always be added to verbs that are used in the independent pronoun verb phrase, since subject number suffixes are not used with these verbs. Examples are:

Bea guyeeg.
'He sees me.'

Gu bea guyeem.
'I see you.'

Gamow bea guyrow.
'We (he and I) see them.'

Object suffixes may be added to verbs used in suffixed pronoun verb phrases if no subject number suffix is used, that is if the subject of the verb is either singular or else is expressed entirely by a separate noun phrase, with no subject pronoun. Examples are:

Guyeeg.
'He saw me.'

Gu guyeem.
'I saw you.'

Gu guyrow.
'I saw them.'

Guyrow ea gäl bitür neey.
'These two children saw them two.'

However, if a subject number marker is used the object pronoun suffixes may not be used. Instead, the independent personal pronouns are used. Examples are:

Ra guyeew gaeg.
'They two saw me.'

Ra guyeew gimeew.
'They two saw you two.'

One cannot say:

**Ra guyeeweeg.*
**Ra guyeewmeew.*

Tense Markers in Suffixed Pronoun Verb Phrases

5.3.4 There are a number of different tense morphemes that may be used before the subject pronoun in a suffixed pronoun verb phrase.

Ka 'Perfect'

5.3.4.1 The perfect tense marker *ka* is illustrated by the following example:

Kea yaen nga Donguch.
'He has gone to Donguch.'

Ka refers to an action completed in the past, but which the speaker is saying is relevant to the present. For example, compare the meaning of the above example with the meaning of the following sentence, which is in the simple past (section 5.3.4.8 below):

Yaen nga Donguch.
'He went to Donguch.'

In this sentence the meaning is simply that he went to Donguch, but no implication is made that his going to Donguch is related to the present situation. It is an action that happened in the past, and this is all that is being said.

On the other hand, the sentence with *ka* emphasizes the relevance in present time of the fact. In certain cases the adverb *chiineey* 'now' may be used with sentences with *ka*, even though they describe an action that happened in the past. Consider the sentence:

Kea maenigil ea chiineey.
'It's good now.'

This sentence means something like 'It became good in the past and is still fine now'.

On the other hand, it is sometimes strange to use an adverb like *fowaap* 'yesterday' with the *ka* tense. The following sentence may be awkward in meaning for many people:

Kea yaen nga Donguch fowaap.
'He has gone to Donguch yesterday.'

But with an adverb that includes the present time, such as *dabaq* 'today', the sentence is perfectly normal:

Kea yaen nga Donguch ea dabaq.
'He has gone to Donguch today.'

This type of tense with a meaning of 'past action with present relevance' is traditionally called 'perfect', and we will use this term here for *ka*.

Note that *ka* changes its pronunciation in combination with subject pronouns according to the operation of various morphophonemic rules. *Ka* plus *gu* 'I' is pronounced *kug*. *Ka* plus *mu* 'you' is pronounced *kam*. *Ka* plus *i* 'he' is pronounced *kea*. *Ka* plus *ni* 'one' is pronounced *kan*. *Ka* plus *da* 'we inclusive' is pronounced *kad*. And *ka* plus *ra* 'they' is pronounced *kar*. These combinations are sometimes written as they are pronounced, so that the sentence:

Ka mu feek.
'You have taken it.'

is sometimes written as:

Kam fek.

In this book *ka* plus *i* 'he' will be written *kea*, but in other places *ka* will be written as *ka*, and the subject pronouns will be written with the vowels they are actually pronounced with. Similar comments apply to the pronunciation of *nga* 'inceptive'.

Nga 'Inceptive'

5.3.4.2 The inceptive tense marker *nga* is illustrated by the following example:

Ngu gu waen nga Donguch.
'I'm going to go to Donguch.'

The meaning of *nga* 'inceptive' is nearly the mirror image of the meaning of *ka* 'perfect'. Whereas the meaning of *ka* was 'action completed in the past with present relevance', the meaning of *nga* is 'action to be completed in the future with present relevance'. Thus one can use the adverb *chiineey* 'now' with *nga*, as in the following example:

Ngu gu waen nga Donguch ea chiineey.
'I'm going to go to Donguch now.'

Nga is similar in meaning to the English phrase 'to be going to do something, to be about to do something'. The term 'inceptive' means 'pertaining to starting or beginning something', and it is therefore used for *nga*, which is close in meaning to the meaning of 'to begin'.

Baey 'Definite Future'

5.3.4.3 The definite future tense marker *baey* is illustrated by the following sentence:

Baey gu guyeem u roem.
'I will see you there.'

Baey simply refers to the future, without implication of present relevance as with *nga*. Thus it is natural to say:

Ngu gu waen nga Donguch ea chiineey.
'I'm going to go to Donguch now.'

using the adverb *chiineey* 'now'. But it would be strange to say:

Baey gu waen nga Donguch ea chiineey.

Baey differs from *raa* 'simple future' in that the meaning of *raa* is simply future, but *baey* affirms that the action will certainly take place. Thus one might feel greater confidence if a friend said to him:

Baey gu soen nageem u roem ngea madaq ko meedlip ea kalook.
'I will wait for you there until seven o'clock.'

than if he said:

Gu raa soen nageem.
'I will wait for you.'

Raa 'Simple Future'

5.3.4.4 *Raa* 'simple future' was described in connection with its use in independent pronoun verb phrases (section 5.2.2), as for example:

Gu raa yaen nga raam.
'I will go there.'

Raa may also be used in suffixed pronoun verb phrases, with the same meaning as when it is used in independent pronoun verb phrases. An example is:

Raa gu guy.
'I will see him.'

Raa plus *i* 'he, she' would be pronounced simply *raa*, and therefore there is no way to know if a verb phrase such as:

raa marweel
'he will work'

is an independent pronoun verb phrase or a suffixed pronoun verb phrase.

Raa as a subordinating conjunction is discussed in section 7.5.2.

Daab 'Future Negative'

5.3.4.5 The future negative tense marker *daab* is used to make negative sentences corresponding to all future tense markers. Examples are:

Ga raa yaen?	*Daab gu waen.*
'Will you go?'	'I won't go.'
Nga mu maen?	*Daab gu waen.*
'Are you going to go?'	'I am not going to go.'
Baey mu maen?	*Daab gu waen.*
'Will you certainly go?'	'I won't certainly go.'

Daab is not combined with other future tense markers in order to specify the differences between 'simple future', 'definite future' and 'inceptive'. These differences in meaning regarding the future tense are made in Yapese in positive sentences, but are not normally made in negative sentences.

Daa 'Past Negative'

5.3.4.6 *Daa* is used to form the negative of the perfect (with *ka*), and also of the simple past (with no tense marker—see section 5.3.4.8). Examples are:

Ka mu guy?	*Daa gu guy.*
'Have you seen him?'	'I haven't seen him.'
Mu guy?	*Daa gu guy.*
'Did you see him?'	'I didn't see him.'

Daa combines with *i* 'he, she' to become *dea*, as in:

Dea naang rogon i riin'.
'He didn't know how to do it.'

However, because *daa* has a long vowel, it does not become *du* before *gu*, in contrast with *ka* 'perfect' and *nga* 'inceptive', which both change their vowel to *u* before *gu*. Compare the following examples:

Ku gu riin'.
'I have done it.'

Ngu gu riin'.
'I'm going to do it.'

Daa gu riin'.
'I haven't done it.'

Daa 'Present Negative'

5.3.4.7 The following example illustrates the use of the present negative:

Daa gur riin'.
'I am not doing it (at the moment).'

In this verb phrase the tense marker *daa* is used, and in addition a morpheme *-r* is suffixed to the subject pronoun *gu* 'I'.

The present negative is the negative used corresponding to the 'present progressive' *bea*. Consider the following example:

Ga bea diqiy? 'What are you doing?'
Daa gur riin' ban'ean. 'I'm not doing anything.'

The present negative is also used with the tense marker *maa* 'present habitual', as in the following example:

Ga maa marweel u quw? 'Where do you work?'
Daa gur maa marweel u baang. 'I don't work anyplace.'

However, this usage with *maa* is optional. The present negative by itself may also have the present habitual meaning. Thus one may say:

Ga maa marweel u quw? 'Where do you work?'
Daa gur marweel u baang. 'I don't work anyplace.'

When the present negative is used with *maa*, the subject pronouns are those normally used with the present negative, not those which would otherwise be used with *maa* (compare section 5.2 above).

The *-r* suffix of the present negative combines with the subject pronouns of the suffixed pronoun verb phrase according to a slightly complex pattern. This pattern is illustrated by the following sentences:

Daa gur marweel.
'I'm not working.'

Daa mur marweel.
'You are not working.'

Daar marweel.
'He is not working.'

Daa nir marweel.
'One is not working.'

Daa dad marweel gow.
'We (you and I) are not working.'

Daa gur marweel gow.
'We (he and I) are not working.'

Daa mur marweel gow.
'You two are not working.'

Daa rar marweel gow.
'They two are not working.'

Similar examples could be given for the plural.

The tense morpheme plus the subject pronoun of the above sentences may be arranged as follows:

PRESENT NEGATIVE TENSE MARKERS IN YAPESE

	singular	dual
1st inclusive		*daa dad*
1st exclusive	*daa gur*	*daa gur*
2nd	*daa mur*	*daa mur*
3rd	*daar*	*daa rar*
indefinite	*daa nir*	

The first thing to notice in this table is that in the third person singular the *-r* of the present negative is suffixed to the *daa* directly. The third person singular pronoun *i* 'he, she', since it begins with a vowel, disappears.

The second thing to notice is that the *-r* suffix changes to *-d* after the first person inclusive pronoun *da*. Thus one says:

Daa dad marweel gow.
'We (you and I) are not working.'

rather than:

**Daa dar marweel gow.*

Certain dialects of Yapese further modify these markers by changing the vowel of all of them (except the third person singular *daar*) to *u*, thus producing the following sets of forms:

Daa gur marweel.
'I'm not working.'

Daa mur marweel.
'You are not working.'

Daar marweel.
'He is not working.'

Daa nur marweel.
'One is not working.'

Daa dud marweel gow.
'We (you and I) are not working.'

Daa gur marweel gow.
'We (he and I) are not working.'

Daa mur marweel gow.
'You two are not working.'

Daa rur marweel gow.
'They two are not working.'

Certain verbs change their forms in the suffixed pronoun verb phrase. Examples are:

Ku guub.
'I have come.'

Ku gu waen.
'I have gone.'

These verbs are called irregular verbs, and these changes in their pronunciation are discussed in section 5.5. However, in the singular, with the present negative tense markers, these verbs do not change their form but rather are used in their independent forms (the same forms as are used in independent pronoun verb phrases). Examples are:

Daa gur yaen.
'I am not going.'

Daa gur yib.
'I am not coming.'

However, in the dual and plural these verbs apparently do occur in their changed pronunciation, yielding:

Daa gur waarow.
'We (he and I) are not going.'

Daa gur bow.
'We (he and I) are not coming.'

It is not certain whether these latter sentences are correct or not, however.

Simple Past

5.3.4.8 Suffixed pronoun verb phrases may occur without any tense marker at all. Examples are:

Gu waen nga Donguch.
'I went to Donguch.'

Mu maen nga Donguch.
'You went to Donguch.'

Yaen nga Donguch.
'He went to Donguch.'

Ni yaen nga Donguch.
'One went to Donguch.'

Daarow nga Donguch.
'We (you and I) went to Donguch.'

Gu waarow nga Donguch.
'We (he and I) went to Donguch.'

Mu maarow nga Donguch.
'You two went to Donguch.'

Raanow nga Donguch.
'They two went to Donguch.'

Similar examples could be given for the plural. Such verb phrases are said to be in the simple past.

Imperative

5.3.4.9 In the example sentences listed in section 5.3.4.8 above, three of the sentences are ambiguous in meaning. These three sentences are:

Mu maen nga Donguch.
Mu maarow nga Donguch.
Daarow nga Donguch.

If an adverb such as *fowaap* 'yesterday' referring to past time is added to these sentences, the meanings of these sentences are simple past, and there is no ambiguity:

Mu maen nga Donguch fowaap.
'You went to Donguch yesterday.'

Mu maarow nga Donguch fowaap.
'You two went to Donguch yesterday.'

Daarow nga Donguch fowaap.
'We (you and I) went to Donguch yesterday.'

On the other hand, if there is an adverb such as *chiineey* 'now' referring to present time, the meanings of the sentences are different from simple past:

Mu maen nga Donguch ea chiineey.
'Go to Donguch now.'

Mu maarow nga Donguch ea chiineey.
'Go to Donguch now (you two).'

Daarow nga Donguch ea chiineey.
'Let's go to Donguch now (you and I).'

Suffixed pronoun verb phrases without a tense marker may be used in the second person and in the first person inclusive (as in the above examples) to express a command. Verbs used to express a command in this way are called **imperatives**.

One verb, *yib* 'to come', has a special set of imperative forms, different from the simple past forms for the same verb, in the second person.

The simple past and imperative forms of *yib* are:

Muub.	*Moey.*
'You came.'	'Come.'
Mubow.	*Mireew.*
'You two came.'	'Come (you two).'
Mubaed.	*Mireed.*
'You all came.'	'Come (you all).'

However, in the first person inclusive the simple past and imperative forms are the same for *yib*, as with all other verbs:

Dabow.
'We (you and I) came.' or 'Let's come (you and I).'

Dabaed.
'We (you all and I) came.' or 'Let's come (you all and I).'

Daab 'future negative' is used in the second person as a negative imperative, that is to tell someone not to do something. An example is:

Daab mu riin' ea biniir.
'Don't do that.'

Qa 'Priorative' and qu 'non-present progressive/habitual'

5.3.4.10 The tense morphemes *qa* 'priorative' and *qu* 'non-present progressive/habitual' are illustrated by the following sentences:

Ka qa gu marweel.
'I worked first.'

Ku qu gu marweel.
'I have been working.'

Daa qa gu marweel.
'I didn't work first.'

Daa qu gu marweel.
'I haven't been working.'

The tense morpheme *qa* means to do something first, that is, to do it prior to something else. Thus it is called 'priorative'. The tense morpheme *qu* conveys the meaning of an action which is going on or continuing to happen. Recall (section 5.2.2) that this meaning is called 'progressive', because it describes an action in progress. Because *qu* is not used in the present tense, it is called 'non-present progressive'. Because it is also used in non-present tenses when one might expect *maa* 'habitual', it is called 'non-present progressive/habitual'.

As illustrated in the above sentences, *qu* and *qa* are used following one of the tense morphemes already described. Since the following tense morphemes have been described so far:

ka	'perfect'
nga	'inceptive'
baey	'definite future'
raa	'simple future'
daab	'future negative'
daa	'past negative'
daa + *-r*	'present negative'
– – –	'simple past'
– – –	'imperative'

one could theoretically combine any one of them with *qa* or *qu*. In actual fact, most such combinations are used. *Qa* and *qu* cannot be used with the present negative. They cannot be used in the present negative because both *qa* and *qu* are specifically non-past in meaning. Furthermore, I have not seen them used with *raa* 'simple future'. The other combinations all occur, however. Some examples are:

Ka qa gu marweel.
'I have worked first.'

Ku qu gu marweel.
'I have been working.'

Nga qa gu marweel.
'I'm going to work first.'

Ngu qu gu marweel.
'I'm going to be working.'

Baey qa gu marweel.
'I'll work first.'

Baey qu gu marweel.
'I'll be working.'

Daab qa gu marweel.
'I won't work first.'

Daab qu gu marweel.
'I won't be working.'

Daa qa gu marweel.
'I didn't work first.'

Daa qu gu marweel.
'I wasn't working.'

Qa gu marweel.
'I worked first.'

Qu gu marweel.
'I used to work.'

Qa (but not, apparently, *qu*) is used in the imperative. Here the meaning is not to do something first, but the use of *qa* merely makes the command or request somewhat more polite and gentle:

Mu piiq ea waey room ngoog.
'Give me your basket.'

Qa mu piiq ea waey room ngoog.
'Please give me your basket.'

By the operation of various morphophonemic rules (see section 2.5), *ka*, *nga*, *qa* and *qu* change pronunciation in various ways next to *i* 'he, she' and *gu* 'I'. Thus before *i* we have the following contractions:

qu + *i* = *qii*
ka + *i* = *kea*
nga + *i* = *ngea*
qa + *i* = *qea*

Before *gu* 'I', *ka* and *nga* become *ku* and *ngu*. Before *qu*, *ka* becomes *ku* and *nga* becomes *ngu*. Before the contractions *qii* and *qea* the following changes take place:

before *qii*, *ka* and *nga* become *ki* and *ngi*
before *qea*, *ka* and *nga* become *ke* and *ngea*

Other Elements in Verb Phrases

5.3.4.11 Certain other elements appear in verb phrases under certain conditions. Examples are *ka* 'still', as in:

Ka ga maa marweel u roem?
'Do you still work there?'

ku 'again', as in:

Ku mu guy?
'Did you see him again?'

daagthii 'not', as in:

Daagthii maenigil ea bineey.
'This thing is not good.'

and certain others. These morphemes are sometimes also found in noun phrases. An example is *ku* in:

Ku taqreeb ea gu ba qadaag.
'I want another one.'

These elements are called **sentence adverbs**, and are discussed in section 7.4.

PREDICATE TYPES

5.4 The predicate, or head, of a verb phrase is represented by the words *marweel* 'to work' and *kaahool* 'box' in the following two sentences:

Gu bea marweel ea chiineey.
'I am working now.'

Ba kaahool ea biniir.
'That is a box.'

Various different types of words and phrases may be used as predicate of a verb phrase.

Intransitive Verbs as Predicates in Verb Phrases

5.4.1 Examples of intransitive verbs as predicates in verb phrases are:

Ku qu ra chuwaey' gaed.
'They have been buying.'

Gadaed raa fitaeq gabuul.
'We will fish tomorrow.'

Ga bea diqiy?
'What are you doing?'

As has been pointed out, intransitive verbs in the suffixed pronoun verb phrase are used with the particles *gow* 'dual' and *gaed* 'plural' as subject number marker. Thus one says:

Ku gu fitaeq gow.
'We (he and I) have fished.'

not:

**Ku gu fitäqeew.*

Of course verb phrases with intransitive verbs may not be followed by direct objects, as the very definition of an intransitive verb is one that is not followed by a direct object.

The intransitive verb *diqiy* 'to do what?' is interrogative in meaning; that is, it asks a question. Thus one says:

Ga bea diqiy?
'What are you doing?'

Diqiy may also be used with a meaning like 'what to happen?', as for example:

Kea diqiy?
'What happened?'

Transitive Verbs as Predicates in Verb Phrases

5.4.2 Examples of transitive verbs as predicates in verb phrases are:

Ka mu chuwqiyeed?
'Did you all buy it?'

Yaed bea qayweeg neeg.
'They all are helping me.'

Daab mu riin' ea biniir.
'Don't do that.'

Ngea fal'eag ea qotobaay rook' ni kea kireeb.
'He's going to fix his motorcycle which is broken.'

In contrast with intransitive verbs, transitive verbs take the subject number suffixes *-eew* and *-eed* rather than the particles *gow* and *gaed*, and of course they may take direct object suffixes:

Ka ra chuwqiyeew.
'They two bought it.'

Kea guydaed.
'He has seen us (all).'

However, they may not be used with both a subject number suffix and a direct object pronoun. Thus one cannot say:

**Ka ra guyeewdaed*

but rather one says:

Ka ra guyeew gadaed.
'They two saw us all.'

Adjectives as Predicates in Verb Phrases

5.4.3 Examples of adjectives as predicates in verb phrases are:

Ba maenigil ea biniir?
'Is that one good?'

Kea kireeb ea piinsal roog.
'My pencil is no good, is broken.'

Yaed raa gaaq.
'They all will get big.'

Baey ra gaaq gaed.
'They will get big.'

When adjectives are used as the predicate of a verb phrase they behave as intransitive verbs. They require *gow* and *gaed* as subject number markers. Thus one says:

Ku gu chuuchuw gow.
'We (he and I) have become sleepy.'

but not:

**Ku gu chuuchuweew.*

Of course they may not take direct object pronoun suffixes.

Adjectives, but not intransitive verbs, may be used with the stative marker *ba*. An example is:

Ba maenigil Tamag.
'Tamag is good.'

Another difference between adjectives and intransitive verbs is that adjectives may not be used in the incorporated object construction (discussed in detail below in section 5.4.6). Thus one can say:

Yaed bea thuum' qachif.
'They are cutting (making) coconut toddy.'

to mean the same thing as:

Yaed bea th'aeb ea qachif.

But one cannot say:

**Yaed bea feal' kaarroo.*

to mean the same thing as:

Yaed bea fal'eag ea kaarroo.
'They are fixing cars.'

because *feal'* 'good' is an adjective.

In other respects adjectives are like intransitive verbs. Notice that even when adjectives are used to describe nouns in noun phrases they must still be the predicate of a verb phrase. For example:

ba kaarroo ni ba roowroow
'a red car' literally 'a car which is red'

Compare this with English where one can say either 'a red car' (with the adjective *red* in front of the noun) or 'a car which is red', with the adjective in a relative clause as in Yapese.

Nouns as Predicates in Verb Phrases

5.4.4 Nouns may be used as predicate of a verb phrase ordinarily only with the stative marker *ba*. An example is:

Ba seensey Tamag.
'Tamag is a teacher.'

As this is a verb phrase, the ordinary independent pronoun verb phrase subject pronouns are used before *ba*, as in:

Yaed ba seensey.
'They all are teachers.'

Gu ba seensey.
'I am a teacher.'

Ba seensey.
'He is a teacher.'

In certain cases nouns may be used as intransitive verbs. An example is the noun *seensey* 'teacher', which may also be used as a verb meaning 'to be a teacher', as in the examples:

Gamow ba seensey.
'We (he and I) are teachers.'

Gamow bea seensey.
'We (he and I) are teaching.'

However, most nouns cannot be used in this way. Presumably if *seensey* were used in a suffixed pronoun verb phrase, the intransitive subject number markers would be used.

Adverbs as Predicates in Verb Phrases

5.4.5 In certain cases adverbs may be used as predicates of verb phrases. Some examples are:

Kea mingyaal' ea chiineey?
'What time is it now?'

Ba qaraam ea waey room.
'Over there is your basket.'

Kea quw rogon?
'How is he' literally 'Where is his way?'

When adverbs are used as predicates in this way they are used much as are adjectives. They presumably require the intransitive subject number markers.

Incorporated Object Constructions as Predicates in Verb Phrases

5.4.6 The incorporated object construction consists of an intransitive verb with a direct object, the combination acting as a single intransitive verb. Examples are:

Baey qu ra thuum' qachif gaed.
'They will be cutting coconut toddy.'

Gu bea chuwaey' mareaw.
'I am buying copra.'

In this construction the combinations such as *thuum' qachif* 'to cut coconut toddy' and *chuwaey' mareaw* 'to buy copra' each

act as a single intransitive verb. Therefore, they must be used with the intransitive subject number markers, and of course no pronoun direct object may follow them.

Only intransitive verbs may be used in this construction, and only those intransitive verbs which have a transitive counterpart. One may say:

Yow bea thuum' qachif.
'They two are cutting coconut toddy.'

because of the existence of the transitive verb *th'aeb* 'to cut'. But one may not say:

**Yow bea yaen qotoobaay.*

because *yaen* 'to go' does not have a transitive counterpart.

