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SHELDON P. HARRISON,
WITH THE ASSISTANCE
OF SALICH Y. ALBERT

**MOKILESE
REFERENCE
GRAMMAR**

Mokilese Reference Grammar

PALI LANGUAGE TEXTS: MICRONESIA

Social Sciences and Linguistics Institute
University of Hawaii

Donald M. Topping
Editor

Mokilese Reference Grammar

SHELDON P. HARRISON

with the assistance of
SALICH Y. ALBERT

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Honolulu



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Preface

This first attempt toward a grammar of Mokilese is bound to be a disappointment to all. It is intended to be a grammar that will be useful to native speakers of Mokilese, both as a stimulus towards the development of interest in the study of the Mokilese language, and as an introduction to the study of language in general. The grammar's second aim is to provide information on Mokilese for the linguist. I have tried to steer a middle course between these two audiences and I fear that in doing so I have failed to satisfy either. It is my hope that the present work will be succeeded by other efforts in both the educational and the purely linguistic spheres. Errors of fact, of analysis, and of design present in the following pages can then be corrected.

The research summarized here was carried out between October 1971 and December 1973 at the Pacific and Asian Linguistics Institute (PALI) of the University of Hawaii. During June and July of 1973 I was able to work on Mokil. Of the many people who struggled valiantly to teach me Mokilese, I must give special thanks to Salich Albert, Aruwo David, Aira Edmond, Galen Joel, Lidy Poll, and Damien Sohl. Thanks also to Thomas H. Roberts for allowing me to use the Mokilese data he collected during 1970 and 1971, and to Donald M. Topping, the then director of the PALI, who gave me invaluable help and advice at every stage of my work. My special thanks go to the clerical staff of the PALI for suffering through numerous revisions of early drafts, and to the Linguistics Department of Monash University, Melbourne, for its cooperation in the preparation of the final typescript. Lastly, I must not fail to acknowledge the contribution of my wife Nicole, who not only typed the bulk of the final manuscript, but also proved to be an excellent linguistic fieldworker whose suggestions, drawn from her attempts to use the grammar as an aid in learning Mokilese, were of great value throughout.

Abbreviations

The following abbreviations are used in tree diagrams and in Mokilese examples.

A	aspect suffix
attrib	attribute
C	consonant
CA	causative prefix
Cl	classifier
conj	conjunction
D, Det	determiner
i	intransitive
INT	intransitive suffix
MOD	modal
N, n	noun
NP	noun phrase
P, poss	possessive
Pred	predicate
Pro	pronoun
Q	question marker
RED	reduplicated
S	sentence
t	transitive
TR	transitive suffix
v	verb
V	verb, vowel
VP	verb phrase

Introduction

0.1 THE STUDY OF LANGUAGE

Language can be defined in many ways. Most people tend to think of language as a tool; one we use to communicate our wishes and thoughts to other people. This view equates language with **talking**, an external, social activity involving ourselves and other people. What we often overlook is that language is also a tool for **thinking**. In a real sense, we use language to communicate internally with ourselves, to frame ideas, make plans, and consider problems. Whenever we think, dream, worry, or engage in any other mental activity we use words and we make sentences, although these are words and sentences that we alone “hear” without ever having to speak them.

As a social instrument, language is more than a means of communication. It is also a symbol of identity, a way of setting off one’s own group from other groups. At the simplest level, young people often use slang words not used by adults. The use of these words sets off the young as a social group. On Ponape, for example, the use of high language helps define social groups. On an even larger scale, is it not to a great extent the fact that one speaks Mokilese that makes one a Mokilese? In this sense, language helps define ethnic and national groups.

The study of language is important for all these reasons. First, because language is a tool of communication, the study of language is to some degree the study of how we communicate, and may aid us in learning how to communicate more effectively. Second, because language is tied closely to all thought processes, the study of language is important in understanding the structure of thought and perhaps ultimately the structure of the human mind. Third, one studies his own language to learn to what extent it shapes, and is shaped by, the society in which he lives. Pride in one’s language and a desire to preserve it and to understand its workings should follow directly from pride in oneself and in one’s community.

Introduction

0.1.1 Grammar

There are also a number of ways to define the word “grammar.” It is, first, a set of rules and observations about a language and, second, a book in which these rules and observations are set down. In referring to language the word *rule* has two senses that have led to two very different conceptions of the purpose of a grammar. Some people take the term *rule of grammar* to mean a rule about how a language should be spoken. For example, it is a rule of the grammar of English, in this sense, that one should not use the word *ain’t* or that one should say “He and I went fishing” rather than “Him and me went fishing.” This kind of grammar has been called PRESCRIPTIVE GRAMMAR because it seeks to **prescribe** (direct, order) how language should be used. (Terms printed in small capital letters are defined in Appendix B.)

The second sense of the notion rule of grammar derives from the observation that languages do not use words and sounds randomly, but follow set patterns. Thus, in Mokilese, the word *wa* ‘the’ must always follow the word to which it refers: (*woalwa* ‘the man’ not **wa woal*). Also, whenever the word *wa* follows a word that ends in *p* or *m*, the *w* of *wa* changes to *p* or *m*. Thus, *poappa* ‘the board’ (not **poapwa*) and *damma* ‘the outrigger’ (not **damwa*). (In this grammar, ungrammatical structures will be preceded by an asterisk (*).) These are rules of the grammar of Mokilese in the sense that they describe the patterns that words and sentences must follow in Mokilese. This kind of grammar has been called DESCRIPTIVE GRAMMAR because it seeks to **describe** how a language actually is used by those who speak it, rather than to set down laws concerning how a certain individual, or group, feels the language should be used.

This grammar attempts to be descriptive of Mokilese, a set of observations about how Mokilese is used and spoken by the speakers of Mokilese who gave so much of their time to teach me about their language. At no time does it claim to be a set of rules about how Mokilese *should* be spoken. In this grammar, when we speak of a **grammatical sentence** or a **grammatical structure** in Mokilese, we are talking about something that the Mokilese people might say in the proper circumstances. Conversely, an ungrammatical sentence or structure is one that is not correct Mokilese, because it is not a sentence or structure that any Mokilese himself would ever use. Thus, example 1a is a grammatical sentence in Mokilese, while 1b is ungrammatical.

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- 1a. *Woal sihkeio poaloahdi sukhoahu*
man strong-that chop-down tree-that
'The strong man chopped down the tree.'
- b. **Sihkei woallo poaldi suhkoahu.*²

(An English sentence such as *'The man strong was chopped the tree.' captures the flavor of the Mokilese sentence 1b.)

It might be wise to caution the reader at this point that it is often difficult to judge the grammaticality of structures in a language. Some people might allow certain structures that others consider totally ungrammatical, while a third group might be undecided. This is perhaps true of an English sentences such as:

2. *There's a man come to see you.*

As much as possible I have tried to note places in which speakers of Mokilese seem to disagree on the grammaticality of structures in their language.

0.1.2 Organization

Language is a complex mechanism. To some extent it may be compared to a multistoried building in which small units (bricks) are put together in a certain fashion to make larger units (rooms, stories) which, when taken together, make up a larger unit (the whole building). In language we might consider the smallest units to be the sounds that a given language uses. These combine together to form the larger units that we call WORDS, which then combine according to fixed patterns to form larger units called SENTENCES. It is also possible to consider units larger than sentences, units we might call speeches, stories, narratives, discourses, and so forth. For the most part, sentences are the largest units with which we will be concerned in this grammar.

The first chapter of the grammar will be concerned with PHONOLOGY, the study of sounds and the ways in which they can combine. Of course, we will be dealing almost exclusively with the phonology (sounds and sound system) of Mokilese. Chapter 2 will deal with MORPHOLOGY, the study of the structure of words. That subject will be taken up again, by way of summation, in chapter 11. The subject matter of the rest of the

grammar will be SYNTAX, the study of the ways in which words combine to form sentences, and, to a lesser extent, SEMANTICS, the study of the system of meanings that are associated with words and sentences.

0.2 MOKIL AND THE MOKILESE LANGUAGE

Mokilese is a Micronesian language spoken by the approximately four hundred inhabitants of Mokil Atoll, Ponape District, Eastern Caroline Islands, and by perhaps another eight hundred to one thousand people residing on the island of Ponape, principally in the town of Kolonia and in Sokehs municipality. The history of Mokil, and therefore of its language, has been shaped by two factors: its position with regard to winds and ocean currents, and its frequent exposure to devastating typhoons. The modern history of Mokil begins with just such a typhoon around 1780. It ravaged the atoll to such an extent that only about thirty people survived. (It is probable that more people died of starvation following the typhoon than in the storm itself.) The Mokilese people are the descendants of these survivors and of newcomers who reached Mokil afterwards.

Mokil is so situated that freely drifting canoes, particularly from the Marshalls, cannot help but make a landfall there. The Mokilese have numerous stories about Marshallese visitors, settlers, or invaders, and these stories, perhaps, have led to the belief that Mokilese is somehow linguistically closer to Marshallese than are the other languages of Ponape district. While this may be true, I have found very little more similarity between Mokilese and Marshallese than between Mokilese and other Micronesian languages. The resemblance of Mokilese to Ponapean is much more striking. Moreover, it is not obvious that any more Marshallese appear in Mokilese genealogies since the typhoon of 1780 than do immigrants from other islands. A much more significant influence on Mokilese was the frequent visits by whalers in the nineteenth century. A few of these whalers settled on Mokil and appear to have made large genetic and cultural, as well as linguistic, contributions.

The large settlements of Mokilese on Ponape began after 1905, through a combination of events: first, another typhoon that destroyed all the atoll's sources of food and, second, a rebellion in 1911 against the German administration on Ponape,

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centered in Sokehs municipality. The German authorities banished large numbers of the rebellious inhabitants of Sokehs and resettled large numbers of Mokilese on their land. Many of the Mokilese returned to Mokil, but large numbers stayed on Ponape. Since the typhoon of 1905, all of Mokil's surplus population has been shifting to Ponape. (It is probable that the atoll cannot economically support many more than five or six hundred inhabitants.) This trend has increased since the end of World War II, as interisland shipping was improved. At the present time, many Mokilese seem to spend at least part of every year on Ponape with relatives who live there, and many own property on both islands. There are probably no Mokilese, except the very young, who have not visited Ponape.

Because of this peculiar social situation, most Mokilese have some command of Ponapean. This has already led to extensive borrowing of Ponapean words. In future this borrowing can tend only to increase.

0.2.1 The Position of Mokilese

It should be obvious that the more a language resembles one's native language (in using similar words to name the same objects or actions, in constructing sentences in similar ways, and so forth) the easier that language will be to learn. We may think of languages as being somewhat like members of a family. The more closely related they are, the more likely they are to resemble one another. More distant relatives, whether languages or people, resemble each other less. Just as people from different families often bear almost no resemblance to one another, unrelated languages will tend to use very different words, sentence types, and so on.

The parallel between language groups and family groups does not end here, however. Just as we can say that two people are related through a **common ancestor**, it is possible to say that two languages are related in this way. To illustrate this, let us assume that half the people in one village on one island move to another island a few hundred miles away. At the time of the migration, all the people of the village, both those who leave and those who stay, speak the same language. Languages do not remain the same however; they are constantly changing. Young people may not speak exactly the same way their grandparents do. They may use a few different words, or pronounce

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the same words in a slightly different way. We can assume that this would happen in the two mythical communities we have been discussing, both in the case of those who migrated to the new island and those who stayed behind. There is no guarantee, however, that the same changes would occur in both places. Over the years, perhaps many hundreds of years, change would follow change until the languages of the two communities, originally the same, had become so different as to be called different languages. In this way we might think of a **parent language** (the language of the original community before the migration) changing into two **daughter languages**. The parallel between people and languages fails at this point, however. Parents give birth to children, so that both parents and children can be alive at the same time. Parent languages **change into** daughter languages, so that both parent and daughters cannot exist in the same place at the same time (except where the parent language is artificially preserved, as is true of Latin).

This process of language change is a continuous one. Two daughter languages may themselves change, each into two more languages, so that the original parent language has developed into four languages. These languages might be said to belong to the same LANGUAGE FAMILY because they have a common ancestor, namely, the language spoken in the original community. To describe this kind of situation, we might use the diagram in figure 1. We call such a diagram a **family tree diagram**. The term **tree** is appropriate because the original language has branched into new languages just as trees become taller and wider by adding new branches. Each line (or branch) in the diagram represents a series of changes that has led to the development of a new language.

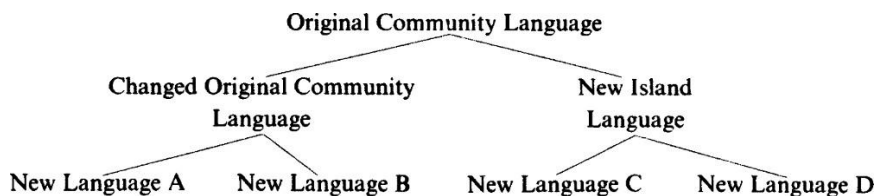


Figure 1: Family Tree

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Languages can be shown to be related (in the sense described above) to the extent that they resemble one another. The fact that most of the languages of Micronesia are related is obvious if we compare words in those languages. For example:

	Mokilese	Ponapean	Kusaiean	Trukese	Marshallese	Gilbertese
'day'	<i>rehn</i>	<i>rahn</i>	<i>lwen</i>	<i>raan</i>	<i>rahan</i>	—
'hand'	<i>poa</i>	<i>peh</i>	<i>po</i>	—	<i>pay</i>	<i>bai</i>
'to chew'	<i>mehme</i>	<i>mehme</i>	<i>meme</i>	<i>mani</i>	<i>meymey</i>	—
'away'	<i>-la</i>	<i>-la</i>	<i>-lac</i>	<i>-na</i>	<i>-laq</i>	<i>lako</i>
'outside'	<i>likin</i>	—	<i>lihkin</i>	<i>nukun</i>	<i>liyik</i>	—
'to drink'	<i>nim</i>	<i>nim</i>	<i>nihm</i>	<i>wún úmi</i>	<i>nime-</i>	<i>nima</i>
'where'	<i>ia</i>	<i>ia</i>	<i>yac</i>	<i>iya</i>	<i>iyiah</i>	<i>ia</i>
'blood'	<i>insa</i>	<i>nta</i>	<i>srah</i>	<i>ccha</i>	<i>da</i>	<i>raraa</i>
'coconut'	<i>ni</i>	<i>nih</i>	<i>nu</i>	<i>nuu</i>	<i>niy</i>	<i>ni</i>
'shark'	<i>pako</i>	<i>pakoa</i>	<i>pahko</i>	<i>pók ó</i>	<i>pakew</i>	<i>pakoa</i>
'eye'	<i>maj</i>	<i>maas</i>	<i>muhta</i>	<i>maas</i>	<i>maj</i>	<i>mata</i>
'to hear'	<i>rong</i>	<i>rong</i>	<i>lohng</i>	<i>rong</i>	<i>řeǵ</i>	<i>rogorogo</i>
'to vomit'	<i>umwwuj</i>	<i>mmwus</i>	<i>woht</i>	<i>mmwus</i>	<i>ńńej</i>	<i>mumuta</i>
'forehead'	<i>soamwe</i>	—	<i>motonsro</i>	<i>chaamw</i>	<i>dań</i>	<i>ramwa</i>

These and many other words are very similar in all the languages that we call Micronesian, while the English words with the same meaning are very different. From this we can conclude that all the Micronesian languages are related (belong to the same language family), while English is not related to the Micronesian languages, but belongs to a different language family.

Within the **Micronesian** family some languages seem to be more closely related than others. It is obvious that Mokilese and Pingelapese are very closely related, since a speaker of one language can understand the other language with no difficulty. Both Pingelapese and Mokilese are closely related to Ponapean. Beyond this, however, it is difficult to say which Micronesian languages are more closely related to which others. The family tree shown in figure 2 gives a rather simplified picture of the Micronesian language family, with special attention given to those Micronesian languages most closely related to Mokilese.

When we compare words in Micronesian languages with words from other languages in the Pacific, it becomes clear that Micronesian languages belong to an even larger family containing many hundreds of languages. This family has been called **Austronesian** and includes Polynesian languages (like

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Hawaiian, Samoan, and the languages of Nukuoro and Kapingamarangi); most of the languages of the Solomon Islands and the New Hebrides, to the south of Micronesia; the languages of the Philippine Islands, a few languages spoken on Taiwan, the languages of Indonesia and even of the island of Madagascar, off the coast of Africa. (This last large group of languages has been called Indonesian and includes Palauan and Chamorro, both of which are spoken within what is geographically Micronesia.)

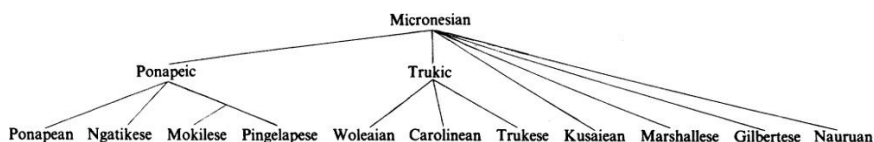


Figure 2: *Micronesian Linguistic Relationships*

These relationships become obvious if we compare a few common Austronesian words in languages as far apart as Mokilese, Hawaiian, and Indonesian.

English	Mokilese	Hawaiian	Indonesian
'he, she'	<i>ih</i>	<i>ia</i>	<i>dia</i>
'sky'	<i>loang</i>	<i>lani</i>	<i>langit</i>
'fire'	<i>oai</i>	<i>ahi</i>	<i>api</i>
'eye'	<i>maj</i>	<i>maka</i>	<i>mata</i>
'road'	<i>al</i>	<i>ala</i>	<i>jalan</i>
'five'	<i>limoaw</i>	<i>lima</i>	<i>lima</i>
'die'	<i>mehdi</i>	<i>make</i>	<i>mati</i>
'coconut'	<i>ni</i>	<i>niu</i>	<i>nyior</i>
'bird'	<i>mahn</i>	<i>manu</i>	<i>manok</i>

The three Austronesian languages—Mokilese, Hawaiian and Indonesian—show striking resemblances in the form of these words, while the corresponding English words are very different. This leads us to conclude that English is not a member of the Austronesian family.

The exact nature of the relationships among languages in the Austronesian family is not clear. Figure 3 gives a simplified, and perhaps a not entirely correct, picture of what these relationships might be. Only more detailed comparison of all the languages concerned will give us a clearer picture.

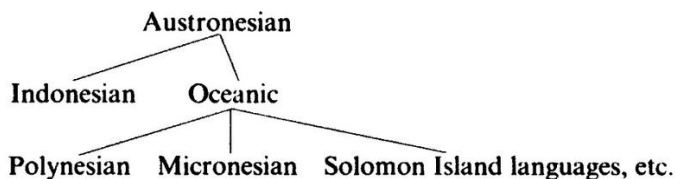


Figure 3: Austronesian Languages

0.3 BORROWING

Contact between peoples often leads to changes in language. The most obvious of such changes is the adoption of new words **borrowed** from other languages. Mokilese has borrowed large numbers of words from the languages of foreigners who have come to Micronesia, as well as from other Micronesian languages. The two earliest European rulers of Micronesia—the Spanish and the Germans—left very few words in Mokilese. Some that were borrowed from Spanish are *pwohla* ‘ball’ and *mihsa* ‘mass’. The only words that seem to have been borrowed from German are *dois* ‘Germany’ and *mahk* ‘mark, German money’. In contrast, however, there are many hundreds of words of Japanese and English origin that have found their way into Mokilese.

0.3.1 Japanese Borrowings

The Japanese introduced many new foods, games, tools, articles of clothing, plants, and government institutions which are reflected today in the fact that Japanese words are still used for many of these objects and concepts. Among the food names that were borrowed from Japanese are:

<i>aiskeiki</i>	‘popsicle’ (originally borrowed by Japanese from the English ‘ice cake’)
<i>dakuang</i>	‘pickled radish’
<i>juangke</i>	‘lime drink’
<i>kimji</i>	‘pickled cabbage’
<i>kiuhri</i>	‘cucumber’
<i>miso</i>	‘bean paste’
<i>ningi</i>	‘green onion’
<i>ramen</i>	‘noodles’
<i>sasimi</i>	‘raw fish’

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Names for field sports such as jumping and racing, and especially baseball and the words associated with it, have been borrowed almost totally from Japanese. Most of the baseball terms were originally borrowed by Japanese from English. Examples of Japanese sports terms used in Mokilese are:

<i>apa dopi</i>	'broad jump'
<i>daka dopi</i>	'high jump'
<i>damaski</i>	'pool'
<i>iakumehda</i>	'hundred meter race'
<i>iakiu</i>	'baseball'
<i>omiddo</i>	'out of bounds'
<i>padda</i>	'baseball bat'
<i>okes</i>	'substitute player'
<i>wannangge</i>	'shotput'
<i>middo</i>	'catcher's mit'

Japanese words for tools and other implements are common in Mokilese.

<i>dama</i>	'light bulb'
<i>dapang</i>	'chopping board'
<i>depwehra</i>	'file'
<i>jawang</i>	'rice bowl'
<i>kua</i>	'hoe'
<i>kama</i>	'sickle'
<i>kansoppha</i>	'copra drying shed'
<i>kingko</i>	'safe'
<i>jidohsa</i>	'car'
<i>ohdai</i>	'bandage'
<i>penehda</i>	'plywood'
<i>supwo</i>	'pile of firewood'

Some names of clothing are of Japanese origin.

<i>aramaki</i>	'belly band'
<i>dehpwukro</i>	'gloves'
<i>jarmada</i>	'underwear'
<i>kuspara</i>	'shoehorn'
<i>pwundoji</i>	'loincloth'
<i>sohri</i>	'sandals'

The Japanese also introduced a few plants into Micronesia.

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ansu 'apricot tree'
masnoki 'ironwood tree'
apwraiaji 'kind of pine tree'
dohng 'kind of tree used for
lumber'

Terms for certain government and civil institutions have still survived from Japanese times.

aikiu 'dole'
jikeng 'test'
kadaiking 'public work'
pehnggohsi 'defender'
rahkudai 'to fail, to be demoted'

These are by no means all the words of Japanese origin that are used in Mokilese, but they do represent a fair sampling. Today, however, the trend is away from the use of Japanese words. Many are known only by older people, and large numbers are being replaced by recent borrowings from English. For example, for 'telephone' young people would be more likely to use the English borrowing *delpwohn* than the Japanese *dengwa*.

0.3.2 English Borrowings

The largest foreign segment of the Mokilese vocabulary seems to be words of English origin. Words borrowed from English can be divided into two types: an older set, learned from whalers, traders and missionaries in the nineteenth century; and a recent set, introduced since the American administration began at the end of World War II. It is often possible to tell these two segments apart on the basis of the form the words take in Mokilese. Thus, for example, in older English loanwords, English *t* regularly becomes *s* in Mokilese, while English *s* usually becomes *j*. In recent borrowings *t* and *s* tend to remain *t* (*d*) and *s*. Compare the older borrowings *sehpil* 'table', *jeila* 'sailor' with the more recent borrowings *delpwohn* 'telephone' and *koangkiris* 'congress'. The phonology of English borrowings in Mokilese is a complex subject yet to be studied in detail.

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The English loanwords in Mokilese are too numerous to list exhaustively here. We will give only a brief outline of the major types of borrowings. In the older (nineteenth-century) set, we find a large number of words involving boats and boat-building activities.

<i>pohs</i>	'boat'
<i>jip</i>	'ship'
<i>dimper</i>	'rib of a boat'
<i>soa</i>	'saw'
<i>kainpis</i>	'canvas'
<i>kepden</i>	'captain'
<i>pwoaila</i>	'tank for boiling timber'
<i>spwukseip</i>	'spokeshave'
<i>wihnj</i>	'winch'
<i>kihl</i>	'keel'
<i>pihn</i>	'paint'

Many names for tools, furniture, and other implements were also introduced during this period.

<i>sehpil</i>	'table'
<i>jeia</i>	'chair'
<i>ama</i>	'hammer'
<i>pinjel</i>	'pencil'
<i>mwoak</i>	'cup, glass'

Many words for clothing, food, and drink are also of English origin.

<i>pilawa</i>	'flour, bread'
<i>pirehs</i>	'biscuit'
<i>malahsohs</i>	'molasses'
<i>ihs</i>	'yeast'
<i>juke</i>	'sugar'
<i>piha</i>	'beer'
<i>roam</i>	'rum'
<i>rauujj</i>	'trousers'
<i>jehs</i>	'shirt'
<i>ju</i>	'shoe'

American missionaries introduced many terms, including religious terms, names for church offices, and names of the months.

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<i>ehl</i>	'Hell'
<i>jehsen</i>	'Satan'
<i>elder</i>	'elder in the church'
<i>kohs</i>	'God'

The list of such older English loanwords in Mokilese is extensive. It also includes many color terms (*krihn* 'green', *dan* 'tan'), units of measure (*inj* 'inch', *pihd* 'foot', *iahs* 'yard'), games and other amusements (*pilei* 'to play cards', *jeked* 'checkers', *dainj* 'dance'). A complete list would run to many pages.

English loanwords of the recent (post-World War II) period consist largely of terms for government and civil institutions and new products that have been introduced during the American administration. Among these are:

<i>kias</i>	'gasoline'
<i>sipahk</i>	'spark plug'
<i>klohrahks</i>	'bleach'
<i>kirajiweid</i>	'graduate'
<i>koangkiris</i>	'congress'

This list is still growing as many more Mokilese learn English and are exposed to American products and culture.