Even when a transitive verb exists, it still may not be possible to use a corresponding incorporated object construction. The transitive verb must be derived from an intransitive verb, not from some other part of speech. The transitive verb *qayweeg* 'to help' is derived from the noun *qayuw* 'help'. Therefore one cannot say:

**Gu bea qayuw pilibthiir.*

to mean the same as:

Gu bea qayweeg ea pilibthiir.
'I am helping old people.'

because *qayuw* is a noun, not an intransitive verb.

No determiner element may be used with a noun that is the object in an incorporated object construction, and the noun phrase connector *ea* may not be used either. Thus one cannot say:

**Gu bea thuum' ea qachif.*
**Gu bea thuum' boech ea qachif.*

Demonstratives may not be used with a noun that is an object in an incorporated object construction. Thus one may not say:

**Gu bea thuum' qachif neey.*

Relative clauses may be used with the object in an incorporated object construction, but they must follow the verb phrase as a whole, and thus must follow the subject number marker. Thus one may say:

Ku qu ra thuum' qachif gow ni ba maenigil.
'They have been cutting coconut toddy which is good.'

but one cannot say:

**Ku qu ra thuum' qachif ni ba maenigil gow.*

The Transitivizing Particle naag in Verb Phrases

5.4.7 Many nouns, adjectives and intransitive verbs which have no transitive counterpart may be used with the transitivizing particle *naag* to form a compound transitive verb. An example is:

Kea roowroow naag.
'He made it red, caused it to become red.'

This special transitive verb particle *naag* takes the transitive subject number markers *-eew* and *-eed* as any other transitive verb. An example is:

Ku qu ra roowroow nageew.
'They two have been making it red.'

As may be seen with the example *roowroow naag* 'to make red', *naag* often adds the meaning 'to cause to . . .'. In the case of *roowroow naag* the meaning is 'to cause to become red'. *Naag* is therefore called 'causative'.

Naag may also be used with certain intransitive verbs that do not have corresponding transitive verbs:

Kea yaen naag ea kaarroo rook'.
'He made his car go.'

Naag is not always causative in meaning. Compare the following two sentences:

Yaed bea puruuy'.
'They are having a discussion.'

Yaed bea puruuy' naag.
'They are discussing it.'

Naag is regularly used with borrowed words to make transitive verbs. An example is:

Bea sukuul naag ea bitiir rook'.
'He is educating his children.'

where the causative is used with the borrowed word *sukuul* 'school' with the resultant meaning 'to educate'.

Miscellaneous other Predicate Types in Verb Phrases

5.4.8 There are a number of verbs with certain peculiarities which will be discussed here.

The Existential Verb *baey*

5.4.8.1 The verb *baey* 'to exist, to be in a place' asserts the existence of something, and therefore is called the **existential verb**. It is normally used without any tense marker at all, as in the following examples:

Ga baey u quw?
'Where are you?'

Baey ea girdiiq u roem.
'There are people there.'

Baey ha camera rook' Tamag.
'Tamag has a camera.'

When the meaning expressed by this verb is expressed in some other tense than the present (as above, without any tense marker), the verb takes a special form *moey* (or *mmoey* after *i* 'he'), as in the following examples:

Raa moey u roey gabuul.
'He will be here tomorrow.'

Daa gu moey u tafean.
'I wasn't in his house.'

Qii mmoey riy.
'He was there.'

Dea mmoey.
'He wasn't (there).'

Moey, although an intransitive verb, takes the transitive subject number markers *-eew* and *-eed*. Recall that this is also the case with *paer* 'to remain, to stay in a place'. There may be some significance that these two verbs which both mean 'to be in a place' also both take the transitive subject number markers, although they themselves are intransitive.

Examples of *moey* and *paer* are:

Yaed raa moey u tafënraed.
'They will be at their houses.'

Daa ra möyeew.
'They two weren't (there, at home, etc.).'

Ka ra päreew.
'They two stayed.'

Qu gu päreed u Mariken faraam.
'We used to live in America before.'

The non-present negative morphemes *daa* 'past negative' and *daab* 'future negative' are used with *moey* in the same way as other tense morphemes. However, the present negative of *baey* is not expressed using the present negative construction *daa* with suffixed *-r*. Rather, the verb *daariy* 'to not exist, to be not, nothing' is used as the present negative of *baey*. An example is:

Daariy ea chugum room?
'Don't you have any belongings?'

Daariy is used only in this way, without any subject pronoun. It is thus an **impersonal verb**, and is discussed below in section 5.4.8.2.

Because *daariy* is an impersonal verb, it is the negative of *baey* only when speaking of things. When speaking of persons, *baey* has no present negative.

Baey (and its negative *daariy*) is the ordinary verb used to express the idea of 'to have'. Thus one says:

Baey ea buw rooraed.
'They have some betel nut.'

Daariy ea salpiy roog.
'I have no money.'

Impersonal Verbs

5.4.8.2 Impersonal verbs are verbs that may not be used with a person as subject (and therefore may not be used with subject pronouns). The two clear examples of impersonal verbs are *daariy* 'to be not' and *yog* 'to be enough, to be possible'. These verbs are exemplified by the following sentences:

Daariy ea ggaan u roey.
'There is no food here.'

Daariy ea langad room?
'Do you not have any betel nut?'

Raa yog room ea bineey.
'You can do this.' Literally, 'This will be possible for you.'

Kea yog ea tineey?
'Are these enough?'

Woed 'to resemble'

5.4.8.3 The only verbs used with the stative marker *ba* are *woed* 'to resemble' and *qadaag* 'to like' (discussed in 5.4.8.4). An example of *woed* is:

Ga ba woed Tamag.
'You are like Tamag.'

The combination *ba* plus *woed* is often pronounced as a single word *boed*. Thus one says:

Ga boed Tamag.
'You are like Tamag.'

Bineey ea boed ea biniir.
'This one is like that one.'

Woed may also be used with tense markers other than *ba*. Thus one may say:

Bineey ea kea woed ea bineem.
'This one is like that one.'

Qadaag 'to like'

5.4.8.4 *Qadaag* is also used with the stative marker *ba*, as in the example:

Ga ba qadaag ni nga mu langad ea chiineey?
'Do you want to chew betel nut now?'

Gu ba qadagmeew.
'I like you two.'

However, *qadaag* may also be used with other tense markers, as for example:

Qu gu qadaag, ma chiineey ea dabuug.
'I used to like it, but now I don't.'

Dea qadaag.
'He didn't like it.'

Qadaag is not normally used with the present negative construction *daa* plus *-r*. Rather, *qadaag* has a special negative form *dabuug* which is discussed below in section 5.4.8.6.

Naang 'to know'

5.4.8.5 *Naang* is the only verb that is used with *ma* 'stative marker'. An example is:

Ma naang ea pi pilibthir neey ni daab ra marweel gaed ea dabaq.
'These old people know that they're not going to work today.'

Naang is also used with other tense markers, as for example:

Daab i nangeem.
'He won't know you.'

Ku gu naang.
'I know it, I remember.'

Dabuug 'to not like'

5.4.8.6 *Dabuug* is morphologically a possessed noun, meaning 'my dislike'. However, it is used as a transitive verb, as for example:

Dabuug ea bineey.
'I don't like this one.'

Dabuun gaeg.
'He doesn't like me.'

Dabraed ea pi chaqneey.
'He doesn't like these people.'

Since *dabuug* has a possessive pronoun suffix to express the person who is doing the disliking, no subject pronoun is used. Furthermore, since the word ends in a suffix, the object pronoun suffixes may not be used, and instead a direct object is expressed by an independent pronoun, as in the example:

Dabuun gaeg.
'He doesn't like me.'

Sentences of this type may actually be treated as **nominal predications** (section 7.2.2), that is as a sentence without any verb at all, such as:

Maang ea bineey?
'What is this?'

Dabuug may not be used with tense markers. However, there is a normal transitive verb *dabuy* 'to dislike' derived from *dabuug* which is used with tense markers in the usual way, as for example:

Ka mu dabuy?
'Don't you like it?'

Compound Verbs with Possessive Suffixes

5.4.8.7 Certain compound words act as adjectives (and therefore as

predicates of verb phrases), but they also have a possessive suffix attached to them because they are derived from a verb or adjective compounded with the possessed noun *waen'* 'his dislike'. They therefore have characteristics both of adjectives and of nouns. An example is:

Kea kirbaen'uug.
'I am sad.'

The adjective *kirbaen'* 'sad' is derived from the adjective *kireeb* 'bad' and *waen'* 'his mind'. Therefore the above sentence is somewhat parallel to the following sentence:

Kea kireeb wun'uug.
'My mind has become bad.'

although the two sentences do not mean precisely the same thing.

With such adjectives, either the possessive suffix is used to express the subject, or the subject pronoun is used, but not both. One may say:

Ku gu kirbaen'.
'I am sad.'

Ku gu qawaen'.
'I am envious.'

and also:

Kea kirbaen'uug.
'I am sad.'

Kea qawaen'uug.
'I am envious.'

IRREGULAR AND CONTRACTED VERBS.

5.5 Irregular verbs are verbs which behave in an irregular way phonologically; that is their pronunciation changes in various environments in ways which differ more or less from those predicted by the normal morphophonemic rules.

A number of irregular verbs in Yapese combine with the subject pronoun in the suffixed pronoun verb phrase to form a single word. These combinations are called **contractions**, and thus these verbs are called **contracted verbs**, or **contract verbs**.

The verb *yaen* 'to go' changes its pronunciation in various ways in the suffixed pronoun verb phrase. Its independent form is *yaen*, as seen in the independent pronoun verb phrase:

Gu bea yaen.
'I am going.'

However, when used in suffixed pronoun verb phrases, this verb has the following forms:

	singular	dual	plural
1st inclusive		*daarow*	*daeroed*
1st exclusive	*gu waen*	*gu waarow*	*gu waeroed*
2nd	*mu maen*	*mu maarow*	*mu maeroed*
3rd	*(i) yaen*	*raanow*	*raenoed*
indefinite	*ni yaen*		

We may make the following general comments about the forms of the verb *yaen*:

1. After *gu* 'I' the verb has the consonant *w-* added at the beginning.
2. After *mu* 'you' the consonant *m-* is added
3. After *i* 'he' and *ni* 'one' the consonant *y-* is added
4. *Da* 'we inclusive' and *ra* 'they' combine with the underlying form of the verb **aro/ano** into a single word with long *aa* in the first syllable
5. The consonant of the verb is *-n-* in the singular and in the third person dual and plural. It is *-r-* elsewhere

Other changes, such as the lightening of *aa* to *ae* in the plural, are normal morphophonemic processes that apply to all words.

In certain dialects the consonant *-n-* is used after *da* 'we inclusive' as well as after *ra* 'they'. Thus one says:

Ka daanow.
'We (you and I) have gone.'

In some dialects the vowel of the verb is short in the first and second person singular. Thus one says:

Ku gu won.
'I have gone.'

Ka mu man.
'You have gone.'

(The change to *o* after *w* in the first person singular is due to the operation of a morphophonemic rule.) In these dialects the

vowel of the verb in the second and third person is the same as in the other dialects.

The irregular verb *kaay* 'to eat' has the following forms:

	singular	dual	plural
1st inclusive		*da kayeew*	*da kayeed*
1st exclusive	*gu waay*	*gu wayeew*	*gu wayeed*
2nd	*mu kaay*	*mu kayeew*	*mu kayeed*
3rd	(*i*) *kaay*	*ra kayeew*	*ra kayeed*
indefinite	*ni kaay*		

The only irregularity of this verb is that the initial *k-* of most of the forms is changed to *w-* after *gu* 'I'. However, in some dialects the vowel of the verb in the singular (and also in the independent form used in the independent pronoun verb phrase) is changed into short *o* in the first and second persons, and short *a* elsewhere. Thus one says:

Gu woq.
'I ate it.'

Mu koq.
'You ate it.'

Kaq.
'He ate it.'

Ni kaq.
'One ate it.'

Gu bea kaq.
'I am eating it.'

There are a small number of verbs whose underlying forms begin in a vowel, and which combine with the subject pronoun into a contracted form which is a single word. This process applies to *yaen* 'to go' after *da* 'we inclusive' and *ra* 'they', as seen above. The following verbs contract with the subject pronoun in all except the independent form:

yoet' 'to step on' (underlying form **ö:t'**). In some dialects this verb is pronounced *yit'* (underlying form **it'**)
yif' 'to step the foot, take a step (transitive)' (underlying form **if'**)
yoeg 'to say something' (underlying form **ö:g**)
yoen' 'to throw, shoot' (underlying form **ö:n'**)
yip' 'to pierce' (underlying form **ip'**)
yib 'to come' (underlying form **iba**)
yim' 'to die' (underlying form **im'a**)

The forms of these verbs will be given here in tables. The verbs *yim'*, *yib* and *yip'* (at least, and perhaps others) have a special form when they are used as nouns beginning with *w-*, namely *wum'*, *wub* and *wup'*, as for example:

wub roog
'my coming'

Most verbs when used as nouns do not have any special form, as for example:

marweel roog
'my work'

There is some dialect variation for some of these verbs, and the forms given may not be correct for all dialects.

yoet' 'to step on'

	singular	dual	plural
1st inclusive		*doet'eew*	*doet'eed*
1st exclusive	*goet'*	*goet'eew*	*goet'eed*
2nd	*moet'*	*moet'eew*	*moet'eed*
3rd	*yoet'*	*roet'eew*	*roet'eed*
indefinite	*noet'*		

In some dialects *yoet'* is pronounced with the same vowels as *yip'* 'to pierce' and *yif'* 'to step the foot'.

yif' 'to step the foot'

	singular	dual	plural
1st inclusive		*daf'eew*	*daf'eed*
1st exclusive	*guuf'*	*guf'eew*	*guf'eed*
2nd	*muuf'*	*muf'eew*	*muf'eed*
3rd	*yif'*	*raf'eew*	*raf'eed*
indefinite	*niif'*		

yoeg 'to say something'

	singular	dual	plural
1st inclusive		*doegeew*	*doegeed*
1st exclusive	*goeg*	*goegeew*	*goegeed*
2nd	*moeg*	*moegeew*	*moegeed*
3rd	*yoeg*	*roegeew*	*roegeed*
indefinite	*noeg*		

As noted in section 5.3.2 above, *yoeg* may also be used with the special form of the subject number markers *neew* and *need*.

yip' 'to pierce'

	singular	dual	plural
1st inclusive		*dap'eew*	*dap'eed*
1st exclusive	*guup'*	*gup'eew*	*gup'eed*
2nd	*muup'*	*mup'eew*	*mup'eed*
3rd	*yip'*	*rap'eew*	*rap'eed*
indefinite	*niip'*		

yib 'to come'

	singular	dual	plural
1st inclusive		*dabow*	*dabaed*
1st exclusive	*guub*	*gubow*	*gubaed*
2nd	*muub*	*mubow*	*mubaed*
3rd	*yib*	*rabow*	*rabaed*
indefinite	*niib*		

As discussed in section 5.3.4.9 above, *yib* has a special set of imperative forms: *moey* 'come (singular)', *mireew* 'come (you two)' and *mireed* 'come (you all)'.

yim' 'to die'

	singular	dual	plural
1st inclusive		*dam'ow*	*dam'aed*
1st exclusive	*guum'*	*gum'ow*	*gum'aed*
2nd	*muum'*	*mum'ow*	*mum'aed*
3rd	*yim'*	*ram'ow*	*ram'aed*
indefinite	*niim'*		

6 Adverbial Phrases

INTRODUCTION

6.1 The subject of a sentence tells who or what performed the action described by the verb phrase (or predicate—see section 7.1) in the sentence. Consider the sentence:

Bea marweel Tamag.
'Tamag is working.'

Tamag is the subject of this sentence. It is Tamag who is doing the work.

The object of a sentence tells who or what the action of the sentence was done to. Consider the sentence:

Kea guy Tamag Tinag.
'Tamag saw Tinag.'

In this sentence, Tamag is the subject because he did the seeing, while Tinag is the object of the sentence. It was Tinag who was seen.

The subject and object in a sentence are normally expressed by means of pronouns or noun phrases. Pronouns and noun phrases have been discussed in chapters 3 and 4.

Sentences have other components besides verb phrases, subjects and objects. Consider the sentence:

Kea guy Tamag Tinag u Donguch.
'Tamag saw Tinag in Donguch.'

In this sentence the predicate is the verb phrase *kea guy* 'he saw her'. The subject is the noun phrase *Tamag*. The object is the noun phrase *Tinag*.

The phrase *u Donguch* is neither subject nor predicate. It serves a different function, which is to tell the location where

Tamag saw Tinag, and it is called a **locative phrase**. This phrase is of the type called a **prepositional phrase.**

Functions other than subject, predicate, and object are expressed using four different types of constructions.

These four different types of construction are loosely grouped together here under the heading of **adverbial phrases**. This expression is a term of convenience, used because these four different types of elements serve similar functions in the sentence. They are not formed in the same way, and most linguists would not use the term "adverb" to describe all the uses which these different phrases serve.

ADVERBIAL WORDS

6.2 Adverbial words are separate words that may be used alone to serve adverbial functions, that is functions other than those of subject and object.

TIME ADVERBS

6.2.1 Time adverbs tell the time of the action of the sentence. A list of the important time adverbs in Yapese are as follows:

bangyaal'	'some time'
bayaey	'once, one instance'
chiineey	'now'
dabaq	'today'
diqer	'today' (or in some dialects *daqir*, *daqer*)
gabuul	'tomorrow'
langlaeth	'the day after tomorrow'
duk'uuf	'two days after tomorrow'
fowaap	'yesterday'
fooplaan	'the day before yesterday'
foopringaan	'two days before yesterday'
foewngaen	'last night'
faraam	'before, in the past'
kaakroom	'long ago'
taqboech	'later (in the future)'
wuqin	'when?'
mingyaal'	'what time?'

Examples of the use of these adverbs are:

Raa yib gabuul.
'He will come tomorrow.'

Yib fowaap.
'He came yesterday.'

Bea marweel ea chiineey.
'He is working now.'

Wuqin ea riin'?
'When did he do it?'

Mingyaal' ea baey yib?
'What time will he come?'

Baey yib bangyaal'.
'He will come some time.'

Qii marweel u roem faraam.
'He worked there before.'

Raa guy taqboech.
'He will see him later.'

The noun phrase connector *ea* must be used before the time adverbs: *chiineey* 'now', *dabaq* 'today', *diqer*, *daqir*, *daqer* 'today', but may not be used before the others listed.

Wuqin 'when?' and *mingyaal'* 'what time?' are both interrogative time adverbs; that is they ask a question. *Bangyaal'* 'sometime' is the indefinite time adverb corresponding to both of them (compare the discussion of interrogative and indefinite pronouns in section 4.5.7). *Mingyaal'* refers basically to time of day. *Wuqin* is more general. Compare the following sentences:

Wuqin ea raa yib?
'When will he come?'

Raa yib bangyaal'.
'He will come sometime.'

Raa yib gabuul.
'He will come tomorrow.'

Mingyaal' ea raa yib?
'What time will he come?'

Raa yib bangyaal'.
'He will come some time.'

Raa yib ko meereeb ea kalook.
'He will come at nine o'clock.'

Other time expressions in Yapese are formed by means of prepositional phrases (section 6.3) and by the use of time expressions in subordinate clauses (section 7.5).

Locative Adverbs

6.2.2 Locative adverbs give the location of the action of the sentence. Locative adverbs normally are used following the preposition *u* 'at, from', as in the sentence:

Bea mool u wur.
'He is sleeping there (near you).'

Although the phrase *u wur* begins with a preposition, and therefore looks like a prepositional phrase, it is nevertheless treated as an adverbial phrase. The reason is that prepositional phrases consist of a preposition plus a noun phrase, but *wur* 'there near you' and the other locative adverbs to be discussed in this section are not nouns but adverbs. Thus *wur* does not behave like a noun, since it cannot be used with determiners or attributes like a noun.

The important locative adverbs in Yapese are:

roey	'here'
wur	'there near you'
roem	'over there'
laeng	'above, up'
but'	'below, down'
taalaang	'above, uphill, upstairs'
peqning	'below, downhill, downstairs'
l'aay	'seaward'
qarow	'inland, landwards'
qaer	'in the depths, deep'
wean	'outside'
yimuch	'south'
qälqöch	'north'
ngeak	'east'
ngael	'west'
quw	'where?'
baang	'somewhere'
m'oon	'front'
toemur	'behind'

All of these locative adverbs are used after the preposition *u* 'at, from'. Examples are:

Baey u l'aay.
'He is at the seashore.'

Raa marweel u baang.
'He will work somewhere.'

U means both 'at' and 'from'. Locative phrases with *u* mean 'from' when used with verbs of motion away from something:

Kea yib u l'aay.
'He came from the shore.'

Raa suul u wean.
'He will return from outside.'

The directions of the compass may be used with *ko* as well as with *u* to mean both 'at' and 'from'. Examples are:

Kea yib ko yimuch.
'He came from the south.'

Baey ko yimuch.
'He is in the south.'

Quw 'where?' is an interrogative, or question word. The indefinite locative adverb corresponding to *quw* is *baang* 'somewhere', as in the examples:

Baey u quw?
'Where is he?'

Baey u baang.
'He is somewhere.'

Directional Adverbs

6.2.3 All of the above adverbs (with two exceptions) may be used after the preposition *nga* 'to' to indicate direction of motion. They are then called directional adverbs. Examples are:

Nga gu waen nga l'aay.
'I'm going to go towards the seashore.'

Kea suul nga peqning.
'He came back downstairs.'

The only differences between the adverbs used with *nga* 'to' and those used with *u* 'at, from' discussed in section 6.2.2 above concerns the adverb meaning 'up', and the interrogative adverb.

'Up' is *laeng* after *u*, but *laang* after *nga*, as in the following examples:

Kea yib u laeng.
'He came from above.'

Kea yaen nga laang.
'He went up.'

The reason for this difference is that, according to rule D2

(section 2.5.4.3), a long /a:/ vowel is light /ä:/ if it is preceded by a dental consonant which is preceded by *i* or *u*. Thus *mitaeg* 'my eye' has light *ae* in the second syllable, and *wulaeg* 'my feather' does also, and the vowel of *laang* becomes light *ae* when *u* precedes the word *laang*.

The interrogative adverb used after *u* is *quw* 'where?', but with a directional meaning one does not say **nga quw* but *ngaan* 'to where?' as in:

Kea yaen ngaan?
'Where has he gone to?'

It should be noted that locative and directional adverbs (that is separate words with locative and directional meaning) are not the only way of expressing the meanings of location and direction. One important set of words used for expressing location and direction are the relational nouns, such as *dakean* 'its top' and *laanggiin* 'its inside', as in the following examples:

Baey u dakean.
'It's on top of it.'

Mu taey nga dakean.
'Put it on top of it.'

Kea yaen nga laanggiin.
'He went inside of it.'

These words are shown to be possessed nouns rather than adverbs, by contrast with words like *m'oon* 'in front', by the fact that you can use relational nouns in construct constructions, but you cannot so use locative adverbs. Thus you can say:

u laanggiin ea waey roog
'inside of my basket'

but not:

**u m'oon ea waey roog*

Rather, to express this latter meaning you must say:

u m'oon ko waey roog
'in front of my basket'

because *m'oon* is an adverb rather than a noun.

A few of the locational/directional adverbs may also be possessed, and in that case they become normal possessed relational nouns. Thus one may say:

Kea yaen nga toemur.
'He went behind.'

using *toemur* as a directional adverb, or one may say:

Kea yaen nga toemurean.
'He went behind it.'

Possessed relational nouns are discussed in section 6.3.2.