0.3.3 Borrowings from Other Micronesian Languages

Because the people of Mokil have lived in close contact with Ponapeans, Marshallese, Pingelapese, and Kusaieans for so many years, it seems obvious that words from the languages spoken by these people must have entered Mokilese. Since all these languages are closely related they tend to resemble one another rather closely, so that it is often difficult to recognize words in Mokilese borrowed from other Micronesian languages. Some cases are clear, however. For example, words like *indan* 'popular', *pohnkahke* 'lazy', *rahnmwahu* 'greetings', and *wahn poaroan* 'minister' have been borrowed from Ponapean. It would appear that words like *moado* 'skilled navigator' and *mej* 'exhausted' are Marshallese in origin. It is likely that the word *doa* 'sugarcane' was borrowed from Kusaiean. There are undoubtedly many more Mokilese words borrowed from the

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other languages of Micronesia, but it is difficult to tell exactly how many because of the problems in distinguishing such borrowings from native Mokilese words.

1 The Phonology of Mokilese

Language is primarily sound; or, more precisely, sound produced by the human speech organs and arranged in a manner that is meaningful to a listener who speaks the same language. It is not one of the main tasks of this grammar to describe how speech sounds are produced; but, in order to understand the Mokilese sound system, we will give some attention to articulatory phonetics, the study of the production of speech sounds.

1.1 SOUND AND SPELLING

It is important not to confuse speech sounds with writing. Writing is a way of representing language on paper. It allows us to communicate ideas and descriptions of events to people in places and at times far removed from the places and times where these ideas originated. Thus, it is possible for a person on Mokil to read about events that took place in Honolulu or in Washington and to find out about the ideas of people who lived many hundreds of years ago.

Although writing represents **language**, it does not necessarily represent the **sounds of language**. For example, in the case of the Chinese writing system that uses symbols to represent whole words, a Chinese will be able to look at a character and pronounce the word it represents, but he will not be able to say that any part of the character stands for a specific sound of that word.

Most of the world's languages use alphabetic writing systems. (The name comes from the first two letters of the Greek alphabet—**alpha** and **beta**.) In such systems, the symbols used are meant to represent sounds. For example, in the English word *cat*, most of us would agree that there are three sounds which are represented by the three letters *c-a-t*. In fact, phoneticians (people who study speech sounds) tell us that speech is actually a more or less continuous stream of sound, so that it is often very difficult to tell where one sound ends and the next begins. If this is true, it is not surprising that sounds can be affected by the sounds surrounding them, as we shall see below.

1 The Phonology of Mokilese

Even though speech is continuous, it is still convenient for us to try to cut up the stream of speech sounds into **segments**, a segment being what most of us would agree is a single sound.

Even alphabetic systems do not always represent sounds accurately or consistently. In English, for example, the same symbols are often used to represent very different sounds, as in the case of the *ou* in *thought*, *though* and *through*. The same is true in Mokilese, where *e* is used to represent different sounds in *ngenin* 'his spirit' and *jed* 'sea water'.¹ A string of symbols is often used to represent what is phonetically a single sound. This is true in the case of the *th*² in the English words *thought* and *though* mentioned above and in Mokilese in the case of the *ng* in *ngen*, which is phonetically the single sound [ŋ].

As is probably very obvious by now, we will often find it necessary to represent speech sounds more accurately than the writing system does. For this purpose we will use PHONETIC SYMBOLS. Phonetic TRANSCRIPTION (as this phonetic representation is called) will always be enclosed in square brackets [] to distinguish it from ORTHOGRAPHY (as the normal spelling system is called), which will always be in italics. Thus, *ngen* [ŋɛn] 'spirit'.

1.2 ARTICULATORY PHONETICS

The phonetic symbols that we will be using are really a kind of short form for a description of how the sounds they represent are produced by the speech organs. This kind of study of speech sounds is called ARTICULATORY PHONETICS. Figure 4 shows the principal speech organs and their parts. We will be referring to it often in the pages that follow.

A phonetic symbol is an abbreviation for a description of the way a sound is made. When we use the phonetic symbol [m] we are actually describing a sound produced by bringing the two lips together and, at the same time, allowing air to escape through the nose and making that air vibrate by vibrating the vocal cords (the result of this vibration is called VOICING). The result of closing the lips, vibrating the vocal cords, and allowing the air to escape through the nose is a sound that we call a **voiced bilabial nasal**, which we represent by the phonetic symbol [m].

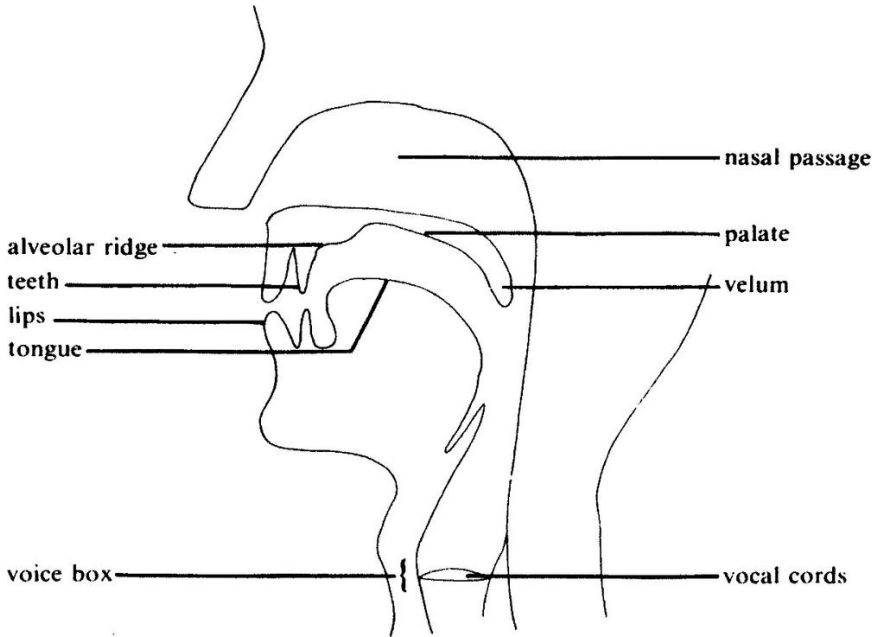


Figure 4: The Human Speech Organs

A great variety of different sounds can be produced by making various adjustments in the **SPEECH TRACT** (a handy term of reference for the passage from the voice box through the nose and mouth in which speech sounds are produced). Two such adjustments we have mentioned are **voicing** (vibration of the vocal cords) and **nasalization** (allowing air to escape through the nose). In addition, the speech tract may be narrowed or closed completely by adjusting those speech organs that are flexible. Principal among these are the **tongue** and the **lips**. This narrowing (or constriction) may take place at any number of points along the speech tract. These points are commonly called **POINTS OF ARTICULATION**. A **LABIAL** sound is one in which the principal constriction (point of articulation) is at the lips; a **DENTAL**, at the teeth; an **ALVEOLAR**, at the alveolar ridge; a **PALATAL**, at the palate; and a **VELAR**, at the velum. These terms will be discussed in more detail as they are used in the description of Mokilese sounds. Phonetic symbols and their values are shown in figure 5.

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Consonants

Manner of Articulation	Point of Articulation					
	Labial	Dental	Alveolar	Palatal	Velar	Velarized Labial
Stop Voiceless	[p]		[t]	[c]	[k]	[p ^w]
Voiced	[b]		[d]	[j]	[g]	
Fricative Voiceless	[f]	[θ]	[s]			
Voiced	[v]	[ð]	[z]			
Nasal	[m]		[n]	[ɲ]	[ŋ]	[m ^w]
Lateral			[l]			
Trill			[r]			
Glide				[y]		[w]

Vowels

	Front	Central	Back
High	[i]	[ɨ] [ɯ]*	[u]
Higher Mid	[e]	[ə]	[o]
Mid	[ɛ]	[ʔ]	[ɔ]
Low		[a]	

*[ɨ] represents a central unrounded vowel and [ɯ] represents a central rounded vowel.

Figure 5: Phonetic Symbols

1.3 THE SOUNDS OF MOKILESE

1.3.1 Contrastive and Noncontrastive Sounds

In the preceding sections we have described an important distinction that must be kept constantly in mind in the study of phonology, the distinction between the way we write down a language and the actual sounds that we produce in speaking it. In that discussion we showed that the letters we use in writing often represent very poorly the actual sounds we use. In the last section we introduced a way of describing sounds in terms of the way they are produced by the speech organs. At the same time, we showed that it would be very inconvenient to have to write out a long description of each sound every time we wanted to refer to that sound, so instead we use a set of short forms called PHONETIC SYMBOLS. Thus, instead of having to write out “voiced bilabial nasal” every time we want to talk about that particular sound, we use the symbol [m].

In this section we shall be discussing another distinction that is important in understanding Mokilese phonology; the distinction between **contrastive** and **noncontrastive** sounds. Any speaker of Mokilese will agree that the sounds represented by the first letters in *soal* ‘black’ and *joal* ‘rope’ are different. If we take the word *soal* ‘black’ and replace the first segment by *j*-, the result is a new word with a completely different meaning: *joal* ‘rope’. We can continue in this same way and get:

<i>poal</i>	‘chop’
<i>loal</i>	‘deep’
<i>woal</i>	‘man’
<i>doal</i>	‘mix’

If we replace the first segment by *n*- we get **noal*, which is not a Mokilese word. Nevertheless, we have still produced a change in meaning—from a word like *soal* that has a meaning to a word like **noal* that has none at all. Sounds that differ like the ones we have been discussing are called **contrastive**, because they can produce a contrast in meaning.

If asked about the sound represented by the final letters in the words *pehng* ‘to help lift’ and *poang* ‘canoe platform’, however, most speakers of Mokilese would say they were the same. They are, in fact, very different phonetically. Both are pro-

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duced by lifting the back of the tongue to the roof of the mouth, but the POINTS OF ARTICULATION of the two differ considerably. The *ng* in *pehng* is articulated much farther forward than that of *poang*. A more accurate phonetic transcription would represent them as [ŋ̟] and [ŋ] respectively. But these are differences which an average speaker of Mokilese would not notice unless they were pointed out to him. This reflects the fact that in the **sound system** of Mokilese they are not **significant** differences, though in the sound systems of other languages they might be as significant as the difference between *s* and *j* discussed above. This is true of a language like Chamorro, which distinguishes /ŋ̟/ from /ŋ/.

Many of these nonsignificant, noncontrastive differences can be described in terms of the ENVIRONMENT in which they occur; that is, in terms of what sounds precede or follow. For example, in the case of *pehng* and *poang*, we find [ŋ̟] after front vowels like [ɛ], and [ŋ] after back vowels like [ɔ]. When we talk about /ŋ/ as a contrastive sound different from all other contrastive sounds we can choose to ignore the phonetically different kinds of /ŋ/ that Mokilese speakers actually make: [ŋ̟] and [ŋ], for example. A transcription that ignores this kind of nonsignificant phonetic variation is called a phonemic transcription. (PHONEME is another name for contrastive sound.) Phonemic transcription is always enclosed in slashes //. The ALLOPHONES, as nonsignificant phonetic variants are also called, are enclosed in brackets [], to show that they represent a more or less phonetic transcription.

1.3.2 Consonants

In describing sounds it is necessary to distinguish at least two basic classes: VOWELS and CONSONANTS. These can be defined in many different ways, but for the present we can think of consonants as those sounds produced with a major constriction (narrowing) in the speech tract, and vowels as those sounds produced without such a major constriction. There are twelve consonant phonemes in Mokilese, which, for convenience, are given here in their orthographic representations.

	Labial	Alveolar	Palatal	Velar	Velarized Labial
Stop	p	d	j	k	pw
Nasal	m	n		ng	mw
Fricative		s			

Liquid	l
Trill	r

1.3.2.1 STOPS

A STOP consonant is one in which there is complete closure of the speech tract at some point. Stops in Mokilese are normally voiceless, but often have nondistinctive variants (allophones) that are voiced when the consonant is found between vowels. Thus, we might find *ad* ‘name’ pronounced [at], but *oadoa* ‘his name’ pronounced [ɔdɔ]. The conditions under which non-nasal stops are voiced in Mokilese are undoubtedly much more complex than this, and the problem has yet to be studied in detail.

/p/ is a bilabial stop, made by bringing the lips together.

<i>poap</i>	‘swim’
<i>apid</i>	‘outrigger support’

/d/ is an alveolar stop, made by raising the tip of the tongue to the alveolar ridge.

<i>dir</i>	‘many’
<i>jaid</i>	‘finger’
<i>oadoa</i>	‘his name’

/j/ is a palatal stop, made by raising the body of the tongue to the palate.

<i>joamoai</i>	‘my father’
<i>wija</i>	‘place’
<i>ohroj</i>	‘all’

Under certain conditions still unclear to me, /j/ is produced as a palatal affricate or fricative (see 1.3.2.2).

/k/ is a velar stop, made by raising the back of the tongue to the velum.

<i>kang</i>	‘to eat’
<i>dak</i>	‘to drive’
<i>pako</i>	‘shark’

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/pw/ is a velarized labial stop, made like */p/*, but at the same time drawing the tongue back toward (but not touching) the velum. At the same time, the lips are protruded and rounded, as in puckering one's lips for a kiss. This difference between */p/* and */pw/* can be seen by pronouncing two words like *pu* 'bent' and *pwu* 'betel nut' in front of a mirror.

<i>pwa</i>	'to say'
<i>japw</i>	'land'
<i>apwal</i>	'difficult'

1.3.2.2 FRICATIVES

A FRICATIVE, unlike a stop, does not involve complete closure of the speech tract. In producing a fricative the air is allowed to pass through a narrow opening at some point in the speech tract.

/s/ is an alveolar fricative, produced by placing the sides of the tongue against the upper teeth so as to produce a narrow opening between the tongue and the alveolar ridge. The air passing through this opening produces a hissing sound.

<i>soausoau</i>	'heavy'
<i>kisai</i>	'we'
<i>ros</i>	'darkness'

In some cases */j/* is produced as a palatal fricative rather than a stop. It may also be produced as a palatal affricate. (An AFFRICATE is a combination of a stop and a fricative. First, the speech tract is closed completely, as for a stop. In producing an affricate this closure is released slowly enough for a fricative to be heard following the stop.)

1.3.2.3 NASALS

The NASAL consonants of Mokilese are produced with the velum lowered to allow air to pass through the nose. The articulation of a nasal consonant is accompanied by the vibration of the vocal cords that we call VOICING.

/m/ is a bilabial nasal.

<i>dam</i>	'outrigger'
<i>jamah</i>	'his father'

moangoai 'easy'

/n/ is an alveolar nasal.

rehn 'day'

inah 'his mother'

noas 'to do business'

/ng/ is a velar nasal.

jang 'from'

ange 'its claw'

ngap 'fathom'

/mw/ is a velarized bilabial nasal

lomw 'wet'

imwi 'coconut bunch'

mwaj 'worm'

It is important to remember that */mw/*, */pw/*, and */ng/* represent single sounds, although they are written with two letters.

1.3.2.4 LATERAL

/l/ is an alveolar lateral, produced with closure at the alveolar ridge like an alveolar stop. Unlike the stop, however, the lateral is produced by allowing air to escape over the sides of the tongue, sometimes only over one side, often over both. Sounds produced in this way are called LATERALS. */l/* is usually voiced, though it is often voiceless at the end of a word.

pil 'water'

pwili 'to accompany'

loang 'sky'

1.3.2.5 TRILL

/r/ is an alveolar trill, produced by anchoring the body of the tongue against the upper teeth so that when air is pushed through the mouth it will cause the tip of the tongue to tap rapidly against the alveolar ridge.

rir 'shudder'

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arai 'they'
jahr 'knife'

1.3.2.6 GEMINATE CONSONANTS

In addition to the simple consonants described above, all Mokilese consonants can occur doubled, or geminate.

nappa 'cabbage'
pwakke 'a disease (yaws?)'
koammoal 'to rest'
wahssa 'red'

A GEMINATE CONSONANT is one whose articulation is prolonged to approximately twice the normal length. Geminate stops, for example, are stops in which the speech tract is completely closed for approximately twice the amount of time as for plain stops. In the case of the geminate varieties of /s/, /l/, and /r/, the air is allowed to pass through the constriction for a longer time than for the corresponding plain consonants.

Geminate consonants are phonemic; that is, they can potentially change meaning. For example:

likkoau 'clothes' *likoau* 'chapped'

1.3.2.7 A NOTE ON INITIAL GEMINATE CONSONANTS

Geminate (doubled) consonants, as already noted, occur only between vowels in Mokilese. What were initial geminate consonants in early stages of the language appear to have been altered in two ways. First, a PROTHETIC (initial) VOWEL has been added to the beginning of the forms in question. This vowel is /i/ unless the geminate consonant is both ROUND (/pw/ or /mw/) and followed by a round vowel (see 1.3.3.1). Under such conditions the prothetic vowel is /u/. For example:

immas 'ripe' (earlier *mmas)³
umwwuj 'to vomit' (earlier *mwwuj)
umwwoais 'to play' (earlier *mwwoais)

(Geminate *mw* is represented as *mww*, *pw* as *pw*, and *ng* as *ngg*.) Also, the first of two initial consonants has changed into the corresponding nasal. For example:

<i>impal</i>	‘coconut cloth’	(earlier * <i>ppal</i>)
<i>insa</i>	‘blood’	(earlier * <i>ssa</i>)
<i>ingkoang</i>	‘sharp’	(earlier * <i>kkoang</i>)

These changes can be summarized as follows. First, the first of two identical consonants becomes a nasal through a process we might call **nasal dissimilation**. Then, a prothetic (initial) vowel is added by a process we might call **vowel prothesis**. For example:

	<i>*ssa</i>	<i>*mwwuj</i>	<i>*kkoang</i>
Nasal Dissimilation	<i>nsa</i>	<i>mwwuj</i>	<i>ngkoang</i>
Vowel Prothesis	<i>insa</i>	<i>umwwuj</i>	<i>inkoang</i>

1.3.3 Vowels

A vowel is produced with less constriction in the speech tract than is necessary to produce the hissing that is characteristic of fricatives. This means that it is not convenient to describe vowels in terms of point (labial, velar) and manner (stop, fricative) of articulation, since these imply a greater degree of constriction than that which is found in vowels. The fact that there is less constriction for vowels than for consonants does not mean that the speech organs do not change position in producing vowels. Vowels are normally described with reference to the position of the tongue in relation to its neutral (rest) position. A vowel articulated with the tongue raised toward the roof of the mouth is called a **high vowel**, one articulated with the tongue lowered is a **low vowel**. Other positions between these two extremes can be labelled **mid**, **higher mid**, **lower mid**, and so forth, depending on the distinctions it is found necessary to make.

A vowel articulated with the tongue pushed forward in the mouth is called a **front vowel**; one with the tongue drawn back in the mouth, a **back vowel**. Positions between the two can be described as **central**, **front central**, **back central**, and so forth (see Figure 6).

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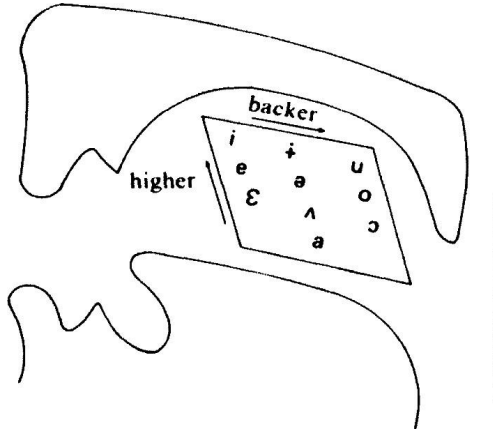


Figure 6: Approximate Places of Articulation of Some Phonetic Vowels in Mokilese

The contrasting (phonemic) vowels of Mokilese are:

	Front	Central	Back
High	i		u
Higher Mid	e		o
Lower Mid	ɛ		ɔ
Low		a	

The vowel phonemes /e/ and /ɛ/ are not normally distinguished in Mokilese orthography. Both are represented by *e*: *pei* 'to fight' /peɨ/, *pei* 'to float' /peɨ/. When phonetic or phonemic transcriptions are used, we will always distinguish these two sounds. When orthography is used, however, standard practice will be followed.

It should also be noted that the phoneme /ɔ/ is represented orthographically by *oa*. This is always to be considered a single segment, not a combination of two.

1.3.3.1 ROUNDING

Mokilese vowels can also be distinguished according to whether or not they are produced with the lips rounded. (Lip rounding for consonants has already been described in 1.3.2.1.) In most languages (and Mokilese is no exception) back vowels are nor-

mally rounded while central and front vowels are normally unrounded. This phenomenon can be verified for Mokilese with the following pairs:

<i>kik</i>	'to kick'	<i>kuk</i>	'to cook'
<i>ken</i>	'immediately'	<i>koan</i>	'you are going to'
<i>dak</i>	'to drive'	<i>dok</i>	'to spear'

In some phonetic environments the normal values of backness and rounding are subject to change. These changes will be discussed in section 1.6.

1.3.3.2 DEVOICING OF HIGH VOWELS

Vowels are normally produced with vibration of the vocal cords, called VOICING. This voicing can be felt by holding the outside of the voice box between the thumb and the first two fingers and then saying a word like *nah* 'his (child)'. The vibration that we can feel in this way is voicing.

Under certain conditions high vowels in Mokilese can become VOICELESS. A voiceless vowel is produced by holding all the speech organs in the correct positions to produce the vowel, but not vibrating the vocal cords. Examples of voiceless vowels in Mokilese are the *i* of *kisa* 'we two' and the *u* of *supwo* 'pile of firewood', as these words are pronounced in rapid speech. We represent voiceless vowels phonetically by writing a small circle [ʰ] under the vowel. The examples above are phonetically [kɪsʰa] and [sʰup^wo].

High vowels can be devoiced in weak syllables (see section 1.4) between voiceless consonants. Thus, the *i* in *mine* 'to be in a place' and the first *u* in *lujuk* 'to tackle' will not be devoiced because /m/ and /l/ are voiced consonants. If one of the voiceless consonants is /s/, devoicing is particularly likely. Thus, the *u* in *supwo* is more likely to devoice than the *u* in *pukod*. Only high vowels seem to undergo devoicing.

1.3.3.3 LONG VOWELS

All vowels can occur long as well as short. A long vowel is produced by prolonging the corresponding short vowel, just as a doubled fricative consonant is a prolonged single fricative consonant. In the orthography, long vowels have been indicated by

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the corresponding short vowel followed by *h*. In our phonetic transcription, we shall adopt the convention of writing two short vowels to indicate a long one.

<i>pihn</i>	'to paint'	[piin]
<i>jehjoa</i>	'to not know'	[ceecɔ]
<i>rehn</i>	'day'	[rɛɛn]
<i>lahd</i>	'sea grass'	[laat]
<i>poahm</i>	'to feel'	[pɔɔm]
<i>kohp</i>	'to prophesy'	[koop]
<i>duhl</i>	'metal roof'	[tuul]

All but one of the seven long vowels can be shown to be phonemic, as the following MINIMAL PAIRS show. (A minimal pair is a pair of words whose meanings are different and which differ by only one sound.)

<i>win</i>	'feather'	<i>wihn</i>	'to win'
<i>men</i>	'one (animates)'	<i>mehn</i>	'bitter'
<i>paj</i>	'nest'	<i>pahj</i>	'hollow of a canoe'
<i>ros</i>	'darkness'	<i>rohs</i>	'flower'
<i>koap</i>	'to grow'	<i>koahp</i>	'yam'
<i>pwur</i>	'to turn'	<i>pwuhr</i>	'to drown'

The only vowels for which a long-short minimal pair was not found were /e/ and /ee/.

1.4 THE SYLLABLE

We have been describing the sounds that are used in making Mokilese words in terms of the way they are produced by the human speech organs. In this discussion it has been convenient to look at each sound individually. This view is misleading, however, because, as has already been pointed out, we actually speak in a more or less continuous stream rather than in individual single sounds.

When we actually produce speech, certain sounds do tend to group together. For example, it is difficult to produce a consonant sound like /k/ by itself. (This is something that we would only try to do in order to demonstrate the sound for a student of phonetics or for a foreigner learning our language.) In actual speech production, a consonant is normally accompanied by

a vowel. Vowels, /a/ for example, can be produced alone with ease. It is for this reason that the heart of the unit of speech production that we have been discussing is usually a vowel. This unit is called a SYLLABLE.

Under most conditions a word has as many syllables as it has vowels. Thus, the English word *consider* has three vowels, *o, i, e*⁴, **and** three syllables—*con-si-der*. Similarly, the Mokilese word *melengleng* ‘shiny’ has three vowels and three syllables—*me-leng-leng*.

Often, simply counting the vowels in a word will not give the correct number of syllables. For example, the Mokilese word *melengleng* spoken at normal speed is pronounced [mɛlɛŋɟɛŋ]. The vowel [ɪ], however, does not function as the heart of a syllable. For that reason it is not written in Mokilese. Nonsyllabic vowels arise in Mokilese in a number of ways, some of which will be discussed in sections 1.5 and 1.8.