Quantity Adverbs

6.2.4 There are only two words used as quantity adverbs. These are *boech* 'some' and *boechquw* 'a little bit', as in the sentences:

Qii marweel boech.
'He worked some.'

Qii marweel boechquw.
'He worked a little.'

Other ideas expressing how or to what extent an action took place are expressed using relative clauses. For example, *ni ba geel* 'hard, strongly' is a relative clause expressing how he worked in the sentence:

Kea marweel ni ba geel.
'He worked hard.'

Relative clauses of this type are discussed in section 6.4.2.

PREPOSITIONAL PHRASES

6.3 Prepositional phrases consist of a preposition followed by a noun phrase. The prepositions of Yapese are:

u	'at, from'
nga	'to'
ko	'for'
roo-	'of, from'

Each preposition may be used to express a variety of different relationships. For example, *u* may express the idea of location, as in the example:

Baey u tafean Tamag.
'He is at Tamag's house.'

But *u* may also express the place from which something moves, as in the example:

Kea yib u Ngilis.
'He has come from England.'

Section 6.3.1 will discuss the forms that different prepositions take when used with certain other morphemes. Section 6.3.2 will discuss the different relations which prepositional phrases may be used to express.

Prepositions in Prepositional Phrases

6.3.1 When prepositions are used in prepositional phrases certain morphophonemic processes apply which are peculiar to each preposition.

The preposition ko. When the preposition *ko* is used before a person's name, or before the pronouns *miniiq* 'who?' and *beaq* 'someone' it is pronounced *ku* rather than *ko*, as in the examples:

ba piinsal ku Tamag
'a pencil for Tamag'

ba piinsal ku miniiq?
'a pencil for who?'

ba piinsal ku beaq
'a pencil for someone'

But before other noun phrases the form *ko* is used, as in:

ba piinsal ko rea piin neam
'a pencil for that woman'

The preposition nga. The preposition *ko* is not used before personal pronouns, and neither is *nga*. Instead, *nga* is used with possessive pronoun suffixes to express the meanings of both *ko* and *nga*, as in the examples:

Mu piiq ngaak'.
'Give it to him.'

Mu piiq ngoog.
'Give it to me.'

These forms were discussed in section 3.3.7.

The preposition has a special impersonal form *ngaay/ngaq* 'to it'.

The preposition roo-. The preposition *u* is not used with personal pronouns. Rather, the preposition *roo-* is used with suffixed possessive pronouns (see section 3.3.7), as in the example:

Kea feek rook'.
'He took it from him.'

Roo- has a special impersonal form *riy* 'of it, at it, from it'. *Roo-* is only used in these suffixed forms and may not be used by itself, by contrast with the other prepositions.

After the prepositions *u*, *nga* and *ko* the noun phrase connector *ea* is not used. Thus one says:

Ka mu guy ea rea piin neam.
'Have you seen that woman?'

with *ea* before *rea piin neam* 'that woman', but:

Mu piiq ko rea piin neam.
'Give it to that woman.'

Relations Expressed by Prepositional Phrases

6.3.2 The prepositions may be used to express a variety of relations.

The Relation of Location

6.3.2.1 Location is normally expressed using a prepositional phrase with *u* 'at, from', or one of the locative prepositions discussed above in section 6.2.2 preceded by *u*, as in the examples:

Baey u dakean ea teebel.
'It is on top of the table.'

Baey u wur.
'It is there (near you).'

As was mentioned in section 6.2.2, if the location is specified using one of the four compass directions (north, south, east or west), the preposition *ko* may be used, as in the examples:

Baey ko yimuch.
'He is in the south.'

Baey u yimuch.
'He is in the south.'

The word *riy* 'at it, from it, of it', which is the special impersonal form of *roo-* 'of, from', is used to express unspecified location, as in the sentence:

Baey ea qarcheaq riy.
'There are birds in it.'

Riy is also used in focused sentences (see section 7.3) to express the location of something which has been moved to the front of the sentence, as in the example:

Tafean Tamag ea baey ea waey roog riy.
'It is Tamag's house that my basket is at.'

Location is not expressed directly with personal pronouns. That is, one does not say simply:

Baey u gaeg.

to mean 'It's at me'. Rather, one must use some relational noun, as in the sentence:

Baey u dakean doewaag.
'It's on top of my body.'

(Note that the sentence *Baey u gaeg* does have a meaning, namely 'It's with mine.' This usage is discussed in section 6.3.2.4 below).

There are a number of possessed relational nouns which are used to express location (and also source of movement and goal of movement. These functions are discussed in sections 6.3.2.2–3 below). The most important ones are:

dakean 'its top, top of'
laen/laanggiin 'its inside, inside of'
taan/taanggiin 'its underneath, underneath it'
luknguun 'its middle, in the middle of it'
toemurean 'its behind, behind it'
taban/tabanggiin 'its end, end of'
taboelngiin 'its beginning, beginning of'
charean 'its side, beside it'

The possessed locational nouns are used as ordinary possessed nouns in prepositional phrases with *u*, as in the examples:

Baey u dakean ea bineey.
'It is on top of this.'

Baey u charean Tamag.
'It is next to Tamag.'

Several of these locative relational nouns may only have the third person singular possessive suffix added. This is true at least of *laen/laanggiin* 'inside of', of *taban/tabanggiin* 'the end of' and of *taboelngiin* 'beginning of'. Thus one cannot say **laanggiig* 'inside of me', **tabanggiig* 'the end of me' or **taboelngiig* 'the beginning of me'.

Others of these locative relational nouns are possessed in somewhat irregular ways.

The possessed forms of *dakean* 'its top, on top of it' are as follows:

	singular	dual	plural
1st inclusive		*dakeandow*	*dakeandaed*
1st exclusive	*dakeanaeg*	*dakeanmow*	*dakeanmaed*
2nd	*dakeanaem*	*dakeanmeew*	*dakeanmeed*
3rd	*dakean*	*dakeanrow*	*dakeanraed*
indefinite	*dakeaney*		

The forms of this word could be accounted for by assuming an underlying form **dakë:nä** for the root.

The forms *laen* 'inside of', *taan* 'underneath', and *taban* 'end of' may only be used in construct noun phrases, that is with another noun phrase following them. They may not stand alone. Thus one says:

Baey u laen paqag.
'It is in my hand.'

Baey u taan ea rea kaahool neey.
'It is underneath this box.'

Baey u taban ea kanaawoq.
'It is at the end of the road.'

But one may not say:

**Baey u laen.*
'It is inside.'

**Baey u taan.*
'It is underneath.'

**Baey u taban.*
'It is at the end.'

Rather for the above meanings one says:

Baey u laanggiin.
'It is inside.'

Baey u taanggiin.
'It is underneath.'

Baey u tabanggiin.
'It is at the end.'

Laanggiin, *taanggiin* and *tabanggiin* may also be used in construct constructions, but *laen*, *taan* and *taban* are preferred here. Thus one may say:

Baey u laanggiin ea kaahool.
'It is in the box.'

but it is better to say:

Baey u laen ea kaahool.
'It is in the box.'

Certain construct noun phrases with *laen* have special meanings. Some are the following:

laen paaq
'the palm of his hand'
literally 'inside his hand'

laen qowchean
'his face'
literally 'inside his face'

laen miit
'his eye'
literally 'inside his eye'

The forms of *taanggiin* 'underneath it' with possessive pronoun suffixes are somewhat irregular, and are set out as follows:

	singular	dual	plural
1st inclusive		*taangidow*	*taangidaed*
1st exclusive	*taanginaeg*	*taangimow*	*taangimaed*
2nd	*taanginaem*	*taangimeew*	*taangimeed*
3rd	*taanggiin*	*taangirow*	*taangiraed*
indefinite	*taanginey*		

A number of classifiers are used to express location. The important ones are:

fidik' 'midst'
mit 'front'
dabap' 'edge'
bugul 'tip of'
wuruq 'outside'
gil' 'place'

The locational classifiers are used normally in the same way as other classifiers, except that they may not be used with the articles *fa* 'definite article' or *ba* 'indefinite article', and they may not be used with *rea* 'singular'. One may say:

Baey u fidik' ea paan.
'It's in the grass.'

Baey u wuruq ea naqun.
'It's outside the house.'

Baey u bugul i paqag.
'It's on my finger.'

Like other classifiers, certain of these (but possibly not all) may be used in pronoun phrases, as for example:

bugul neey
'this tip'

bugul neey i paqag
'this finger of mine'

Source of Motion

6.3.2.2 This relation indicates the place from which something moved, as in the example:

Kea yib u Donguch.
'He came from Donguch.'

U is the preposition normally used for this relation, though with the points of the compass *ko* is also used, as

Kea yib ko ngael.
'He came from the west.'

Kea yib u ngael.
'He came from the west.'

The impersonal word *riy* is used to mean 'from it', as in the example:

Kea yib riy foewngaen.
'He came from there last night.'

Riy is also used in the sentence when a word which indicated the source of movement is focused (see section 7.3), as in the example:

Mariken ea kea suul riy.
'It is America that he returned from.'

Related to the meaning of source of movement, though

somewhat different from it, is the meaning 'from' used with a person, as in the examples:

Kea feek roog.
'He took it from me.'

Kea chuwqiy roomow.
'He bought it from us (him and me).'

The preposition *roo-* with suffixed possessive pronouns is used to mean 'from' in this personal sense. To express this meaning with other noun phrases, the preposition *ko* is used, as in the following examples:

Ka ra chuwqiyeew ea kaarroo roorow ko rea piin neey.
'They two bought their car from this woman.'

Ka mu feek ea binney ko pi bitiir neam?
'Did you take this from those children?'

The meaning 'movement from a place' is expressed with people using relational nouns, as in the following example:

Kea feek u chareeg.
'He took it from beside me.'

Goal of Movement

6.3.2.3 The goal of movement is the place to which something moves. It is normally expressed with the preposition *nga* 'to', with place names, locational relational nouns, locational adverbs, and so forth, as in the examples:

Kea yaen nga Donguch.
'He has gone to Donguch.'

Kea yaen nga taan ea naqun.
'It has gone under the house.'

Raa suul nga raam.
'He will return there.'

With directions of the compass, *ko* may be used as well as *nga*, as in the examples:

Mu maen ko qälqöch.
'Go north.'

Mu maen nga qälqöch.
'Go north.'

As with location and source of movement, one does not

speak of motion to with a personal pronoun. Rather a locational relational noun is used, as in the examples:

Kea yib nga chareeg.
'He came to me.' literally 'He came to beside me.'

With noun phrases referring to persons, either locational relational nouns are used, or else the preposition *ko* is used. Thus one may say both:

Kea yaen nga charean ea rea piin neam.
'He went to that woman.'

or:

Kea yaen ko rea piin neam.
'He went to that woman.'

The Relation of Possession

6.3.2.4 The relation of possession, or ownership (sometimes called the genitive relation), is expressed by the preposition *roo-* with a suffixed possessive pronoun, as in the example:

waey roog
'my basket'

When the owner is expressed by a noun phrase, possession is normally expressed using *roo-* with a possessive pronoun in a construct construction with the noun phrase which is the possessor. Consider the following examples:

waey rook' Tamag
'Tamag's basket'

waey rook' ea gäl i bpiin neam
'the basket of those two women'

waey roorow Tamag
'the basket of him and Tamag'

naqun roomaed ea bitiir roog
'the house of me and my children'

Nouns which may take possessive pronoun suffixes are not possessed with *roo-*, but with the possessive pronoun suffixes, as in the examples:

chitinaeg
'my mother'

p'eethnguun
'his nose'

walaagey
'one's brother'

If the possessor is expressed by a noun phrase, then the construct construction is used, as in the examples:

chitinngiin Tamag
'Tamag's mother'

chitinngiin ea gäl i bpiin neey
'the mother of these two women'

chitinngirow Tamag
'the mother of him and Tamag'

Recall that in the construct construction (discussed in section 4.8), if the possessor is expressed by a noun phrase, and none of the possessors is expressed by a personal pronoun, then the possessive suffix is always the third person singular *-n*, no matter how many possessors there are. Compare the following examples:

walaagean fa rea pumoqon
'the brother of that man'

walaagean fa gäl pumoqon
'the brother of those two men'

walaagean fa pi pumoqon
'the brother of those men'

However, if some of the possessors are referred to by a personal pronoun suffix, then the suffix must agree with (have the same number and person reference as) all the possessors, both those indicated by the noun phrase and those only indicated by the personal pronoun suffix. Thus, if the possessor is 'I and Tamag', then the suffix must be *-mow* 'we (he and I)', to indicate both Tamag ('he') and I in the same pronoun.

Possession using a suffixed personal pronoun is sometimes called inalienable possession. Things possessed in this way are considered not able to be separated (alienated) from the possessor. Thus the parts of one's body are intrinsically one's possessions. They are not normally able to be "unpossessed," and therefore words as:

paqag
'my hand'

qayig
'my foot'

p'eethnguug
'my nose'

are inalienably possessed, as also are terms for relatives.

Some words may be possessed both alienably and inalienably, with a difference in meaning. An example is *taang* 'song', which may be possessed both ways:

tangiig
'my song, song about me'

taang roog
'my song, one I sang, composed, etc.'

Some nouns which one would expect to be inalienably possessed nevertheless are not so possessed. An example is *warrum* 'lungs', which is possessed as:

warrum roog
'my lungs'

Warrum is not inalienably possessed because this word basically means 'sponge', and the lungs are actually being called a sponge.

With noun phrases (but not with personal pronouns) alienable possession may also be expressed using the preposition *ko* 'for', as in the following examples:

waey ku Tamag
'a basket for Tamag'

waey ko gäl i bpiin neam
'a basket for those two women'

However, inalienable possession cannot be expressed with *ko*.

The preposition *u* is sometimes used with independent personal pronouns to express possession, as in the example:

Baey u gaeg.
'It's mine.'

However, it is not clear under what circumstances one can use expressions like the above.

Time of an Action

6.3.2.5 Time expressions in Yapese are very complex, and only some of the types of time reference are discussed in this book.

Time expressions may be formed using the preposition *u* plus a possessed relational noun referring to time, as in the following example:

Kea yib u nap'an ea mael.
'He came during the war.'

Several of the important possessed relational nouns of time are:

nap'an	'its duration, during, while'
ngiyal'ean	'it's time, time when it happened'
taboelngiin	'beginning of'
fean	'its date'

In addition, the unpossessed relational nouns *m'oon* 'first' and *somm'oon* 'first' may be used after *u*, as in the examples:

Raa yib u somm'oon ko moqlung.
'He will come before the meeting.'

Raa yib u m'oon ko moqlung.
'He will come before the meeting.'

Nap'an 'its duration, time' may also be used after *ni* in a type of relative clause (discussed in section 6.4.2), as in the example:

Baey yib ni nap'an ea moqlung.
'He will come during the meeting.'

Nap'an may also be used as a normal possessed noun, as (for example) subject of the sentence, as in the example:

Ka yigii n'uw nap'ag u roey.
'I have been here too long.'

in which *nap'ag* means 'my duration'.

Time adverbs (discussed above in section 6.2.1) are used without any preposition, as in the examples:

Raa ngoongliy bangyaal'.
'He will do it sometime.'

Gu guy foewngaen.
'I saw her last night.'

Wuqin ea yib'?
'When did he come?'

Most other time expressions are used with the preposition *ko*, as in the example:

Baey yib ko Moontaak.
'He will come on Monday.'

Some of the ways of expressing time will be discussed now,

including the days of the week, dates of the year, times of day, and other concepts.

The days of the week are normally expressed using names for Saturday and Sunday, and sometimes also for Friday and Monday, while Tuesday through Thursday, and sometimes Friday and Monday, are named with numbers. The days of the week are therefore as follows:

Madnam 'Sunday' (this word also means 'week', and it also means 'holiday, feast, party')
Moontaak or *Moontaag* 'Monday' (this word is borrowed from German *Montag*)
taqreeb fean ea marweel 'Monday' (literally 'first day of work')
l'agruw fean ea marweel 'Tuesday' (literally, 'second day of work')
dalip fean ea marweel 'Wednesday' (literally, 'third day of work')
qaningeeg fean ea marweel 'Thursday' (literally, 'fourth day of work')
Biyaerniis 'Friday' (borrowed from Spanish *viernes*)
laal fean ea marweel 'Friday' (literally, 'fifth day of work')
Saabaadoo 'Saturday' (borrowed from Spanish *sabado*)

Besides the word *madnam* 'week', the word *wiik*, from English *week*, is also used.

The names of the month are either taken from English (or Spanish, for certain older people), or are numbered, in the following fashion:

puul ni taqreeb	'the first month, January'
puul ni l'agruw	'the second month, February'
puul ni dalip	'the third month, March'

There is also a system of naming months that is based on the moon. One of the names in this system is *tafgiif*, which apparently refers to a month approximately at the time of July. Certain other such names are listed in the Yapese dictionary, but knowledge of these names is no longer widespread in Yap.

Dates of the month are numbered using the word *fean* 'its date', as in the following examples:

Kea yib ko ragaag ngea dalip fean ea puul ko puul ni taqreeb.
'He came on the thirteenth of January.'

Kea yib ko neel' fean ea puul ko August.
'He came on the sixth of August.'

From *fean* 'its date' the pronoun stem *roofean* is formed. This word may be used with a following relative clause, as in the example:

Kea yib ko roofean ni Moontaak.
'He came on Monday.'

When the definite article *fa* is used before *roofean*, the resulting time expression is a normal noun phrase with relative clause, for example:

Kea yib fa roofean ni Moontaak.
'He came on Monday.'

Fa always implies past time. You cannot use time expressions containing *fa* with verb phrases that have future tenses, as in the example:

**Baey yib fa roofean ni Moontaak.*

Instead you must say:

Baey yib ko roofean ni Moontaak.
'He will come on Monday.'

Puul means 'moon', and also 'month'. The various days of the lunar month (month measured from one new moon to the next) also have old Yapese names, but these are no longer widely known. The only name still in common use is *ngaqon* 'full moon', as in the example:

Raa yib ko yaey neam ea ngaqon.
'He will come at the next full moon.'

Duw means 'year'. It may have possessive suffixes added, as in:

Nga gu waen nga kaalbuus ni daariy duwaag.
'I'm going to jail for life' (that is, there is no specified period of years for me, *duwaag* 'my years')

In a similar way, *puul* 'month' may be possessed. *Nap'an* 'its duration' may be a possessed form of *neap'* 'night'.

Some of the words for the different times of day are:

rraan	'day, daytime'
neap'	'nighttime, night; used for counting days of the moon'
taanirraan	'just before dawn'
woch	'dawn'

kaakadbuul	'early morning'
kadbuul	'morning'
misiiw'	'noon'
thigaayaal', *mathigyaal'*	'early afternoon'
balaayaal'	'afternoon'
madaadbiy	'before dawn'
taanmadbiy	'before dawn'
ganawrug	'evening, sundown'
qawaayaal'	'sunset'
litheayaal'	'sunset'
lingeayaal'	'sunset'
lukngunn ea neap'	'midnight'

Clock time is told by counting, as in:

dalip ea kalook
'three o'clock'

meeruk ea kalook
'eight o'clock'

Minutes past the hour are literally 'minutes which have let go of the hour', as in the examples:

ragaag ea miint' ni kea paag ko dalip ea kalook
'ten minutes past three o'clock'

ruliiw' ngea meedlip ea miint' ni kea paag ko ragaag ngea taqreeb ea kalook
'twenty-seven minutes past eleven o'clock'

To say minutes until the hour one says literally 'so many minutes, then the hour', as in:

ragaag ea miint', mea meereeb ea kalook
'ten minutes until three o'clock'

ragaag ngea laal ea miint', mea l'agruw
'fifteen minutes until two'

Half past the hour is literally 'half of the following hour', as in:

ba lëy ko qaningeeg
'half past three' literally 'half for four'

ba lëy ko meereeb
'half past eight' literally 'half for nine'

Consider the following examples:

Raa yib ko bineem ea duw.
'He will come next year.'

Raa ngoongliy ko yaey neam ea ngaqon.
'He will do it the next full moon.'

Yaen fa bineem ea wiik.
'He left last week.'

These examples illustrate the fact that demonstratives with *neam* are used to mean 'next' in time. These demonstratives are preceded by the preposition *ko*. Demonstratives with *fa* 'definite article' preceding, and the demonstrative *neam*, and without *ko*, are used to mean 'last' in time.

The Relation of Indirect Objects

6.3.2.6 The **indirect object** (or **dative**, the traditional term) of a sentence is illustrated by the phrase *ngaak' Tamag* 'to Tamag' in the following sentence:

Kea piiq Tinag l'agruw ea waey ngaak' Tamag.
'Tinag gave two baskets to Tamag.'

In this sentence, the subject of the sentence is Tinag, since she is the one who did the giving, the action described by the verb phrase. The two baskets are the direct object of the sentence, since they are the things that were given. The indirect object of the sentence is Tamag. He is the person that the baskets were given to. Someone who receives something in a sentence is called its indirect object.

The indirect object of a sentence is in many ways similar to the goal of motion of a verb of motion. In English we often use the preposition *to* for both meanings, as in the examples:

I went to the store.
I gave the baskets to Tamag.

Likewise, in Yapese the preposition *nga* 'to' is, in many conditions, used for both the goal of motion and the indirect object of a sentence, as in the examples:

Kea yaen nga Donguch.
'He went to Donguch.'

Kea piiq ngaak' Tamag.
'He gave it to Tamag.'

The preposition *nga* is used when the indirect object is expressed by a personal pronoun. In this case the pronoun is a suffixed possessive pronoun on the preposition *nga*, as in the examples:

Kea piiq ngoog.
'He gave it to me.'

Mu piiq ngaak'.
'Give it to him.'

If the indirect object is expressed with a noun phrase in addition to the pronoun, the construct construction (see section 4.8) is used, as in:

Mu piiq ngaak' Tamag.
'Give it to Tamag.'

Mu piiq ngaak' Tamag ngea rea piin niir.
'Give it to Tamag and that woman.'

Mu piiq ngoorow ea rea piin niir.
'Give it to him and that woman.'

Recall that in the construct construction the possessed form of *nga* must be the third person singular *ngaak'* 'to him' if all of the people who are the indirect objects are expressed by a noun phrase, even if there are more than one of them. This is illustrated by the example:

Mu piiq ngaak' Tamag ngea Tinag ngea walaagrow.
'Give it to Tamag and Tinag and their brother.'

However, if some of the persons who are indirect objects are expressed only by the suffixed pronoun, then the pronoun must agree in number and person with all of the indirect objects of the sentence, both those expressed by the noun phrase and those expressed only by the pronoun. Thus one says:

Mu piiq ngoorow Tamag.
'Give it to him and Tamag.'

not:

**Mu piiq ngaak' ngea Tamag.*

If the indirect object is expressed only by a noun phrase, then the preposition *ko* may be used, as in the following examples:

Mu piiq ku Tamag.
'Give it to Tamag.'

Mu piiq ku Tamag ngea rea piin neam.
'Give it to Tamag and that woman.'

Mu piiq ko pi pilibthir neey.
'Give it to these old people.'

However, *ko* may not be used with personal pronouns, and *nga* may only be used with personal pronouns to express indirect objects. That is, one may not say either of the following two sentences:

**Mu piiq ku qiir.*
**Mu piiq nga Tamag.*

The Relation of the Instrument Used for an Action

6.3.2.7 The tool used in doing something, or what one used to do something with, is called the **instrument** of the action, and the relationship in the sentence of the instrument of an action is called the **instrumental** relationship. This relationship is expressed in Yapese with the preposition *ko*, as in the following examples:

Mu toey ko tow roog.
'Hit it with my axe.'

Kea liiq ko booyoch.
'He killed him with a gun.'

Kea tuug ko paaq.
'He hit with his hand.'

In many cases where English would use an instrumental phrase, Yapese uses other methods to express the same idea, as in the following sentence:

Kea feek u laen ea kaarroo.
'He took him with a car' (literally 'in a car')

In this sentence English says 'with a car', expressing the idea that the car is the instrument with which he took him. Yapese says 'in a car', expressing the idea that the car is the thing in which he took him, a locative idea.

SUBORDINATE CLAUSES

6.4 Subordinate clauses are sentences that occur with some word in front of them, and the combination acts as a normal part (such

as subject, object, adverb phrase, etc.) in a larger sentence. An example is:

Ma naang ni gu raa yib.
'He knows that I will come.'

In this sentence, the phrase:

ni gu raa yib
'that I will come'

consists of the subordinating particle *ni* (which is the same as the relativizing particle *ni* discussed above in section 4.2.15) followed by the sentence:

gu raa yib
'I will come'

This phrase, which looks like a relative clause, is not part of a noun phrase (as are relative clauses), but is actually the direct object of the verb *naang* 'to know'. Thus it may answer the question *maang* 'what', as in the following dialogue:

Maang ea ma naang? — 'What does he know?'
Ma naang ni gu raa yib. — 'He knows that I will come.'

Maang 'what?' is the direct object of the question above, and the subordinate clause *ni gu raa yib* 'that I will come' is the direct object of the answer.

Subordinate clauses may serve various functions in sentences. They are formed in two different ways in Yapese, one with *ni*, and one with *ko*, as in the following example:

Daa gu naang ko raa yib, fa daangaq.
'I don't know if he will come or not.'

Subordinate clauses with *ko* will be discussed in section 6.4.1, those with *ni* in section 6.4.2.

A different type of subordinate clause is illustrated in the following sentence:

Faqän raa mu guy i Tamag, ma goog ngaak' ni ngea piiq fa rea n'ean ngoog.
'If you see Tamag, tell him to give me that thing.'

In this sentence the phrase:

faqän raa mu guy i Tamag
'if you see Tamag'

is a subordinate clause occurring in a construction called a subordinate conjunction. These are discussed in section 7.5.2.

Ko Subordinate Clauses

6.4.1 *Ko* subordinate clauses consist of the preposition *ko* followed by a question, as in the following example:

Ga ma naang ko bea diqiy?
'Do you know what he is doing?'

Daa gu naang ko baey u quw.
'I don't know where he is.'

Notice that the sentence following *ko* must be a question, and using a sentence in a *ko* subordinate clause will always result in its being interpreted as a question. Thus one may not say:

**Daa gu naang ko bea riin'.*

but only:

Daa gu naang ko maang ea bea riin'.
'I don't know what he is doing.'

Usually *ko* subordinate clauses are used after verbs which refer to knowing, telling, and so forth. Thus one may say:

Ka noeg ngoom ko maang ea ngoongliy?
'Did they (one) tell you what he did?'

with the verb *yoeg* 'to say' plus a *ko* subordinate clause as its direct object.

Ni Subordinate Clauses

6.4.2 *Ni* subordinate clauses have the form of relative clauses. That is, they consist of *ni* plus a sentence, as in the example:

Gu ba qadaag ni ngu gu guy gabuul.
'I want to see him tomorrow.'

in which the phrase:

ni ngu gu guy gabuul.
'that I see him tomorrow'

is a subordinate clause serving as direct object of *qadaag* 'to want'.

Ni subordinate clauses may serve various functions in sentences which are discussed in the following two sub-sections.

Ni Subordinate Clauses as Subjects and as Direct Objects

6.4.2.1 *Ni* subordinate clauses may be the subject of an adjective. Examples are:

Ba feal' ni nga mu maen nga mu guy.
'It's good that you go and see him.'

Ba kireeb ni kea guyeem.
'It's bad that he saw you.'

They may also be the direct object of a verb. Examples are:

Gu ba qadaag ni ngu gu guy.
'I want to see him.'

Ga ma naang ni ba qaraay?
'Do you know that he is here?'

Gu bea leam naag ni daab kii riin'.
'I think that he won't do it again.'

Only certain verbs may have a *ni* subordinate clause as direct objects. Among these are verbs meaning 'to know', 'to think', 'to want', and other verbs which express a mental attitude toward the action of the subordinate clause. These are discussed more fully in sections 7.2.2.8, 9, 11.

Ni Subordinate Clauses as Adverbial Phrases

6.4.2.2 *Ni* subordinate clauses containing possessed relational nouns may be used to express a variety of adverbial relations, such as time, location, purpose, and so forth. An example is:

Kea ngoongliy Tamag ni faan ngoom.
'Tamag did it for you, for your benefit.'

The relational noun *faan* 'its meaning, purpose' is used to express the purpose for which Tamag did the action. With the prepositional phrase *ngoom* 'to you' the subordinate clause expresses a relationship called **benefactive**, that is the person for whose benefit something is done.

Not enough is known at present about the various relational nouns which may be used in subordinate clauses of this type to express various relations. Only a few will be discussed here.

Faan 'its meaning, purpose' may be used generally to express the purpose or reason why someone did something. Some examples are:

Yaen nga raam ni faan ea ngea chuwqiy ba yaer.
'He went there in order to buy a knife.'

Ngoongliy ni qaraam faan.
'He did it for that reason.'

Rogon 'its way' is used to describe how something took place. The idea of how something took place is sometimes called a **manner adverbial**, because it tells the manner in which something happened. Examples are:

Maa fitaeq ni ba kireeb rogon.
'He fishes badly.'

Raa riin' ni ba feal' rogon.
'He will do it well.'

Adjectives may be used in *ni* subordinate clauses to tell how something happened. Examples are:

Qii yaen ni ri ba paapay.
'He was going very fast.'

Gu maa marweel ni ba soosoowaath.
'I work slowly.'

Ni subordinate clauses may be used to express time, price, distance, and many other ideas. Some further examples are:

Gu ba qadaag ni nga gu chuwqiy reeb ea qotoobaay ni ba soobut' pulwon.
'I want to buy a motorbike which is cheap.' (literally, 'which its price is low')

Thingar gu marweel ni ba n'uw nap'an.
'I have to work for a long time.'

Qii yaen ni ba n'uw ea kanaawoq.
'He went a long way.'

Note that *ni* combines with *i* 'he' to become *nii*, as in:

Gu ma naang nii riin'.
'I know that he did it.'

Ni also combines with *u* 'at' to become *nuu*, as in:

girdiiq nuu Waab
'the people of Yap'

INFINITIVE PHRASES

6.5 An example of an infinitive phrase is contained in the sentence:

Mu qaywegeeg i ngoongliy.
'Help me to do it.'

In the above sentence, the phrase:

i ngoongliy
'to do it'

is called an infinitive phrase. An infinitive phrase consists of a sentence beginning with a verb phrase which has *i* 'he' as subject. This sentence is called an **infinitive phrase** and is used to complete the meaning of the main verb of the sentence. Thus, in the above example the infinitive phrase completes the meaning of *mu qaywegeeg* 'help me', telling what it is that I want you to help me to do.

Infinitive phrases are not widely used, and are perhaps only used with a small number of verbs which may precede them.

Infinitive phrases are similar to the type of construction called **sequential conjunction** (section 7.5.3 below), exemplified by the sentence:

Ngu gu waen nga Donguch nga gu chuwqiy.
'I'm going to go to Donguch and buy it.'

The sequential conjunction consists of two sentences side by side, as above, with no word like *ni* or other subordinating particle between. However, in this construction the subject of the first sentence must be the same as the subject of the second sentence. That is, one may not say:

**Ngu gu waen nga Donguch ngea chuwqiy.*

with 'I' as the subject of the first sentence but 'he' as subject of the second sentence.

In infinitive constructions, however, the subject of the second sentence must be *i* 'he', no matter what the subject of the first sentence is.

7 Sentence Types

INTRODUCTION

7.1 There are many different types of sentences in Yapese. Some sentences make statements, such as:

Bea marweel Tamag.
'Tamag is working.'

Other sentences ask questions, as for example:

Bea diqiy Tamag?
'What is Tamag doing?'

Some sentences contain only one main verb phrase, as the above two, and are called simple sentences. Other sentences consist of two or more sentences put together, as the following example:

Ngu gu waen nga tafean ngu gu pining.
'I'm going to go to his house and call him.'

which is composed of the two simple sentences:

Ngu gu waen nga tafean.
'I'm going to go to his place.'

and:

Ngu gu pining.
'I'm going to call him.'

SIMPLE SENTENCES

7.2 Simple sentences are sentences which have only one main verb phrase (or nominal predicate, discussed in section 7.2.1 below), which occurs at the beginning of the sentence. An example of a simple sentence is:

Bea mool Tinag.
'Tinag is sleeping.'

In this sentence the verb phrase:

bea mool
'she is sleeping'

is the predicate, and it is the only predicate in the sentence, and it comes at the beginning of the sentence. Thus, this is a simple sentence.

Contrast this with the following sentence:

Tinag ea bea mool.
'It is Tinag who is sleeping.'

This sentence also has only one predicate, the same as in the previous sentence. However, in this sentence the predicate does not come at the beginning of the sentence. Rather, the subject *Tinag* comes at the beginning of the sentence. Sentences like this, in which the subject, the direct object, a time adverbial, or any other phrase of the sentence except the predicate comes first in the sentence is called a **focused sentence**. In this sentence it is the subject *Tinag* which comes first. Thus this sentence is not a simple sentence, but a focused sentence. Focused sentences are discussed in section 7.3.

Now consider the following sentence:

Bea mool Tinag, ma raa qod.
'Tinag is sleeping, and then she will awaken.'

This sentence contains two different predicates, and in fact two different sentences. They are:

Bea mool Tinag.
'Tinag is sleeping.'

and:

Raa qod.
'She will awaken.'

These two sentences are joined, or **conjoined** as is sometimes said, using the conjunction *ma* 'and then'. Conjoined sentences consist of two sentences joined together using some form of conjunction. These processes are discussed in section 7.5.

Not all sentences that have a second sentence inside of themselves are considered as conjoined sentences. Consider the sentence:

Gu ba qadaag ni ngea yaen.
'I want him to go.'

This sentence includes the sentence:

Ngea yaen.
'He's going to go.'

However, these two sentences are not said to be conjoined. Rather, the second sentence is said to be embedded in the first sentence. The reason for this statement is that the second sentence functions as the direct object of the verb in the first, rather than simply being loosely joined to the verb as was the case with the example just discussed. Sentences like this one with embedded sentences (rather than conjoined sentences) are considered as simple sentences.

Simple sentences consist of a predicate (usually a verb phrase, but in certain cases it is a noun phrase; these are discussed in section 7.2.1 below) followed by one or more noun phrases, adverbial phrases, and subordinate clauses, called **actants**. The actants in a sentence perform certain functions or jobs, such as subject, direct object, indirect object, time, location and so forth.

However, sentences differ one from another in terms of the types of actants that may occur with each type of predicate. For example, we can say:

Kea yaen nga Donguch.
'He went to Donguch.'

In this sentence, the predicate is the verb phrase *kea yaen*, with a verb of motion *yaen* 'to go' as predicate. The actant *nga Donguch* 'to Donguch' serves the function of indicating the goal of the motion. Thus with verbs of motion we may have a goal of motion actant.

However, we cannot say:

**Kea mool nga Donguch.*

because the verb *mool* 'to sleep' is not a verb of motion, and thus cannot be used with a goal of motion actant like *nga Donguch*. We may classify simple sentences in Yapese according to the kinds of actants that occur with predicates of different types.

In order to discuss the different types of simple sentences, we must first discuss the idea of predicate. All sentences have a predicate. In most sentences the predicate is the main verb phrase. Consider the following examples:

Bea marweel Tamag.
'Tamag is working.'

Kea chuwqiy Tamag ea falowaa.
'Tamag bought bread.'

In the above sentences, the verb phrases:

bea marweel
'he is working'

kea chuwqiy
'he bought it'

are the predicates. The predicate of the sentence is (roughly speaking) what the sentence is saying about something. The thing that the predicate is saying something about is the subject.

Thus, in the first sentence the predicate *bea marweel* 'he is working' is telling us something about Tamag, who is the subject. What it tells us is that he is working. This fact is the predicate.

In the second sentence, *Tamag* is again the subject. He is what the sentence is about. What the sentence tells us about him is that he bought something. Thus, *kea chuwqiy* 'he bought it' is the predicate. It is the part of the sentence that tells us about Tamag.

Falowaa 'bread' tells us what Tamag bought, and is called the direct object. Sentences that have direct objects, like the second one above, are called **transitive sentences**. Those which, like the first sentence above, do not have a direct object are called **intransitive sentences**.

All the above sentences are called **verbal sentences**, because they have a verb phrase as predicate. Now consider the following sentence:

Chitamngiig Tamag.
'Tamag is my father.'

In this sentence, Tamag is the subject. It is he about whom we are saying something. What we are saying about him is that he is my father. Thus, the predicate of the above sentence is *chitamngiig* 'my father'. Since the predicate of this sentence is a noun phrase, and there is no verb phrase in this sentence, we call this sentence a **nominal sentence**. Nominal sentences are those where the predicate is expressed by a noun phrase (nominal means 'pertaining to nouns').

It is not always clear in a nominal sentence which noun phrase is the subject and which is the predicate. Thus, in focused

sentences, the subject is moved to the front of the sentence, with *ea* between (focused sentences are discussed in detail in section 7.3). The focused version of the above sentence is:

Tamag ea chitamngiig.
'Tamag is my father'

We might suppose that in this sentence Tamag is the predicate and my father is the subject. However, in section 7.3 an explanation will be given why this supposition is not correct.

The various types of simple sentences will be discussed under the following headings:

Nominal Sentences

7.2.1 Nominal sentences consist of just two noun phrases placed side by side. The first noun phrase is the predicate, and the second is the subject. Examples are:

Chitamngiig Tamag.
'Tamag is my father.'

Tamag fithngaan.
'His name is Tamag.'

Seensey roog ea rea pumoqon neam.
'That man is my teacher.'

In the first sentence above, *Tamag* is the subject, *chitamngiig* 'my father' is the predicate. In the second sentence, *fithngaan* 'his name' is the subject and *Tamag* is the predicate. In the third sentence *rea pumoqon neam* 'that man' is the subject, and *seensey roog* 'my teacher' is the predicate.

These sentences illustrate the fact that the noun phrase connector *ea* is used according to the normal rules for *ea* before the subject of a nominal sentence. Since the noun phrase connector is not used before a proper noun (such as *Tamag* in the first sentence), or a possessed noun (such as *chitamngiig* 'my father' in the second), *ea* is not used before the subject in these two sentences. Since *ea* is normally used before number markers like *rea* 'singular', *ea* is used before the subject *rea pumoqon neam* 'that man' in the third sentence.

The fact that *ea* is used in the normal way before noun phrases which are subjects of a nominal sentence enables us in certain cases to tell whether a nominal sentence has been focused or not. In a focused sentence (discussed in detail in section 7.3), the subject of the sentence (or other noun phrase, as is explained in section 7.3) is moved to the front of the sentence, and the noun phrase connector *ea* is put before the rest of the sentence. Consider the following unfocused sentence:

Kea yaen Tamag.
'Tamag went.'

When the subject of this sentence, which is *Tamag*, is focused it is moved to the front of the sentence, and the noun phrase connector *ea* is put between, giving us:

Tamag ea kea yaen.
'It is Tamag who went.'

Now consider the simple nominal sentence:

Chitamngiig Tamag.
'Tamag is my father.'

The subject of this sentence is *Tamag*. If we now focus the subject of the sentence, moving *Tamag* to the front of the sentence and inserting *ea*, we have:

Tamag ea chitamngiig.
'It is Tamag who is my father.'

In this focused sentence, the noun phrase connector *ea* is now being used in front of *chitamngiig*. The fact that *ea* is used here proves that the sentence must be a focused sentence, with the noun phrase connector *ea* being introduced because of the focusing process, because the noun phrase connector *ea* cannot normally be used in front of possessed nouns like *chitamngiig*. Thus in certain cases, we can tell whether a particular noun phrase is the subject or not. *Tamag* must be the subject of the sentence:

Chitamngiig Tamag.
'Tamag is my father'

because if this were a focused sentence, with *Tamag* as predicate and *chitamngiig* as (focused) subject, there would be the noun phrase connector *ea* between the two words, and the sentence would be:

Chitamngiig ea Tamag.
'It is my father who is Tamag.'

In many other cases we cannot tell simply from the structure

of a nominal sentence whether it is focused or not. Thus in the sentence:

Seensey roog ea rea pumoqon neam.
'That man is my teacher.'

we cannot tell from the structure of the sentence itself whether *seensey roog* 'my teacher' is the predicate and *rea pumoqon neam* 'that man' is the subject, or whether this is a focused sentence with *seensey roog* as focused subject. We cannot tell which is the case since the noun phrase connector *ea* would be used before *rea pumoqon neam* in any case. We can only say which is the subject and which is the predicate by asking what the sentence is supposed to mean. If the person who used the sentence meant to say something about that man, namely that he was his teacher, then *rea pumoqon neam* 'that man' is the subject. On the other hand, if the speaker meant to say something about his teacher, namely that his teacher is that man, then *seensey roog* 'my teacher' is the subject. Of course in the latter case this would be a focused sentence, and the additional meaning added by focussing would be meant (see section 7.3), so that the person would be saying something like "It is my teacher that is that man (not my doctor, etc.)."

The following sentence may seem to be a nominal sentence:

Ba seensey ea chaqneey.
'This person is a teacher.'

However, this sentence is not a nominal sentence, but a verbal sentence. Its predicate is the verb phrase:

ba seensey
'he is a teacher'

and its subject is the demonstrative pronoun *chaqneey* 'this person'.

The reason we can be sure that *ba seensey* in the above sentence is a verb phrase, and not the noun *seensey* 'teacher' with the indefinite article *ba*, is that if the subject of the above sentence is expressed by a pronoun, as in the following example:

Gu ba seensey.
'I am a teacher.'

then the subject pronoun *gu* 'I' is used. Subject pronouns are of course not used with noun phrases. Verbal sentences such as the one above which have a noun as head (or predicate) of the verb phrase are discussed in section 7.2.2.1.

If a personal pronoun is subject of a nominal sentence, the independent forms of the pronouns are always used, as in the following examples:

I gaeg ea seensey roomeed.
'I am your teacher.'

I guur ea seensey rooraed.
'You are their teacher.'

In all of these examples the personal pronoun which is the subject is also focused. It may be that personal pronouns as subject of nominal sentences are always focused. The unfocused versions of the above sentences, if they are acceptable, would be:

Seensey roomeed gaeg.
'I am your teacher.'

Seensey rooraed guur.
'You are their teacher.'

There is one possessed noun that is used in nominal sentences in a way which translates into English as a transitive verb. This is the word *dabuug* 'my dislike', as in the following examples:

Dabuug ea bineey.
'I don't like this one.'

Dabuum Tamag?
'Don't you like Tamag?'

Dabuun gaeg.
'He doesn't like me.'

Dabrow ea pi chaqneey.
'He doesn't like these people.'

These sentences are translated into English using the transitive verb 'to like', but in Yapese they are actually nominal sentences. That is the reason why, in the third sentence above, *gaeg* 'I', an independent pronoun, is used to express the person who is disliked. 'Me' would be the direct object of the corresponding English sentence, but *gaeg* 'I' is the subject of the Yapese sentence. It is as if one were to say 'I am his dislike'.

Some people apparently do not use this possessed noun frequently, but rather use the related transitive verb *dabuy* 'to dislike', as in the following examples:

Kea dabuyeeg.
'He doesn't like me.'

Ka ra dabuyeed ea pi chaqniir.
'They don't like those people.'

Verbal Sentences

7.2.2 Most sentences in Yapese are verbal sentences. Verbal sentences have a verb phrase as the predicate.

Except in focused sentences (see section 7.3 below), the predicate always comes first in a Yapese sentence. Following the predicate is always the subject. If the sentence is a transitive sentence, then the direct object follows the subject. Thus in the following sentence:

Kea guy Tamag Tinag.
'Tamag saw Tinag.'

the predicate is *kea guy* 'he saw her', the subject is *Tamag* (since it follows the predicate), and the direct object is *Tinag* (since it follows the subject.

The only exception to this rule, that the subject immediately follows the predicate and the direct object immediately follows the subject, is in the case of sentences like the following:

Mu piiq ngoog ea falowaa.
'Give me some bread.'

In this sentence the word *ngoog* 'to me' is the indirect object (see section 6.3.2.6). Sentences with indirect objects normally have the indirect object following the direct object, as in the following example:

Mu piiq ea falowaa ngoog.
'Give me some bread.'

However, if the indirect object is expressed by just the preposition *nga* with a suffixed personal pronoun, as in the above examples, it may occur immediately after the predicate. Examples of this sort are discussed below in section 7.2.2.7.

Since either the subject or the direct object of a Yapese sentence may be expressed only by the subject and direct object pronouns on the verb, the possibility exists for various sorts of ambiguity to arise. Ambiguity is a word meaning 'having more than one meaning'. Consider the following sentence:

Kea guy Tamag.

This sentence is ambiguous: that is, it has more than one possible meaning. It may be interpreted with *Tamag* as subject (and 'him' as direct object), and then it means:

Kea guy Tamag.
'Tamag saw him.'

Or, on the other hand, it may be interpreted with *Tamag* as direct object (and 'he' as subject), and in that case it means:

Kea guy Tamag.
'He saw Tamag.'

The possibility of ambiguity in meaning in the various types of simple sentences must always be borne in mind.

The subject of a sentence in Yapese may be expressed by subject pronouns in the verb phrase, as in the following example:

Qu ra marweel gaed.
'They all were working.'

In this sentence the subject is 'they', and is expressed by the subject pronoun *ra* 'they' and the subject number marker *gaed* 'plural'. No noun phrase is used.

The subject may also be expressed using only a noun phrase, as in the following example:

Qii marweel fa pi girdiiq.
'Those people were working.'

In this sentence the subject is expressed by the noun phrase *fa pi girdiiq* 'those people'. In this case the verb is in the third person singular. *Qii* is a contraction of the tense marker *qu* 'non-present progressive/habitual' and *i* 'he' (see section 5.3.4.10). Thus, if the subject of a verb is expressed completely by a noun phrase, with no pronouns used to express any of the doers of the action of the verb, the verb is always in the third person singular, no matter whether the subject is singular, dual, or plural. This fact about Yapese pronoun reference with respect to subjects of sentences is further illustrated in the following examples:

Bea yaen fa pi girdiiq.
'Those people are going.'

Kea yib fa gäl bitiir.
'Those two children came.'

Now consider the following example:

Ka ra bow Tamag.
'He and Tamag came.'

In this example, the predicate is the verb phrase:

ka ra bow
'they two came'

The doers of the action of this verb—that is, the people who came—are Tamag and someone else. Tamag is represented by the noun phrase *Tamag* following the verb in the normal position of the (noun phrase) subject of the sentence. The other person who came, 'he', is represented by the subject pronoun *ra* 'they' with the subject number marker suffix *-w* 'dual' on the verb. Thus the verb is dual, because two people came, although the noun phrase subject only expressed one of them. This example illustrates in general the way in which subject pronouns in Yapese are used. If all of the persons or things referred to by the subject of the sentence are expressed by a noun phrase in the normal subject position, then the verb is in the third person singular. If any of the persons or things referred to by the subject are represented by subject pronouns in the verb, then the subject pronoun in the verb must agree in person and number (that is, have the same person and number) with all of the subjects, including those referred to by the noun phrase.