We can define the syllable in Mokilese according to the following principles:

1. In Mokilese, a sequence of consonants within a word does not normally belong to the same syllable, because it is difficult to produce a sequence like CCV (for example *pka). If two consonants come together within a word, place a syllable boundary between them. (Remember that *ng* is a single consonant even though it is written with two letters.)

<i>angkoa</i>	‘anchor’	ang-koa
<i>dipkelkel</i>	‘to stumble’	dip-kel-kel
<i>janjal</i>	‘clear’	jan-jal

2. If a single consonant occurs between two vowels within a word, place a syllable boundary before the consonant.

<i>dangahnga</i>	‘lazy’	da-ngah-nga
<i>widek</i>	‘to pour’	wi-dek
<i>pere</i>	‘room’	pe-re

3. If two vowels come together within a word, place a syllable boundary between them.⁵

<i>duhriion</i>	‘kind of tree’	duh-ri-on
<i>injinjued</i>	‘sad’	in-jin-ju-ed

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ki ‘to not want’ *ki-a*

In Mokilese we can speak of two kinds of syllables—**strong** and **weak**. A **strong syllable** is one that:

- (i) ends in a consonant, or
- (ii) contains a long vowel

A **weak syllable** is one that ends in a short vowel. For example, in the word *dangahnga*, the first syllable *da-* is weak, the second *-ngah-* is strong, and the third *-nga* is weak. In the word *angkoa*, the first syllable *ang-* is strong and the second *-koa* is weak. We shall have occasion to refer to these syllable types in some of the sections that follow.

1.5 GLIDES

The sounds represented by the letters *u*, *i*, and *w* in the words *kehu* ‘mast’, *iahia* ‘rainbow’, *oawoa* ‘his mouth’, and *poauweij* ‘kind of flower’ are called GLIDES. Even though the sounds represented by *i* in *li* ‘woman’ and *ia* ‘where’ and by *u* in *su* ‘to meet’ and *mwehu* ‘good’ are very different, it is not an accident that the letters *i* and *u* used to represent both glides and vowels.⁶ This is because glides are sounds that move either towards or away from the position of a high vowel. The glides represented by *u* in words like *mwehu* and *lau* are really vowels that move in the direction of the high back vowel [u]; that is, they become higher, farther back, and more rounded as they are being pronounced. A careful reader should be able to feel some of these movements as he says words like *mwehu*. The glide represented by *w* in *awa* ‘hour’ represents movements of the speech organs in the direction of [u] and then back again to [a]. The front glide represented by *i* in *iahia* or *pinahiek* ‘to cover’ involves exactly the same kind of movement, except that in this case it is a movement in the direction of the position of the vowel [i]. Very often these glides do not reach their exact targets of [u] and [i]. Sometimes they might fall a little short, rising only to the level of [o] or [e]. On other occasions they appear to overshoot their marks. When this occurs, the glides come to sound somewhat like fricative consonants.

Glides, then, are vowel-like sounds. The most important difference between vowels and glides is that glides cannot function as syllables (see section 1.4). In terms of syllable structure, glides act like consonants. They may begin syllables, like the *i*'s in *iahia*—divided into syllables as *iah-ia*—or end them, as in *joi* ‘porcupine fish’. A glide that occurs at the beginning of a syllable is called an **on-glide**; one that occurs at the end of a syllable is called an **off-glide**.

In Mokilese, on-glides tend to have the fricative quality mentioned above, while off-glides are more likely to fall short of the level of high vowels. The glides in words like *wehn* ‘fruit of’ and *neu* ‘stone fish’ seem to differ in this way. This is, however, only a tendency. If a word like *neu* is said with special emphasis, the off-glide might take on a fricative quality. Similarly, if *wehn* occurs in the middle of a stream of very rapid speech it might be produced with less constriction than normal. In the case of the back glide (toward [u]), the Mokilese spelling system differentiates the fricative (or **tense**) glide from the vocalic (or **lax**) glide, by writing *w* for the back on-glide and *u* for the back off-glide. Thus we find *w* in words like *wa* ‘carry’, *lawalo* (la-wa-lo) ‘wild’, and *oawoa* (oa-woa) ‘his mouth’, but *u* in words like *neu* and *doauoau* (doau-doau) ‘to fill’.⁷

The corresponding front on-and off-glides have not been distinguished in the Mokilese writing system. Both are written as *i*. In this grammar we shall ignore the phonetic difference between tense and lax glides, mentioning it only occasionally where it seems relevant. All front glides will be represented phonetically as [y] and all back glides as [w]. Thus *lawalo* will appear as [lawalo], *neu* as [nɛw]; and *iahia* as [yaaya] and *joi* as [coy].

1.5.1 Rules of Glide Formation

There are two processes in Mokilese that create glides. One, **glide insertion**, places a glide between two vowels that are side by side. The second, **glide formation**, changes a vowel into a glide.

1.5.1.1 GLIDE INSERTION

A glide is inserted between two vowels that differ in height. The inserted glide will be [y] if the higher vowel is a front vowel, but [w] if the higher vowel is a back vowel. For example:

<i>sioa</i>	‘his ear’	[siyɔ]
<i>kiam</i>	‘basket’	[kiyam]
<i>puoa</i>	‘on top’	[puwɔ]
<i>luarmwe</i>	‘kind of pandanus’	[luwarm ^w e]

Inserted glides are not normally written in Mokilese.

1.5.1.2 GLIDE FORMATION

A vowel is changed into a glide when the structure of the form in which it occurs changes in such a way that the vowel in question ceases to function as a syllable. For example, if a vowel comes to follow a lower vowel, it may cease to be a syllable. When *ka-* ‘causative’ is added to *onopda* ‘prepared’, the syllable structure of the combined form becomes *kao-nop-da* and first *o* becomes a glide. The result is *koaunopda* ‘to prepare’, phonetically [kɔwnɔpta].⁸

Most examples of word-final and pre-consonantal glides can be explained in this way. That is, the glides in words like *joi* ‘porcupine fish’, *kaik* ‘to scratch’, *doau* ‘to climb’, and *jaun* ‘to feed a fire’, are explained by the following rule: **a high vowel becomes a glide after a lower vowel and before a consonant or at the end of a word.**

When three vowels come together and the middle vowel is a higher vowel than the other two, that middle vowel becomes a glide. In such cases the glide that results is doubled; that is, either [yy] or [ww]. Thus, a word like *aio* ‘yesterday’ is phonetically [ayyo]. It is interesting that this is just the result that the rules we have proposed for creating glides would predict.

	a-i-o
by Glide Insertion	[aiyo]
by Glide Formation	[ayyo]

First, a glide [y] is inserted before the [ɔ]. As a result, the [i] comes to be syllable-final and is converted into a glide [y].

We can see the same processes at work when we attempt to relate the forms *ohla* ‘broken’ and *koauwehla* ‘to break’. The word *ohla* has two parts: *o-* and *-la* (the *o* becomes long before *-la* by a very general rule that will be discussed in section 2.1.2.2). The word *koauwehla* can be said to consist of *ka-* ‘causative’, *-oe-* (the TRANSITIVE of *o*—see section 6.5) and *-la*. Its phonetic form can be predicted in the following way:

		ka + oe + la
	by Glide Insertion	ka + owɛ +
		la
by Syllable Structure		kao + wɛ +
Adjustment		la
	by Glide Formation	kaw + wɛ +
		la

The surface phonetic form [kɔwwɛɛla] is the result of two additional rules; one changing [a] to [ɔ] and the other lengthening [ɛ] before [-la].

1.5.2 A Note on Final High Vowel Morphemes

When the transitive suffix *-i* (see 2.1.1.2) is suffixed to a word ending in a vowel, it does not normally become a glide. Compare:

juei [cuwey] ‘to boast’
and *jukeii* [cukɛyi] ‘to add sugar’, from *juke* ‘sugar’ and *-i* ‘transitive’.

where the final *-i* of *jukeii* is treated as a full syllable. This seems to be a result of the fact that, in this case, *-i* is an independent MORPHEME (see 2.1).

1.5.3 Glide Phonemes

Up to now we have been assuming that all Mokilese glides arise through one of the two rules outlined in the preceding section, either as a transition between vowels or as the result of the de-syllabification of vowels under certain conditions. This analysis allows us to speculate that the glides in words like *war* ‘canoe’ or *iahk* ‘to strip leaves’ might in fact be **vowels** that become **glides** through the Glide Formation Rule.

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There is, however, a second possibility; namely, that there are two independent glide phonemes /y/ and /w/ that are not created from vowels. Thus, a word like **doau** ‘climb’ might be phonemically /tɔw/ or /tɔu/. In the latter case, the phonetic form [tɔw] is the result of glide formation. The existence of a phoneme /w/ is suggested by examples like **jawa** ‘sweet taro’. If we assume that this word is /jaua/, and apply our rules to it, we get the following result:

/jaua/	
[jauwa]	Glide Insertion
[jawwa]	Glide Formation

For most speakers of Mokilese, however, this word is phonetically [cawa], not *[cawwa]. This suggests that the analysis with phonemic /u/ is wrong for this word, and that it should be represented phonemically as /jawa/ with phonemic /w/. Other words that seem to have phonemic /w/ are *lawalo* ‘wild’ and *oawoa* ‘his mouth’. (Note that the fact that *oawoa* is analyzed as /ɔwɔ/ suggests that the related word *au* ‘mouth’ should be analyzed as /aw/ rather than /au/.) Since all cases of the glide [y] between two vowels are doubled, there is no similar evidence for a phoneme /y/.

1.6 INFLUENCE OF CONSONANTS ON VOWELS

As described in Section 1.3.3 (see in particular figure 6), different vowels are produced by raising and lowering the tongue and by pushing it forward and pulling it back. Other changes are brought about by adjusting the degree of lip rounding and by prolonging the amount of time during which the vocal cords are allowed to vibrate. That description assumed that we were producing vowels in isolation; that is, beginning with the speech organs at their most neutral position (their position when we are not speaking), producing the desired vowel, then returning the speech organs to their neutral position again. It is only very rarely that vowels are produced under such conditions in actual speech, however. Examples are the words *a* ‘but’ and *ih* ‘he’ in sentences like the following.

1. *Ngoah mwehuki iakiu, a John joah.*
I good-with baseball but John not

'I like baseball, but John doesn't.'

2. *Ih, ih ioar ma wia.*
he he *focus* that do
'Him, he's the one who did it.'

It is more often the case that a vowel occurs directly before or after some other segment, usually a consonant.

puk 'book', where /u/ occurs between /p/ and /k/
ros 'darkness', where /o/ occurs between /r/ and /s/
al 'road', where /a/ occurs before /l/
pwoa 'fern', where /ɔ/ occurs after /pw/

Before we pronounce the vowel in the word *u* 'tide', the speech organs are at rest. We move them into the proper position to produce [u], then return them to a position of rest. Before we pronounce the [u] in *puk*, however, the speech organs are involved in the production of [p] and, therefore, the lips are closed and unrounded. After we have produced [u], the speech organs move directly to the positions they will occupy to articulate [k]. That is, the tongue must move back to touch the velum.

In normal speech the speech organs are in motion most of the time, constantly changing to produce one sound after another. It is only natural that the exact quality of a sound will be influenced by the sounds that precede and follow it. Let us now examine an example of this kind of effect. The /p/ of *puk* 'book' is made with no lip-rounding (see section 1.3.3.1). This lack of lip-rounding 'rubs off' on the following /u/, so that what we would expect to be phonetically a back round vowel [u], is in fact a somewhat centralized, less rounded [ɯ]. Thus, *puk* is phonetically [pɯk]. We can see the effect of the preceding /p/ by comparing the /u/ in *puk* with that in *kuk* 'cook', phonetically [kuk].

The consonants /k/, /d/, /s/, /n/, and /ŋ/ have little effect on the vowels in their immediate environment. Vowels in the environment of these consonants will tend to have their normal values, as described in section 1.5. Thus, the /u/ in *kuk* is a high back rounded vowel, in contrast to the centralized [ɯ] in *puk*. In what follows, we will briefly summarize the effects of the other consonants.

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1.6.1 Labial Consonants

As mentioned above, the non-round labials /p/ and /m/ tend to centralize and unround an adjacent round vowel. By contrast, we would expect the rounded labials /pw/ and /mw/ to round an adjacent vowel. In the case of back vowels, whose normal values are round in any case, the round labials do not seem to affect these normal values very much. Let us again compare the values of the vowels in the following words:

<i>up</i>	‘sheet’	[ʌp]
<i>mum</i>	‘sweet’	[mʌm]
<i>poap</i>	‘board’	[PʔP]
<i>po</i>	‘shelf’	[pθ]
<i>uk</i>	‘smoke’	[uk]
<i>kun</i>	‘out (of a fire)’	[kun]
<i>noas</i>	‘to sell’	[nɔs]
<i>no</i>	‘wave’	[no]
<i>upw</i>	‘shoulder’	[up ^w]
<i>mwumw</i>	‘fish’	[m ^w um ^w]
<i>pwoapw</i>	‘goiter’	[p ^w ɔp ^w]
<i>pwo</i>	‘pole’	[p ^w o]

In my opinion, the vowels in the words in the third group (*upw*, *mwumw*, *pwoapw*, and *pwo*) are somewhat rounder than those in the middle group. This seems particularly true for the non-high vowels; *no* as compared with *pwo*, for example. If it is the case that the /o/ in *pwo* is rounder than that of *no*, then the round labials /pw/ and /mw/ do in fact exert a rounding influence on adjacent vowels parallel to the unrounding effects of /p/ and /m/. In any case, the phonetic differences are so slight as to be insignificant.

A following labial consonant has a stronger effect on a vowel when it is part of the same syllable as that vowel. This can be seen from the following example:

<i>oapi</i>	‘pull it’	/ɔ-pi/	[ɔpi]
<i>oappoap</i>	‘pulling’	/ɔp-pɔp/	[ʔppʔp]
or <i>oppop</i>	‘pulling’	/ɔp-pɔp/	[əppəp]

The round labials have a slight backing effect on the non-round vowels /i/, /e/, /ɛ/, and /a/. In the following examples this is indicated by a raised > after the vowel.

<i>pa</i>	‘to weave’	[pa]	<i>pwa</i>	‘to say’	[p ^w a ^{>}]
<i>pel</i>	‘also’	[pɛl]	<i>pwel</i>	‘bog’	[p ^w ɛ ^{>} l]
<i>maj</i>	‘eye’	[mac]	<i>mwaj</i>	‘worm’	[m ^w a ^{>} c]
<i>melmel</i>	‘storm’	[mɛlmɛl]	<i>mwelmwel</i>	‘forelock’	[m ^w ɛ ^{>} lm ^w ɛ ^{>} l]
<i>ep</i>	‘ape’	[ɛp]	<i>epw</i>	‘always eager’	[ɛ ^{>} p ^w]
<i>sip</i>	‘tied’	[sip]	<i>sipw</i>	‘broken’	[si ^{>} p ^w]

1.6.2 /j/, /l/, and /r/

In the preceding subsection we noted that round vowels respond to the roundness of adjacent labial consonants. The effects of the consonants /j/, /l/, and /r/ are similar. The production of palatal sounds like Mokilese /j/ involves movement of the tongue towards or away from (depending on whether a vowel precedes or follows /j/) a position near to that of the high front vowel [i]. For that reason, any vowel adjacent to /j/ will have an [i]-like quality.

This “[i]-like quality” is perceived in different ways. For example, the /ɔ/ of *oaj* ‘thatch’ begins as phonetic [ɔ], but moves forward during its articulation in anticipation of the following /j/. The /u/ of *ju* ‘shoe’, on the other hand, begins as a central rounded vowel, and moves back toward the normal /u/ value, phonetic [u], during its articulation. In some other cases, the effect of an adjacent /j/ is negligible.

<i>joan</i>	‘psoriasis’
<i>paj</i>	‘nest’

The extent of the effect of an adjacent /j/ depends on the following factors:

- a. the height of the vowel
High vowels are more influenced than low.

<i>juk</i>	‘to pound’
------------	------------

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jan 'to snare'

b. the backness of the vowel
Back vowels are more influenced than front.

kij 'a bit'

kuj 'semen'

c. the position of the /j/

Syllable-final /j/ appears to have more influence than syllable-initial /j/. The influence of a syllable-initial /j/ is increased if the syllable in which it occurs is a weak syllable, as the following examples will illustrate:

kuj 'semen'

juk 'to pound'

ju 'shoe'

Although not described as a palatal in section 1.3.2.4, the consonant /l/ has effects on adjacent vowels similar to those of /j/. One difference is that syllable-initial /l/ has even less influence over a following vowel than does syllable-initial /j/.

<i>lul</i>	'flickering'	[lʌl]
<i>luk</i>	'knot'	[luk]
<i>juk</i>	'to pound'	[cʌk]

In producing Mokilese /r/, the body of the tongue is pulled back to a position similar to that for central vowels. For this reason, an adjacent /r/ will tend to centralize a vowel. Like /j/, the effect of /r/ appears to be greater on higher vowels than on lower. In the case of /r/ it is easy to see why this should be so. As is clear from figure 6, the normal values for higher vowels are farther from central position than the normal values for lower vowels. In the most extreme case, the normal value for the low vowel /a/ is, in fact, central. The effect of /r/ on high vowels can be seen in examples like:

<i>Ruk</i>	'Truk'	[rʌk]
<i>rir</i>	'shadow'	[rir]

Vowels following an /r/ tend to begin somewhat centralized and then move towards their normal values. Vowels preceding an /r/ tend to move from their normal values to a more central position in anticipation of the /r/.

1.6.3 Adjustments to Long Vowels

Long vowels are less affected by surrounding consonants than are short ones. Compare:

<i>poal</i>	'to chop'	[pʔl]
<i>poahl</i>	'to steam'	[pɔɔl]

Because long vowels actually last longer than short ones, they are able to recover and hold their normal values in spite of the effects of adjacent consonants. For example, although the /ɔɔ/ of *poahl* is somewhat unrounded by the preceding /p/, it can return to its normal value, [ɔ], and hold that value long enough to be perceived as [ɔ] much more easily than the /ɔ/ of *poal* can, because it is longer.

1.6.4 A Note on the Effect of Glides

For some speakers a following glide [w] or [y] can affect the backness of a vowel. Thus:

<i>jeu</i>	'to stand'	[cɛw]
<i>jeuda</i>	'to stand up'	[cɛwta] or [cɔwta]
<i>woi</i>	'turtle'	[woy]
<i>woin</i>	'turtle of'	[woyn] or [weyn]

We see from these examples that a [w] can back a preceding front vowel and a [y] can front a preceding back vowel if some other segments follow the glide, like the *da* of *jeuda* or the *-n* of *woin*. This process is not yet very well understood.

1.6.5 Nasalization

In section 1.3.2.3 we described the mechanism of nasalization, in which air is allowed to escape through the nose. This mechanism is a characteristic of nasal consonants. Vowels that precede or follow nasal consonants are often nasalized also.

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That is, air is allowed to pass through the nasal passage during the articulation of the vowel as well as during that of the nasal consonant. Compare:

<i>me</i>	'here'	[mẽ]	and	<i>pe</i>	'still'	[pɛ]
<i>no</i>	'wave'	[nõ]		<i>lo</i>	'caught'	[lo]
<i>ma</i>	'that'	[mã]		<i>pa</i>	'to weave'	[pa]
<i>ngi</i>	'tooth'	[ŋĩ]		<i>ki</i>	'key'	[ki]

(The symbol ~ above a vowel indicates nasalization.)

I am aware of two words with nasal vowels where there is no adjacent nasal consonant:

<i>eh</i>	'yes'	[ẽẽ]
<i>o</i>	'there'	[õ]

Note that *o* is nasalized not only if it follows a vowel in the preceding word. Thus:

3. *Ih kijoula* ([õ])
'He ran there.'
4. *Ih kirakir wus o.* ([o])
'He was peeling bananas there.'

1.7 VOWEL REDUCTION

Under certain conditions, short vowels in Mokilese weaken and often disappear. In such cases we can only know that a vowel was there previously when we compare pairs of related words (words that share the same ROOT—see section 2.1.1). For example, in the form *oaljoa* 'his beard', the vowel /i/ that appears in the related form *alij* 'beard' has disappeared.⁹ In a similar example, the vowel /u/ in the word *molukluk* 'forgetful' is lost in the related word *moalkoahla* 'to forget'. Also, the /a/ that we find between the /p/ and the /s/ in *kapas* 'to add' is not pronounced in the related form *kapasahpene* 'to add together', phonetically [kapsaapɛnɛ].¹⁰

The process that results in the disappearance of such vowels is called **vowel reduction**. In order for a short vowel to be reduced it must be in a weak syllable. The syllable to be reduced

must not be word final (that is, it must be followed by at least one more syllable) and it must be preceded by another weak syllable. All of these conditions must hold: **vowel in a weak syllable, preceding weak syllable, following syllable**, in order for vowel reduction to apply.

The environment for vowel reduction (that is, the set of conditions under which it occurs) can be represented thus:

X V C V C V X

where X represents possible other segments and where the emphasized vowel is the one to be reduced. The vowel reduction rule changes a sequence X V C V C V X into X V C C V X. In the examples discussed above it operates as follows:

	[ɔlicɔ]	[mʔlukɔɔla]	[kapasaapɛɛ]
Vowel Reduction	[ɔlcɔ]	[mʔlkɔɔla]	[kapsaapɛɛ]

One of the results of the application of the vowel reduction rule is the creation of a CONSONANT CLUSTER. This is a term used to refer to a sequence of two or more consonants. Thus, the *lj* in *oaljɔa* is a consonant cluster. As we shall see in section 1.8, certain consonant clusters are not permitted in Mokilese. Such nonpermitted clusters are broken up by the insertion of an EXCRESCENT VOWEL. An example of such an excrescent vowel is the italicized vowel in the phonetic representation of *nainki* ‘to have a child’ [nəyniki]. The exact quality of this vowel is difficult to identify. It is clearly central and seems most often to be higher mid, phonetically [i]. Excrescent vowels are not written under most conditions. The following example shows how the **vowel reduction rule** and the **rule of excrescent vowel insertion** interact.

<i>kajapahl</i>	‘to return something’
[kac paal]	(Vowel Reduction)
[kacipaal]	(Excrescent Vowel Insertion)

At this point, it will be instructive to list some of the situations in which the phonological conditions for vowel reduction described above are found in Mokilese. One is in the paradigm for inalienably-possessed nouns (see sections 5.1 and 5.3) whose roots are two syllables. Thus:

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<i>alij</i>	‘beard’	<i>oaljoa</i>	‘his beard’
<i>uduk</i>	‘flesh’	<i>udukoa</i>	‘his flesh’ ¹¹
<i>pwalik</i>	‘foot’	<i>pwoalkoa</i>	‘his foot’

Another is causative verbs.

<i>mijik</i>	‘fear’	<i>kamijiki</i>	‘to frighten’
<i>mojul</i>	‘thick’	<i>kamojuli</i>	‘to thicken’
<i>roj</i>	‘finished’	<i>koarjoa</i>	‘to finish’

A third is in transitive verbs that have intransitive forms (see section 6.5.1) with final reduplication (see 2.1.5.5).

<i>karaja</i>	‘to explain’	<i>karajraj</i>	‘exemplified’
<i>moalkoahla</i>	‘to forget’	<i>molukluk</i>	‘forgetful’

In the examples above the addition of an affix often provides the proper conditions for vowel reduction. Vowel reduction cannot apply to *alij* ‘beard’, because it does not apply to two-syllable words. The addition of the suffix *-oa* ‘his’ creates the three-syllable word **oalijoa*, to which reduction can apply. Similarly, the addition of the prefix *ka-* ‘causative’ to a word like *mijik* ‘fear’ results in the three-syllable word *kamijik* ‘fearful’. This word then reduces to [kamcik].

There are many examples of vowels that fail to reduce after the causative prefix:

<i>karosi</i>	[karosi]	‘to darken’ (from <i>ros</i> ‘dark’)
but <i>koarjoa</i>	[kɔrcɔ]	‘to finish’ (from <i>roj</i> ‘finished’)
<i>kamwoakidi</i>	[kam ^w ɔkiti]	‘to move’ (from <i>mwoakid</i> ‘to move’)
but <i>kamojuli</i>	[kamculi]	‘to thicken’ (from <i>mojul</i> ‘thick’)

We can only attribute such differences to different MORPHEME BOUNDARY types (see 2.1.2). It appears that the more **loosely** (see section 2.1.2.1) an affix is bound to its root, the less likely it is that vowel reduction will apply. It appears that the causative prefix *ka-* may be bound more tightly to some roots than to others, which accounts for the differences noted above.

Many foreign words do not undergo vowel reduction, or do so optionally. Consider the following Japanese loanwords, for example:

<i>dokange</i>	}	'kind of lizard' 'marbles'
<i>doruno</i>		
or <i>dorno</i>		

Forms like *dalala* 'kind of dancing' are difficult to characterize, and must be treated as exceptions to vowel reduction.

1.7.1 A Note on Vowel Reduction and High Vowels

Vowel reduction seems to "skip over" high vowels. That is, reduction does not apply to words like: *ikare* 'kind of fish', *inani* 'carrying pole', and *pinapin* 'to cover', in which the first vowel is high and the second nonhigh. When both vowels are high, as in *irijek* [irjɛk] 'erasing' (related to *irij* 'to erase') or *dupukoa* [dupkɔ] 'its cost' (related to *dupuk* 'pay for') reduction does take place. The exceptional behavior of high vowels with regard to some phonological rules will be considered again below. At present, it is impossible to draw firm conclusions about it.

1.8 CONSONANT CLUSTERS AND EXCRESCENT VOWELS

In section 1.7 we saw that the process of vowel reduction can produce consonant clusters. For example, the cluster *lk* in *moalkoahla* 'to forget' is derived by reducing the syllable *luk* in *molukluk* 'forgetful'. We also noted cases like *armaj* 'human' [arimac], where the consonant cluster *rm* has been broken up by an excrescent vowel.

As was suggested in that same section, certain consonant clusters do not arise through vowel reduction. This is, of course, true for clusters in loanwords; for example, *jilper* 'silver' and *dengwa* 'telephone'—the former an English loanword, the latter a Japanese. Words such as these entered the Mokilese vocabulary with consonant clusters that existed in their language of origin. In a Mokilese word like *moalkoahla*, we know that the *lk* cluster arose through vowel reduction because we can compare this word with the related word *molukluk*. For other words, for example, *adroau* 'egg' and *armaj* 'human', there are no related words with a vowel separating the two consonants. Unless such related words exist, we have no way of knowing if these consonant clusters arose through vowel reduction (as in the case

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of *moal koahla*) or not. When we cannot be sure whether vowel reduction has operated, it is perhaps safest to assume that the basic form of the word in question contains a consonant cluster.

Consonant clusters that arise through vowel reduction and consonant clusters that exist in the basic form of the word, before any rules have applied, are both examples of morpheme-internal consonant clusters. (For a discussion of the concept MORPHEME, see section 2.1.) That is, both consonants in the cluster belong to the same morpheme. This is not always the case, however. In the following examples the two consonants in each cluster belong to different morphemes.

<i>apwalki</i>	'to find difficult',	from <i>apwal</i>	'difficult' + <i>ki</i> 'with'
<i>weijla</i>	'to pull out',	from <i>weij</i>	'to pull' + <i>la</i> 'away'
<i>akpwung</i>	'to self-justify',	from <i>ak-</i>	'display' + <i>pwung</i> 'correct'
<i>limwijmwij</i>	'slippery',	from <i>limwij</i>	'to slip' + Final Reduplication
<i>loangloang</i>	'full of flies'.	from <i>loang</i>	'fly'

As the last two examples show, clusters that are the result of the process of REDUPLICATION (see section 2.1.5) are treated as morpheme boundary clusters.

Consonant clusters are often broken up by the insertion of a vowel, usually [i]. Such a vowel is called an EXCRESCENT VOWEL. Excrescent vowel insertion is a complex process because in some circumstances it must take place, while in others it must not, and in still others an excrescent vowel may or may not be inserted. For example, an excrescent vowel can never be inserted in *kodda* 'to run aground', nor in *pumpum* 'to kick feet'. It is normal in cases like *soapla* 'huge' [sɔpɪla], however. In examples like *minmin* 'clean', *lipilpil* 'watery', and *onopda* 'ready', the insertion of an excrescent vowel is optional.

An excrescent vowel is never inserted between identical consonants, as in *kodda* above. Clusters consisting of a nasal (/m/, /n/, /ŋ/, /mw/) and a stop, a liquid (/l/, /r/) and a stop, or a fricative (/s/) and a stop are not broken up by an excrescent vowel when the two consonants have the same point of articulation. Therefore, no excrescent vowel is inserted in *mwindi* 'to sit down', *pumpum* 'to kick feet', *lolda* 'to become wet', or *rosda*

‘to become dark’. Clusters of a stop followed by a liquid are usually broken up: *pwedla* ‘lucky’ [pwetila], *pakrikrik* ‘to coax’ [pakirikirik].

We have only mentioned a few of the possible consonant cluster types in Mokilese. In the cases we have not mentioned—stop-stop, nasal-nasal; and nasal-stop, liquid-stop, or fricative-stop clusters, where the two consonants have different points of articulation—excrement vowel insertion appears to be optional.

Consonant clusters tend to be favored (that is, not broken up) under the following general conditions:

- a. when followed by a sequence of a high and a non-high vowel

	<i>aksuahu</i>	‘dissent’	[aksuwaaw]
	<i>akjuei</i>	‘to boast’	[akcuwey]
compare	<i>akmwahl</i>	‘to disdain’	[ak(i)mwaal]
	<i>akmai</i>	‘to argue’	[ak(i)may]

- b. in longer words

	<i>wedmalan</i>	‘watermelon’	[wɛtmalan]
	<i>dikjeneri</i>	‘dictionary’	[tikceneri]
	<i>moalkoahla</i>	‘to forget’	[mʔlkoɔla]
compare	<i>dakno</i>	‘to surf’	[takino]
	<i>jikjik</i>	‘to make a wake’	[cikicik]

In general, the more segments that follow a cluster, the less likely an excrement vowel is to arise. In addition to these factors and those mentioned earlier in the discussion, there is some evidence that clusters are also favored under the following conditions:

- c. when a long vowel follows

	<i>doakdoahr</i>	‘kind of fish’	[tɔktɔɔr]
compare	<i>dakdak</i>	‘to meat out a coconut’	[takitak]
but compare	<i>engdehng</i>	‘to hurry’	[ɛŋɪtɛɛŋ]

- d. when the cluster is morpheme-internal

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	<i>wedmalan</i>	‘watermelon’	[wɛtmalan]
compare	<i>dakno</i>	‘to surf’, lit. ‘to ride wave’	[takino]

We do not yet know enough about Mokilese consonant clusters to draw any conclusions from these facts.

Mokilese has borrowed many foreign words (particularly from English) that contain consonant clusters. Unlike Mokilese, English allows a consonant cluster to begin a word; for example, *flour, glass, blue*. In the Mokilese versions of these words, the initial clusters are broken up. Instead of inserting an [i], however, a high front vowel [i] is normally inserted. (A high back round vowel [u] is inserted when the following vowel is round.)

<i>pilawa</i>	‘bread’	[pilawa]
<i>kilahs</i>	‘glass, mirror’	[kilaas]
<i>puluh</i>	‘blue’	[puluu]

Speakers of Mokilese who are familiar with English tend to reduce these vowels somewhat. Many such speakers will not insert a vowel at all, but will pronounce the clusters much as they are in English. Word internal clusters in foreign words are treated in the same way as Mokilese clusters; *eprel* ‘April’ [ɛpɪrɛl].

1.8.1 Assimilation in Consonant Clusters

The most stable consonant clusters are clusters of similar consonants. The consonants in a cluster can be similar in a number of ways: they can agree in voicing, in nasalization, or in point of articulation. Therefore, we would expect consonant clusters whose members have the same point of articulation to be more stable than those that do not. For example, the *nd* cluster in *mwindi* ‘to sit down’ will not be broken up because /n/ and /d/ are both alveolar, while the *ngd* cluster of *risingdi* ‘to close’ is usually broken up by an excrescent vowel because /ŋ/ and /d/ do not have the same point of articulation (/ŋ/ is velar and /d/ is alveolar).

A phonetic rule that makes sounds more similar is called an ASSIMILATION rule. One such rule is the **nasal assimilation rule**. It applies to relate forms like *soanoak* ‘hang up’ and *soangki* ‘hang it up’.

[sɔnɔki]

[sɔnki] by Vowel Reduction

[sɔŋki] by Nasal Assimilation

The nasal assimilation rule changes the point of articulation of a nasal to make it the same as a following consonant. In the example above it has changed the alveolar nasal /n/ to the velar nasal /ŋ/ before the velar stop /k/.

Nasal assimilation does not apply across a morpheme boundary (see section 2.1.2). Thus, *poanki* ‘hammer with’ is phonetically [pʔnki], not *[pʔŋki], because the *n* of the *nk* cluster belongs to the morpheme *poan-* ‘to hammer’ while the *k* belongs to the morpheme *-ki* ‘with’. Many words, particularly foreign words, are exceptions to nasal assimilation. Examples are *inglij* ‘English’ and *jimingdoan* ‘kind of taro’, where the non-homorganic clusters *nɟl* (velar nasal and alveolar liquid) and *ngd* (velar nasal and alveolar stop) appear within the same morpheme.

Total assimilation occurs when a cluster of two different consonants becomes a geminate consonant. Common cases in Mokilese are:

- a. *nl* becomes *ll*

<i>inla</i>	‘to go’	is often <i>illa</i>
<i>menlau</i>	‘thanks’	is often <i>mellau</i>

Total assimilation does not apply to an *nl* cluster across a morpheme boundary. For instance, *akanla* ‘made a fire’ (*akan* ‘start a fire’ + *la* ‘away’) is never **akalla*.

- b. A sequence of a liquid (/l/ or /r/) and an alveolar or palatal stop or fricative (/d/, /j/, or /s/) becomes a geminate stop or fricative. For example:

<i>jarjarjar</i>	becomes	<i>jajjajjar</i>	‘fading’
<i>dildil</i>	becomes	<i>diddil</i>	‘penetrating’
<i>salsalip</i>	becomes	<i>sassalip</i>	‘putting on pomade’
<i>jaljal</i>	becomes	<i>jajjal</i>	‘winding rope’

This assimilation applies in reduplications (see section 2.1.5), like the examples above, but not across other morpheme boundaries. For example:

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dildo 'to enter' (*dil* 'to penetrate' + *do* 'towards speaker')

c. A sequence of a labial consonant (/p/, /pw/, /m/, or /mw/) and /w/ becomes a geminate labial consonant.

poap 'board' + *wa* 'the' becomes *poappa* 'the board',
phonetically [pʔppa]

japw 'land' + *wa* 'the' becomes *japwwa* 'the land',
phonetically [cap^wp^wa]

lam 'lagoon' + *wa* 'the' becomes *lamma* 'the lagoon',
phonetically [lamma]

mwumw 'fish' + *wa* 'the' becomes *mwumwwa* 'the fish',
phonetically [m^wum^wm^wa]

1.8.2 Cluster Metathesis

In a cluster of a labial and a velar stop, the order of the consonants may be reversed.

apkas 'now' or *akpas*
apwkan 'in a little while' or *akpwan*
kapkihla 'to drop' or *kakpihla*

This kind of change in the order of segments is called METATHESIS.

2 Words and Meaningful Units

2.1 MORPHEMES

It is common to think of **words** as the basic units of language. Words are the units that we string together to form sentences. We tend to forget that words themselves are often complex, and that each of their parts supplies a bit of the meaning of the whole word. For example, we can divide a word like *boys* into two parts: *boy* and *s*. The first part carries the meaning ‘young male human’ and the second the meaning ‘more than one’.

The units *boy* and *s* can be used independently of one another. Thus, *s* can be combined with many other units; for example, *cat*, *boat*, *tree* to form *cats*, *boats*, *trees*. *Boy* can be combined with some other units too; for example, *boyish* ‘acting like a boy’. It can also be used alone in a sentence like: *The boy is playing outside*.

Both *boy* and *s* are independent units, but, when they are combined they form what we commonly think of as the single word *boys*. From this we must conclude that there are meaningful units in language that are smaller than words. We call these units MORPHEMES. Some morphemes can be used alone as words, like our example *boy*. Others, like the *s* plural marker and the *-ish* in *boyish*, cannot appear alone. A morpheme that can appear alone is called a FREE MORPHEME; one that cannot is called a BOUND MORPHEME.

To illustrate from Mokilese, consider the word *kamwinge* ‘to feed’. This word can be divided into two morphemes: *ka* ‘causative marker’ and *mwinge* ‘to eat’. Like the *s* plural marker in English, *ka* in Mokilese can combine with many other elements:

<i>du</i>	‘to sink’	<i>kadu</i>	‘cause to sink’
<i>inen</i>	‘straight’	<i>kainene</i>	‘to straighten’
<i>kun</i>	‘extinguished’	<i>kakun</i>	‘to put out’

Not every occurrence of *ka* is a morpheme, however. For example, if we take the word *kalai* ‘bamboo section’ and try to divide it into two parts: *ka* and *lai*, we find that in this case neither of the parts has any meaning by itself. The *ka* in *kalai* is

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not the morpheme meaning 'cause to' and the sequence *lai* has no meaning at all. The word *kalai* is a single morpheme, because it cannot be broken down into smaller units that have meanings by themselves.

2.1.1 Roots and Affixes

Morphemes can be divided into two types: ROOTS and AFFIXES. The root may be thought of as the heart of the word. Most (but not all) roots are free morphemes. In the case of *kamwinge*, *mwinge* is a word that can be used alone, while *ka* is not.

1a. *Inahu kamwinge jeriho*
'His mother fed the boy.'

b. *Jeriho mwinge*
'The boy ate.'

but not

c. **Jeriho ka*

Similarly, the word *poki* 'to hit' is composed of two morphemes: *pok* 'to hit' and *-i* 'transitive marker', where *pok* is the root and *-i* is an affix.

2a. *Woallo poki jeriho*
'That man hit the boy.'

b. *Ih pok jeri*
'He beats children.'

but not

c. **Woallo i jeri* or anything similar.

Perhaps the true difference between root and affix is one of meaning. The meaning of the root is the primary meaning of the whole word. In the case of a word like *jeriho* 'that boy', the meaning of *-o* 'that' is added to the meaning of the root *jeri* 'child, boy'. The addition of *-o* answers the question 'Which boy?'. It is very difficult to think of *jeri* as answering the question 'Which "that"?''. Similarly, in the case of *kamwinge*, the

addition of *ka* changes the meaning *mwinge* ‘eat’ into ‘cause to eat, feed’. It would be very strange to say that the addition of *mwinge* changes the meaning of *ka-* into ‘cause to eat’. In short, affixes can be thought of as adding meaning to the roots with which they occur.

So far we have seen words that consist of roots alone, such as *mwinge*, *pok*, *jeri*. We have also seen words that consist of roots and affixes, such as *kamwinge*, *poki*, *jeriho*. It is also possible for two or more roots to combine to form compound words: *ngil* ‘voice’ and *mwehu* ‘good’ can combine to form *ngilmwehu* ‘have a good voice’. Similarly, *alu* ‘walk’ and *suhkoa* ‘stick, tree’ can combine to form *alusuhkoa* ‘stilts’. Word-building processes will be considered in detail in chapter 11.

2.1.1.1 KINDS OF ROOTS

Most roots in Mokilese are **free roots**. These are roots that can occur alone without affixes. Examples of free roots are:

<i>woal</i>	‘man’
<i>nauna</i>	‘bad’
<i>doau</i>	‘climb’
<i>dapwa</i>	‘perhaps’

There are some roots, however, which are **bound**. Bound roots must occur with some affix; they cannot stand alone. Some examples of bound roots can be seen in:

<i>mehdi</i>	‘to die’	(<i>me-</i> ‘die’ and <i>-di</i> ‘down’)
<i>mehda</i>	‘to die’ (of plants)	(<i>me-</i> ‘die’ and <i>-da</i> ‘up’)
<i>soapoan</i>	‘big’	(<i>soap-</i> ‘big’ and <i>-oan</i> ‘of’)
<i>soaplakoan</i>	‘really big’	(<i>soap-</i> ‘big’, <i>-la</i> ‘away’, and <i>-koan</i> ‘of’)
<i>inoai</i>	‘my mother’	(<i>in-</i> ‘mother’ and <i>-oai</i> ‘my’)
<i>inoamw</i>	‘your mother’	(<i>in-</i> ‘mother’ and <i>-oamw</i> ‘your’)
<i>inah</i>	‘his mother’	(<i>in-</i> ‘mother’ and <i>-ah</i> ‘his’)

The roots *me-* ‘die’, *soap-* ‘big’, and *in-* ‘mother’ are never found in any Mokilese sentences without some affix. Because of this they are bound roots.

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2.1.1.2 KINDS OF AFFIXES

One method of classifying affixes is according to their position before or after the root. Affixes that come before the root are called PREFIXES; those that come after the root are called SUFFIXES. Some prefixes in Mokilese are:

<i>ka-</i>	'causative'	<i>kamwinge</i>	'to feed'
<i>ak-</i>	'display of'	<i>aklaplap</i>	'be haughty'
		<i>aksohrohr</i>	'act independent'
<i>li-</i>	'given to'	<i>lijoangloang</i>	'prone to crying'
<i>ja-</i>	'not'	<i>jaroairoai</i>	'not tall, short'
		<i>jamum</i>	'not sweet'
		<i>jasihkei</i>	'not strong, weak'

Most Mokilese affixes are suffixes. A few will be listed here to show the variety in Mokilese suffixation.

<i>-i</i>	'transitive'	<i>poki</i>	'hit'
		<i>jowi</i>	'wait for'
		<i>kuki</i>	'cook'
<i>-ki</i>	'with'	<i>painki</i>	'marry'
<i>-oar</i>	'only'	<i>emennoar</i>	'only one'
<i>-rai</i>	'their'	<i>jamarai</i>	'their father'
		<i>imwarai</i>	'their house'
<i>-la</i>	'away'	<i>peidla</i>	'throw away'
<i>-an</i>	'full of'	<i>dipan</i>	'sinful'
		<i>winan</i>	'hairy'
<i>-e</i>	'this'	<i>woalle</i>	'this man'
<i>-oaw</i>	'one'	<i>pukkoaw</i>	'one book'
		<i>umwwoaw</i>	'one house'

2.1.2 Morpheme Boundaries

Another method of classifying affixes is according to the type of MORPHEME BOUNDARY with which they are associated. A morpheme boundary is the place at which a separation between morphemes can be made. For example, the sentence:

3. *Woallo japahlda imwahu.*

'That man went back up to his house.'

can be said to consist of three words: *woallo* ‘that man’, *japahlda* ‘went back up’, *imwahu* ‘his house’. (Note that one word in Mokilese often represents a number of words in English.) Each of these words can be divided into morphemes: *woal* ‘man’ -*o* ‘that’; *Japahl* ‘go back’ -*da* ‘up’; and *imw-* ‘house’ -*ah* ‘his’ -*o* ‘that’.

The boundary that separates words can be called **word boundary** and may be symbolized as #. (Since words are made up of morphemes, a boundary between words is also a type of boundary between morphemes.) To distinguish it from word boundary, we may call the boundary between morphemes within a word, *word internal morpheme boundary* or simply MORPHEME BOUNDARY. It may be symbolized as -. With the boundaries indicated, sentence 3 may be rewritten:

Woal-o # japahl-da# imw-ah-o

In fact, it is convenient to think of two different morpheme boundaries in Mokilese, rather than the single morpheme boundary we have indicated above. This distinction helps to describe phonological processes that are associated with certain affixes but not with others. We may term these two boundaries **tight morpheme boundary** and **loose morpheme boundary**. The first is a boundary between morphemes that are so closely associated that it is often difficult to tell where they should be separated. The loose morpheme boundary will be discussed first.

2.1.2.1 LOOSE MORPHEME BOUNDARY

A loose morpheme boundary is the boundary that is associated with what we might call “loosely-bound affixes.” The separation between a loosely-bound affix and the morpheme to which it is attached is usually quite easy to identify. This is particularly true of loosely-bound suffixes, which, under certain conditions, trigger changes in the final segment of the preceding morpheme. For example, when the loosely-bound suffix -*o* ‘that’ is attached to *woal* ‘man’, the final /l/ of *woal* becomes geminate—*woallo* ‘that man’. Similarly, when the loosely-bound suffix -*la* ‘away’ is attached to *alu* ‘to walk’, the final /u/ of *alu*

becomes long— *aluhla* ‘walk away’. When it is necessary to distinguish the loose morpheme boundary from other boundaries, it may be symbolized = .

2.1.2.2 BOUNDARY LENGTHENING

The phonological changes affecting segments that precede a loosely-bound suffix are called *boundary lengthening*. They may be summarized as follows:

a. a single consonant becomes geminate before a loosely-bound suffix **that begins with a vowel**.

didde ‘this wall’

did = e

wall this

pukkoar ‘only books’

puk = oar

book only

Note that final glides also geminate under these circumstances, although the change is not always indicated in the spelling:

moaio ‘that breadfruit’ phonetically [mɔyɔyɔ]

moai = o

b’fruit that

doauoang ‘climb to’ phonetically [tɔwɔwɔŋ]

doau = oang

climb to

b. a short vowel becomes long before a loosely-bound suffix **that begins with a consonant**:

indihla ‘go down and away’

indi = la

go-down away

sihpas ‘a bone’

si = pas

bone a

pinahkihdi ‘cover with’

pina = ki = di
 cover with down

The following is a short summary of the types of suffixes that are loosely-bound and, therefore, trigger boundary lengthening:

- a. determiners (like *-e* ‘this’, *-wa* ‘the’, *-kai* ‘these’, *-oawe* ‘this very’, *-oaw* ‘a, one’, etc. [see chapter 3]. Note that the suffixed numerals for ‘one’ [which also function as determiners] trigger boundary lengthening; other numerals do not)
- b. directionals (like *-do* ‘towards the speaker’, *-we* ‘towards the hearer’, *-la* ‘away’, etc. [see 8.2])
- c. others (*-ki* ‘with’ [see 6.6.1], *-oang* ‘to’ and *-jang* ‘from’ [see 8.3], *-oar* and *-oaroh* ‘till’ [see 10.3])

2.1.2.3 SYNTAX OF LOOSELY-BOUND AFFIXES

The association between a tightly-bound affix and the root to which it is attached is usually so close that no other morphemes can come between the root and the affix (though there are some exceptions—see below). The association between a loosely-bound affix and the root to which it is attached is not so close. Consider:

4. *inoangge* ‘this story’
 inoang = e
 story this
5. *inoang koalikke* ‘this long story’
 inoang # koalik = e
 story long this

In 4, the loosely-bound suffix *-e* ‘this’ is attached to *inoang* ‘story’, while in 5 it is attached to *koalik* ‘long’. In both cases, however, the suffix refers to *inoang* ‘story’. We might want to say that *-e* ‘this’ (and other similar suffixes) do not suffix (syntactically) to individual words, but rather to whole phrases (see 2.2.1). In phonological terms, they suffix to the last word or morpheme in the phrase in which they are used.

- 6a. *koauilla* ‘finished singing’

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koaul = la
sing away, as in

- b. *Ngoah koaulla.*
'I finished singing.'

- 7a. *koaulkihla* 'finished singing it'
koaul = ki = la
sing with away, as in

- b. *Ngoah koaulkihla koaullo.*
'I finished singing that song.'

The suffix *-ki* 'with' can be placed between the root *koaul* 'to sing' and the suffix *-la* 'away' when a word such as *koaullo* 'that song', which describes what was sung, is also used.

The distance between loosely-bound suffixes and their roots often becomes so great that the suffixes begin to function like independent words. For example, the combination *-dahlahng* (*-da* 'up' plus *-la* 'away' plus *-oang* 'to') is clearly a suffix in 8a, but in 8b seems more like an independent word.

- 8a. *I h kaliplipdahlahng Mwoakilloa.*
he CA - exile-up-away - to Mokil
'He was exiled to Mokil.'

- b. *Ih kaliplipjang Pohnpei dahlahng Mwoakilloa.*
he CA - exile - from Ponape up-away-to Mokil.
'He was exiled from Ponape to Mokil.'

2.1.2.4 TIGHT MORPHEME BOUNDARY

A tight morpheme boundary (symbolized by +) is the boundary associated with affixes that we might term 'tightly-bound.' As with loosely-bound affixes, it is possible to define tightly-bound affixes in terms of the phonological processes with which they are associated. A tightly-bound suffix, in the broadest terms, is one which does **not** regularly trigger boundary lengthening, as described in 2.1.2.2. As defined by this principle, the following are the major types of tightly-bound suffixes.

- a. transitive and intransitive suffixes (*-i* and *-ek*—see chapter 7)
b. possessive suffixes (*-mw* 'your', *-sa* 'our',—see chapter 5)

- c. nominalizing suffixes (-*poa* or -*koa*—see 11.4)
 d. stative forming suffixes (-*an*,—see 11.6)

It is difficult to judge the degree of binding of prefixes. They never trigger boundary lengthening phenomena of any sort. On the other hand, some prefixes undergo MORPHOPHONEMIC CHANGES (changes in phonological form triggered by morphological conditions) that seem to bind them closer to the root with which they are associated. Compare:

- 9a. *kamehki* ‘to embarrass’

ka = mehk + i

CA embarrass TR

- b. *kemwehui* ‘to improve’

ka + mwehu + i

CA good TR

in which the causative prefix *ka-* becomes *ke-* in 9b but, under similar conditions, remains *ka* in 9a. We are perhaps justified in describing this difference in terms of morpheme boundary type. Note that in the case of prefixes, we do not say that a particular prefix is always loosely-bound or tightly-bound (as we did in the case of suffixes), but that a particular use of a given prefix involves either a tight or a loose morpheme boundary. For example, in 9a the prefix *ka-* is associated with a loose morpheme boundary while in 9b it is associated with a tight morpheme boundary.

Although the failure to trigger boundary lengthening is a characteristic of all tightly bound suffixes, this is not to say that all such suffixes behave in the same way in other respects. In fact, there is a considerable difference in the degree with which tightly-bound suffixes are associated with their roots. More tightly-bound suffixes tend to trigger morphophonemic changes in the roots to which they are attached, while less tightly-bound ones do not. It is usually quite easy to locate the boundary between a less tightly-bound suffix and its root, while this often proves difficult in the case of a more tightly-bound suffix. These differences can be seen clearly in a comparison of the less tightly-bound suffixes *-i* ‘transitive’ and *-ek* ‘intransitive’ with the more tightly-bound possessive suffixes.