Similar comments apply to object pronoun suffixes, when they are used. Thus in the sentence:

Kea guyrow Tamag Tinag.
'Tamag saw him and Tinag.

the predicate is:

kea guyrow
'he saw them two'

The subject of this sentence is *Tamag*. The direct object is 'him and Tinag'. This direct object is dual, and only one of the two persons seen is mentioned by a noun phrase, namely *Tinag*. In this case a direct object pronoun is used, and it must be dual, to agree in number with the whole object.

If on the other hand the direct object is expressed only by a noun phrase, then no direct object pronoun suffix is used at all, whether the direct object is singular, dual or plural. This usage is illustrated by the following examples:

Kea guy Tamag fa gäl bitiir.
'Tamag saw those two children.'

Kea feek Tamag fa pi n'ean.
'Tamag took those things.'

Note that ambiguity can arise when noun phrases are used as subject or direct object along with subject or object pronouns. Consider the sentence:

Kea guyrow Tamag.

This sentence is ambiguous, that is it has two different possible interpretations. It may either mean:

Kea guyrow Tamag.
'Tamag saw them two.'

or else it may mean:

Kea guyrow Tamag.
'He saw him (someone else) and Tamag.'

Now the various types of simple sentences of Yapese will be discussed each in its own section.

Noun Predicate Verbal Sentences

7.2.2.1 Noun predicate sentences are sentences with a predicate that is a verb phrase containing a noun as head, with the stative marker *ba*. Examples are:

Ba seensey Tamag.
'Tamag is a teacher.'

Gu ba toogtaa.
'I am a doctor.'

The subject of a noun predicate sentence is expressed in the usual way, either by a noun phrase following the predicate, or by a subject pronoun, or with both. This is illustrated by the examples:

Ba toogtaa ea gäl i chaqneey.
'These two people are doctors.'

Yow ba toogtaa Tamag.
'He and Tamag are doctors.'

Yow ba toogtaa.
'They two are doctors.'

However, one may not express all of the subjects (the ones who are doctors in the above sentences) using a noun phrase, and at the same time have a non-third person singular subject pronoun. In other words, one may not say:

**Yow ba toogtaa Tamag ngea Taman.*
**Yow ba toogtaa ea gäl i chaqneey.*

Under certain circumstances a classified noun phrase may also be used as head of a noun predicate verb phrase, as in the following examples:

Ba yael' ii buw ea yael' neey.
'This one is a betel nut.'

Ba yaang ii saasiing ku Tamag ea gineey.
'This one is a picture of Tamag.'

Subject noun phrases are the only sentence element that may be used with a noun predicate sentence. That is, for example, there is no direct object, indirect object, and so forth in such sentences.

Adjective Predicate Verbal Sentences

7.2.2.2 Adjective predicate sentences are similar to noun predicate sentences, except that, of course, an adjective rather than a noun is used as head of the predicate. Examples are:

Ba maenigil ea bineey.
'This one is good.'

Ga ba ngochngooch.
'You are short.'

Yaed ba llowaen' Tamag.
'They and Tamag are smart.'

Ba malmaal ea gäl ii chaqneey.
'These two people are lazy.'

Adjective predicate sentences are used to compare two things. Thus one may say:

Bineey ea ba maenigil.
'This one is better.'

Bineey ea ba maenigil ko bineem.
'This one is better than that one.'

Bin ni ngaan ea ba maenigil?
'Which one is better?'

All of the above sentences are focused sentences. That is, the subject of each sentence has been moved to the front of the sentence, and the noun phrase connector *ea* is inserted between subject and the rest of the sentence. Thus the subject of the first two sentences is *bineey* 'this one', and the subject of the third sentence is *bin ni ngaan* 'which one?' (literally 'the one which is where?'). When two things are compared in an adjective predicate sentence, the subject is often focused. However, it is not necessarily so, and one can say:

Ba maenigil ea bineey ko bineem.
'This one is better than that one.'

A special sentence adverb is used to express the idea of 'most' with adjectives. This adverb combines with adjectives to form an adjective predicate. This sentence adverb will be discussed here rather than in section 7.4 as it is connected closely with adjective predicates.

Consider the following sentence:

Bineey ea th'äb i feal' ko tineem.
'This one is the best of them.'

The adverb *th'äb* takes the place of *ba* 'stative' in adjective verb phrases. Apparently the subject of adjective predicate sentences with *th'äb* is always focused. Thus one cannot say:

**Th'äb i feal' ea bineey.*

Rather, one says:

Bineey ea th'äb i feal'.
'This one is the best.'

Or, even better, one would use the following special type of focused sentence (see section 7.3) (note that *raay* in the following sentence means 'here'):

Qiir ea raay ea bin ni th'äb i feal'.
'This one here is the best one.'

As noted in section 5.4.8.7, some adjectives are composed of compounds with the second compound having a possessive pronoun suffix. Thus, the subject of such adjectives may be expressed by the possessive suffix, as in the example:

Ba kirbaen'uug.
'I am sad.' (literally, 'My mind is bad.')

If the subject of such an adjective is expressed with a noun phrase, and none of the persons referred to by the subject are expressed by a pronoun, then the adjective is used with the third person singular form, as in the example:

Ba kirbaen' fa gäl bpiin.
'Those two women are sad.'

However, if some of the persons referred to by the subject are expressed with pronouns and some with a noun phrase, then the possessive pronoun suffix must include the persons referred to by the noun phrase. Thus one says:

Kea kirbaen'mow Tamag.
'Tamag and I are sad.'

These adjectives may also be used with normal subject pronouns and no possessive suffix. In this case they behave as normal adjectives. Examples are:

Ku gu kirbaen'.
'I am sad.'

Ku gu kirbaen' gow Tamag.
'Tamag and I are sad.'

Kea kirbaen' fa gäl bpiin.
'Those two women are sad.'

Various sorts of adverb and prepositional phrases may be used in adjective predicate sentences, depending on the meaning of the adjective. One may use time and place adverbs, as in the following examples:

Ba feal' ea yafaang ea dabaq.
'The weather is fine today.'

Ba feal' ea yafaang u roey.
'The weather is fine here.'

If the meaning of the adjective is appropriate, one may use adjective predicate sentences with indirect objects (see section 6.3.2.6). The indirect object is the person to or for whom something is done, or exists. An example is:

Ba feal' ea rea maad neey ngoom.
'This clothing is good for you.'

Adjective predicate sentences may not contain direct objects.

With an appropriate adjective as predicate, subordinate clauses may be used as subject of an adjective predicate sentence

(relative clauses as sentence components are discussed in section 6.4). An example is:

Ba feal' ni ngea yaen nga Hawaii.
'It is good that he is going to Hawaii.'

The subject of this sentence is the subordinate clause:

ni ngea yaen nga Hawaii
'that he is going to go to Hawaii'

Notice that the relative clause as subject is the normal subject position, namely right after the verb phrase.

Adjectives may be used with other tense markers than *ba* 'stative'. Examples are:

Kea maenigil.
'It is good.' (literally, 'It has become good.')

Yow raa gaaq.
'They two will get bigger.'

Ka ra gaaq gaed.
'They have grown up, have become large.'

Sentences with adjective predicates with tense markers other than *ba* 'stative' differ slightly in meaning from those with *ba*. Compare the following two sentences:

Ba maenigil.
'It's good.'

Kea maenigil.
'It's good, has become good.'

The first sentence merely says that 'it is good'. The second implies a process of change, as, for example, it was not good at first but it is good now.

The sentence adverb *th'äb* 'most' may not be used in conjunction with any other tense markers. Thus one may not say:

**Kea th'äb i gaaq.*

Intransitive Verb Predicate Sentences

7.2.2.3 These are sentences with an intransitive verb as head of the verb phrase. Verbs of motion are also intransitive verbs, but will be discussed in section 7.2.2.4 following.

As in all sentences except focused sentences, the subject immediately follows the verb phrase if it is a noun phrase, as in the following examples:

Bea mool Tamag.
'Tamag is sleeping.'

Ka ra marweel gow ea fagear roog.
'My friend and he worked.'

Ngea fitaeq Tamag ngea Taman.
'Tamag and Taman are going to fish.'

Time and location adverbial and prepositional phrases may be used with intransitive verb sentences, if the meaning of the verb is appropriate, as in the following examples:

Nga mu marweel ea dabaq?
'Are you going to work today?'

Ngu gu marweel u Donguch.
'I'm going to work in Donguch.'

Indirect objects (see section 6.3.2.6) may also be used if the meaning of the verb is appropriate, as in the following example:

Maa marweel ko Qaam.
'He works for the government.'

In this example, the phrase *ko Qaam* 'for the government' is an indirect object phrase, because it tells who he works for.

If an indirect object phrase is used in the same sentence with a time phrase and a location phrase, the indirect object comes after the subject but before the time and location phrases, normally, as in the following example:

Ngea marweel Taman ku Tamag u Keng ea dabaq.
'Taman will work for Tamag in Keng today.'

In this sentence, *ku Tamag* 'for Tamag' is the indirect object, and comes immediately after the subject *Taman*, and before the location phrase *u Keng* 'in Keng'. Although this is the usual order of sentence elements, other orders are also possible, provided that the subject must come immediately after the verb phrase. An example is:

Ngea marweel Taman ea dabaq ku Tamag u Keng.
'Taman will work today for Tamag in Keng.'

Subordinate clauses (discussed in section 6.4 above) may be used with intransitive verb sentences to express such relationships as the manner in which something is done, the person for whom something is done, as well as ideas which are also expressed by prepositional phrases, such as time, location, and so on. Such subordinate clauses are normally placed after the prepositional and adverbial phrases in the sentence, but may occur anywhere except between the verb phrase and the subject. Some examples are:

Ngea marweel Taman ku Tamag u Keng ea dabaq ni ba qël märin.
'Taman is going to work hard (*ni ba qël märin*) for Tamag in Keng today.'

Ngea marweel ni bachaan ea ngea yog naag boech ea salpiy.
'He's going to work in order to earn some (more) money.'

Baey i marweel ni ba feal' rogon.
'He will work well.'

Baey i marweel ni faan ngoom.
'He will work for your benefit.'

Maa marweel ni nap'an ea rraan.
'He works during the day.'

Some intransitive verbs are called **stative intransitives**, because they describe a state of being rather than an action. Such stative intransitives are not generally used with an indirect object or with subordinate clauses describing the manner in which something is done. Some examples are:

Kea yim'.
'He has died.'

Kea mool.
'He is asleep.' (literally, 'He has slept.')

The intransitive verb *diqiy* 'to do what?' is an interrogative intransitive verb; that is, it asks a question, as illustrated by the sentence:

Ka mu diqiy?
'What have you done, what has happened to you?'

Motion Verb Predicate Sentences

7.2.2.4 Motion verbs are intransitive verbs that indicate the movement of something. They characteristically may be used with goal and source of motion adverbial or prepositional phrases (see sections 6.3.2.2 and 6.3.2.3) as well as location and time adverbial phrases, and subordinate clauses expressing the manner of an action and other ideas. Examples are:

Kea yaen Tamag nga raam. (goal of motion)
'Tamag went there.'

Kea yib Tamag u roem. (source of motion)
'Tamag came from there.'

Bea yaenyaen u laen ea naqun. (location)
'He is walking around in the house.'

Raa yib gabuul. (time)
'He will come tomorrow.'

Raa yib ni bachaan ea ngea guyeem. (purpose subordinate clause)
'He will come in order to see you.'

Yaen 'to go' and *yib* 'to come' are the most important verbs of motion, and are two of the most irregular verbs in Yapese (see section 5.5).

Yaen (and, to a lesser extent, *yib*) is very commonly used as the first verb in a sequential conjunction (see section 7.5.3), as illustrated by the following examples:

Ngea yaen i riin'.
'He's going to go and do it.'

Ngu gu waen ngu gu guy.
'I'm going to go and see him.'

Action Transitive Verb Sentences

7.2.2.5 These sentences are the common type of transitive verb sentences. They contain verb phrases with verbs that describe some action. An example is:

Bea toey Tamag ba naqun.
'Tamag is building a house.'

All transitive verb sentences have a direct object as well as a subject. If the direct object is expressed by a noun phrase, it immediately follows the subject, as in the following sentence:

Kea liiq Tamag ea rea baabiy niir.
'Tamag killed that pig.'

In this sentence, *Tamag* is the subject, because it comes right after the verb phrase. The direct object is *rea baabiy niir* 'that pig (near you)', coming immediately after the subject.

As pointed out in section 7.2.2, if only one noun phrase follows the verb phrase, there is a possibility of ambiguity in that one cannot tell whether this noun phrase is subject or direct object (if the meaning of the verb permits). An example is:

Kea liiq ea kuus roog.

which may mean either 'He killed my dog' (with *kuus roog* 'my dog' as direct object), or 'My dog killed it' (with *kuus roog* as subject). Another example of this sort of ambiguity, with a subject pronoun in the verb phrase is:

Ka ra liqeew Tamag.

which may mean either 'They two killed Tamag' (with *Tamag* as direct object), or 'He and Tamag killed it' (with *Tamag* as subject).

If the verb phrase does not have a subject number marker, the direct object, if expressed by a personal pronoun, is expressed by a direct object pronoun suffix attached to the verb (see section 3.3.4), as in the following example:

Raa piqmeew Tamag.
'Tamag will push you two.'

However, if the verb phrase does have a subject number suffix, then direct object suffixes may not be attached. Rather, an independent pronoun in the normal direct object position (following the subject) must be used. Thus one says:

Ka ra piqeew Tamag guur.
'He and Tamag pushed you.'

One may not say:

**Ka ra piqeeweem Tamag.*

If the verb phrase has a subject number suffix, and the direct object is to be expressed by a combination of a personal pronoun plus a noun phrase, one would expect something like the following:

Daa gu piningeew Tinag yow Tamag.
'Tinag and I didn't call him and Tamag.'

However, such sentences are very clumsy and difficult to understand, and the direct object in such a case would often be focused, to give:

Yow Tamag ea daa gu piningeew Tinag yow.
'It's him and Tamag that Tinag and I didn't call.'

Action transitive verbs include a great many transitive verbs. These may normally be used with time and location adverbial and prepositional phrases, and also with subordinate

clauses telling the manner, purpose, and so forth of an action. Some examples are:

Raa toey Tamag ba naqun u Keng. (location)
'Tamag will build a house in Keng.'

Ngea ngoongliy ea chiineey. (time)
'He's going to do it now.'

Maa riin' ni ba feal' rogon. (manner subordinate clause)
'He does it well.'

Some action transitive verbs may also be used with indirect object prepositional phrases, as in the following example:

Daab mu riin' ngoog.
'Don't do it to me.'

Action transitive verbs may not be used with the stative marker *ba*. Thus one may not say:

**Gu ba riin'.*

This is in contrast with verbs such as *qadaag* 'to want', to be discussed in section 7.2.2.11 below, which may be used with the stative marker *ba*, as in the following example:

Gu ba qadaag.
'I want it.'

Motion Transitive Verb Sentences

7.2.2.6 Motion transitive verbs are verbs that are like action transitive verbs in general, but which imply the motion of an object. An example is:

Kea taey nga dakean ea teebel.
'He put it on top of the table.'

The difference between motion transitives and action transitives is that motion transitives are normally used with goal of motion and source of motion adverbial and prepositional phrases (see sections 6.3.2.2 and 6.3.2.3). Examples are:

Kea taey nga raam. (goal of motion)
'He put it there.'

Kea feek u laen ea waey rook'. (source of motion)
'He took it from his basket.'

In other respects these verbs are not different from action transitive verbs.

Bitransitive Verb Sentences

7.2.2.7 **Bitransitive verbs** are verbs such as *piiq* 'to give' which involve the transfer of something from one person to another. Some such verbs, as *piiq* 'to give', *daag* 'to show', *l'oeg* 'to send someone to somebody' involve the transfer (sometimes only figuratively, as with *daag* 'to show') of something from the subject of the sentence to the person named in an indirect object phrase. Examples are:

Raa piiq ea ggaan ngoog.
'He will give me food.'

Mu l'oeg ea chaqneey ngaak'.
'Send this person to him.'

In the above sentences the subject is where the thing to be transferred starts (*ggaan* 'food' in the first example), and the indirect object (*ngoog* 'to me' in the first example) indicates the person where the thing transferred ends up.

Some bitransitive verbs involve the transfer of an object from something or someone marked with a *roo-* prepositional phrase to the subject. Such a verb is *chuwqiy* 'to buy', as in the following example:

Kea chuwqiy Tamag ea ggaan room?
'Did Tamag buy food from you?'

If the answer to this question is "yes," it indicates that the food began with 'you' (*room* 'from you'), and ends up with the subject *Tamag*.

As discussed briefly above in section 7.2.2, when an indirect object phrase is expressed only by the preposition *nga* with a suffixed pronoun, this word may be placed in front of the direct object, and perhaps in front of the subject as well. Thus one may say:

Mu piiq ea langad ngoog.
'Give me some betel nut.'

or also:

Mu piiq ngoog ea langad.
'Give me some betel nut.'

And in addition to saying:

Kea piiq Tamag ea langad ngoog.
'Tamag gave me some betel nut.'

it may be that one may also say either of the two sentences:

Kea piiq Tamag ngoog ea langad.
Kea piiq ngoog Tamag ea langad.

to mean the same thing.

Experience Transitive Verb Sentences

7.2.2.8 Experience verbs are verbs like *rungqag* 'to hear' in which the subject does not act on the object, but rather senses the object through sight, hearing, and so forth. An example is:

Bea rungqageeg.
'He hears me.'

Such verbs may not be used with indirect object prepositional phrases. One may not say:

**Bea rungqageeg ngaak'.*

There are not many such experience verbs. Some others are *guy* 'to see', *thaemiy* 'to feel', and *riiq* 'to taste'. In other respects these verbs are like action transitive verbs.

Causative Verb Sentences

7.2.2.9 Causative transitive verbs are verbs which contain the meaning 'to cause'. They are usually derived from intransitive verbs or adjectives. Some examples are:

Mu moleag ea rea bitiir neey.
'Put this baby to sleep, cause it to sleep.'

Bea mool ea rea bitiir neey.
'This baby is sleeping.'

Ku gu thingeeg
'I leaned it down, caused it to lean.'

Kea thig.
'It leaned.'

Mu qodeag.
'Wake him up, cause him to wake up.'

Kea qod.
'He woke up.'

Mu roowroow naag.
'Make it red, cause it to be red.'

Kea roowroow.
'It is (has become) red.'

Kea yaen naag nga Donguch.
'He caused it to go to Donguch.'

Kea yaen nga Donguch.
'It went to Donguch.'

As the above examples illustrate, most causatives are derived using the transitive suffix *-eeg* (see section 3.3.1.3) or the transitive verb particle *naag* (see section 5.4.7). However, not all words derived using these two transitive verb forming morphemes are causative. Consider the following examples:

Mu qayweeg.
'Help him.'

Mu piiq ea qayuw ngaak'.
'Give him some help.'

Yaed bea puruuy'.
'They are discussing.'

Yaed bea puruuy' naag Tamag.
'They are discussing Tamag.'

The verbs *puruuy' naag* 'to discuss something', derived from *puruuy'* 'to discuss, have a meeting' and *qayweeg* 'to help', from *qayuw* 'help' do not appear to be causative in any special sense.

Whether a particular causative sentence may contain such adverbial and prepositional phrases as time, location, indirect object, and so on depends on the meaning of the particular verb.

Incorporated Object Sentences

7.2.2.10 Incorporated object constructions consist of an intransitive verb and a direct object, the whole being used as an intransitive verb (see section 5.4.6 for full discussion). Examples are:

Qu ra thuum' qachif gow.
'They two were cutting coconut toddy.'

Gu bea chuwaay' mareaw.
'I am buying copra.'

Incorporated object sentences are like intransitive sentences. Thus the intransitive subject number markers *gow* and *gaed* are used in the verb phrase. The sentence may have a noun phrase subject which immediately follows the verb phrase, as in the following example:

Qu ra thuum' qachif gow Tamag.
'He and Tamag were cutting coconut toddy.'

Incorporated object sentences may not have a direct object (other than the object noun which occurs in the verb phrase itself). They may, like other intransitive sentences, normally be used with time and location adverbial and prepositional phrases if the meaning is appropriate.

Incorporated object sentences always have a corresponding transitive sentence. Thus corresponding to the examples given are the following transitive sentences:

Qu ra th'äbeew ea qachif.
'They two were cutting coconut toddy.'

Gu bea chuwqiy ea mareaw.
'I am buying copra.

Qu ra th'äbeew Tamag ea qachif.
'He and Tamag were cutting coconut toddy.'

This pairing of incorporated object sentences and transitive sentences corresponds to the fact, pointed out in section 5.4.6, that an intransitive verb may only be used in an incorporated object construction if it has a transitive counterpart.

Other Verb Types

7.2.2.11 There are many different intransitive and transitive verbs in Yapese that do not fit well into the above types of verbs. Some of these have been mentioned briefly under the specific types of verbs above. An example is *chuwqiy* 'to buy', discussed under the heading bitransitive verbs, but which does not, like other bitransitives, take indirect objects (section 7.2.2.7 above). Other verb types that differ somewhat from the above types are intransitive verbs of talking such as *noon* 'to talk', *puruuy'* 'to have a discussion', and others.

Certain verbs will be discussed individually here. Many of these verbs have special relationships to subordinate clauses which may be used with them. The verbs to be discussed here are:

baey	'to exist'
paag	'to let'
digeey	'to let'
n'ënigin	'to cause'
mang	'to become'
fal'eag	'to fix, make right'
naang	'to know'
leam naag	'to think'
taafinaey naag	'to think'
yoeg	'to say'
gaqar	'to do or say like this'
qadaag	'to want, to like'
fiith	'to ask'

Baey 'to exist' is used as an intransitive verb (and thus does not have a direct object). *Baey* has two basic different uses. One is with a location phrase, to indicate that something exists in a place. Examples are:

Gu baey u tafnaag.
'I am at home, at my place.'

Baey fa gäl bpiin u Donguch.
'Those two women are in Donguch.'

Yow baey Tamag u booch roorow.
'He and Tamag are in their boat.'

This verb may also be used with a possessed noun or a noun phrase containing a *roo-* possessive phrase, to mean 'to have', as in the following examples:

Baey walaageeg.
'I have a brother.'

Baey ea waey roomeew?
'Do you two have a basket?'

As is discussed in detail in section 5.4.8.1, the verb *baey* 'to exist' has the special form *moey* when it is used other than in the present tense. Thus one may say:

Qu gu moey u tafean ea ngiyaal' neam.
'I was at his house at that time.'

Qu ra moeyeew u Donguch.
'They used to be in Donguch.'

When the subject is third person singular *i* 'he, she' and the

tense marker *qu* 'non-present progressive/habitual' is used, the combination *qii* is produced, and the verb *moey* is pronounced *mmoey*, as in the following example:

Fowaap ea qii mmoey riy.
'Yesterday he was there.'

Apparently the only past tense marker that *moey* may be used with is *qu* 'non-present progressive/habitual', and the only future marker is *raa* 'simple future'. Thus one may say:

Fowaap ea qii mmoey u roem.
'Yesterday he was there.'