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Less tightly-bound suffixes are usually added to roots with no change in either the root or the suffix (beyond regular changes like vowel reduction).

ingkoad 'to roof'
ingkoadi 'to roof something' (*ingkoad* + *i*)

padahk 'to teach'
padahki 'to teach someone' (*padahk* + *i*)

kidim 'to wrap something'
kidimek 'to wrap' (*kidim* + *ek*)¹

By contrast, roots to which a more tightly-bound suffix is added often change their form.

from *ad* 'name' we can derive *oadoa* 'his name'
from *war* 'canoe' we can derive *woaroi* 'my canoe'
warah 'his canoe'
from *maj* 'face' we can derive *mijoa* 'his face'
mijen 'face of'
mijarai 'their faces'

Under the influence of **more** tightly-bound suffixes, the vowels of the roots above (*ad* 'name', *war* 'canoe', *maj* 'face') often change. **Less** tightly-bound suffixes do not regularly trigger such changes.

It is often difficult to locate the boundary between a tightly-bound suffix and its root. This difficulty is particularly true of nouns that take the possessive suffixes. Consider:

<i>oadoan</i>	'name of'	from <i>ad</i>	'name'
<i>mwomwen</i>	'behavior of'	from <i>mwomw</i>	'behavior'
<i>kilin</i>	'skin of'	from <i>kil</i>	'skin'
<i>insahn</i>	'blood of'	from <i>insa</i>	'blood'

It is not immediately clear whether it is correct to divide a word like *mwomwen* into morphemes as *mwomw* + *en* or *mwomwe* + *n*. If we choose the first analysis, then the root *mwomw*- has the same form as the FREE FORM of the noun, *mwomw*. However, if we divide all the nouns in the above list in this way we will have four different forms for the **construct suffix** (see section 5.2): *-oan*, *-en*, *-in*, and *-hn*. If we choose the second analysis

(*mwome+n*) the construct suffixes in all the words now have the same form *-n*, but the roots now have an extra vowel not found in the free form; for example:

<i>oadoa + n</i>	and	<i>ad</i>	'name' ²
<i>mwomwe+n</i>	and	<i>mwomw</i>	'behavior'
<i>kili+n</i>	and	<i>kil</i>	'skin'
<i>insah+n</i>	and	<i>insa</i>	'blood'

A third possibility is to divide these words in the following way:

<i>oad + oa + n</i>
<i>mwomw + e + n</i>
<i>kil + i + n</i>
<i>insa + h + n</i>

This analysis produces a single construct suffix *-n* and gives the noun roots the same shape as the related free forms. However, it leaves an extra unit (*-oa-*, *-e-*, *-i-*, and *-h-*) that does not seem to be associated with any meaning. The only function of this unit is to connect a root and an affix. We call such units STEM FORMANTS. The merits of these three analyses will be discussed in more detail in 5.2.

2.1.2.5 GEMINATION AND TIGHTLY-BOUND SUFFIXES

Tightly-bound suffixes do not regularly cause gemination of preceding consonants as do loosely-bound suffixes. If, however, the root to which a tightly-bound suffix is attached is a single syllable containing a short high vowel, the final consonant of that root becomes geminate before *-ek*. For example:

<i>lim</i>	'to fold something'
<i>limmek</i>	'to fold'

<i>pid</i>	'to wind something'
<i>piddek</i>	'to wind'

<i>sipis</i>	'to tie something'
<i>sippeke</i>	'to tie' (the loss of the final <i>-is</i> is unexplained)

A similar pattern is found in a few inalienably possessed nouns. For example:

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<i>pwurroa</i>	'his stomach'
<i>pwukkoa</i>	'his knee'
<i>pwijjoa</i>	'his navel'

Not all nouns of this form geminate in this way, however. More data are needed before the pattern is completely understood.

2.1.3 Suffixing to Vowel Final Roots

Suffixes that begin with a vowel (or consist of only a vowel) have special forms used only when the root to which they are attached ends in a vowel.³ Most suffixes of the form -VC lose the vowel after a vowel final root.

-en	'that near you'	becomes	-n	after a vowel
-ok	'those'	becomes	-k	after a vowel
-oar	'till, only'	becomes	-r	after a vowel
-oaroh	'till'	becomes	-roh	after a vowel
-oang	'to'	becomes	-ng	after a vowel

Below are examples of the use of these suffixes after vowels.

10. *lehn* 'that oil'
le = en
oil that
11. *suhkoahk* 'those trees'
suhkoa = ok
tree that
12. *jipwellahr* 'look back and'
jipwel = la = oar
look away till
13. *inlahng* 'go towards'
inla = oang
go to

Two suffixes of the form VC have alternate forms with an initial glide [y] when they occur following a vowel.

-ew (<i>ioaw</i>) 'a, one'	becomes -iew (<i>ioaw</i>) vowel
---------------------------------	---------------------------------------

-ek 'intransitive' becomes *-iek* after a vowel

as in:

14. *pukohioaw* 'a basket'
puko = ioau
basket a
15. *pinahiek* 'to cover'
pina = iek
cover INT

Note that the suffix *-ek* 'intransitive', which is normally tightly-bound (not triggering boundary lengthening), causes lengthening of a root-final vowel. This suffix also has a more common post-vocalic alternate *-k*, as in:

16. *kararahk* 'to split'
ka = rara = ek
CA split INT
17. *kilelehk* 'to take a picture'
kilele = ek
picture INT

I know of no way to predict which post-vocalic alternate, *-k* or *-iek*, will be used with a particular verb.

The suffixes *-e* 'this' and *-o* 'that' have the post-vocalic alternate forms *-i* [y] and *-u* [w], as in:

18. *peipahi* 'this paper'
peipa = e
paper this
19. *rahu* 'that branch'
ra = o
branch that

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2.1.4 Suffix Alternates After High Vowels

Roots ending in high vowels regularly take the full forms, rather than the post-vocalic forms, of the suffixes described above. In such cases it is difficult to tell whether the final vowel of the root has been lengthened or whether a glide has been inserted. Such forms may be written with or without vowel lengthening.

<i>ujuho</i>	or <i>ujuo</i>	'that star' [ujuuo] or [ujuwwo]
<i>kasihen</i>	or <i>kasien</i>	'that boat pole'
<i>juhoaw</i>	or <i>juoaw</i>	'a shoe'
<i>lujdihoar</i>	or <i>lujdioar</i>	'jump down and'

Some speakers allow the post-vocalic alternates of *-oang* 'to' and *-oar* 'till, only' after high vowels.

<i>indihoang</i>	or <i>indihng</i>	'go down to'
<i>lujdihoar</i>	or <i>ludjihr</i>	'jump down and'

Some speakers also allow either the full or the post-vocalic alternates of *-oang* 'to', *-oar* 'only, till', and *-ew* 'one, a' after the mid vowels /e/ and /o/. For example:

<i>kasdohioaw</i>	or <i>kasdohoaw</i>	'a movie'
<i>audohr</i>	or <i>audohoar</i>	'fill up till'
<i>kadohng</i>	or <i>kadohoang</i>	'move to'

This choice does not seem to be true for any other suffixes, however.

2.1.5 Reduplication

So far the discussion of morphological processes has centered on affixation—the changing of the meaning of roots through the addition of prefixes and suffixes. Another important morphological process in Mokilese is REDUPLICATION—the phonological extension of a root by repeating some portion of it. For example:

<i>kasoa</i>	'to throw something'
<i>kaskas</i>	'to throw'

<i>mwinge</i>	'to eat'
<i>mwingmwinge</i>	'to be eating'

poadok 'to plant something'
poadpoadok 'to be planting something'

loang 'a fly'
loangloang 'full of flies'

In this section we will be concerned with describing the phonological forms that reduplications can take. The meanings and functions of reduplication will be covered in chapters 6, 9, and 11.

2.1.5.1 #CVC- REDUPLICATION

The most common reduplication type in Mokilese is a reduplication of the first #CVC- of the root, as in the examples given above. It is used regularly in:

- a. the progressive form of roots of the shape CVCV(C), as, for example, *poadpoadok* (from *poadok* 'to plant') *kaskasoa* (from *kasoa* 'to throw')—see 9.2 and 9.3;
- b. stative verbs derived from one syllable nouns whose root vowel is non-high; as, for example, *loangloang* 'full of flies' (from *loang* 'fly')—see 11.6.2; and
- c. intransitive forms of bitransitive verbs; as in *kaskas* 'to throw' (related to *kasoa* 'to throw something')—see 6.5.4.

2.1.5.2 #CVh- Reduplication

#CVh- reduplication involves a reduplication of the first #CV- of the root *and* lengthening of the vowel. It is used in place of #CVC- reduplication when the root in question is of the form CVVC (C), CVhC, or CV. For example:

<i>wihwia</i>	'to be doing',	from <i>wia</i>	'to do'
<i>jahjahk</i>	'to be waving',	from <i>jahk</i>	'to bend'
<i>pahpa</i>	'to be weaving',	from <i>pa</i>	'to weave'
<i>nohno</i>	'lots of waves',	from <i>no</i>	'a wave'

Many speakers, particularly younger speakers, can substitute #CVh- reduplication for #CVC- reduplication **in the progressive form of verbs.**

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poadpoadok or *poahpoadok* ‘to be planting’
mwihmwinge or *mwingmwinge* ‘to be eating’

This substitution is not possible in other uses of #CVC- reduplication.

2.1.5.3 #VCC- Reduplication

Most roots that begin with #VC reduplicate the VC and geminate the consonant also.

irrir ‘to be stringing’ from *ir* ‘to string’
oappoap ‘to pull’ from *oapi* ‘to pull something’
onnonop ‘to be preparing’ from *onop* ‘to prepare’

This pattern is used in:

- a. the progressive in verbs, in which case it can be replaced by #Vh- reduplication for some speakers; and
- b. unpredictably in a few derived statives and intransitives of this shape (though in others **final vowel preserving reduplication** is used—see 2.1.5.6).

When a root begins with a vowel followed by a nasal-stop consonant cluster with the same point of articulation, all three segments are reduplicated. For example: *andandip* ‘to be spitting’, from *andip* ‘to spit’.

The three patterns we have been discussing (#CVC-, #CVh-, and #VCC-) can together be called **strong syllable reduplication**, because the extension of the root created by these processes is a strong syllable (see 1.4).

poad-poadok where *poad-* is a strong syllable
wih-wia where *wih-* is a strong syllable
id-didip where *id-* is a strong syllable

The progressive form of verbs always uses one of the three types of strong syllable reduplication. Other functions of reduplication (deriving statives or intransitives) are sometimes marked by strong syllable reduplication but in many cases are not.

2.1.5.4 # CV-Reduplication

A few verbs of the shape #CV#, #CVV- or #CVh- have derived intransitives involving a reduplication of the first #CV-.

doadoa 'to sew', from *doa* 'to sew something'
mwamwahl 'to treat badly', from *mwahl* 'bad'
koakoaik 'to scratch', from *kaik* 'to scratch something'

This pattern is restricted to a very few roots

2.1.5.5 FINAL -CVC# REDUPLICATION

A few forms of more than one syllable have derived statives or intransitives produced by reduplicating the last -CVC# of the root. For example:

pwirejrej 'dirty', from *pwirej* 'dirt'
sakaikai 'rocky', from *sakai* 'rock'

(In this form, the final glide [y], written *i*, functions as a consonant.)

limwijmwij 'slippery', from *limwij* 'to slip'
piroakroak 'braided', from *piroaki* 'to braid'

2.1.5.6 FINAL-VOWEL-PRESERVING REDUPLICATION

Many roots of the form C₁ V₁ C₂ V₂, where V₁ is a high vowel and V₂ is non-high, reduplicate on the pattern CVCV-CVC

pinapin 'to cover', from *pina* 'to cover something'
jilejil 'to guard', from *jiloa* 'to guard something'
sikesik 'to converse', from *sikoa* 'to talk about something'

In some forms, an internal (rather than a final) vowel is preserved in the reduplication.

pilepil 'to pick', related to *piload* 'to pick something'
inihn 'to cook', related to *inim* 'to cook something'

In other cases, the V₂ that appears in the reduplicated form does not appear in the root, but may appear in related forms. For example:

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ukuhk 'to smoke', related to *uk* 'to blow'

alahl 'striped', related to *al* 'road, line' (compare *aloa* 'its road')

Note that all these examples of final vowel preserving reduplication involve cases where **vowel reduction** (see 1.7) does not apply; that is, after high vowels and when the vowel to be reduced is long. For example, forms such as:

doapwdoapw 'to pull', from *doapwoa* 'to pull something'

might be very similar to forms like *pinapin* 'to cover', except that the internal vowel has been reduced.

<i>pina</i>	<i>doapwoa</i>	
<i>pinapin</i>	<i>doapwoadoapw</i>	Reduplication
—	<i>doapwdoapw</i>	Vowel Reduction

2.1.5.7 A HISTORICAL NOTE ON FINAL-VOWEL-PRESERVING REDUPLICATION

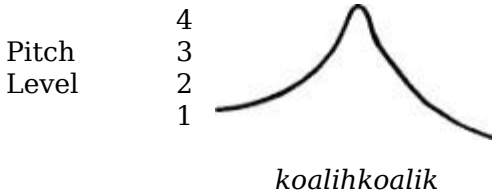
Final vowel preserving reduplication appears to be the result of an older (C)VCV reduplication pattern, followed by deletion of final vowels and vowel reduction (where applicable). For instance, *al* 'road' comes from an older **ala*, the final vowel of which is reflected in the reduplication *alahl* 'striped' (from an older **ala-ala*). Final vowel deletion has applied to both the root *al* and to the reduplication *alahl*.

2.1.5.8 INTENSIVE REDUPLICATION

A few stative verbs have a special intensive form created by lengthening and raising the pitch of the first vowel (if the form is reduplicated) or reduplicating the first # CV(h)C(V) and lengthening and raising the pitch of the vowel **nearest** the root. For example:

<i>sihksik</i>	'very small'.	from <i>siksik</i>	'small'
<i>dahrdahr</i>	'very fast',	from <i>dahr</i>	'fast'
<i>koalihkoalik</i>	'very big',	from <i>koalik</i>	'big'

We might diagram the intonation pattern in these forms as follows:



2.2 STRUCTURE AND FUNCTION OF LANGUAGE

Language may be thought of as a kind of machine. Language has a job to perform, the very complex job of expressing thoughts and ideas in a way that permits people to communicate with each other. A language, like a machine, has an internal structure—a number of parts (like phonemes, morphemes, words, etc.) that are put together in fixed ways to enable it to work efficiently. Each unit of language, and each kind of combination into which these units can enter, contributes something to the task of expressing ideas.

It is necessary to think about language in two ways at the same time. We must seek to describe the structures that are found in language, to show how units such as *morphemes* combine to form *words* and how words combine with other words to form larger units and constructions. In short, part of our job is to describe how language, like any fine machine, is put together. It is equally important to consider the way in which each morpheme and each construction contributes to the primary job of language—communication.

2.2.1 The Sentence

First, we will consider whether there is anything in language that can be called the **unit of communication**. It is easy to show that this unit is not the same as the **unit of meaning**—the MORPHEME that was discussed in section 2.1. Using morphemes (or even words) in isolation is not equivalent to communicating. Communication involves thoughts and ideas that are much more complex than elementary units of meaning.

For example, consider a relatively simple situation that we might want to describe through language. Let us suppose we are on the beach, and we see an old man out on the reef fishing. To describe what we see, we must use a number of units of meaning (morphemes) such as the following: *woal* ‘man’, *loakjid*

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'to fish', *wos* 'reef', *-o* 'that', *lap* 'old', and *pohn* 'on'. It is not enough to list the morphemes in some random order, however. Communication requires some organization of the meaningful units. For example, it is the man who is old, so that the morphemes *woal* 'man' and *lap* 'old' must be closely associated. One means of expressing such association of meaning is to place the morphemes in question near one another; thus, *woal lap*.

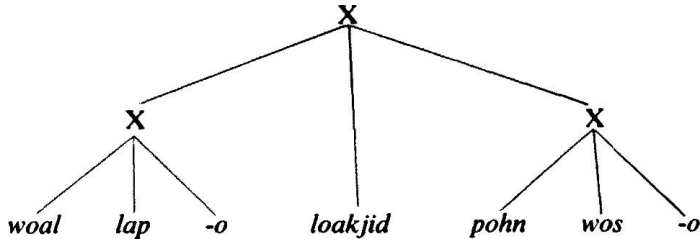
Similarly, it is the old man that we are pointing at on the reef. We signal this kind of pointing by the morpheme *-o* 'that'. Grouping these three morphemes together we produce the construction⁴ *woal lappo* 'that old man'. The order of morphemes within a construction is normally fixed. We cannot say **lappo woal* or **o woal lap*. The orders *lap woallo* and *woallo lap* might be possible, but with a different meaning ('That man is old' rather than 'that old man').

We can form another construction from *pohn* 'on', *wos* 'reef' and *-o* 'that' since these three morphemes together tell where the old man was fishing—not under the reef, nor inside it, but on the reef. The order of these elements is also fixed. We must say *pohn wos so*, not **wosso pohn*.

From the six morphemes with which we began, we now have three units: the constructions *woal lappo* and *pohn wosso* and the word *loakjid*. These, too, must be combined in a specific way; we must say *woal lappo loakjid pohn wosso* 'that old man is fishing on the reef' rather than **woal lappo pohn wosso loakjid*.

We have described in some detail one way in which the process of organizing morphemes into a unit that can be used to communicate information can be viewed. What we produced was the sentence: *Woal lappo loakjid pohn wosso*. 'That old man is fishing on the reef.' We may, therefore, consider the SENTENCE to be the unit of communication that we set out to define. Since the principal function of language is communication, it must be able to produce such units of communication. A language may then be viewed as a device that produces sentences.

The internal structure that we assumed for the sentence constructed in the preceding paragraphs may be diagrammed as follows:



This type of diagram is called a **tree diagram**. It is made up of lines (called **branches**) that join together those morphemes that are most closely associated in a group of morphemes. The point in a tree diagram at which these lines meet (labeled X in the tree above) marks a construction of associated morphemes. These constructions can themselves be joined together in a larger construction (and these into still larger constructions and so forth) by means of other branches. In the above tree diagram the topmost X marks the construction that we have been calling a SENTENCE. Thus, the above tree tells us that the sentence *Woal lappo loakjid pohn wosso* is a combination of the units (constructions) *woal lappo*, *loakjid*, and *pohn wosso*.

2.2.2 Word Classes

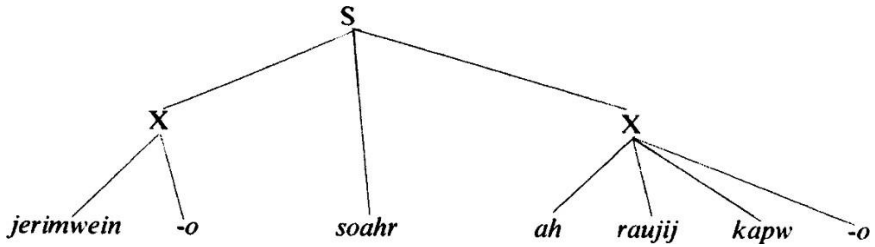
One of the most important tasks of a grammar is to describe how words combine. We have demonstrated that words or morphemes can combine to form constructions and that constructions can combine to form sentences. In most cases these elements must combine in a fixed order. For example, in a construction formed from the morphemes *woal* 'man', *-o* 'that' and *lap* 'old', the morpheme *lap* must follow *woal* and the morpheme *-o* must follow *lap*.

Let us now consider the sentence:

20. *Jerimweinno soahrla ah raujij kapwwo*
 boy-that tore his pants new-that
 'That boy tore his new pants.'

We might proceed in the manner outlined above and produce a tree to describe the internal structure of sentence 20.

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This diagram tells us that in sentence 20, *jerimwein* and *-o* form a construction and that *jerimwein* must come before *-o*. Similarly, *ah*, *rau jij*, *kapw*, and *-o* form another construction and must appear in that order (**rau jij ah o kapw*, etc., is ungrammatical). Both these constructions occur with *soahr* in a sentence construction (labelled S on the tree diagram). The constructions that combine to make up a sentence must also occur in a fixed order.

While it seems possible to describe the internal structure of sentences by describing the relationships between the words and morphemes that make up those sentence, it would soon become obvious that there are so many words and so many sentences in which they can combine that the job would be endless. Furthermore, this method overlooks one very important fact: many different words combine in sentences in exactly the same way. In sentence 20, we could replace *soahr* 'tear' by *mwehuki* 'like', *insinge* 'write on', *nikidla* 'save', and many similar words, yet all these would still have to follow *jerimweinno* and precede *ah rau jij kapwwo*. Similarly, we could replace *kapw* 'new' by *reping* 'old', *pwirejrej* 'dirty', *koarohroa* 'white', and so forth, and all of these would still have to follow *rau jij* 'pants'. Words that can be substituted for each other in this way are said to belong to the same WORD CLASS.

The discovery of word classes makes the task of describing sentence patterns much easier, because it permits us to state one rule for a word class that will be true for all members of that word class. We can, therefore, explain the ungrammaticality of:

21. **Lap woallo loakjid pohn wos.*
22. **Jerimweinno soahr ah kapw rau jijjo.*

by one rule that states that ATTRIBUTES like *lap*, *kapw*, *reping*, *pwirejrej*, *koarohroa*, must follow the NOUNS, like *woal*, *rau jij*, *kerimwein*, *wos*, to which they refer. In the chapters that follow,

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we will be defining many word classes in Mokilese and showing how these classes (rather than individual words or morphemes) combine to form constructions and sentences.

3 Nouns and Reference

A large part of the ideas we must communicate through language involve information about people and objects in the world around us. Words that name such people and objects are called NOUNS. The following are nouns.

a. <i>John</i>	b. <i>woal</i>	'man'
<i>Elsa</i>	<i>jeri</i>	'child'
<i>Mwoakilloa</i>	<i>ni</i>	'coconut'
<i>Pohnpei</i>	<i>doakoa</i>	'island'
<i>Japahn</i>	<i>puk</i>	'book'
	<i>suhkoa</i>	'plant'

The nouns in column b are the names of whole classes of objects. All the objects in the world that have the qualities **human**, **male**, and **mature** can be given the name *woal* 'man'. Nouns that refer to such classes are called **common nouns**. The nouns in column a, on the other hand, are the names of particular people and places, rather than of whole classes of objects. Such nouns are called **proper nouns**.

Most nouns, like those above, refer to people or objects that we can see and touch. Many nouns, however, refer to ideas or concepts that exist only in our minds or in the customs of the society in which we live. For example:

<i>siahk</i>	'custom'
<i>ad</i>	'name'
<i>dihp</i>	'sin'
<i>mwomw</i>	'behavior'
<i>injen</i>	'desire, privilege'
<i>iroa</i>	'his condition, his health'

Nouns that refer to physical objects are called **concrete nouns**. Those that have only mental reality are called **abstract nouns**.

3.1 RELATIONAL NOUNS

Among the abstract nouns of Mokilese there is a special set of nouns called RELATIONAL NOUNS. Some of these are:

<i>ipen</i>	'near to'
<i>mwohn</i>	'before, in front of'
<i>pehn</i>	'under'
<i>nehn</i>	'in, inside'
<i>pohn</i>	'on, on top of'
<i>mwerin</i>	'behind, after'

Relational nouns refer to notions of space and time. They give us a way to refer to the location of objects and events in relation to other objects and events.

1. *Kasso oakkoak pohn najjo.*
 cat-D hide-RED on boathouse-D
 'The cat is hiding on the boathouse.'
2. *Ih mine nehn imwahu.*
 he be in house-his-D
 'He is inside his house.'
3. *Ngoah kapang ih mwohn anjoauo ma ih inla o.*
 I saw him before time-D that he go there.
 'I saw him before he went there.'

Although it is difficult to justify calling these relational "nouns" on the basis of their meaning, it is clear that they are nouns because of the kinds of constructions in which they occur. They always occur with the possessive suffixes found with nouns like *umw* 'house'. Compare:

<i>ipoai</i>	'near me'	<i>imwoai</i>	'my house'
<i>ipoamw</i>	'near you'	<i>imwoamw</i>	'your house'
<i>ipah</i>	'near him'	<i>imwah</i>	'his house'
<i>ipen woallo</i>	'near that man'	<i>imwen woallo</i>	'that man's house'

These relational nouns show that it is possible to classify words according to the kinds of constructions in which they occur, in addition to classifying them according to their

3 Nouns and Reference

meaning. A relational noun can be called a noun because it is found in positions (environments) where nouns are normally found, but never in constructions typical of other word classes.

3.2 NOUN PHRASES

In section 2.1, we examined constructions like *woal lappo* ‘that old man’, *jerimweinno* ‘that boy’, and *ah raujij kapwwo* ‘his new pants’. Each of these constructions consists of one noun (*woal* ‘man’, *jerimwein* ‘boy’, and *raujij* ‘pants’) and a number of other elements.¹ Each of these elements helps to specify the meaning of the noun in some way. In the construction *woal lappo*, the word *lap* tells us that the man being discussed is old, while the suffix *-o* points the man out as being over there, rather than here. The noun is the most important element of each of these constructions, however. The other morphemes in the construction add in some way to the meaning of the noun.

We call the most important element of any construction the **head** of that construction. All the constructions above have nouns as heads. A construction with a noun as head is called a NOUN PHRASE. All other elements of a noun phrase help refine the meaning of the head noun.

A NOUN PHRASE, therefore, is a construction that is built around a noun. From this it follows that the shortest possible noun phrase consists of only a noun. Thus, in the sentence:

- 4a. *John pirin jeila loakjid rehnnoawe.*
‘John is going to go fishing today.’

John is a **noun phrase**. Other more complex noun phrases can be used in the same position (ENVIRONMENT) as the simple noun phrase *John*.

- b. *Woallo pirin jeila loakjid rehnnoawe.*
‘That man is going to go fishing today.’
- c. *Woalmeno pirin jeila loakjid rehnnoawe.*
‘A certain man is going to go fishing today.’
- d. *Woal roairoaimeno pirin jeila loakjid rehnnoawe.*
‘A certain tall man is going to go fishing today.’

e. *Woal roairoaimeno ma ngoah kapang aio pirin jeila loakjid rehnnoawe.*

'A certain tall man that I saw yesterday is going to go fishing today.'

All of these expanded constructions are noun phrases, because they occur in the same position (environment) as simple nouns like *John* in 4a above.²

Any of the sentences 4a to 4e above can be replaced by:

f. *Ih pirin jeila loakjid rehnnoawe.*

'He is going to go fishing today.'

The word *ih* 'he' can stand for *John*, *woallo*, *woalmeno*, *woal roairoaimeno*, *woal roairoaimeno ma ngoah kapang aio*, or any number of similar nouns or noun phrases. A word that can be substituted for a noun or noun phrase in this way is called a PRONOUN. Most pronouns (see section 3.4) are used to replace a noun or noun phrase whose identity is clear to us. Thus, in:

5a. *Jeri siksikko joh kak alu.*

'That small boy can't walk.'

b. *Ih sipwla ehn aio.*

'He broke his leg yesterday.'

we know that *ih* 'he' in 5b refers to the small child mentioned in sentence 5a. In this way 5b is equivalent to:

c. *Jeri siksikko sipwla ehn aio.*

'That small boy broke his leg yesterday.'

We use *ih* 'he' as a substitute for *jeri siksikko* 'that small boy' rather than repeat the whole noun phrase.

Pronouns like *ngoah* 'I' and *koah* 'you' may be thought of as substitutes for the names of the speaker and the listener in a conversation. Because pronouns substitute for and occur in the same environments as nouns and noun phrases, they are themselves noun phrases. For example, in:

6a. *Woallo mwehuki kang rais.*

'That man likes to eat rice.'

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- b. *Ih mwehuki kang rais.*
'He likes to eat rice.'
- c. *Ngoah mwehuki kang rais.*
'I like to eat rice.'
- d. *Koah mwehuki kang rais.*
'You like to eat rice.'

woallo, ih, ngoah, and koah are all noun phrases.

3.3 REFERENCE: DETERMINERS AND PRONOUNS

As we have said before, most nouns refer to classes of people or objects. A noun like *li* 'woman' identifies a group of people having certain characteristics, and a noun like *suhkoa* 'plant', a group of objects with a different set of characteristics. Because the number of people or objects to which a certain noun, like *li* or *suhkoa*, might refer is so large, it is necessary to have some way to restrict its reference. In this way, the noun will refer to only a small number of all the possible objects to which it might refer, or even to one particular object. A number of different kinds of morphemes can be used to determine the *reference*³ of a noun. One such set of morphemes are called DETERMINERS. These include such suffixes as *-e* 'this', *-o* 'that', *-kai* 'these', *-pwi* 'some' and *-wa* 'the'. Determiners serve to point out the location of the object(s) being discussed or to tell us whether the object is one with which we should be familiar. The form and function of determiners in Mokilese will be discussed in sections 3.3.2 to 3.3.6.

PRONOUNS (3.4), unlike determiners, do **not** help to determine the reference of nouns. Rather, as has already been suggested above, they take the place of nouns whose identity and reference should be clear to the hearer. The form and function of Mokilese pronouns will be discussed in section 3.4.

3.3.1 Nouns without Determiners

3.3.1.1 **GENERIC USE**

As already suggested, most nouns can refer to a whole class of objects. In the following sentences the emphasized nouns are used in this way.

7. Mahnsang *kin wia ahr paj in kohn* suhkoa.
bird MOD make P nest at top tree
'Birds build their nests in treetops.'
8. *Nehn woal kaper.*
in forest dangerous
9. *Ngoah kin nimen kang* mwumw.
I MOD want eat fish
'I like to eat fish.'
10. *Woal sihkei jang li.*
man strong from woman
'Men are stronger than women.'
11. *A koah kak wiahda* war?
Q you can build canoe
'Can you build canoes?'

A noun that is used to represent the whole class of objects to which that noun can refer is called **GENERIC** (from the Latin word *genus* meaning 'kind, class'). In the above sentences the emphasized nouns are being used generically because they refer to a class of objects in general, not to any one object or objects in particular. In Mokilese, a noun used generically does not require a determiner.

3.3.1.2 **CONTRASTIVE USE**

Nouns appear without determiners in sentences that imply **contrast**. For example:

12. *Ioar kida ma ngoah nimen dupukda.*
'It's a guitar that I want to buy.'
13. *Ngoah mwehuki kida koalikjang* diroam.

'I want a guitar more than a drum.'

14. *Ngoah anahne woal en jeuweje ngoahi, jaudi jerimwein.*

'I need a man to help me, not a boy.'

In each of the sentences 12 to 14 there is a contrast implied between an object belonging to one class of objects and one belonging to another class (or, in the case of sentence 12, all other classes of objects). Contrast between some **nonspecific** object belonging to one class of objects and another nonspecific object belonging to another class is expressed by a noun without a determiner.

3.3.1.3 EXISTENTIAL SENTENCES

Existential sentences (see section 8.6), as the name implies, discuss the existence of an object. They generally say nothing more about the object than that it does or does not 'exist'. Existential sentences consist of a noun or noun phrase without a determiner and one of the existential verbs, *mine* 'to exist', *joh* 'not exist', or *johla* 'no longer exist'.

15. *Mine noai* puk.

'I have a book.'

16. *A mine mwumw koah loakjidihda?*

'Did you catch any fish?'

17. *Johla suhkoa mijen imwoamwen.*

'There are no longer any trees in front of your house.'

18. *Ngoah joh kak oaloo dehsse pwa joh pinjel ipoai.*

'I can't take this test because I don't have a pencil with me.'

Nonspecific nouns in existential sentences take no determiner.

3.3.1.4 IDENTIFICATIONAL SENTENCES

Nouns that give some kind of identification of another noun or pronoun often occur without a determiner. In the following sentences the identifying noun is emphasized.

19. *Nehn woalin me joapwoai.*

‘This forest is my land.’

20. *Pinjelle nah.*
‘This pencil is his.’
21. *Johnpadahkko pel doaksoa.*
‘The teacher is also a doctor.’
22. *Me ruhl.*
‘This is a ruler.’

In sentences like 21 and 22, where the emphasized nouns identify some property of a noun or pronoun previously mentioned, it is also common for the nouns to occur with the indefinite determiner (see 3.3.2.1).

23. *Johnpadahkko pel doaksoahmen.*
‘The teacher is also a doctor.’
24. *Me ruhlpas.*
‘This is a ruler.’

3.3.2 Nouns with Determiners

3.3.2.1 NONGENERIC

Just as a generic noun refers to an entire class of objects, a non-generic noun refers to a particular member or members of a class, rather than to the class as a whole. Most nongeneric nouns are marked with a determiner of some kind. As was suggested in 3.3.1.4, the nonemphatic forms of the number ‘one’ (-*ew*, -*oaw*, -*men*, -*pas*, and -*kij*—see 4.1.8) can be used in this way. Examples are:

25. *Ioar pukkoaw me pohn sehpile.*
‘There’s a book here on the table.’
26. *Japalahkkoaw pirin wiawi rehnnoawe.*
‘A trip will be made today.’
27. *Enihmen pwen mine nehn rosso.*
‘A demon was waiting in that dark place.’

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28. *Ih koahkoahkoaulki koaulpas.*
'He kept on singing a song.'

In sentences 25 to 28, one instance of the classes of objects represented by the nouns *puk*, *japalahk*, *eni*, and *koaul* is being discussed, rather than the whole class. It is also possible to discuss more than one member of a class without discussing the whole class. In English, the distinction between one member of a class and more than one (called SINGULAR 'one' and PLURAL 'more than one') is made by adding a suffix (usually -s) to a noun, or by otherwise changing the form of that noun. For example:

Singular	Plural
one book	five books
one girl	five girls
one man	five men
one foot	two feet

In Mokilese, the distinction between singular and plural is usually expressed by a change in the form of the determiner. The determiners discussed above (-*ew*, -*men*, -*pas*, and -*kij*) all have the same plural form -*pwi*. This suffix is perhaps best translated by the English word 'some'.

29. *Woallo imwanki umwpwi.*
man-D own house-D
'That man owns (some) houses.'
30. *Joangoan koahrs dahpwi koah oalloaloo?*
kind-of course Q-D you take-RED
'What kinds of courses are you taking?'
31. *Ngoah kapang woalpwi o.*
I see man-D there
'I saw some men there.'

This set of determiners (-*ew*, etc. and the plural -*pwi*) are called the INDEFINITE DETERMINERS.

By singling out a member or members of a class of objects, indefinite determiners serve to introduce a new subject into a story or conversation. We can see this function in the following lines taken from the opening of a story:

32. *Oh mehjwa mine doakoahioaw adanki Mwoakilloa.*
Pohn doakoahioawe, jerihpwi kin mine pooa.
'A long time ago there was an island named Mokil.
On this island there were some children.'

The two indefinite nouns introduce new subjects into the story. It is as if the storyteller were saying: "Let me tell you about a member of the class *doakoa* 'island'." and "Let me tell you about some members of the class *jeri* 'child'."

As mentioned above, the indefinite determiner is also common in noun phrases that give new information about a noun that has already been introduced. For example:

33. *Sakoal mahn ekij siksikmen.*
sakoal bird rather small-D
'The *sakoal* is a rather small bird.'
34. *Inoangpase pel inenin inoang kajamwpwalpas.*
story-D also very important-D
'This story is also a very important story.'
35. *Doahkko doahkin keikeimen.*
dog-D dog-of bite-D
'That dog bites.' (Lit.: 'is a biting dog')

Here again, the indefinite determiners in the emphasized noun phrases single out a member of a class of objects. For example, it is as if sentence 35 were saying: "That dog is a member of the class 'biting dog'."

3.3.2.2 DEFINITE NOUNS

In a sentence containing indefinite nouns, such as

36. *Oh mehjwa lihmen noaisikihdi nah jerimweinmen.*
'A long time ago a woman gave birth to a son.'

we assume that the speaker knows the identity of the woman and of the son who are being discussed. We, as hearers, however, do not know who they are. We can also assume that the speaker thinks that we do not know their identity. Otherwise the speaker would not have introduced them to us with indefinite determiners.

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When the speaker assumes, for any reason, that the hearer knows or should know the identity of an object referred to by a noun, the speaker uses a DEFINITE DETERMINER with that noun. We can see this if we replace the indefinite determiners in the above sentence by definite ones.

37. *Liho noaisikihdi nah jerimweinno.*
'That woman gave birth to that boy.'

where the use of the determiner *-o* 'that' indicates that we should be aware of the identity of the woman and of her son. Similarly, in:

38. *Arai poaloa warpas. Arai poaloahro peiddi warwa.*
'They chopped down a canoe hull. They kept chopping until the canoe hull was felled.'

the speaker introduces the canoe hull with the indefinite determiner *-pas* 'a'. The second time he refers to it, however, he assumes that we know what he is talking about because the canoe hull has already been introduced, so he uses the definite determiner *-wa* 'the'.

3.3.2.3 DEMONSTRATIVES

A definite determiner is used if the speaker feels that the hearer should know the identity of the object being discussed. He might assume this, as in sentence 38 above, because the object has been mentioned before. He might also assume this if the object is present when it is being discussed. On occasions when the object is present when it is being discussed, it is often appropriate to indicate it by pointing out its location. For example:

39. *Woalle, jaudi woallo.*
'This man, not that man.'
40. *Ngoah mwehuki rimehn.*
'I want that bottle (near you).'

Determiners that point to an object are called DEMONSTRATIVES.

Demonstratives give the location of an object with reference to the speaker and the hearer. Thus, we use the determiner *-e* 'this' to refer to an object that is near the speaker and the deter-

miner *-en* ‘that’ to refer to an object that is near the hearer. When the object is not near to either the speaker or the hearer, but might be near to some third person, the determiner *-o* ‘that’ is used.

- 41a. Jahrre *mine me*.
‘This knife is here.’
- b. Jahrren *mine men*.
‘That knife is there (near you).’
- c. Jahrro *mine o*.
‘That knife is over there.’

These same concepts, speaker-oriented, hearer-oriented, and third person-oriented, that are used to classify demonstratives are also used to classify pronouns (like *ngoah*, *koah*, and *ih*) and nouns of location, as in:

- 42a. *A ngoan ken mwindi me?*
‘Should I sit here?’
- b. *A ngoan ken mwindi men?*
‘Should I sit there (by you)?’
- c. *A ngoan ken mwindi o?*
‘Should I sit there?’

Speaker-oriented is commonly called **first person** and hearer-oriented is called **second person**. Orientation to someone other than the speaker or the hearer is called **third person**. Person relationships between pronouns, locatives, and demonstratives can be summarized as follows:

	Pronouns	Locatives	Demonstratives
1st person	<i>ngoah</i>	<i>me</i>	<i>-e, -i</i>
2nd person	<i>koah</i>	<i>men</i>	<i>-en, -n</i>
3rd person	<i>ih</i>	<i>o</i>	<i>-o, -u</i>

As pointed out in section 2.1.3, the demonstratives have different forms, depending on whether they follow a consonant or a vowel. Thus, from the nouns *woal* ‘man’ and *pwo* ‘pole’, we get:

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<i>woalle</i>	'this man'	and	<i>pwohi</i>	'this pole'
<i>woallen</i>	'that man'		<i>pwohn</i>	'that pole'
<i>woallo</i>	'that man'		<i>pwohu</i>	'that pole'

The demonstratives have different forms for singular and plural. These can be summarized as follows:

	Singular	Plural
this	-e, -i	-kai
that (near you)	-en, -n	-kan
that	-o, -u	-ok, -k

Their use can be seen in:

<i>woalkai</i>	'these men'	and	<i>pwohkai</i>	'these poles'
<i>woalkan</i>	'those men'		<i>pwohkan</i>	'those poles'
<i>woallok</i>	'those men'		<i>pwohk</i>	'those poles'

When a number is used in a noun phrase with a demonstrative, that demonstrative may be either singular or plural if the number is three or higher.

kipar jilpasso 'those three pandanus trees'

kipar jilpassok

loang limmenno 'those five flies'

loang

limmennok

rohpu waluwwo 'those eight mats'

rohpu waluwwok

If the number is one or two, the determiner must be singular:

kipar rahpasso 'those two pandanus trees'

loang roahmenno 'those two flies'

rohpu riawwo 'those two mats'

When no number appears in the noun phrase, a plural determiner is used if the noun with which it occurs refers to more than one person or object. For example, *lih kai* 'these women' might refer to two women, or six, or a hundred, but *lihe* 'this woman' can refer to only one woman.

When the demonstrative definite determiners are used to point out an object that is present we call this their **deictic** (or pointing) function. When they are used to refer back to an object that was previously mentioned, we call this their **anaphoric** (or referential) function. We can see the referential function of the definite determiner in sequences like:

43. *Inminjoangwa kansohpahiew okda poaidi. Kansohpahu dirin oaring nehn loaloo anjoauwa ma okda.*

‘That morning a copra shed burned down. That copra shed was full of copra when it burned.’

44. *Doahr pwoapwoauddoaw nainki jeripeinmen. Oadoan nihra jeripeinno Likarsiksik.*

‘And a couple gave birth to a girl. That girl’s name was Likarsiksik.’

The determiner *-o* (*-u*) ‘that’ used with the nouns *kansohpa* ‘copra shed’ and *jeripein* ‘girl’ in sentences 43 and 44, does not point to the copra shed or to the girl but refers back to previous occurrences of those nouns.

The demonstrative most commonly used in this referential function is *-o* ‘that’, because it is the determiner that implies the greatest distance from speaker and hearer. That is, the determiner *-o* can be used to point to objects that are present, but not close to speaker or hearer, and to objects that are not present at all, but are removed from the speaker and hearer in either time or space; that is, objects that are in another place or were introduced at another time.⁴

The fact that *-o* can be used to indicate objects that are either present or removed allows it to be used freely in a referential function.⁵

In addition to the demonstratives, the determiner *-wa* (and its plural *-koa*) are used referentially. We have already seen this determiner in sentence 38 above (repeated here as 45):

45. *A rai poaloo warpas. A rai poaloahro peiddi warwa.*

‘They chopped down a canoe hull. They kept chopping until the canoe hull was felled.’

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As was pointed out at the beginning of this section, the use of a definite determiner suggests that the speaker feels that the identity of the object being referred to ought to be clear to the hearer. The use of the determiner *-wa* leaves no room for doubt. An identification of the object is usually provided in the same sentence as the noun with which *-wa* is used.

46. *Minpase ioar noai pinjelwa.*
'This one is my pencil.'

47. *Doadoa likkoau ioar oai doadoahkwa.*
'Sewing clothes is my job.'

-wa is used in sentence 46 because there is only one possible pencil the speaker could be referring to, the one he is pointing to by his use of *-e* 'this' in *minpase* 'this one'. Similarly, in sentence 47, *-wa* is used because the speaker has just finished identifying his job, namely 'sewing clothes'. Notice, however, that the determiner *-o* can appear in a slightly changed version of sentence 47.

48. *Oai doadoahkko ioar doadoa likkoau.*
'That work of mine was sewing clothes.'

The noun phrase *oai doadoahkko* 'that work of mine' in this sentence identifies something the speaker was doing at some past time. In this sentence he identifies it as 'sewing clothes'. The speaker first refers to the job as 'that job of mine', suggesting it was a job with which the hearer should be familiar, and then goes on to say that the job was 'sewing clothes'. This sentence contrasts with sentence 47, in which the only identification the speaker gives of the work is *doadoa likkoau* 'sewing clothes'. The work is not being identified as some past event with which the hearer should be familiar. The difference between *-o* and *-wa* is that the former identifies an object by pointing to it or referring back to a previous occurrence of it, while, for the latter to be used, the identification must be more immediate. For example:

49a. *Woallo ma mijoa akpas me pirin wihn.*
'That man who is in front now will win.'

b. *Waalwa ma mijoa akpas me pirin wihn.*
'The man who is in front now will win.'

If the speaker uses 49a, he is probably pointing to the man in question; if he uses 49b, he has no reason to point because he is identifying the man who will win as the one who is ahead now. He assumes that the hearer knows who that is. The determiner *-o* suggests that the object being discussed is being identified by pointing or that it was mentioned earlier, while *-wa* suggests that the identification is much more obvious, as in 49b, where that identification appears in the sentence itself.

To summarize, DEFINITE DETERMINERS serve to identify the nouns with which they occur. This identification might be made by **pointing**, by **referring** to a previous mention of the noun, or by **supplying an identification** of the noun in (or near) the sentence in which the noun is used. This latter function is usually filled by *-wa*, as in sentence 49b. On occasion, the identification can be supplied in a previous sentence, as in 45 above. In such cases the function of *-wa* is referential. It is even possible for *-wa* to be used with nouns whose identification was made at a much earlier point in a conversation or story, as long as there is no doubt in the mind of the hearer as to which object the noun is referring.

3.3.2.4 UNIQUE OBJECTS

The use of determiners with nouns that refer to unique objects, like the sun, the moon, and the earth, is variable. Most unique nouns can appear without a determiner.

50. Jampah *inenin koalikjang johnpwong*.
'The earth is a lot bigger than the moon.'

51. Joau *inenin pwideng*.
'The sun is very hot.'

The nouns *johnpwong* 'moon' and *joau* 'sun' can occur with the determiner *-o* 'that', as in:

52. Joauo *mwomwen siksik pwa ih inenin doh*.
'The sun seems small because it is very far away.'

Joau 'sun' can also occur with *-e* 'this' in sentences like:

53. Joaue *oaujoangoan pwideng rehnoawe*.
'The sun is very hot today.'

It appears that a sentence like 53 would be spoken by someone standing out in the sun, while a sentence like 52 might be spoken by a teacher during a science class.

Jampah 'earth' usually appears without any determiner, but can occur with the determiner *-e* 'this'. *Loang* 'sky' always appears with the determiner *-e* 'this'.

54. Mijen loangge *oaujoangoan mwehu*.
face-of sky-D very clear
'The sky is very clear.'

3.3.2.5 NONSPECIFIC INDEFINITES

In section 3.3.2.1, we suggested that the function of an indefinite determiner was to single out a member or members of a class of objects. We see this in the emphasized noun phrases in sentences like:

55. *Mehj mehj* woalmen *nainki* pwinihkin sakoalmen.
'A long time ago a man owned a young *sakoal*.'
56. *Enihmen kupdihjang nehn loangge*.
'A demon fell down from the sky.'

The speaker is using indefinite nouns to introduce new characters to the hearer. In each of the above cases, moreover, we assume that the speaker has a particular object in mind; that is, he, at least, knows which man, which flock of *sakoal*, and which demon he is referring to. When the speaker has a particular object in mind when he uses an indefinite noun, we call this noun a **specific indefinite noun**.

This contrasts with the emphasized noun phrases in sentences like:

57. *Menlau, kihdoahng ngoahi* epwi pinjellen.
'Please give me some pencils.'
58. *Ngoah anahne emen woallo ma kid a l lalin Pohnpei*.
'I need a man who speaks Ponapean.'

In sentence 57, *epwi pinjellen* ‘some pencils’ refers to any of a number of pencils that the speaker assumes are there. The speaker does not have any particular pencils in mind. Similarly, in sentence 58 the speaker is requesting any man who speaks Ponapean. He doesn’t care which Ponapean speaker he finds; any one will do.

An indefinite noun that refers to any of a class of objects is called a **nonspecific indefinite noun**. A nonspecific indefinite noun is usually marked by a **Number + Noun + Determiner** construction (see section 4.1.8.), as in sentences 57 and 58. Further examples of such nonspecific indefinites are:

59. *Ngoah nimen dupukda ew kidahu.*
‘I want to buy a guitar.’

60. *Ngoah joahpwa waranki apas jidohsahu.*
‘I wish I had a car.’

The choice of determiner in such constructions is determined by how certain the speaker is that the hearer can supply his needs. In a sentence like:

61. *Ngoah nimen dupukda apas pinjellen.*
‘I want to buy a pencil.’

the speaker assumes that the hearer has pencils to sell, so he uses the hearer-oriented determiner *-en* ‘there (near you)’. In a sentence like:

62. *Ngoah mwehuki noai jeripeonno en painkihla emen woallo ma inenin koapwoahpwoa.*
‘I want my daughter to marry a man who is very rich.’

the speaker uses the third person determiner *-o* ‘that’, because he does not want to suggest that the hearer can supply his daughter with a rich husband. The determiner *-o* implies that the class of men referred to is probably as remote from the hearer as from the speaker.

While the determiners *-e* ‘this’ and *-wa* ‘the’ are found less often in this type of construction, situations can be found where their use would be appropriate. For example:

63. *Oaloo apas pinjelle.*
 'Take a pencil.'

Here, the speaker is offering the hearer a pencil from his own supply. Since it is the speaker who has access to the pencils, he uses the speaker-oriented determiner *-e* 'this'. I have never encountered any examples of this construction where *-wa* was used.

3.3.2.6 SUMMARY

In preceding sections, terms like **GENERIC**, **INDEFINITE**, **SPECIFIC**, and **DEFINITE** were used to describe different specifications of the meaning of a noun. A **generic noun** refers to a whole class of objects, an **indefinite noun** singles out a member of that class, a **specific noun** indicates that it is a particular member (rather than just any one at all) that has been singled out, and a **definite noun** assumes that that particular object has been identified for the hearer. The relationships among these various degrees of specification are summarized in figure 7 (in which the noun *woal* 'man' is used to exemplify some of the forms these specifications can take).

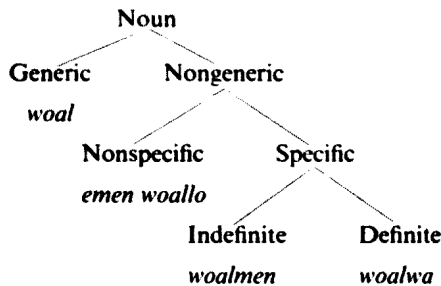


Figure 7: Noun Reference and Determiners

3.3.3 Emphatic Determiners

The emphatic determiners are compounds of the definite determiners (*-e*, *-en*, and *-o*)⁶ and the indefinite determiners (*-ew*, etc.). These forms are summarized below.