Gabuul ea raa moey u roem.
'Tomorrow he will be there.'

Paag and *digeey* both mean 'to let, permit', as in:

Kea paag Tamag Taman ni ngea yaen.
'Tamag let Taman go.'

Fowaap ea mu digyeeg ni ngu gu riin'.
'Yesterday you let me do it.'

In each case the verb has a direct object and in addition (following the direct object if it is a noun phrase) a subordinate clause with *ni* expressing what the person named by the direct object was permitted to do.

Note that in the above sentences, the tense of the verb phrase is past (perfect in the first case, simple past in the second). These verbs may only be used with *ni* subordinate clauses in the past tense. If the verb *paag* or *digeey* is put into a future tense (or the imperative, or command form, which is also future), then *ni* subordinate clauses may not be used. That is, one may not say, as a command, the following two sentences:

**Mu digyeeg ni ngu gu riin' gabuul.*
**Mu pageeg ni ngu gu riin' gabuul.*

Rather, to express this meaning, one must use the type of sentence combination called sequential conjunction (discussed in section 7.5.3 below), and say the following:

Mu pageeg ngu gu riin' gabuul.
'Let me do it tomorrow.'

Mu digyeeg ngu gu riin' gabuul.
'Let me do it tomorrow.'

Note that the verb *paag* is also used as an ordinary motion transitive verb (see section 7.2.2.6 below) meaning 'to drop, let go', as in the example:

Ka mu paag ea waey room.
'You dropped your basket.'

N'ënigin 'to cause' (which has the special form *n'ënigiy-* when used with singular object pronoun suffixes) is used as first verb in sequential conjunctions, like *paag* and *digeey* 'to let', as in the following examples:

Kea n'ënigiyeeg ku guub u roem.
'He caused me to come from there.'

Mu n'ëniginrow nga ra ngoongliyeew.
'Cause them (two) to do it.'

Mang 'to become' seems in certain respects to be a transitive verb. In the first place, it is used with both a subject and an object, as in the following example:

Kea mang Tamag reeb ea toogtaa.
'Tamag has become a doctor.'

Another fact about *mang* which makes it seem like a transitive verb is that it is used with the transitive subject number suffixes *-eew* 'dual' and *-eed* 'plural', as in the following example:

Ka ra mangeew Tamag toogtaa.
'He and Tamag became doctors.'

However, in certain respects this verb does not behave like a normal transitive verb. In the first place, a normal transitive verb may be used with object pronoun suffixes, but *mang* may not be used with object pronoun suffixes. Furthermore, normal transitive verbs may be used without any expressed object, as in the example:

Kea guy.
'He saw him.'

In this case, the verb *guy* 'to see' is used without any expressed direct object, yet it is translated with a direct object 'him' (or, it could be, 'her' or 'it'). In other words, normal transitive verbs always have at least an implied direct object. *Mang*, however, must always have an expressed direct object. One cannot say, for example, something like:

**Kea mang.*
'He became it.'

Another difference between *mang* and normal transitive verbs is that the direct object of *mang* does not obey all the rules that noun phrases as direct objects must normally obey. For example, consider the sentence:

Kea mang Tamag toogtaa.
'Tamag became a doctor.'

In this sentence, the noun phrase connector *ea* is not used before *toogtaa* 'doctor', although one expects it normally before a noun phrase of this type, as in the following example:

Kea guy Tamag ea toogtaa.
'Tamag saw a doctor.'

The indefinite article *ba* may not be used with the direct object of *mang*. Rather, the same idea is expressed using the word *reeb* 'one', as in:

Kea mang Tamag reeb ea toogtaa.
'Tamag became a doctor.'

The reason for this is presumably the fact that *ba* means something like 'a certain one'. Thus a sentence like:

**Kea mang Tamag ba toogtaa.*

would mean something like 'Tamag became a certain doctor'; that is, he changed into another person.

In certain respects, sentences like these would be better explained if we considered the verb *mang* to be an impersonal verb, that is one without any subject or object (see section 5.4.8.2 above). Then the "subject" of *mang* in the above examples would be the nominal sentence (see section 7.2.1 above for a discussion of nominal sentences):

Reeb ea toogtaa Tamag.
'Tamag is a doctor.'

As will be discussed in section 7.5.2 below, the two subordinate conjunctions *mangea* and *goomangea* 'if' may be related to *mang*. These are illustrated by the examples:

Goomangea gaeg guur, ma ku gu waen.
'If I were you, I would go.'

Mangea gu ma naang ni raa muub, ma ku guub gu guyeem.
'If I had known that you were coming, I would have come to see you.'

In the first of these two examples the nominal sentence:

Gaeg guur.
'I am you.'

follows *goomangea*. In the second example, the verbal sentence:

Gu ma naang ni raa muub.
'I know you will come.'

follows *mangea*. Thus, we have here two words which may be related to *mang* 'to become' and which are followed by sentences. Therefore, it may be that *mang* is followed by a nominal sentence in the examples of this section such as:

Kea mang Tamag reeb ea toogtaa.
'Tamag has become a doctor.'

Fal'eag 'to fix, make better' is one of several verbs which may have an infinitive phrase in the sentence (infinitive phrases are discussed in detail in section 6.5), as in the following example:

Mu fal'eag i ngoongliy ea marweel room.
'Do a good job at doing your work.'

This sentence contains the infinitive phrase:

i ngoongliy ea marweel room
'to do your work'

Some other verbs may also be used with infinitive phrases. One example is *qayweeg* 'to help', as in the following example:

Kea qaywegeeg i ngoongliy ea marweel roog.
'He helped me do my work.'

Most verbs, however, may not be used with an infinitive phrase, and it is not known which verbs may and which may not be so used.

Naang 'to know', *leam naag* 'to think', *taafinaey naag* 'to think', *yoeg* 'to say', and other verbs meaning 'to think', 'to say', and so forth may be used with a subordinate clause as direct object indicating the thing that was said, thought, and so forth. Examples are:

Ga ma naang ni kea yib?
'Do you know that he came?'

Ga bea leam naag ni raa yib?
'Do you think that he will come?'

Bea taafinaey naag ni ba riyuul'.
'He thinks it's true.'

Kea yoeg fa pi girdiiq ni ba qadaag Tamag ea tamaagow.
'Those people said that Tamag likes cigarettes.'

If the thing said or thought is uncertain, that is if its truth is not known, or if it is a question, then the thing said or thought is not put in a *ni* subordinate clause, but in a *ko* subordinate clause (see section 6.4.1), as in the following examples:

Daa gu naang ko raa yib, fa daangaq.
'I don't know if he will come or not.'

Daa goeg ko raa yib, fa daangaq.
'I didn't say whether he would come or not.'

However, *ko* subordinate clauses may not be used with *leam naag* 'to think' or *taafinaey naag* 'to think', because these verbs assume that the thing thought is true. Since putting a statement in a *ko* subordinate clause says that its truth is uncertain, this contradicts the meanings of these verbs.

Qadaag 'to want, to like' and verbs with similar meanings may be used with a *ni* subordinate clause as direct object, indicating the thing the subject wants to happen. Examples are:

Gu ba qadaag ni ngu gu qabiich.
'I want to eat.'

Gu ba qadaag ni ngu gu mool.
'I want to sleep.'

Qadaag may not be used with *ko* subordinate clauses.

Qadaag is normally used with the stative marker *ba*, as in the example:

Ba qadaag ni ngea guy.
'He wants to see him.'

However, *qadaag* may also be used with other tense markers, as in the example:

Raa qadaag ni ngea guy.
'He will want to see him.'

Gaqar is often translated 'to say', as in the following example:

Kea gaqar, "Ngu gu waen nga raam ea chiineey".
'He said, "I'm going to go there now"'.

Gaqar is not a transitive verb, like *yoeg* 'to say'. Rather, it is an intransitive verb, and thus is used with the intransitive subject number markers *gow* 'dual' and *gaed* 'plural', by contrast with *yoeg* which is transitive. Consider the following examples:

Ka roeg neew ni nga raanow nga raam.
'They two said that they were going to go there.'

Ka ra gaqar gow, "Ngu gu waarow nga raam".
'They two said, "We're going to go there"'.

The above two sentences illustrate the fact that *yoeg* 'to say' is used with an **indirect quotation**, while *gaqar* 'to say' is used with a **direct quotation**. In a direct quotation, one simply repeats what the person originally said. Thus, if Tamag had originally said:

Daab gu marweel ea dabaq.
'I'm not going to work today.'

then using a direct quotation with the verb *gaqar*, one would simply repeat what Tamag said, as follows:

Kea gaqar Tamag, "Daab gu marweel ea dabaq".
'Tamag said, "I'm not going to work today"'.

However, if we were to quote Tamag using an indirect quotation, we would change his statement from the first person (with *gu* 'I') into the third person (with *i* 'he'), and say:

Kea yoeg Tamag ni daab i marweel ea dabaq.
'Tamag said that he wasn't going to work today.'

Furthermore, as these examples illustrate, with a direct quotation with *gaqar* the quoted statement is not used with *ni*, as it is with *yoeg* 'to say'.

Gaqar may also be used with an indirect quotation. In this case also *ni* is not used. Rather, the statement to be quoted is changed into third person, as with *yoeg* 'to say', and the noun phrase connector *ea* is placed before it, as in the following example:

Kea gaqar ea daab i marweel ea dabaq.
'He said he wasn't going to work today.'

Gaqar has been translated 'to say', but its meaning is actually something like 'to do or say like this'. Thus one can say:

Mu gaqar—
'Do like this—'

and then perform some action, expecting the person to whom you are speaking to duplicate the same action.

Fiith 'to ask' may be used with a *ko* subordinate clause (see section 6.4.1), as in the following example:

Mu fiith ko raa yib fa daangaq.
'Ask him if he's coming or not.'

In this case the meaning of the sentence is always that the truth of the sentence of the *ko* clause is uncertain.

FOCUSED SENTENCES

7.3 Focused sentences are produced from normal simple sentences by the following process:

1. Any actant (the term actant is defined in section 7.2) of the simple sentence, such as the subject, object, time phrase, and so forth is selected to be focused
2. This actant is moved to the front of the sentence and is now called the **topic** of the sentence, and the noun phrase connector *ea* is inserted
3. In the place in the simple sentence where the focused actant originally was (or, in the case of subject and object focus, in the verb phrase) a pronoun is used.

To understand this process, consider the following simple sentence:

Ku guub u Donguch.
'I have come from Donguch.'

To perform step one, let us suppose that we choose the source of motion actant *u Donguch* 'from Donguch' to focus. Step two tells us to move the actant to the front of the sentence. This gives us:

U Donguch ea ku guub.

In Yapese, when prepositions would come at the beginning of a sentence, they are normally dropped. Dropping *u* from the above string gives us the string (which is still not a correct sentence):

Donguch ea ku guub.

Now we perform step three, which tells us to put a pronoun in the sentence in the place where the focused actant used to be. In this case the pronoun to be used is the special impersonal form *riy* 'of it', from the preposition *roo-*, which gives us:

Donguch ea ku guub riy.
'It is Donguch that I came from.'

which is a correct focused sentence. The topic of the sentence is *Donguch*.

If focusing moves a personal pronoun, then an independent personal pronoun is put in topic position at the front of the sentence. This process may be illustrated by focusing the subject of the same simple sentence we have been discussing, namely:

Ku guub u Donguch.
'I came from Donguch.'

The subject of this sentence is *gu* 'I'. Focusing this, and making it into an independent personal pronoun, we have the focused sentence:

Gaeg ea ku guub u Donguch.
'It is I who came from Donguch.'

In this sentence it is the subject which is focused. The pronoun which is left in the sentence (according to rule 3) is simply the normal subject pronoun *gu* 'I' of *guub* 'I came'.

If an actant is expressed wholly by a noun phrase in Yapese, then any associated pronoun is normally in the third person singular. An example is the following sentence:

Kea marweel fa pi girdiiq.
'Those people have worked.'

This is a rule which has been illustrated many times so far. The only exception to this rule is in focused sentences. In focused sentences, the pronoun left in the sentence must always agree in person and number with (that is, be the same in person and number as) the topic, or focused actant. Thus, if the subject of the above sentence is focused we have:

Fa pi girdiiq ea ka ra marweel gaed.
'It is those people who have worked.'

When a noun phrase is focused which refers completely to inanimate objects, such as houses, stones, trees and the like, apparently only a third person singular pronoun (or, where one

is available, an impersonal pronoun, such as *riy* 'of it') is left in the sentence by rule 3. Thus from the simple sentence:

Raa muul fa pi chuguum.
'Those things will fall.'

the focused sentence is:

Fa pi chuguum ea raa muul.
'Those things are what will fall.'

rather than the presumably ungrammatical sentence:

**Fa pi chuguum ea yaed raa muul.*

When the subject of the sentence is focused, it is the subject pronoun of the verb phrase which is the pronoun left by rule 3 above. Examples are:

Tamag ea kea chuwqiy ea mareaw.
'It is Tamag who bought the copra.'

Gaeg ea ngu gu riin'.
'It is I who am going to do it.'

Gamow Tamag ea ku gu waarow.
'It is I and Tamag who went.'

Yow ea yow bea marweel.
'It is they two who are working.'

Qiir ea ngea yaen i fitaeq.
'It is he who is going to go fishing.'

Fa gäl bitiir ea yow bea faafeal.
'It is those two children who are playing.'

Tamag ngea Taman ngea Tinag ea ka raenoed nga Keng.
'It is Tamag, Taman and Tinag who went to Keng.'

When the direct object of the sentence is focused, it is the object pronoun suffix on the verb which is the pronoun left remaining in the sentence by rule 3. Of course, if the focused direct object is in the third person singular, then no pronoun suffix is left as no third person singular pronoun object suffix is ever used in Yapese. Examples are:

Yow Tamag ea ku gu guyrow.
'It is him and Tamag that I saw.'

Gaeg ea guyeeg Tamag.
'It is me that Tamag saw.'

Qiir ea ku gu guy.
'It is him that I saw.'

Tamag ea ku gu guy.
'It is Tamag that I saw.'

Fa gäl baabiy ea gu liqrow.
'It is those two pigs that I killed.'

Fa pi girdiiq ea gu guyraed.
'It is those people that I saw.'

If a subject number suffix is used on the verb, then the object pronoun which is left by rule 3 is found in the normal object position. An example is:

Gamow Tamag ea ra guyeew gamow.
'It is me and Tamag that they two saw.'

Apparently in this case, the object pronoun may optionally be omitted, so one may apparently say:

Gamow Tamag ea ra guyeew.
'It is me and Tamag that they two will see.'

As is always the case when only a single noun phrase is found following the verb phrase in a Yapese sentence, one cannot tell whether this noun phrase is subject or object. Thus focusing produces possibilities for ambiguity. Thus the sentence:

Tamag ea kea guy Tinag.

is ambiguous. It may either mean:

'It is Tamag that saw Tinag.'

with *Tamag* as focused subject and *Tinag* as direct object, or it may mean:

'It is Tamag that Tinag saw.'

with *Tamag* as focused direct object, and *Tinag* as subject.

When a location or source of motion phrase is focused, the impersonal pronoun *riy* 'at it, of it, from it' is left in the sentence. Examples are:

Donguch ea gu feek riy.
'I got it from Donguch.'

Tafean Tamag ea baey riy.
'It's Tamag's house that it is at.'

If a goal of motion actant is focused, the impersonal pronoun *ngaay* 'to it' is left in the sentence. Examples are:

Donguch ea ngu gu waen ngaay.
'It is Donguch that I'm going to go to.'

Rea teebel neam ea nga mu taey ngaay.
'It's that table that you're going to put it on.'

If the possessor of something is focused, the possessive pronoun, or a pronoun with *roo-*, is left in the sentence. Thus one says:

Qiir ea ka mu guy walaagean?
'Is it him whose brother you saw?'

Gaeg ea ka mu feek ea waey roog.
'It is me whose basket you have taken.'

If the focused actant is a person from whom someone has bought something, taken something, and soon, then a *roo-* prepositional phrase is left in the sentence, as in the example:

Tamag ea ku gu chuwqiy rook'.
'It is Tamag that I bought it from.'

If a time phrase or adverb is focused, no pronoun is left in the sentence. Examples are:

Dabaq ea ngu gu waen.
'Today I'm going to go.'

Fowaap ea gu guy.
'It was yesterday that I saw him.'

The subject of a nominal sentence may also be focused. Thus from the simple nominal sentence:

Walaagean Tamag.
'Tamag is his brother.'

one may form the focused sentence:

Tamag ea walaagean.
'It's Tamag who is his brother.'

As pointed out in section 7.2.1, it is not always possible to tell from the structure of a nominal sentence whether it is focused or not. One can tell that the above sentence is focused because the noun phrase connector *ea* is used before the possessed noun *walaagean* 'his brother'.

More than one actant in a sentence may be focused. Thus, consider the simple sentence:

Ngu gu waen nga Donguch.
'I'm going to go to Donguch.'

We may focus the location phrase of this sentence, giving us:

Donguch ea ngu gu waen ngaay.
'It is Donguch that I'm going to.'

We may then further focus the subject *gu* 'I', giving us:

Gaeg ea Donguch ea ngu gu waen ngaay.
'It is I who, as for Donguch, I'm going there.'

If a combined pronoun plus noun phrase is used for a particular actant in the sentence, either the whole combined noun phrase or else some portion of the whole noun phrase may be focused. In the following simple sentence:

Ka ra baed chaqneey ngea Tamag u Donguch.
'This person, Tamag and them came from Donguch.'

the subject is *yaed chaqneey ngea Tamag* 'them with this person and Tamag'. Following are different possible ways of focusing part or all of the subject of this sentence:

Chaqneey ea ka ra baed Tamag u Donguch.
'It is this person who came with them and Tamag from Donguch.'

Tamag ea ka ra baed ea chaqneey u Donguch.
'It is Tamag who came with them and this person from Donguch.'

Chaqneey ngea Tamag ea ka ra baed u Donguch.
'It is this person and Tamag who came with them from Donguch.'

Yaed chaqneey ngea Tamag ea ka ra baed u Donguch.
'It is this person, Tamag and them who came from Donguch.'

and perhaps also even:

Yaed ea ka ra baed chaqneey ngea Tamag u Donguch.
'It is them who came with this person and Tamag from Donguch.'

Interrogatives (question words) which function as an actant in the sentence are almost always focused. Examples are:

Maang ea ngea guy?
'What is he going to see?'

Miniiq ea raa yaen?
'Who will go?'

Quw ea baey riy?
'Where is it?'

Ngaan ea ngea yaen ngaay?
'Where is he going to?'

Qiin ea raa feek?
'How many will he take?'

Wuqin ea raa yib?
'When will he come?'

Mingyaal' ea raa yib?
'What time will he come?'

However, *quw* 'where?' and *ngaan* 'to where?' are commonly used in their normal position at the end of the sentence, as in the following examples:

Baey u quw?
'Where is it?'

Nga mu maen ngaan?
'Where are you going to?'

With the verb *woed* 'to be like, same as' the subject, if a noun phrase, is almost always focused. Examples are:

Tamag ea woed Taman.
'Tamag is like Taman.'

Tamag ea woed reeb ea toogtaa.
'Tamag is like a doctor.'

However, if the subject is a personal pronoun the stative marker *ba* is used, and the sentence need not be focused, as in the sentence:

Ga boed Tamag.
'You are like Tamag.'

The location adverbs *raam* 'over there', *raay* 'here', and *yer* 'there near you' may be used as predicate of a focused nominal sentence of a special type. Examples are:

I gaeg ea raay.
'It is me here.'

I guur ea yer.
'It is you there.'

Fa chaaq ea raam.
'It is that person there.'

Sentences of this sort are used to point someone out.

Raay, *raam*, and *yer* may be used with topic *qiir* 'he' in focused position with a noun phrase following the predicate in subject position, as in the following examples:

Qiir ea raay Tamag.
'This here is Tamag.'

Qiir ea yer ea bin ni qu gu weeliy marngaqgean ngoom.
'That there is the one I was telling you about.'

Qiir ea raam fa rea n'ean.
'That there is the thing (I mentioned in the past).'

This type of focused sentence may also be used with no noun phrase in subject position, as in the example:

Qiir ea raam.
'That's it there.'

SENTENCE ADVERBS

7.4 Sentence adverbs are words or particles which are inserted at various places in sentences, but particularly at the beginning of the sentence, immediately before the verb phrase, and, to a lesser extent, immediately before the noun phrase.

Sentence adverbs are not peculiarly a part of any phrase type (such as verb phrase or noun phrase) and therefore they were not discussed under the headings of the various phrase types. They are discussed here all together in one section because they belong with the sentence as a whole rather than with one or another particular part of the sentence.

Some sentence adverbs are normally used only in front of the whole sentence, and are followed by the noun phrase connector *ea*. An example is *bachaan* 'its purpose, because', as in the example:

Bachaan ea dabuug.
'It's because I don't like him.'

Adverbs of this type appear to be in focused, or topic position in the sentence (see section 7.3 above), and therefore they are called **focused adverbs**. They will be discussed in section 7.4.1.

Other sentence adverbs may be used in various places in the sentence, not only at the beginning, and do not have the character of focused adverbs. These **unfocused adverbs** are discussed in section 7.4.2. An example is:

Waa qiir ea bea marweel.
'It's as if he is the one who is working.'

Chaqneey ea waa bea marweel.
'This person is as if he were working.'

FOCUSED ADVERBS

7.4.1 The following focused adverbs will be discussed:

bachaan	'its reason, because'
suusun	'to be supposed to, to imitate'
sanaa	'maybe, perhaps'
daathi	'to be not'
daawor	'not yet'
woedkee	'as if'
boedkee	'as if'

Bachaan 'its purpose, because' has the form of a possessed noun. It is not, like English *because*, used to connect sentences, but occurs only as a focused adverb (the conjunction *yae* 'because' is used to connect sentences and is discussed in section 7.5.1). Examples are:

Bachaan ea ngu gu waen ko fitaeq.
'Because I'm going to go in order to fish.'

Gu ba qadaag ni ngu gu waen ni bachaan ea ngu gu chuwqiy ea falowaa.
'I want to go because I'm going to buy some bread.'

The last example above illustrates the fact that, as any other sentence, sentences with the focused adverb *bachaan* 'its purpose' may be used as subordinate clauses in other sentence in this case to express the purpose for which one does something.

Suusun means 'to be supposed to', and is illustrated by the following examples:

Suusun ea ngu gu waen.
'I'm supposed to go.'

Suusun ea daab qu mu riin'.
'You shouldn't do that.'

As other focused adverbs, *suusun* may be used with a sentence which also has another element focused, since more than one element of the sentence may be focussed (see section 7.3 for further discussion). Thus one may say:

Suusun ea qiir ea ngea yaen.
'It's supposed to be him that goes.'

In this sentence, first the subject *i* 'he' has been focused as *qiir* 'he', and then *suusun* has been placed in focused position in front of *qiir*. The reverse order may be used as well (with *suusun* focused first), as in the sentence:

Qiir ea suusun ea ngea yaen.
'It's him that is supposed to go.'

Sanaa means 'perhaps, maybe', and is illustrated by the following examples:

Sanaa raa yib.
'Perhaps he will come.'

Sanaa Tamag ea raa yib.
'Perhaps it is Tamag who will come.'

Sanaa is not followed by the noun phrase connector *ea*, and thus may not appear to be a focused adverb. It is not followed by *ea*, however, because it ends in a vowel, and when these two vowels come together the second is dropped. It is a focused adverb as it can only occur in front of the whole sentence.

Daathi means 'to be not'. It is used before whole sentences, and is the normal way of negating nominal sentences and sentences with a noun or adjective as head of the verb phrase. *Daathi* ends in a vowel, and thus, like *sanaa* 'maybe' above, is not followed by the noun phrase connector *ea*. Examples are:

Daathi qiir Tamag.
'He is not Tamag.'

Daathi ba roowroow ea bineey.
'This is not red.'

Daathi gaeg ea gu raa yaen nga raam.
'It is not I who will go there.'

Daathi gu raa yaen nga raam.
'It is not that I'm going to go there.'

Apparently some dialects of Yapese say *gaathi* or *daagthi* to mean the same as *daathi*.

Daawor 'not yet' is illustrated by the following sentences:

Daawor gu guy.
'I haven't seen him yet.'

Daawor i riin'.
'He hasn't done it yet.'

Daawor i maenigil.
'It's not good yet.'

Daawor is used primarily before suffixed pronoun verb phrases, as in the above examples, and might seem to be simply a tense marker to be used in suffixed pronoun verb phrase (see section 5.3 for a discussion of suffixed pronoun verb phrases). However, *daawor* may also be used by itself, for example in answering questions, as in the following conversation:

Kea yib? *Daawor.*
'Has he come?' 'Not yet.'

This usage is similar to that of *sanaa* 'maybe', which is a focussed adverb, as in:

Raa yib? *Sanaa.*
'Will he come?' 'Maybe.'

Therefore, *daawor* has been treated as a focused adverb.

When *daawor* occurs at the end of a sentence, it is sometimes pronounced as *daawoq*. Sound changes of this sort are discussed in section 2.5.6

Woedkee (also pronounced *boedkee*) means 'as if', as in the following examples:

Boedkee ga bea fitaeq.
'It is as if you are fishing.'

Kea minmin ni woedkee dea naang faan ea n'ean ni gu bea yoeg.
'He laughed as if he didn't understand what I was saying.'

Unfocused Adverbs

7.4.2 The unfocused adverbs to be discussed are:

waa	'as if'
thingar	'should, must'
daathngar	'should, must'
goonp'an	'approximately'
goqo	'only'
yigqo	'only'
taqa	'just, only'
yugu	'another, different, more, additional'
ku	'also'
ka	'still'
ri	'very, really'
fin	'just now, immediately'

Waa 'as if' is illustrated by the following examples:

Waa ga bea fitaeq.
'It's as if you are fishing.'

Waa qiir ea bea marweel.
'It's as if he is the one who is working.'

Chaqneey ea waa bea marweel.
'This person is as if he were working.'

Waa is apparently not used immediately before the verb phrase in a focused sentence if the focused element is a pronoun. Thus one may apparently not say:

**Qiir ea waa bea marweel.*

Thingar and *daathngar* mean 'have to, ought', but *daathngar* is stronger in meaning than *thingar*. They are used immediately before the verb phrase, as in the following examples:

Thingar gu waen.
'I should go.'

Daathngar gu waen.
'I have to go.'

Goonp'an means 'approximately', and may either be used before the whole sentence, or before a noun phrase. Some examples are:

Goonp'an dalip ea kalook, ma kea yib.
'About three o'clock he will come.'

Goonp'an raa gabuul, ma kea yaen.
'About tomorrow he will have gone.'

Gu ba qadaag goonp'an dalip.
'I want approximately three.'

Goqo and *yigqo* mean 'only'. They are used before the topic noun phrase of a focused sentence, as in the following examples:

Goqo gaeg ea gu raa yaen nga raam.
'Only I will go there.'

Yigqo bineey ea gu ba qadaag.
'It is only this one that I want.'

When *goqo* and *yigqo* are used in this way before the topic noun phrase of a focused sentence, they mean 'only'.

When *goqo* or *yigqo* is used directly before a verb phrase,

their meaning is very different. In this case the word *goqo* (or *yigqo*) refers to some noun phrase or pronoun in the sentence itself (excluding the topic if it is a focused sentence), and the meaning is 'all' of that noun phrase or pronoun. The noun phrase or pronoun referred to must not be singular, and usually is plural. Examples are:

Goqo gu ba qadaag ea tineey.
'I want all of these.'

Yigqo gu ba qadagraed.
'I like them all.'

Goqo yaed bea marweel.
'They are all working.'

Yaed ea goqo gu ba qadagraed.
'It is them that I like them all.'

Contrast the meanings of the above sentences with those of the following:

Goqo tineey ea gu ba qadaag.
'It is only these that I want.'

Goqo yaed ea gu ba qadagraed.
'It is only them that I like.'

Goqo yaed ea yaed bea marweel.
'It is only them that are working.'

Goqo yaed ea goqo gu ba qadagraed.
'It is only them that I like them all.'

Taqa 'just, only' is used only before singular noun phrases. There it means 'only', with approximately the same meaning as *goqo* when used before topic noun phrases with the meaning 'only'. Examples are:

Gu ba qadaag ea taqa bineey.
'I like just this one.'

Taqa bineey ea gu ba qadaag.
'It is just this one that I like.'

The first sentence illustrates the fact that the noun phrase connector is used before *taqa*. The second illustrates the fact that *taqa* may be used with focused noun phrases. Note that the numeral 'one' *taqreeb* is a compound of *taqa* 'just' and *reeb* 'one'.

The meanings of *yugu* in its various usages vary considerably, but the basic meaning may be summarized as 'further, different, still more'.

One usage of *yugu* is with adjectives with *ka* 'perfect', to express the idea of 'too much', as in the following examples:

Ka yigii geel.
'He is too strong.'

Ka yugu gu gaaq.
'I am too big.'

Ka yugu mu kireeb gaed.
'You all are too bad.'

Yugu may be used with verbs to mean 'to keep on doing something'. With this meaning it is normally used either in conjunction with *bea* 'present progressive' or *qu* 'non-present progressive/habitual'. Examples are:

Yigi qii marweel.
'He just kept on working.'

Yugu gu bea marweel.
'I'm just always, continually working.'

Yugu qu ra noeng gow.
'They two just kept on swimming.'

Yugu may also be used with non-progressive tense markers with verbs with a specific meaning which is difficult to translate, but which is illustrated by the following example:

Ka yugu gu marweel.
'I just worked (as, for example, because there was nothing else to do).'

Yugu may be used with noun phrases with numbers to mean 'another one, different from the one present', as in the following example:

Gu ba qadaag yugu reeb.
'I want another one (different from this one).'

Note that this sentence is different in meaning from a similar sentence with *ku* 'also, yet', as in the example:

Ku gu ba qadaag reeb.
'I want another one (in addition to this one).'

Ku is discussed below.

When *yugu* is used following *daa* 'past negative', the meaning of the resulting sentence is not negative, as one would expect, but rather expresses a wish for something which is viewed as impossible. An example is:

Daa yugu gu waen nga raam.
'If only I could go there.'

An adverb is formed from *qa* plus *yugu* which is used before verb phrases with the same meaning as *daa yugu*. An example is:

Qayugu daab gu waen.
'If only I wouldn't go.'

Qayugu may also be used with the meaning of asking for permission for something, as in the sentence:

Qayugu gu waen nga raam?
'May I go there?'

It should be noted that *yugu*, like *qu* 'non-present progressive/habitual', changes its vowels to *i* in the third person singular, that is, before the third person singular pronoun *i* 'he', and when *yugu* comes immediately before *i* the final vowel of *yugu* combines with *i* to become long /i:/. Thus one says:

Ka yigii marweel.
'He has just worked.'

but:

Ka yugu gu marweel.
'I have just worked.'

Ka yugu mu marweel.
'You have just worked.'

The position of *yugu* in verb phrases is illustrated by the above examples. It follows the tense markers *ka* 'perfect', *baey* 'definite future', and the others which precede *qu* 'non-present progressive/habitual' and *qa* 'priorative' (see section 5.3.4.10), and precedes *qu* and *qa*. Thus one says:

Ka yugu qu gu marweel.
'I have just kept on working.'

When *yugu* is used before independent pronoun verb phrases, it precedes the independent subject pronoun, as in the following example:

Yugu gu bea marweel.
'I am just always working.'

Before these independent subject pronouns, *yugu* changes its pronunciation to *yag* before those which begin with *gi-* or *ga-*. Thus one says:

Yag gadow bea marweel.
'We (you and I) are just always working.'

Yag gimeew bea marweel. (*yag gimeew* pronounced /yaggame:w/)
'You two are just always working.'

Yugu is also used before *raa* in conditional sentences. This type of sentence is discussed in section 7.5.2.

Ku 'again, also' is illustrated by the following sentence:

Ngu ku gu marweel bayaey.
'I'm going to work again.'

Ku 'also, again' changes its pronunciation to *ka* before independent subject pronouns beginning with *g*, except *gu* 'I', and it changes to *ki* before those beginning with *y*. It also changes to *ki* in the third person singular in suffixed pronoun verb phrases, and combines with *i* 'he' to become *kii*, according to the same pattern as *qu* 'non-present progressive/habitual'. Thus one says:

Ku gu bea marweel.
'I am also working.'

Ka ga bea marweel.
'You are also working.'

Ku bea marweel.
'He is also working.'

Kii marweel.
'He also worked.'

Ki yi bea marweel.
'One is also working.'

Ka gadow bea marweel.
'We (you and I) are also working.'

Ka gamow bea marweel.
'We (he and I) are also working.'

Ka gimeew bea marweel. (*Ka gimeew* pronounced /kagme:w/, from 'You two are also working.' underlying from **ka + g + me:w**)

Ki yow bea marweel.
'They two are also working.'

Because of these changes in the pronunciation of *ku* 'again,

also', it is in some places pronounced the same as *ka* 'still', and because of the change in pronunciation of *ka* 'perfect' (see section 5.3.4.1) to *ku* before *gu* 'I', *ku* 'again, also' is in some places pronounced the same as *ka* 'perfect'. Thus, for example, the following sentence:

Ku gu guy.

is ambiguous. If *ku* in this sentence is interpreted as being the pronunciation of *ka* 'perfect' before *gu* 'I', then the sentence means 'I have seen him'. But if *ku* is interpreted as meaning 'also, again', then the sentence means 'I saw him again'.

Likewise, *ku* 'again, also' may be confused with *ka* 'still'. Thus the sentence:

Ka ga bea marweel?

may either mean 'Are you working again?' or 'Are you still working?'.

Sometimes the word *bayaey* 'once' is added to make clear that *ku* 'again, also' is meant, as in the following example:

Ku gu marweel bayaey.
'I worked again.'

If *ku* is used in a sentence with a numeral, the meaning may be 'another one, in addition to this one', as in the example:

Ku gu ba qadaag reeb.
'I want another one (in addition to this one).'

Contrast this use of *ku* with the usage of *yugu* discussed above, as in:

Gu ba qadaag yugu reeb.
'I want another one (different from this one).'

Ku may be used before a focused sentence to mean 'also', as in the following examples:

Ku bineey ea ga ba qadaag?
'Do you want this one also?'

Ku dabaq ea nga mu maen?
'Are you also going to go today?'

Ka means 'still', and is used only before the independent pronoun of an independent pronoun verb phrase, or before a focused noun phrase or adverb. Examples are:

Ka ba maenigil.
'It's still good.'

Ka bea marweel.
'He's still working.'

Ka bineey ea ga ba qadaag?
'Do you still want this one?'

Ka dabaq ea nga mu maen?
'Are you still going to go today?'

As discussed above, *ka* 'still' and *ku* 'also, again' are only pronounced differently under certain conditions, and under other conditions they are pronounced the same. Compare the following contrasting examples:

Ka bea marweel.
'He is still working.'

Ku bea marweel.
'He is also working.'

Ka yi bea marweel.
'One is still working.'

Ki yi bea marweel.
'One is also working.'

Ka yow bea marweel.
'They two are still working.'

Ki yow bea marweel.
'They two are also working.'

These examples illustrate that in the third person (all numbers, including the indefinite) *ku* 'also, again' and *ka* 'still' contrast. However, in other persons *ku* and *ka* are pronounced the same, as in the following examples:

Ku gu bea marweel.
'I am still working.' or 'I am also working.'

Ka ga bea marweel.
'You are still working.' or 'You are also working.'

Ka gadow bea marweel.
'We (you and I) are still *or* also working.'

Ka gamow bea marweel.
'We (he and I) are still *or* also working.'

Ka gimeew bea marweel.
'You two are still *or* also working.'

Like *ku*, *ri* 'very, really' may be used in verb phrases or before focused sentences. When *ri* occurs before *gu* 'I' it changes its pronounciation to *ru*.

In suffixed pronoun verb phrases *ri* occurs after the tense markers *ka* 'perfect', *baey* 'definite future', *nga* 'inceptive', *raa* 'simple future', and the negative tense markers, but before *qu* 'non-present progressive/habitual' and *qa* 'priorative', as in the following examples:

Ka ru gu marweel.
'I have really worked.'

Ka ri qu gu marweel.
'I have really been working.'

Ka ri mu marweel.
'You have really worked.'

Ri combines with *i* 'he' to become *rii*, as in:

Ka rii marweel.
'He has really worked.'

Before *gu* as an independent subject pronoun *ri* changes to *ru*. It does not change pronunciation before the other independent subject pronouns. Consider the following sentences:

Ru gu bea marweel.
'I am really working.'

Ri ga bea marweel.
'You are really working.'

Ri bea marweel.
'He is really working.'

Ru gu ba gaaq.
'I am very big.'

Ri ga ba gaaq.
'You are very big.'

Ri ba gaaq.
'He is very big.'

Ri may be used before a focused noun phrase or adverb. When it is used before the personal article *i* (see section 4.3) it combines with the article to become *rii*. Consider the following examples:

Rii qiir ea ngoongliy.
'It's really him that did it.'

Ri dabaq ea ngea yib.
'It's really today that he's going to come.'

Fin 'just now, immediately' is used in a similar way to *ri* 'very, really' and *ku* 'also', with the exception that when *fin* is used before a focused sentence, it must be used before a time expression. Examples are:

Ka fin guub.
'I have just now come.'

Nga fin i riin'.
'He's going to do it immediately.'

Baey fin muub, ma gadow yaen.
'As soon as you come, we (you and I) will go.'

Fin dabaq ea kea yib.
'He came just today.'

CONJUNCTION

7.5 **Conjunction**, or **conjoining**, means the process of putting things together. In grammar, the subject of conjunction means the study of how phrases and sentences of the same type are joined together.

Coordinate Conjunction

7.5.1 **Coordinate conjunction** means the joining of two sentences (or adverbs or noun phrases) in such a way that the two parts do not depend on each other grammatically. This type of conjunction may be illustrated by comparing the following two examples:

Gu raa yaen nga Donguch, ma Tamag ea raa yaen nga Nimgil.
'I will go to Donguch, and Tamag will go to Nimgil.'

Faqän raa yib, ma gadow guy.
'If he comes, we will see him.'

The first sentence above is a coordinate conjunction. The second sentence is called a subordinate conjunction (subordinate conjunctions are discussed below in section 7.5.2). In the first sentence, both parts which are conjoined may stand alone as separate sentences, namely:

Gu raa yaen nga Donguch.
'I will go to Donguch.'

Tamag ea raa yaen nga Nimgil.
'Tamag will go to Nimgil.'

In the first sentence, neither sentence of the conjunction depends on the fact that it is conjoined to another in order to be a correct sentence. However, in the second sentence the first part:

faqän raa yib
'if he comes'

is not normally used alone without a following sentence. Thus the first part is said to be **subordinate to** (that is, dependent on) the second part.

Morphemes like *ma* 'and, then' which are used to join the two parts of the above sentences are themselves called conjunctions, because they are used to form conjunctions. The following four conjunctions will be discussed in this section:

ngea	'and'
faa	'or'
ma	'and, then'
yae	'because'

Ngea 'and' is used only to conjoin noun phrases and adverbs or adverb phrases. Examples are:

Gu ba qadaag ea bineey ngea bineem.
'I want this one and that one.'

Tamag ngea Tinag ea nga raanow.
'Tamag and Tinag will go.'

Gu raa guy ea dabaq ngea gabuul.
'I will see him today and tomorrow.'

Gu raa yaen nga Donguch ngea Keng.
'I will go to Donguch and Keng.'

As illustrated by the first sentence above, the noun phrase connector *ea* is not used after *ngea*.

Personal pronouns may be conjoined with each other, or with other noun phrases, as in the examples:

Qiir ngea Tamag ea nga raanow.
'He and Tamag will go.'

Guur ngea gaeg ea gadow raa yaen.
'You and I will go.'

However, by preference the normal method of expressing the above ideas is with a single pronoun referring to all the persons, including those referred to by the noun phrase, and without *ngea* 'and', as in the following examples:

Yow Tamag ea nga raanow.
'He and Tamag will go.'

Gadow ea gadow raa yaen.
'We (you and I) will go.'

Conjoined personal pronouns (or personal pronouns conjoined with noun phrases) may not be used at all except in the focused position or in nominal sentences. Thus one may not say:

**Ngea yaen qiir ngea Tamag.*

but must rather say:

Nga raanow Tamag.
'He and Tamag will go.'

Sentences may not be conjoined with *ngea*, but must rather be conjoined with *ma* 'and, then' discussed below.

Noun phrases, adverbs or adverb phrases, and also sentences may be conjoined with *faa* 'or'. The noun phrase connector *ea* is not used after *faa*. Examples are:

Ga ba qadaag ea bineey faa bineem?
'Do you want this one or that one?'

Raa marweel Tamag faa Taman.
'Tamag or Taman will work.'

Gaeg fii qiir ea gamow raa yaen?
'Will I or he go?'

Ga raa yaen ea dabaq faa gabuul?
'Will you go today or tomorrow?'

Raa fitaeq, fa raa marweel?
'Will he fish, or will he work?'

When *reeb* is used before the first sentence in a coordinate conjunction with *faa* before the second, the meaning is 'either . . . or', as in the following example:

Reeb ea ngea yaen ko fitaeq, fa ngea yaen ko marweel.
'Either he will go fishing, or he will go to work.'

As discussed below in section 7.6, *faa* is used also at the end of a sentence to ask a special kind of question called a tag question, as in the following example:

Nga mu maen, faa?
'You're going to go, aren't you?'

As pointed out above, *ngea* 'and' is not used to conjoin sentences. Rather, *ma* 'and, then' is used, as in the example:

Raa kaay ea niig, ma raa qunum ea waeyin.
'He will eat fish, and he will drink wine.'

Ma translates as English 'and' and 'but', depending on the meaning of the two sentences joined by *ma*. Thus it means 'but' in the following example:

Daab i kaay ea niig, ma raa languy ea garbaaw.
'He will not eat fish, but he will eat beef.'

Ma combines with *chanea* to make a conjunction *machanea* meaning 'however', as in the following example:

Daab i kaay ea niig, machanea raa languy ea garbaaw.
'He will not eat fish, but he will eat beef.'

Yae means 'because', as in the following examples:

Daab i yaen nga Donguch, yae dabuun.
'He won't go to Donguch, because he doesn't want to.'

Thingar gu guy, yae baey ban'ean ni ngu gu piiq ngaak'.
'I must see him, because there's something I'm going to give him.'

Subordinate Conjunction

7.5.2 In a subordinate conjunction, the first part of the conjunction depends on the second in some way, and *ma* 'then' is used between the two parts. An example is:

Faqän raa yib, ma gadow guy.
'If he comes, we will see him.'

In this conjunction, the first part depends on the second part, and is not normally used without it.

The conjunction *ma* is used to join sentences in both the coordinate and subordinate conjunction. When *ma* is used to join sentences in coordinate conjunction, it is always pronounced *ma*. However, when it is used to join sentences in subordinate conjunction, the second sentence in most cases has a verb phrase beginning with a pronoun, and *ma* combines with the pronoun in certain ways peculiar to it.

If the subject of the verb phrase after *ma* is singular, then the following combinations occur:

1st singular	*mu gu*
2nd singular	*ma ga*
3rd singular	*mea*
3rd indefinite	*mi ni*

These combinations are illustrated by the following sentences:

Faqän gu guy, mu gu piiq ngaak'.
'When I saw him, I gave it to him.'

Faqän mu guy, ma ga piiq ngaak'.
'When you saw him, you gave it to him.'

Faqän i guy, mea piiq ngaak'.
'When he saw him, he gave it to him.'

Faqän ni guy, mi ni piiq ngaak'.
'When one saw him, they gave it to him.'

If the subject of the verb phrase after *ma* is not singular, then the independent subject pronoun is used, with *ma* being pronounced *mi* before those pronouns beginning with *y*, and the combinations *ma gimeew* and *ma gimeed* are pronounced /magme:w/, magme:d/, although not spelled that way. Examples are:

Faqän da guyeew, ma gadow piiq ngaak'.
'When we (you and I) saw him, we gave it to him.'

Faqän gu guyeew, ma gamow piiq ngaak'.
'When we (he and I) saw him, we gave it to him.'

Faqän mu guyeew, ma gimeew piiq ngaak'.
'When you two saw him, you gave it to him.'

Faqän ra guyeew, mi yow piiq ngaak'.
'When they two saw him, they gave it to him.'

In the nonsingular numbers, a suffixed pronoun verb phrase may optionally be used after *ma*. However, in this case, in the second person, *ga* rather than *mu* is still used for 'you', along with the subject number suffix on the verb, as in the following examples:

Faqän da guyeew, ma da piqeew ngaak'.
'When we (you and I) saw him, we gave it to him.'

Faqän gu guyeew, mu gu piqeew ngaak'.
'When we (he and I) saw him, we gave it to him.'

Faqän mu guyeew, ma ga piqeew ngaak'.
'When you two saw him, you gave it to him.'

Faqän ra guyeew, ma ra piqeew ngaak'.
'When they two saw him, they gave it to him.'

The subject pronouns after *ma* optionally combine with the following verb when this verb is one of the small class (like *yaen* 'to go') with an underlying form beginning in a vowel (see section 5.5), as in the sentence:

Faqän gu guy, mu goeg ngaak'.
'When I saw him, I told him.'

When *ga* 'you' combines with these verbs, the combinations formed are:

ma+ga+yoeg	'to say'	= *ma goeg*
ma+ga+yib	'to come'	= *ma gaab*
ma+ga+yaen	'to go'	= *ma ga yaen*
ma+ga+yoet'	'to step on'	= *ma goet'*
ma+ga+yim'	'to die'	= *ma gaam'*
ma+ga+yin'	'to throw'	= *ma gaen'*
ma+ga+yip'	'to pierce'	= *ma gaap'*

Since *ma* becomes *mu* before *gu* 'I' even when *gu* 'I' is combined with one of these irregular verbs, and *ma* remains *ma* before *ga* 'you', we may have phrases such as the following:

mu goeg
'then I said'

ma goeg
'then you said'

in which the vowel of *ma/mu* tells us whether the subject is 'I' or 'you'.

The first part of a subordinate conjunction is usually preceded by a word or phrase called a **subordinating conjunction**. Subordinating conjunctions are like sentence adverbs in many ways, but they require a following sentence which is preceded by *ma*. The subordinating conjunctions to be discussed are:

faqän	'when (in the past)'
faqän raa	'if'
raa	'when (future)'
yugu raa	'if (contrary to fact); whatever'
mangea, goomangea	'if (contrary to fact)'

Faqän means 'when (in the past)', and is illustrated by the following example:

Faqän i muuq, ma kea yib.
'When he finished, he came.'

Faqän raa means 'if', and is illustrated by the following example:

Faqän raa mu maen nga tafean, ma goeg ngaak' ni ngea yib i guyeeg.
'If you go to his house, tell him to come and see me.'