	General	Animate	Long	Piece	Plural
this	<i>oawe</i>	<i>mene</i>	<i>pase</i>	<i>kije</i>	<i>pwiai, pwiak</i>
that	<i>oawen</i>	<i>menen</i>	<i>pasen</i>	<i>kijen</i>	<i>pwian</i>
that	<i>oawo</i>	<i>meno</i>	<i>paso</i>	<i>kijo</i>	<i>pwiok</i>

(The forms *pwiai* and *pwiak* are free alternates. There does not seem to be any differences between them.)

I am not yet certain about the use of the emphatic determiners. I suspect that they are used to single out a noun as particularly important to what the speaker is saying. Such a noun is often called a TOPIC. An example is the emphasized noun in:

64. *Inoangpase, daidel in inoangge injang in koaulpas nehn inoangge.*

‘This story, the title of this story comes from a song in this story.’

Note that the noun *inoang* ‘story’ is used twice more in this sentence, both times with the simple determiner *-e* ‘this’. It is very common for a topic noun to appear alone at the beginning of a sentence, as does *inoangpase* in sentence 64. Such a noun is said to be **topicalized**.

3.3.4 Determiners With Time Nouns

The determiners *-e* ‘this’, *-oawe* ‘this’, and *-o* ‘that’ are regularly used with nouns denoting time. The determiner *-e* refers to the future.

65. *Ngoah pirin indoa apwkanne.*
‘I’ll come in a little while.’

66. *Kisain edek johnpwongge lakapw.*
‘Let’s have a party next month.’

67. *Skuhl pirin sap mwerin wihkke lakapw.*
‘School will begin the week after next.’

The determiner *-oawe* refers to the present:

68. *Joamo aio jeila loakjid rehnnoawe.*
‘My father went fishing today.’

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69. *Koajoandihn nehn skejuhllowe, jippo pirin kijoudo wihkkoawe.*
'According to the schedule, the ship is supposed to arrive this week.'

70. *Johnparroawe 1973.*
'This year is 1973.'

The determiner *-o* refers to the past:

71. *Ngoah kapang woallo apwkanno.*
'I saw that man a few minutes ago.'

72. *Mine melmel wihkko aio.*
'There was a storm last week.'

73. *Oai piriennes doarihjang high school nehn johnparro aio.*
'My friend finished high school last year.'

Note the use of the words *lakapw* 'tomorrow' and *aio* 'yesterday' in sentences 66 and 67 and 72 and 73 to mean 'next' and 'last'. *Inla* 'gone' can be used instead of *aio*.

74. *Ah kansohpahu okda nehn wihkko inla.*
'His copra shed burned down last week.'

Note also that nouns denoting time can be preceded by *nehn* 'in', as in sentences 73 and 74, and in:

75. *Kisahn pel suhpene nehn rehn kajelelloawe.*
'We might meet again some fine day.'

Although it most commonly refers to the past, as in sentence 76, the determiner *-wa* can be used to refer to any definite time.

76. *Arai doari mwinge apwkanwa.*
'They finished their meal a few minutes ago.'

77. *Ioar wihkwa lakapw ma ngoah pirin kijoula Pohnpei.*
'It's next week that I'll go to Ponape.'

78. *Ioar johnparwa aio ma ih japahldo.*
'It was last year that he came back.'

3.3.5 Double Determiners

The demonstratives *-e*, *-en*, and *-o* and the determiner *-wa* can be combined to form a set of **double determiners**. These are:

	Singular	Plural
this	<i>-wahi</i>	<i>-koahi</i>
that	<i>-wahn</i>	<i>-koahn</i>
that	<i>-wahu</i>	<i>-koahk</i>

The double determiners can be used when a noun is being pointed to and immediately identified (identified in the same sentence) at the same time. For example:

79. *Ioar mwingehwahn ma ngoah wahdo.*
'That's the food that I brought.'
80. *Ioar pukwahi me ma kisa siksikoa.*
'This is the book we were discussing.'
81. *Ioar suhkoahkoahk.*
'Those are the trees.'

3.3.6 Position of Determiners

The determiner is usually the last element in the noun phrase. It follows the noun and its attributes (see 6.4.1.).

<i>armaj pwulopwulkan</i>	'those young people'
<i>jerimwein</i>	'these two boys'
<i>roahmenne</i>	
<i>adroau koalik</i>	'those three large
<i>jiluwwo</i>	eggs'

The only elements in a noun phrase that can follow a determiner are the adjective *ohroj* 'all', the suffix *-oar* 'only' (see section 4.3) and a relative clause (see section 10.4).

82. *Umwwok ohroj wiawihkihda poap.*
'All those houses are made of wood.'
83. *Ih anahne pukkoaweher doari.*
'He wants only this one book.'

84. *Wahdo mwumwwen ma koah jaikdi.*
 ‘Bring me the fish that you caught.’

The position of determiners in these cases will be discussed more fully in sections 4.3, 6.4.1, and 10.4.

3.4 PRONOUNS

A pronoun, as has already been pointed out several times, is a word that replaces a noun or noun phrase, or that substitutes for the name of the speaker or listener in a conversation. For example:

- 85a. *Liho kamwingehla nah jerihok.*
 ‘That woman fed her children.’
- b. *Ih kamwingehla nah jerihok.*
 ‘She fed her children.’
- c. *Ih kamwingehla arai.*
 ‘She fed them.’

In 85b, the pronoun *ih* ‘she’ replaces the noun phrase *liho* ‘that woman’; in 85c, the pronoun *arai* ‘them’ replaces the noun phrase *nah jerihok* ‘her children’. Other examples of pronouns as substitutes for nouns and noun phrases have already been given in 3.2.

3.4.1 Personal Pronouns

The most frequently used pronouns of Mokilese are the PERSONAL PRONOUNS. The personal pronouns of Mokilese are summarized below.

	Singular	Dual	Plural	Remote Plural
1st person inclusive		<i>kisa</i>	<i>kisai</i>	<i>kihs</i>
1st person exclusive	<i>ngoah, ngoahi</i>	<i>kama</i>	<i>kamai</i>	<i>kimi</i>
2nd person	<i>koah, koawoa</i>	<i>kamwa</i>	<i>kamwai</i>	<i>kimwi</i>
3rd person	<i>ih</i>	<i>ara, ira</i>	<i>arai, irai</i>	<i>ihr</i>

The term **personal pronoun** is not meant to suggest that such pronouns refer only to people. Although this is in fact their most common use, they can also refer to animals and to inanimate objects.

- 86a. *Doahkko koahdi John.*
'That dog bit John.'
- b. *Ih koahdi John.*
'It bit John.'
- 87a. *Joauo joah mwomwen koalik.*
'The sun doesn't seem large.'
- b. *Ih joah mwomwen koalikjang jampah.*
'It doesn't seem larger than the earth.'

In 86b, the pronoun *ih* 'it' refers to the noun phrase *doahkko* 'that dog' of 86a; in 87b the same pronoun is used to refer to the noun phrase *joauo* 'the sun' of 87a.

The term **personal** derives from the fact that these pronouns are grouped according to **persons** (see 3.3.2.3). That is, we speak of pronouns as being **first person** if they refer to the speaker, as **second person** if they refer to the hearer but not the speaker, and as **third person** if they refer to neither the speaker nor the hearer. This corresponds to the division of demonstratives into speaker-oriented, hearer-oriented, and third-person-oriented.

3.4.1.1 INCLUSIVE AND EXCLUSIVE

A first person pronoun that refers to both the speaker and the hearer is called a **first person inclusive pronoun**, because it **includes** the hearer. Inclusive pronouns cannot be singular (referring to a single person—see 3.3.2.1) since, by their very nature, they must include at least two people, the speaker and the hearer. This fact accounts for the lack of a first person singular inclusive pronoun in the chart given above. A first person pronoun that does not refer to the hearer is called an **exclusive pronoun** because it **excludes** the hearer. The exclusive pronoun does have a singular form, since it can refer to just the speaker.

3.4.1.2 NUMBER IN PERSONAL PRONOUNS

Personal pronouns, except the first person inclusive, have four numbers: **singular**, referring to only one person; **dual**, referring to two persons; **plural**, referring to more than two persons; and **remote plural** (see below).

It is interesting to note that in a noun phrase consisting of both a pronoun and a noun, the pronoun refers to the total number of people involved in the event, including the person (or people) being referred to by the noun. For example:

88. *Kamwa Davy inla duhdu.*
'You and Davy went swimming.'

In example 88, the dual pronoun *kamwa* 'you two' is used where a total of two people is involved, the hearer and Davy.

89. *Kama John pirin raunla.*
'John and I are going to go for a stroll.'

The dual pronoun *kama* 'we two (exclusive)' is used in 89, where once again only two people are involved, the speaker and John. This differs markedly from the English usage, where the pronoun would refer to the people involved, minus the person or people referred to by the noun.

The remote plural pronouns appear to be used very little in Mokilese. In most cases, they may be replaced by the corresponding plural pronouns. The remote pronouns refer to groups of people, usually large, and most of which are probably not directly present when being discussed. Thus, *kihs* 'we' refers to the speaker, the hearer, and a large group of people not present at the time of the conversation. Similarly, *kimi* 'we' refers to the speaker and to a group of others not present; *kimwi* 'you', to the hearer and others not present, and *ihr* 'they' to a group of people not present.

Since *kihs*, for example, commonly refers to very large groups of people, it is often used to refer to all the people of Mokil or to the whole human race.

90. *Kihs joh kak mine pohh jampah ma joh joau.*
'We couldn't live on the earth if there were no sun.'

It is very common for the remote plural pronouns to be used in **generic habitual sentences** (with the modal *kin*—see 7.1.6) that refer to the activities of a class of people, animals, or objects. For example:

91. *Oaujoangoan daknohioaw kimi kin wia, kimi kin daknohki palwahr.*
 ‘One kind of surfing we do is body surfing.’
92. *Koaroa kin pokonpene pohn pik. Anjoauo ma ihr kin sangda, ihr kin jokpijoang roahmen roahmen, jokla ekij wija roapoan kanahr mwinge.*
 ‘The *koaroa* often gather together on the sand. When they fly away, they separate into two’s and fly off a short distance in search of food.’

3.4.1.3 PRE-PREDICATE PRONOUNS

As indicated in the chart of personal pronouns above there are two forms for the first and second person singular pronouns—the regular forms *ngoahi* and *koawoa* and the special pre-predicate ⁷ forms *ngoah* and *koah*. These latter forms are used most often as sentence subjects (see 6.1), as in:

93. *Ngoah pel inenin koapwoarpwoarki pwa me ohroj men nen pel mwehu.*
 ‘I also hope very much that everything there is fine too.’
94. *Koah ne kidal pwa ia ngoah inla.*
 ‘You already know where I’m going.’

The pre-predicate pronouns may also be used before *ma* (see 12.3.2) in sentences like:

95. *Ngoah ma wia mehu.*
 ‘I was the one who did that.’
96. *Koah ma John kioang pukko.*
 ‘You were the one John gave that book to.’
97. *I oar koah ma ngoah kapang aio.*
 ‘It was you I saw yesterday.’

3 Nouns and Reference

In other circumstances, *ngoahi* and *koawoa* are used.

98. *Woallo pokihdi ngoahi.*
'That man struck me.'
99. *Ngoah pirin dupukjang koawoa kias.*
'I'm going to buy gas from you.'
100. *Ioar koawoa!*
'It was you!'

The pronouns *ngoahi* and *koawoa* may always be used in place of *ngoah* and *koah* if special emphasis is desired.

101. *Ngoahi pirin pwili koawoa.*
'I'll go with you.'
102. *Koawoa ma en ken wahdo mwingehu.*
'It's you that's supposed to bring the food.'

3.4.1.4 PERSONAL PRONOUNS AND INANIMATE NOUNS

Personal pronouns may be used to refer to inanimate nouns (nouns that refer to things rather than persons or animals) only if the pronoun is being used as the SUBJECT of a sentence.

103. *Jippo pirin kijoudo lakapw. Ih pirin idando oai mehk.*
'The ship will arrive tomorrow. It will bring my things.'

Such subject pronouns are often omitted when singular, but must be used when they refer to a nonsingular noun.

- 104a. *Ma suhkoahu kupdi, nen koauwehla umwwo.*
b. *Ma suhkoahu kupdi, ih nen koauwehla umwwo.*
'If that tree falls, it will wreck the house.'

- but 105. *Poappok mwahl pwa arai ne wengla.*
'Those boards are no good because they're already warped.'

No pronoun is used to refer to an inanimate OBJECT of a verb (see 6.5)

- 106a. *Ngoah kapikihla jeriho pel kikihdi ih.*
'I dropped the child and kicked him.'
- b. *Ngoah kapikihla jahrro pel kikihdi.*
'I dropped the knife and kicked it.'

3.4.2 Nouns with Indefinite Reference

Three Mokilese nouns referring to large noun classes are often used to refer to a person or object whose exact identity is either not known or is considered unimportant to the speaker. These nouns are *armaj* 'person', *me* 'thing' and *wija* 'place'. For example:

107. *Armajmen nen indoa suhoang ngoahi mwerin injauwajje.*
'Someone is coming to visit me this afternoon.'
108. *Joh armaj kak daurdi niho.*
'No one can climb that coconut tree.'
109. *Ngoah kihdi amahu wijahkij!*
'I left that hammer somewhere!'
110. *Me ohroj me pwen mwehu.*
'Everything here is just fine.'
111. *Ngoah nimen koan wiahng ngoahi mehkij.*
'I want you to do something for me.'

The indefinite numerals *ew*, *emen*, and *apas* 'one', *ekij* 'some, a little' and *epwi* 'some, a few' are used to refer to persons or objects when the class of person or object is known, but the identity of the particular person(s) or object(s) in question is either unknown or unimportant. For example:

112. *Pe kahjikkoar emen pe poapdihla wijahkijo.*
'No one has ever swum that distance.'
113. *Kihdoahng ngoahi ekij.*
'Give me a little.'
114. *Apas ne sipwla.*
'One is already broken.'

3.4.2.1 MIN

Mokilese has an indefinite pronoun *min* that is used to replace a noun in a specific noun phrase when some characteristic of the noun—its location, size, color, and so forth—is being emphasized. For example:

115. *Ngoah anahne riaw nihmw pukkan, min soalwa apel min korohrohwa.*
'I need two of your books, the black one and the white one.'

where *min* replaces the noun *puk* 'book'.

116. *Ia minno pirin jeuweje ngoahi ?*
'Which one will help me?'
117. *Wahdohng ngoahi minpaso.*
'Bring me that one.'

4 Quantification

4.1 NUMBERS

4.1.1 Numeral Prefixes

If asked to count from one to nine, most Mokilese would give the forms in column (a):

	a	b	c	d
one	<i>ew</i>	<i>emen</i>	<i>apas</i>	<i>ekij</i>
two	<i>riaw</i>	<i>roahmen</i>	<i>rahpas</i>	<i>riahkij</i>
three	<i>jiluw</i>	<i>jilmen</i>	<i>jilpas</i>	<i>jilkij</i>
four	<i>pahw</i>	<i>pahmen</i>	<i>pahpas</i>	<i>pahkij</i>
five	<i>limoaw</i>	<i>limmen</i>	<i>limpas</i>	<i>limkij</i>
six	<i>wonow</i>	<i>wonmen</i>	<i>wonpas</i>	<i>wonkij</i>
seven	<i>ijuw</i>	<i>ijmen</i>	<i>ijpas</i>	<i>ijkij</i>
eight	<i>waluw</i>	<i>walmen</i>	<i>walpas</i>	<i>walkij</i>
nine	<i>duoaw</i>	<i>dohmen</i>	<i>dohpas</i>	<i>dohkij</i>

The numbers in column a) can also be placed after nouns to describe the number of objects being discussed.

<i>puk riaw</i>	'two books'
<i>puk jiluw</i>	'three books'
<i>puk pahw</i>	'four books'
<i>doakoa limoaw</i>	'five islands'
<i>pen waluw</i>	'eight coconuts'

These numbers cannot be used with nouns that describe persons or animals, however. With such nouns, the numbers in column b) must be used.

<i>woal roahmen</i>	'two men'
<i>doahk pahmen</i>	'four dogs'
<i>mahn ijmen</i>	'seven animals'

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Other nouns can only be counted with the numbers of column c), and still others with the numbers of column d):

suhkoa rahpas 'two trees'
inoang jilpas 'three stories'
wija walkij 'eight pieces of land'
me dohkij 'nine things'

If we examine the numbers in each column, we find that all the numbers of any single column have one element in common. All the numbers of column a) end in *-w*, all those of column b) end in *-men*, those of column c) in *-pas* and those of column d) in *-kij*. If we remove these elements from the numbers, we find the following set of units:

	a	b	c	d
one	<i>e-</i>	<i>e-</i>	<i>a-</i>	<i>e-</i>
two	<i>ria-</i>	<i>roah-</i>	<i>rah-</i>	<i>riah-</i>
three	<i>jilu-</i>	<i>jil-</i>	<i>jil-</i>	<i>jil-</i>
four	<i>pah-</i>	<i>pah-</i>	<i>pah-</i>	<i>pah-</i>
five	<i>limoa-</i>	<i>lim-</i>	<i>lim-</i>	<i>lim-</i>
six	<i>wono-</i>	<i>won-</i>	<i>won-</i>	<i>won-</i>
seven	<i>iju-</i>	<i>ij-</i>	<i>ij-</i>	<i>ij-</i>
eight	<i>walu-</i>	<i>wal-</i>	<i>wal-</i>	<i>wal-</i>
nine	<i>duoa-</i>	<i>doh-</i>	<i>doh-</i>	<i>doh-</i>

These elements are called **numeral prefixes**. Mokilese numbers consist of two morphemes; a numeral prefix that represents the value of the number itself, and a root called a NUMERAL CLASSIFIER (*-w*, *-men*, *-pas* or *-kij*).

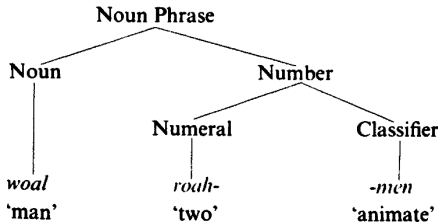
Much of the phonological variation in the numeral prefixes can be explained by the operation of the rule of Vowel Reduction (see section 1.7).

	<i>limoa + w</i>	<i>limoa + men</i>	<i>iju + w</i>	<i>iju + men</i>
Vowel reduction	—	<i>limmen</i>	—	<i>ijmen</i>

The variation found in the prefixes for 'one', 'two', and 'nine', cannot be explained in such a direct manner, however. We will consider these prefixes to have morphophonemic variants. Thus, the prefix 'one' is either *e-* (/e/ and /ɛ/) or *a-*, 'two' either *ria-*, or *roah-*, or *rah-*, or *riah-*, and 'nine' either *duoa-*, or *doh-*.

4.1.2 Numeral Classifiers

As suggested above, a noun phrase containing a noun and a number must consist of at least three morphemes—a noun, a numeral prefix, and a numeral classifier. We can represent such a construction by the following tree;



The choice of numeral classifier depends upon the meaning of the head noun of the construction. This relation between noun and classifier can be summarized as follows:

- men* for animate nouns (people, birds, animals, often fish)
- pas* for long objects (pencils, canoes, songs, and stories)
- kij* for things that have pieces, parts
- w* general classifier (used with all nouns not covered by the other classifiers)

The classifier *men* is used with nouns that represent living, moving things (**animate** things). These include people, birds, insects, and land animals.

<i>jeri roahmen</i>	'two children'
<i>kuleij jilmen</i>	'three plovers'
<i>amwje pahmen</i>	'four mosquitos'
<i>doahk limmen</i>	'five dogs'

Most sea creatures can be counted with either *-men* or *-w*:

<i>pako riaw/roahmen</i>	'two sharks'
<i>m wumw jiluw/jilmen</i>	'three fish'
<i>woi pahw/pahmen</i>	'four turtles'
<i>jipenpen</i>	'six sea
<i>wonow/wonmen</i>	cucumbers'
<i>kihj ijuw/ijmen</i>	'seven octopus'

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There are indications that the choice of numeral classifier with sea creatures is not completely free, but depends on some features of the situation being described. I have not been able to discover what those features are, however.

Shellfish are counted with *-w* rather than *-men*. Thus:

pwun riaw 'two shellfish/shells'
jiloa pahw 'four clams'
kim jiluw 'three giant clams'

Pas is generally considered to be the **long object classifier**. It is used to count things that are long and thin in shape—*pinjel rahpas* 'two pencils', *mwarmwar jilpas* 'three leis', *suhkoa rahpas* 'two trees', *aji rahpas* 'two chopsticks', *alek pahpas* 'four reeds'. Note that while names of trees are regularly counted with *-pas*, the same tree names can be counted with *-w* to refer to the fruit of the tree.

wus rahpas 'two banana trees'
wus riaw 'two bananas'
apwraiaji jilpas 'three pine trees'
apwraiaji jiluw 'three pine cones'
kipar pahpas 'four pandanus trees'
kipar pahw 'four pandanus keys'

Nouns like *inoang* 'legend', *koaul* 'song' and *al* 'road' are also counted with *-pas*. Some nouns can be counted either with *-pas* or with the general classifier *-w*. Examples are:

amper dohpas 'nine umbrellas'
amper duoaw

dam rahpas 'two outriggers'
dam riaw

ahiroa jilpas 'three whirlwinds'
ahiroa jiluw

All nouns that name vehicles, like *war* 'canoe', *jidohsa* 'automobile', *pohs* 'boat', *jipsang* 'airplane', are counted with *-pas*.

The classifier *-kij* is used to count nouns that represent pieces or parts.

dipoar riahkij 'two fragments'
ainkos limkij 'five sennit strands'

Nouns that normally are counted with other classifiers can be used with *-kij* to refer to a part of, rather than to the whole object. For example:

adroau riaw 'two eggs'
adroau riahkij 'two pieces of egg'
peipa rahpas 'two sheets of paper'
peipa riahkij 'two scraps of paper'
pilawa jiluw 'three bags of flour'
pilawa jilkij 'three slices of bread'

The relation between the meaning of the head noun and the choice of classifier is less obvious in some cases than it is in others. The fact that a change in classifier is often accompanied by a change in meaning makes it clear that such a relation does exist, however.

4.1.3 Higher Numbers

In simple base ten arithmetic, we have figures to represent the numbers one to nine (that is 1, 2, 3, 4, 5, 6, 7, 8, 9). When we count past 9 we add another column of numbers; thus, 10, 11, 12 and so forth. A number like 15 represents one unit of 10 plus an additional 5; the number 68 is equivalent to $6 \times 10 + 8$, the number 427 is $4 \times 100 + 2 \times 10 + 7$ and so forth. This counting system is based on a number of columns (units, tens, hundreds, etc.) each of which can contain nine possible digits (the numbers 1 through 9). Every time we exceed the number 9 in any column, we must add another column.

Mokilese has names for these columns, up to a total of ten. These are:

ehd 'unit'
eijek 'ten'
epwki 'hundred'
kid 'thousand'
nen 'ten thousand'

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<i>lopw</i>	'hundred thousand'
<i>rar</i>	'million'
<i>dep</i>	'ten million'
<i>japw</i>	'hundred million'
<i>lik</i>	'billion'

Very few of these numbers are actually used to count anything, since there are very few things in the world that we might want to count that come in millions or billions.

The numeral prefixes can be added to these numbers to produce numbers above nine, in the same way as they are added to the numeral classifiers. In fact, the numbers *eijek* 'ten' and *epwiki* 'one hundred' are formed by adding the numeral prefix *e-* 'one' to the morphemes *-ijek* 'ten' and *-pwki* 'hundred'.¹

Higher numbers can be produced by using other numeral prefixes, although it is only *-ijek* and *-pwki* that can take *e-* 'one'.

<i>-ijek</i>	<i>-pwki</i>	<i>-kid</i>
<i>eijek</i>	<i>epwiki</i>	<i>kid</i>
<i>rieijek</i>	<i>riepwki</i>	<i>riakid</i>
<i>jilijjek</i>	<i>jilipwki</i>	<i>jilkid</i>
<i>pahjek</i>	<i>pahpwki</i>	<i>pahkid</i>
<i>limeijek</i>	<i>limepwki</i>	<i>limkid</i>
<i>woneijek</i>	<i>wonopwki</i>	<i>wonkid</i>
<i>ijihjek</i>	<i>ijipwki</i>	<i>ijkid</i>
<i>walihjek</i>	<i>walipwki</i>	<i>walkid</i>
<i>dueijek</i>	<i>dohpwki</i>	<i>dohkid</i>

'ten, twenty, thirty, etc.'	'one hundred, two hundred, etc.'	'one thousand, two thousand, etc.'
--------------------------------	-------------------------------------	---------------------------------------

Many of the numeral prefixes undergo additional morphophonemic changes when they combine with the bases *-ijek* 'ten' and *-pwki* 'hundred'. Thus, *ria-* 'two' becomes *rie-*; *limoa-* 'five' becomes *lime-*, and so forth.

The formation of other numbers can be illustrated by the following examples.

<i>eijek ew</i>	'eleven'
<i>pahjek jiluw</i>	'forty-three'
<i>epwiki pahw</i>	'one hundred and four'
<i>riepwki limeijek riaw</i>	'two hundred and fifty-two'

kid dohpwki woneijek 'one thousand nine hundred and
duoaw sixty-nine'

When used with nouns only the numbers 'one' to 'nine' take numeral classifiers.

woal eijek 'ten men'
war eijek 'ten canoes'
puk eijek 'ten books'

but

woal eijek pahmen 'fourteen men'
war eijek pahpas 'fourteen canoes'
puk eijek pahw 'fourteen books'

Numbers like *jilihjek* 'thirty', *riepwki* 'two hundred', and *kid* 'one thousand' remain the same no matter with what noun they appear. Only when a number appears in the units column ('one' through 'nine') is a numeral classifier used. Thus, *suhkoa pahpwki* 'four hundred trees', with no numeral classifier; but *suhkoa pahpwki rahpas* 'four hundred and two trees', with the numeral classifier *-pas*.