Raa may also be used to mean 'if', as in the following example:

Raa Tamag ea kea yib, ma gadow yaen da guyeew.
'If it's Tamag who has come, let's go see him.'

Raa may also be followed by a time expression referring to the future, to mean 'when (in the future)', as in the following example:

Raa gabuul, ma kea yib.
'Tomorrow he will have come.'

As this example also illustrates, if the first part of a subordinate conjunction expresses a future time, the second part need not have a future tense marker, but may have *ka* 'perfect', with future meaning. However, a future tense marker may also be used, as the sentence:

Raa gabuul, ma raa yib.
'Tomorrow he will come.'

The first part of a subordinate conjunction may also be just a past time expression, as in the following example:

Nap'an ea Saapaan, ma ba boechquw ea girdiiq u Waab ko chiineey.
'During the Japanese time, there were fewer people in Yap than now.'

In some cases, the first element may simply be a sentence with a verb phrase in a future tense, with a meaning 'when (in the future)', as in the following example:

Baey fin i yib, ma ga yaen nga mu guy.
'As soon as he comes, go and see him.'

Yugu raa may be used to mean 'if' with the implication that the possibility is not going to come true. Consider the example:

Yugu raa mu guy, ma ga naang ni faakaag.
'If you could see him (which you cannot), you would know that he is my child.'

Under some circumstances the second part of a subordinate conjunction may be a noun phrase. In this case, *yugu raa* may be used before the first part to mean 'whatever'. Note also that if the second part of a subordinate conjunction is a noun phrase, then the conjunction *ma* must become *maa*. Examples are:

Yugu raa reeb, maa rogon.
'Every one has its own way.' literally, 'Whatever one, its way.'

Gubiin yaey ni raa gu feek, maa malaang.
'Every time I take it, it's a stone.'
(as, for example, if you are choosing things out of a bag which is supposed to contain both stones and other things, but all you get is stones)

Mangea (also pronounced *goomangea*) means 'if (contrary to fact)', as in the examples:

Goomangea gaeg guur, ma ku gu waen.
'If I were you, I would go.'

Mangea gu ma naang ni raa muub, ma ku guub gu guyeem.
'If I had known that you were coming, I would have come to see you.'

Goomangea qiir ea raa yib, ma ba maenigil.
'If it were he who was coming, it would be good.'

Sequential Conjunctions

7.5.3 Sequential conjunctions are formed by the joining of phrases or sentences without any conjunction between them. Both verb phrases and sentences may be joined. If verb phrases are joined, the first verb phrase normally consists of either of the two verbs *yaen* 'to go' or *yib* 'to come'. The second verb phrase has the same subject as the first verb phrase, but no tense marker. The second verb phrase may be followed by direct objects, adverbial or prepositional phrases, and so forth. Examples are:

Ngea yaen i ngoongliy Tamag ea pi n'ean neam nga Donguch ea dabaq.
'Tamag is going to go and do those things in Donguch today.'
(that is, he is going to go to Donguch and do them)

Ngu gu bow gu guyeew u kaarroo.
'We (he and I) are going to come and see him in a car.'

Kea yaen i chuwqiy ea falowaa.
'He went and bought some bread.' (not 'He went to buy some bread', which is *Kea yaen ni ngea chuwqiy ea falowaa.*)

Ku guub gu fil ea thiin nu Waab.
'I came and studied Yapese.'

As illustrated by the first sentence above, a sentence with sequentially conjoined verb phrases may have adverbial and prepositional phrases pertaining to the first verb *yaen* or *yib*.

The time of the action of conjoined verb phrases is sequential; that is, the time of the second verb phrase immediately follows that of the first. If the time of the first verb phrase is past, so is that of the second. If the first verb phrase is future, so is the second. The second verb phrase may not have a tense marker.

Two sentences may also be conjoined sequentially. The second sentence may not be a focused sentence. Its tense marker must either be past (with no tense marker) or perfect (*ka*) if the time of the first sentence is past. If the time of the first sentence is future, the second sentence must contain the tense marker *nga* 'inceptive'. The subject of the second sentence is usually, though not always, the same as that of the first sentence. Usually the first sentence contains one of the two verbs *yaen* 'to go' or *yib* 'to come', but other verbs are also possible. Some examples are:

Kea yib kea guy.
'He came and saw it.'

Kea feek kea kaay.
'He took it and ate it.'

Ku guub qu gu marweel.
'I came and was working.'

Gu raa yaen ngu gu guy.
'I will go and see him.'

Baey ra baed u Hawaii nga ra fileed ea thiin nu Waab.
'They will come from Hawaii and study Yapese.'

Yaed raa marweel nga ra fal'ëgeed.
'They will work and fix it.'

Ngu gu feekeem nga raam nga mu guy.
'I'm going to take you there and you'll see him.'

The time of the second sentence follows the time of the first immediately, as in sequentially conjoined verb phrases discussed above.

QUESTIONS AND VOCATIVES

7.6 Questions in Yapese may be asked using a question word, as in the following examples:

Maang ea bineey?
'What is this?'

Nga mu diqiy?
'What are you going to do?'

Nga mu maen ngaan?
'Where are you going?'

Ga baey u quw?
'Where are you?'

A sentence addressed to someone may be made into a question by letting the tone of the voice rise at the end of the sentence. Thus, the following sentences are either questions or statements, depending on whether the tone of voice rises or falls at the end:

Nga mu maen nga raam?
'Are you going to go there?'

Nga mu maen nga raam.
'You are going to go there.'

Ka mu guy Tamag?
'Have you seen Tamag?'

Ka mu guy Tamag.
'You have seen Tamag.'

A special type of question, called a **tag question**, is made from a statement by adding *fa* 'or' and a negative word after the statement. Examples are:

Ka mu guy, fa daawoq?
'Have you seen him, or not yet?'

Nga mu maen nga raam, fa daab mu maen?
'Are you going to go there, or are you not?'

Nga mu maen nga raam, fa daangaq?
'Are you going to go there, or not?'

The word *fa* alone may be added, with no negative word, and the meaning is that you are asking a question to which you expect the answer to be 'yes'. An example is:

Nga mu maen nga raam, fa?
'You're going to go there, aren't you?'

The expected answer is *ee* 'yes'. If the question itself is negative, the expected answer is still 'yes', as in:

Daab mu maen nga raam, fa?
'You're not going to go there, are you?'

The expected answer is *ee*, meaning 'yes, I'm not'.

Vocative phrases are discussed in section 3.2.3 and 4.5.6. They are short forms of names of people, and certain special vocative pronouns like *tam* used to a younger male, or *gäliyoo* 'you two'. Vocative phrases are added after a sentence addressed to someone, with a pause before the vocative, as in the following examples:

Gimeew bea diqiy, gäliyoo?
'What are you two doing, you two?'

Nga mu maen ngaan, tam?
'Where are you going, young man?'

Ka mu diqiy, Gal?
'What happened to you?' (speaking to a man whose name begins with *Gil-*)

Sometimes the word *oo* is used before a vocative, especially when talking to someone older than oneself, as in the sentence:

Nga mu maen ngaan, oo Gal?
'Where are you going, Gal?'

Glossary of Linguistic Terms

ablaut. the process of changing the vowel of a word to a different vowel to make a new word. Example: *k'aed* 'to bite (transitive)', *k'aad* 'to bite (intransitive)'.

abstract noun. a noun such as *fean* 'his property, possession' that refers to something that cannot be experienced physically, as by seeing, smelling, hearing, feeling, or tasting.

actants. the different roles or functions in a sentence, such as subject, direct object, indirect object, time, location.

adjective. a word that expresses a quality of something and which can be used as predicate in a Yapese sentence. Example: *maengiil* 'good'.

adverb. a word that describes the action of the sentence and tells such things as when, where, and how something happened. Example: *kaakroom* 'long ago', as in *Gu waen nga raam kaakroom.* 'I went there a long time ago.'

adverbial phrase. a phrase that functions like an adverb in describing the action of the sentence. Example: *u Donguch* 'in Donguch'.

alienable possession. possession of a noun with *roo-*, as in *kaarroo roog* 'my car'. Usually things which are not intimately related to the possessor and thus can be "alienated" from him.

apposition. in Yapese, the pronoun phrase and the following noun phrase are said to be in apposition when they both refer to the same person or thing. Example: *yael' neey ea buw* 'this betel nut', where the pronoun phrase *yael' neey* 'this one (of lines and long fruits)' and the noun phrase *ea buw* 'betel nut' are in apposition.

article. words corresponding to English 'a' and 'the' which are in Yapese (before nouns) *ba, fa* and *ea.*

articulation. the way in which the parts of the speech apparatus—tongue, lips, etc.—work together to produce sounds.

articulators. the different speech organs that are used in articulation.

articulatory phonetics. the study of sound production.

aspiration. an audible puff of air following an aspirated consonant.

attribute. the modifiers of a noun phrase (e.g., prepositional phrases, relative clauses) which follow the head of the noun phrase.

attributive adjective. an adjective that tells what something *is* as opposed to one which describes what something has *become.*

back vowel. vowel pronounced with the tongue in the back of the mouth. In Yapese these vowels are *u, uu, ö, oe, o, oo, a* and *aa.*

bilabial. pronounced with the lips together. In Yapese the bilabial sounds are *p, p', b, m* and *m'*.

bitransitive verb. a verb that requires both a direct object and an indirect object. Example: *piiq* 'to give', as in *Kea piiq ea bineey ku Tamaag.* 'He gave this to Tamaag' in which *bineey* 'this one' is the direct object and *Tamaag* is the indirect object.

borrowed words. words taken into a language from another language, e.g., *benjoo* 'toilet' borrowed from the Japanese language.

bound morpheme. a morpheme that cannot normally be used by itself and is only found attached to another morpheme—prefixes and suffixes.

classifier. one of a set of words used in noun phrases that specify which of a number of classes a word belongs in. For example: *yael'* in *ba yael' ea buw* 'a betel nut'; contrast *ba kea buw* 'a betel nut tree' that contains the classifier for trees, *kea.*

closed syllable. a syllable that ends in a consonant.

common noun. any noun other than a proper noun.

conjunction. a word such as *ngea* 'and' that is used to join two phrases or sentences together

consonant. a sound produced by partial or complete interruption of the outward air flow.

consonant cluster. two or more consonants that occur together without an intervening vowel.

contract verb. a verb, such as *yib* 'to come', which combines with the subject pronoun in the suffixed pronoun verb phrase to form a single word. Example: *guub* 'I came', from *gu* 'I' plus *yib* 'to come'.

contraction. Two words which join together to become one. For example, see **contract verb** above.

construct construction. combination of a possessed noun and a noun phrase. Example: *fithngaan Tamaag* 'Tamaag's name', consisting of *fithngaan* 'his name', a possessed noun, and *Tamaag*.

coordinate conjunction. the joining of two sentences (or adverbs or noun phrases) in such a way that the two parts do not depend on each other grammatically. Also refers to the word *ngea* 'and' which is used to join two phrases coordinately.

dative. the indirect object. The person to or for whom something is done. Example: *Kea piiq ku Tamaag.* 'He gave it to Tamaag.' In this sentence *Tamaag* is in a dative relationship to the verb.

definite article. the word equivalent to English 'the', *fa* in Yapese, as in *fa rea kaahool* 'the box (that we both know about)'.

demonstrative. a word which is used to point out or draw attention to a particular person, animal, or thing. In Yapese, *neey* 'this', *niir* 'that (near you)' and *neam* 'that (over there)'.

demonstrative pronoun. a word or phrase consisting of a demonstrative pronoun stem and a demonstrative. Example: *bineey* 'this one', in which the demonstrative pronoun stem is *bi-* 'one non-human' and the demonstrative is *neey* 'this'. Demonstrative pronouns can function as normal noun phrases.

demonstrative pronoun stem. one set of bound morphemes or words which can be followed by a demonstrative to make a demonstrative pronoun.

dental. a consonantal sound involving the teeth. Dental sounds in Yapese are *t*, *t'*, *d*, *n*, *n'*, *th*, *th'* *l* and *l'*.

derivational processes. processes (other than **inflection**, see below) of deriving one word from another.

determiner. Words such as articles and number words that precede nouns in Yapese.

determiner phrase. the set of determiners that can occur in front of a noun. Example: in *fa rea bulyal* 'that (known to you and me) little girl', *fa rea* is a determiner phrase.

diacritic mark. a modifying mark on the letters of a word indicating a phonetic value different from that given the unmarked letter. Example: the ¨ on the *e* of *lëy* 'stick of something'.

dialect. the different forms that a language takes in different areas.

digraph. a pair of letters used to represent a single speech sound. Example: *ae* in *yaer* 'knife', two letters represent a single long vowel.

diminutive. a morpheme which, when added to other morphemes, adds the meanings "small, cute." Example: *chii* in *chii tiir neam* 'that little (cute) child'.

direct object. the person or thing most directly affected by the action named by the verb.

direct object pronoun suffix. a pronoun suffixed to verbs to indicate the direct object. Example: *-eeg* 'me' in *Kea guyeeg.* 'He saw me.'

dual. grammatical process of indicating the number two. Example: *gamow* 'he and I' is a dual pronoun because it indicates two people.

embedding. process of using sentences within sentences. Example: the sentence *Gu ba qadaag ni nga gu waen.* 'I want to go.' contains the embedded sentence *Nga gu waen.* 'I'm going to go.'

excrescent vowel. a vowel inserted between two consonants to make them pronounceable. Example: the very short vowel heard between the *ng* and the *d* in *rung*^{u}*duuq* 'black'.

extraposition. the process of placing a portion of a construction outside of the construction of which it forms a part.

first person. referring to the speaker, 'I'.

first person exclusive. referring to the speaker but excluding the hearer, 'you'. Example: *gamow* 'we two exclusive, that is I and he but not you'.

first person inclusive. referring to the speaker and also to the hearer. Example: *gadow* 'we two inclusive, that is I and you'.

focused adverbs. adverbs that precede the rest of the sentence and are followed by *ea*. Example: *Maachanea nga guub.* 'Nevertheless I'm going to come.' in which *maachanea* is the focused adverb.

focused sentence. sentence in which the subject, object or some other actant has been moved to the front of the verb and is followed by *ea*. Example: *Tamaag ea ngea yaen.* 'It's Tamaag who is going to go.', which is a focused version, with subject focused, of *Ngea yaen Tamaag.* 'Tamaag is going to go.'

free morpheme. a morpheme that can occur by itself.

fricative. sound pronounced with friction. The voiceless fricatives in Yapese are *f*, *f'*, *th*, *th'*, *s* and *h*. The voiced fricatives are (except when preceded by a nasal) *b*, *d*, and *g*.

friction. the hissing or rubbing sound heard in a consonant such as *th* or *d* when pronounced continuously.

front vowel. a vowel pronounced with the tongue in the front of the mouth. The front vowels of Yapese are *i*, *ii*, *e*, *ee*, *ë*, *ea*, *ä* and *ae*.

glottal stop. stoppage in the sound produced by closing the glottis. Written as *q* in Yapese.

glottis. the larynx or voicebox in the throat.

grammatical morpheme. a morpheme whose function in the sentence is something other than to refer to the various actors in the sentence, or to the action itself.

head. the main word in a construction. E.g., in a noun phrase the noun is the head; in a verb phrase the verb is the head.

high vowel. a vowel pronounced with the tongue high in the mouth. In Yapese the high vowels are *i*, *ii*, *u* and *uu*.

homorganic. two consonants pronounced in the same part of the mouth, as *b* and *m*, both pronounced at the lips.

imperative. a verb used to give a command. Example: *moey* 'come'.

impersonal verb. a verb such as *daariy* 'to not exist' which cannot be used with a subject pronoun other than *i* 'it'.

inalienable possession. possession of things that are necessarily related to their possessor, e.g., parts of the body.

indirect object. see **dative** above.

inflection. when a word is modified in such a way as to affect its relation to the other words in the sentence. Example: the addition of possessive pronouns, *tafean Tamaag* 'Tamaag's house'.

instrument. the tool used in doing something. Example: *Kea riin' ko yaer.* 'He did it with a knife.' *yaer* 'knife' expresses the instrument.

interrogative. words that ask a question.

intransitive. a verb which does not take an object. Example: *fitaeq* 'to go fishing'.

labial. refers to the use of the lips in the process of articulating a sound. Labial consonants in Yapese are *p*, *p'*, *b*, *f*, *f'*, *m*, *m'*, *w* and *w'*.

labiodental. a sound articulated with the bottom lip and upper teeth. In Yapese *f* and *f'*.

larynx. voice box or Adam's apple.

lateral. sound pronounced with air passing the sides of the tongue. Example: *l*.

light vowels. vowels that have a palatalizing effect on adjacent dental and retroflexed consonants. The light vowels in Yapese are *i*, *ii*, *u*, *uu*, *e*, *ee*, *ö*, *oe*, *ä* and *ae*.

liquids. non-nasal consonants with a flowing quality. In Yapese the liquids are *l*, *l'* and *r*.

locative. pertaining to the location of something.

low vowel. a vowel pronounced with the tongue low in the mouth. The low vowels in Yapese are *ä*, *ae*, *a* and *aa*.

manner adverbial. a phrase telling how or in what manner something was done. Example: *Qii maruweel ni ba feal' rogon.* 'He was working well.' in which the phrase *ni ba feal' rogon* 'which its way was good' tells the manner in which he was working.

mid vowel. a vowel pronounced with the tongue midway between

high and low positions in the mouth. In Yapese the mid vowels are *e*, *ee*, *ë*, *ea*, *ö*, *oe*, *o* and *oo*.

morpheme. meaning bearing units which combine with each other in the formation of words; minimal units of meaning.

morphology. the study of the ways morphemes are put together to form words.

morphophonemics. the study of the way the pronunciation of morphemes changes when used next to other morphemes.

nasal. a sound pronounced with the air going out through the nose. The nasal sounds of Yapese are *m*, *m'*, *n*, *n'*, *ng* and *ng'*.

nominal. pertaining to nouns.

noun. a word naming a person, place, or thing.

object. see **direct object** above.

obstruent. a sound that obstructs the free flow of air through the mouth enough to either stop it completely (stops and nasals) or to produce friction (fricatives).

open syllable. a syllable ending in a vowel.

particle. short grammatical word that is not normally usable as a free morpheme, but which is not a bound morpheme either. Example: *fa* in *fa rea gaetuw* 'the cat (that we both know about)'.

phoneme. the sound units of a language: the sounds corresponding to the letters of the alphabet.

phonetics. the study of the way sounds are produced in all languages.

phonology. the study and description of the sound system of a language.

plural. referring to more than two.

predicate. the first element in an unfocussed Yapese sentence. The verb in a sentence containing a verb. The phrase in the sentence which gives new information, or says something about the subject. Example: in the sentence *Kea yaen Tamaag.* 'Tamaag went.' *kea yaen* is the predicate.

prefix. a morpheme that is attached to the beginning of a word.

Example: in *taafitaeq* 'fisherman' the morpheme *taa-* meaning 'one who usually does something' is a prefix.

preposition. term used in English grammar to refer to relating words such as by, with, on, for, etc. In Yapese the prepositions are *u*, *ko*, *nga* and *roo-*.

primary stress. the loudest syllable in a word.

productive process. a process whereby new words can be formed in present-day Yapese. Example: the prefix *sa-* 'a little bit' which can be added to words to make new words.

pronoun. a word that can take the place of a noun phrase. Example: *chaqaneey* 'this person' which can take the place of a word meaning 'this man', 'this woman', etc.

quantifiers. a word that refers to the quantity of a noun phrase. Example: *gubiin* 'all'.

reduplication. process of repeating part or all of a word for grammatical function. Example: *roow* 'red (inchoative or stative adjective)' may be reduplicated as *roowroow* 'red (attributive adjective)'.

relative clause. a sentence that is used to modify a noun phrase by using the relative marker *ni*, as in *ba pumoqon ni ba maenigil* 'a good man' in which the sentence *Ba maenigil.* 'He is good.' is used to modify the noun phrase *ba pumoqon* 'a man' by means of the relative marker *ni*.

resultative. refers to a word whose meaning refers to the results of an action. Example: *maen* 'closed' is the resultative of *niing* 'to close' because it refers to the result of closing.

root. the morpheme from which various words are derived by the addition of suffixes or prefixes. E.g., the root of *qadiig* 'my liver' is *qadi-* 'liver'.

rounded vowel. pronounced with rounded lips. In Yapese, *u*, *uu*, *ö*, *oe*, *o* and *oo*.

second person. referring to the hearer, 'you'.

semantics. the study of meaning.

semivowel. a sound that is phonetically like a vowel but functions as a consonant. The semivowels in Yapese are *y*, *w*, *y'* and *w'*.

sentence. a grammatically complete group of words containing a predicate and usually a subject and other phrases as well.

singular. referring to only one.

stem. the part of a possessed noun that is left when the possessive pronoun suffix is removed. Example: *qadiig* 'my liver' whose stem is *qadi-*.

stressed syllable. the loudest syllable in a word. See **primary stress.**

subject. the actor in a sentence. The person or thing that carries out the action indicated by the verb.

subordinate. a sentence which is part of a larger sentence. Example: the sentence *Gu ba qadaag ni nga gu waen.* 'I want to go.' contains the sentence *Nga gu waen* 'I'm going to go.' which is contained in the larger sentence and thus is part of it.

suffix. a morpheme which is added to the end of another morpheme to make a word.

surface form. the way a word is actually pronounced.

syllable. smallest pronounceable unit of sound. In Yapese, a syllable always contains *exactly* one vowel, which is always preceded by a consonant and may or may not be followed by a consonant.

syntax. the study of the rules for putting words together to make phrases and sentences.

tense marker. morphemes that describe the time of the action of the verb.

third person. a pronoun ('he', 'she', 'it' or 'they') which refers to someone or something the speaker is interested in talking about.

topic. the person or thing that the sentence is about. The first noun phrase in a focused sentence.

transitive. a verb that takes a direct object.

trigraph. a spelling for a single sound which uses three letters, e.g., *th'*.

underlying form. linguistically inferred spelling for a word to account for the fact that the word has different pronunciations in different environments.

unfocused adverbs. adverbs which need not occur in focused position (in front of the predicate). Example: *kaakroom* 'long ago'.

unrounded vowel. a vowel pronounced without any simultaneous rounding of the lips. In Yapese, *i, ii, e, ee, ë, ea, a, ä, ae,* and *aa.*

velar sound. sound pronounced with the back of the tongue against the velum (back of the roof of the mouth). The velar sounds in Yapese are *k, k', g, ng* and *ng'*.

velum. the back of the roof of the mouth; the rear of the soft palate used in making the velar sounds.

verb. the name of an action or relationship which is used as a predicate.

verb complement. the various phrases required to complete the meaning of a verb, e.g., the direct object required by a transitive verb.

verb phrase. the verb and its associated morphemes which make up the predicate, including tense markers, subject pronouns, and suffixed object pronouns.

vocal bands. (see **vocal cords**)

vocal cords. the bands of muscle in the larynx or voicebox in the throat that hum or buzz when saying a voiced sound such as *mmmmm.*

voice. the humming or buzzing sound in the throat when pronouncing a sound such as *mmmmmm.*

voiceless. sounds produced without vibration of the vocal cords.

vowel. a sound pronounced without any obstruction in the vocal tract. Yapese vowels are *i, ii, u, uu, e, ee, ö, oe, ë, ea, o, oo, ä, ae, a* and *aa.*

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