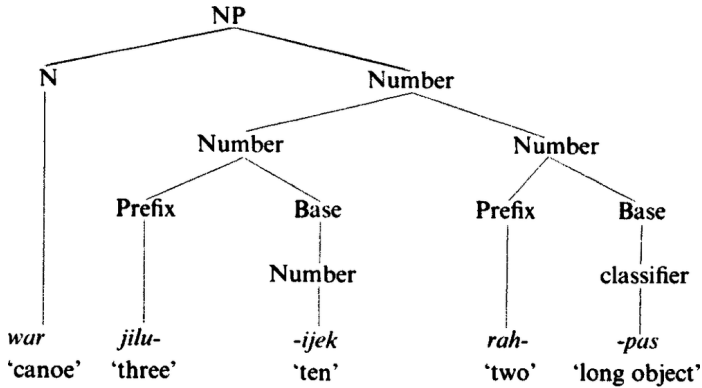
4.1.4 Countable Bases

A COUNTABLE BASE is a morpheme to which the numeral prefixes may be added. So far we have considered two kinds of countable bases:

- a. the numeral classifiers
-w, -men, -pas, -kij
- b. the higher number names
-ijek, -pwki, -kid, etc.

This means that the structure of higher numbers is exactly like that of a numeral prefix with a possessive classifier. This similarity may be seen in the following tree:

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The construction *jiluhjek rahpas* 'thirty-two' consists of two similar number constructions, one consisting of a numeral prefix and a higher number, the other consisting of a numeral prefix and a numeral classifier.

A third type of countable base is represented by morphemes like:

- <i>pak</i>	'times'
- <i>pwong</i>	'night'

These morphemes combine with numeral prefixes to form relational nouns (see 3.1).

1. *Riapak pahw waluw.*
'Two times four is eight'.
2. *Kama pirin kijoula Mwoak illoa jilpwong.*
'We will leave for Mokil in three days.'

Pak used with a numeral prefix expresses multiplication. Note that *pak* can also be used with the general classifier to express repetition.

3. *Woallo ne kijoula Pohnpei pak jiluw.*
'That man has traveled to Ponape three times.'

Pak takes an irregular form *eh-* of the numeral prefix 'one'. Compare *ehpak* 'once' to *apas, emen, ekij* 'one'.

Compounds with *pwong* 'night' refer to days in the future. Counting with *pwong* begins with *jil-* 'three'; special words are used instead of *e-* and *ria-*.

lakapw 'tomorrow, in one day'
pali 'the day after tomorrow, in two days'
jilpwong 'in three days'
pahpwong 'in four days'

Some bases seem to occur only with the prefix for 'one', but with no others. For example:

oaloap 'one half' related to *loap* 'side'
epwi 'a few' related to *-pwi* 'plural suffix'

4.1.5 Serial Counting Numbers

Mokilese has another set of numbers 'one' to 'nine', which are not used to count any nouns. At one time they were probably a neutral counting set, used when no specific objects were being counted, or in counting a number of objects taking different classifiers. They have been largely replaced in these functions by the numbers of the general classifier set. These forms are:

one	<i>oahd</i>	compare	<i>e-</i>
two	<i>ari</i>		<i>ria-</i>
three	<i>ejil</i>		<i>jilu-</i>
four	<i>oapoang</i>		<i>pah-</i>
five	<i>alim</i>		<i>limoa-</i>
six	<i>ohn</i>		<i>wono-</i>
seven	<i>ejj</i>		<i>iju-</i>
eight	<i>awal</i>		<i>walu-</i>
nine	<i>adu</i>		<i>duoa-</i>

These **serial counting numbers** seem to be compounds of the prefix for 'one', in the forms *oa-*, *a-*, *e-*, and *o-*, and the other numeral prefixes. Thus, *ari* 'two' is a compound of *a-* 'one' and *-ria* 'two' (without the final vowel).

Note that the base *-oad* (similar to the unit base *-ed*) is used in the serial counting number 'one', and that *-poang* 'four' is used instead of *-pah*. Also, note that *o* + *won* 'six' becomes *ohn*. In most cases, the bases used in this series are the prefixes of

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column a) given in the list of numeral prefixes in section 4.1.1, without the final vowels. These prefixes have been repeated here for comparison.

The serial counting numbers combine with the morpheme *ni-* (a Ponapean word meaning 'at') to form names for the days of the week:

<i>nioahd</i>	'Monday'
<i>niari</i>	'Tuesday'
<i>niejil</i>	'Wednesday'
<i>nioapoang</i>	'Thursday'
<i>nialim</i>	'Friday'

Saturday and Sunday have different names; *rehn koaunop* and *rehn joarwi*, respectively.

4.1.6 Fractions

Fractions are formed with the classifier *kij*.

jilkij pahw 'three quarters'
riahkij limoaw 'two fifths', literally 'two parts five'

The classifier used with the second number (the denominator of the fraction) is determined by the noun to which the fraction refers.

jilkij pahmen in jerimweinnok
'three quarters of the boys'

limkij wonpas in suhkoahk
'five sixths of the trees'

jilkij pahw in japwwe
'three quarters of this land'

(*Japw* 'land' is usually counted with *kij*, but in the case of a fraction it is counted with the general classifier. While normally it is 'pieces' of land that are counted (thus the classifier *kij*), in the case of fractions, the fraction itself seems to represent pieces of a larger whole.

Here we are not counting pieces of separate portions of land, but parts of a whole land area, represented by the use of the general classifier.)

In forming fractions, the prefix *e-* ‘one’ is not used with *kij*.

ew kij pahmen in jerihok
‘one quarter of the children’
not
**ekij pahmen in jerihok*

The fraction ‘half’ is represented by *oaloap*.

4. *Oaloap in armaj in Mwoakilloa li.*
‘Half of the people of Mokil are women.’

As noted in 4.1.4, *oaloap* ‘half’ takes no numeral prefixes except *oa-* ‘one’. Otherwise, the noun *loap* ‘half, side’ is counted with the general classifier.

5. *Loap riaw wiahda ew.*
‘Two halves make a whole.’

4.1.7 Ordinal Numbers

Ordinal numbers specify the position, or order, in which an object occurs in a series; first, second, third, and so forth. Ordinals are formed in Mokilese by prefixing *ka-* to the regular numbers. Note that ‘first’ is always *keiow* (derived from *ew* ‘one’) no matter what classifier the accompanying noun requires. All other ordinals are formed regularly: *kariaw*, *karoahmen*, *karahpas*, *kariahkij* ‘second’, *kajiluw*, *kajilmen*, *kajilpas*, *kajilkij* ‘third’, and so on.

The ordinals carry two slightly different but related meanings. The first is the **position-in-an-order** meaning noted in the preceding paragraph:

6. *Ngoah ne wadekla puk kajiluwwo.*
‘I’ve already read the third book.’

7. *I oar woal karoahmenno ma pokihdi ngoahi.*
‘It was the second man who hit me.’

4 Quantification

The second meaning suggests a ranking in quality (rather than in position), and is perhaps most aptly translated by ‘best’.

8. *Ih woal keiow in daka dopi.*

‘He is the best man in the high jump.’

Ordinal numbers may either follow the noun to which they refer, as in sentences 1 to 3, or they may precede them, as in:

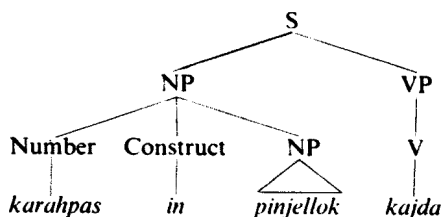
9. *Karahpas in pinjellok kajda.*

‘The second pencil is cracked.’

10. *Koah ioar keiow in armaj ma suhoang ngoahi nehn imwen wini.*

‘You’re the first person to visit me in the hospital.’

When the ordinal number precedes the noun, it is linked to that noun by the particle *in* (called the **construct particle**—see section 5.7.1). Sentence 9 (omitting details) may be diagrammed:



Note that the meaning of such constructions changes slightly depending on whether the noun is marked as singular or plural (see section 3.3.2.1).

kajilmen in woallok (plural noun)

‘the third man’

kajilmen in woallo (singular noun)

‘the third one, counting from that man’

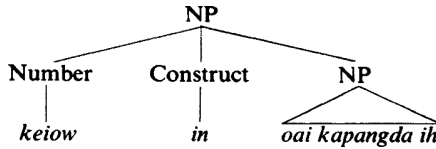
It appears that the ‘best’ meaning is more often associated with the ordinal that follows the noun (particularly in the case of *keiow* ‘first’) and that the rank order meaning is more often associated with the ordinal in an *in*-construction. These observations do not seem to hold for all cases, however.

Finally, note the use of the ordinal in an *in*-construction in the following sentences:

11. *Keiow in oai kapangda ih, ngoah mwehuki ih.*
 ‘The first time I saw her, I liked her.’

12. *Me ioar kariaw in oai pirin lel Pohnpai.*
 ‘This is the second time I have visited Ponape.’

In sentences 11 and 12, the ordinals of the general counting series are used to mean ‘the first time’, and so forth. The construction *oai kapangda ih* ‘my seeing her’ is being used here as a noun phrase, in exactly the same way as *pinjellok* ‘those pencils’ in sentence 9:



Such constructions will be discussed in section 10.6.5.

4.1.8 Indefinite Articles and the Number ‘One’

The full forms of the number ‘one’ appear after nouns only in cases of special emphasis. For example, *woal emen* ‘one man not two’. The number ‘one’ is more often represented by the numeral classifier alone, appearing as a suffix to the noun:

woalmen ‘one man’
woal emen

warpas ‘one canoe’
war apas

pukkoaw ‘one book’
puk ew

Note that the number ‘one’ in the general counting system is never used without the numeral prefix. It is always either *-ew* or *-oaw*.

As noted in 3.3.2.1, the suffixed forms of the number ‘one’ are also used as INDEFINITE DETERMINERS.

4 Quantification

<i>woalmen</i>	'a man'
<i>pukkoaw</i>	'a book'
<i>pinjelpas</i>	'a pencil'
<i>anjoaukij</i>	'some time'

4.1.9 Position of Numbers

Numbers usually follow the nouns to which they refer:

<i>armaj pahmen</i>	'four people'
<i>jiloa rahpas</i>	'two axes'
<i>wus ijuw</i>	'seven bananas'

The indefinite determiners are suffixes that are **loosely-bound** (see 2.1.2.1) to the words to which they are attached:

<i>kasmen</i>	'a cat'
<i>pukkoaw</i>	'a book'
<i>pinjelpas</i>	'a pencil'

Other numbers are independent words.

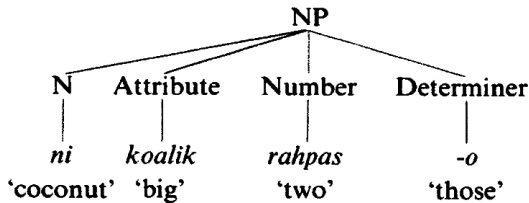
Within the noun phrase, numbers normally follow other attributes, but precede determiners:

ni koalik rahpasso
'those two large coconut trees'

anjoau mwehukije
'this good time'

pwohla pwuhsuhsssoaw
'a round ball'

This kind of internal noun phrase structure may be diagrammed:



The number may precede other attributes, but in this case its meaning is somewhat different. Compare:

- a. *jeri siksik roahmenno*
'those two small boys'
- b. *jeri roahmen siksikko*
'those two small boys'

The noun phrase b) appears to single out two boys from a group who are all small. It seems, then, that moving a number from its usual position to one closer to the noun places special emphasis on the number.

The words *ew, emen, apas* 'one', *ekij* 'a bit, a little, some' and *epwi* 'a few' can precede a noun. When that noun has no determiner, the words mean 'another' or 'other'. For example:

- 13. *Kihdoahng ngoahi ew puk.*
'Give me another book.'
- 14. *Ih wahdo epwi puk sohrohr.*
'He brought some different books.'
- 15. *Joah isar pil ipoai; ih pirin wahdo ekij pil.*
'I don't have enough water; he'll bring some more.'

When a determiner appears in these constructions, the meaning is somewhat different.

- 16. *Kihdoahng ngoahi apas pinjellen apel jiluw poaun in koahpihen.*
'Give me one pencil and three pounds of coffee.' (said in a store, for example)
- 17. *Ngoah anahne emen woallo ma kidal lalin Kusahi.*
'I need a man who speaks Kusaian.'
- 18. *Ekij pillen en wijekdo.*
'Some water should be brought.'

4 Quantification

In such cases the preceding numeral has the meaning ‘some’ or ‘any’. With a singular determiner the whole noun phrase refers to any of a certain kind of object; with a plural determiner it refers to any of a particular group of objects.

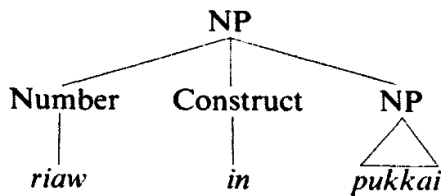
- 19a. *Ih mwehuki epwi pukko.*
‘He wants some books.’
- b. *Ih mwehuki epwi pukkuk.*
‘He wants some of those books.’

4.1.10 Partitive Construction

A partitive construction is used to refer to a definite **number** of a definite **group** of objects.

20. *Emen in jerihok sipwangla wanihmwwo.*
‘One of those children broke the window.’
21. *Ih wahla riaw in pukkai.*
‘He took two of these books.’

The partitive construction is similar in form to the *in-* construction used with ordinal numbers, except that the regular numbers are used, rather than the ordinals.



4.1.11 Numbers as Nouns

Numbers are usually used as attributes to the head noun of a noun phrase. This is the function we see in sentences such as:

22. *Woal jilmen indoa.*
‘Three men came.’
23. *Ngoah wahdo pwohla koalik pahwwo.*
‘I brought those four large balls.’

24. *Ih poadokdi suhkoa rahpasso.*
'He planted those two trees.'

Note, however, that the emphasized noun phrases in the above sentences can be replaced by numbers alone.

25. *Jilmen indoa.*
'Three came.'
26. *Ngoah wahdo pahw.*
'I brought four.'
27. *Ih poadokdi rahpas.*
'He planted two.'

In the sentences 25 to 27, the numbers *jilmen*, *pahw*, and *rahpas* function in the same way as the noun phrases of sentences 22 to 24 and like those in sentences such as:

28. *John indoa.*
'John came.'
29. *Ngoah wahdo pwohlahkai.*
'I brought these balls.'
30. *Ih poadokdi suhkoahk.*
'He planted those trees.'

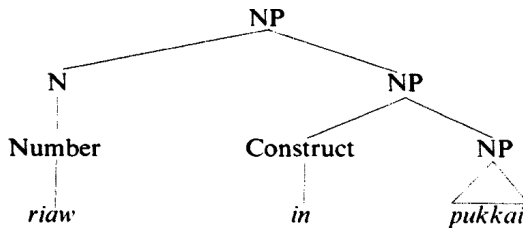
Numbers also function as nouns in constructions like the partitive construction discussed in 4.1.10. The portions of the following sentences that are in parentheses may be removed.

31. *Apas (in suhkoahk) ne uhwahda.*
'One (of those trees) has already started to bear fruit.'
32. *Roahmen (in woalkai) mihn Pohnpei.*
'Two (of these men) are Ponapeans.'
33. *Ngoah sipwangla jilpas (in pinjellok).*
'I broke three (of the pencils).'

4 Quantification

In partitive constructions, the **number** refers to the people or objects being discussed; the **phrase** *in* + NOUN refers to the group to which those people or objects belong. The objects alone can be discussed without referring to the group simply by not using an *in* + NOUN construction. This use is similar to that of numbers as nouns in sentences 25 to 27 above.

This discussion suggests two facts about partitive-like constructions. First, the numbers used in such constructions are **nouns** (because they refer to objects). And second, *in* + NOUN is a **construction** (in fact, a type of noun phrase). We may represent these facts in a modified tree for partitive constructions:



Numbers are also used as nouns in constructions like *emen emen* 'one by one', and so on. For example:

34. *Arai japahldo emen emen.*
'They returned one by one.'
35. *Kihdoahng ngoahi pennok ew ew.*
'Give me those coconuts one by one.'
36. *Pohssok pirin langdo rahpas rahpas.*
'The boats will arrive in twos.'

4.2 QUANTIFIERS

Here we will use the term QUANTIFIER for morphemes that describe the quantity or amount of people or objects being discussed, without referring to a specific number like two, ten or five hundred. Words like *ekij* 'some, a little' and *epwi* 'a few' are quantifiers in this sense.

37. *Mine epwi pwilein suhkoa peipepei nehn lammo.*

'There are some logs floating in the lagoon.'

38. *Ngoah kin mwehuki ekij juke nehn nimoai koahpi.*
'I like a little sugar in my coffee.'

Similar to these is the number 'one', used in the meaning 'any', in sentences like:

39. *Ngoah kak insingki apas pehnno.*
'I can write with any pen.'

and the use of a repeated number 'one' in the meaning 'each, every' in sentences such as:

40. *Emen emen jeri wijik pwalaik.*
'Every child carried a flag.'
41. *Emen emen in armajjok kang ekij mwingehu.*
'Each of those people ate some food.'

Other quantifiers are:

<i>ohroj</i>	'all'
<i>koaraj</i>	'both'
<i>dir</i>	'many'
<i>dirin</i>	'the majority, more'
<i>jipid</i>	'few'
<i>pokon</i>	'whole'

Ohroj 'all' normally follows the determiner (if any).

42. *Jerihn skuhllok ohroj koalik arai onop.*
child-of school-D all big their prepare
'All those schoolchildren studied hard.'

It may also precede the noun, as in:

43. *Ohroj armaj indoa anjoauo.*
'Everybody came then.'

Koaraj 'both' is only used after dual pronouns.

44. *Ara koaraj mwehuki iakiu.*
'Both of them like baseball'

4 Quantification

Dir 'many' and *jipid* 'few' usually precede the noun, but may follow the determiner.

45. *Ih jaikdi dir mwumwwok.*
'He caught many of those fish.'
46. *Jipid mihnwai indoa me.*
'Few foreigners come here.'
47. *Jipid woallok indoa.*
'Those few men came.'

Dirin 'the majority, more' precedes the noun.

48. *Ih wahdo dirin mwumw.*
'He brought back more fish than I expected.'
49. *Dirin armaj me.*
'The majority of the people are here.'

Pokon 'whole' follows the determiner.

50. *Wahdoahng ngoahi kehssoko pokon.*
'Bring me the whole case.'

When *pokon* follows the noun, it is best translated as 'full'.

51. *Wahdoahng ngoahi kehs pokonno.*
'Bring me the full case.'

4.3 THE LIMITING SUFFIX -OAR

When used in a noun phrase, the suffix *-oar* can be translated as 'only' or, in some instances, 'same'. It can be suffixed directly to a noun, number, determiner, or other noun phrase attribute.

52. *Pwen rimehr² doari, a joh pil.*
'Only bottles, but no water.'
53. *Mine oai pwo pahwwoar.*
'I have only four poles.'

54. *Me pwen koauwahr.*
'This is still the same hook.'

55. *Ngoah kak kapang pako roahmennohr.*
'I can see only those two sharks.'

The determiner with which *-oar* is most commonly used is *-wa*. In this case, the unit *-wahr* (*-wa + oar*) has the meaning 'the same'.

56. *Amwda koah pel kihdoahng ngoahi joangoan mwingehwahr?*
'Why do you always give me the same kind of food?'

The suffix *-oar* may also follow other noun phrase attributes (see 6.4.1).

57. *Kihdoahng ngoahi adroau koalikkoar doari.*
'Give me only big eggs.'

The word *doari* 'that's all' frequently follows the suffix *-oar* for extra emphasis, as in sentences 52 and 57. Other examples are:

58. *Ih anahne pukkoawehr doari.*
'He wants only this one book.'

59. *Ngoah pirin wahdo moai riawwoar doari.*
'I'll bring only two breadfruit.'

When used with a negative, *-oar* can often be translated as 'except'. For example:

60. *Joh armaj kamehlele, a armajjehr.*
'No one believed, except this person.'

61. *Armaj ohroj dupuk, a Johnnoar joah.*
'Everyone paid except John.'

The suffix *-oar* is used in a related, but rather different way, in verb phrases. This use will be discussed in section 10.3.3.

5 Possessive Constructions

A **possessive construction** is a way of expressing a number of different relationships between nouns. One of the two nouns in a possessive construction can be thought of as representing the **possessor**; the other, the **thing possessed**. The following are examples of possessive constructions:

- a. *rioai* 'my brother'
- b. *kilin* 'his skin'
- c. *nihmw pukko* 'your book'
- d. *en jeriho koauo* 'that boy's fishhook'

In a), the speaker, represented by the suffix *-i* 'my', is the possessor and 'brother', represented by the noun stem *rioa-* 'brother' is the thing possessed. In b), the possessor is represented by the suffix *-in* 'his' and the thing possessed by the noun stem *kil* 'skin'. In c), the possessor is represented by *nihmw* 'your'¹ and the thing possessed by the noun phrase *pukko* 'that book'. Finally, in d), the possessor is represented by the noun phrase *jeriho* 'that boy' and the thing possessed by *koauo* 'that fishhook'. The word *en* 'thing of' is a POSSESSIVE CLASSIFIER. Its use will be explained below.

The four noun phrases above are examples of three different kinds of possessive relations. In examples like *rioai* 'my brother', *joamoai* 'my father', and *pahioai* 'my spouse', the relationship expressed is **kinship** or **marriage**. In *kilin* 'his skin', *moange* 'his head', *ange* 'its claw', *sooa* 'its member', the relationship is **part-whole**; that is, the person or object possessed is an integral part of the person or object represented by the possessor. In noun phrases like *nihmw pukko* 'your book' and *en jeriho koauo* 'that boy's fishhook' the relation is **ownership**. Other kinds of "possession" will be discussed in the sections that follow. What is important at this time is to understand that the relation we call **possession** is actually a number of different relations, including **ownership**, **part-whole**, and **kinship**.

In terms of their form, there are two basic types of possessive constructions. The first, as in a) and b), involves suffixes added directly to the noun representing the thing possessed.

The second, as in c) and d), involves suffixes added to a possessive classifier rather than to the noun representing the thing possessed.

5.1 ALIENABLE AND INALIENABLE POSSESSION

The two types of possessive construction just mentioned (suffixing vs. possessive classifiers) are related to another important distinction between possessive constructions in Mokilese—that between ALIENABLE and INALIENABLE possession. A noun is said to be inalienably possessed if the relation between the possessor and the thing possessed is viewed as permanent and indestructible. Common classes of nouns that are inalienably possessed are **kinship terms** (as in a below), body parts (as in b), and personal attributes (as in c):

- | | |
|--------------------|----------------|
| a. <i>joamoai</i> | 'my father' |
| <i>inoai</i> | 'my mother' |
| <i>rioai</i> | 'my brother' |
| <i>kijehi</i> | 'my relative' |
| <i>pahioai</i> | 'my spouse' |
| b. <i>poahioa</i> | 'my arm' |
| <i>mijoaioa</i> | 'my face' |
| <i>sioaioa</i> | 'my ear' |
| <i>ngiloaioa</i> | 'my voice' |
| c. <i>oadoaioa</i> | 'my name' |
| <i>mwaroaioa</i> | 'my title' |
| <i>injenoai</i> | 'my privilege' |
| <i>iroai</i> | 'my health' |
| <i>dinihoa</i> | 'my behavior' |

The examples of inalienable possession given above are all cases in which the possessor is a person. Animals and objects may also act as possessors in an inalienable possession relationship. The body parts of animals are inalienably-possessed. For example:

- | | |
|----------------|------------|
| <i>woalooa</i> | 'its gill' |
| <i>kodin</i> | 'its horn' |
| <i>ikin</i> | 'its tail' |

5 Possessive Constructions

Similarly, the relationship between a plant or other object and its parts is usually considered to be inalienable possession. For example:

<i>rah</i>	'its branch'
<i>mwoahroa</i>	'its color'
<i>soah</i>	'its leaf'
<i>sokin</i>	'its stump'
<i>dame</i>	'its outrigger'

Inalienable possession is expressed in Mokilese by means of possessive suffixes (representing the possessor) added directly to the noun representing the thing possessed. It is important to realize that inalienable possession is a relationship between two nouns representing people or things. A given noun may be inalienably-possessed with respect to one noun possessor but not another.

- a. *damen warro*
'that canoe's outrigger'
- b. *en woallo dammo*
'that man's outrigger'

In a), the suffix *-n* 'of' is added directly to the noun stem *dame*- 'outrigger', since the relationship between a canoe and its outrigger is **inalienable** (the relationship of a part to a whole). In b), however, the possessive relationship is expressed by means of the possessive classifier *en* 'thing of', since the relationship between an outrigger and the man who owns it is **alienable** (not firm or permanent) rather than **inalienable**.

Because the ability to take suffixes directly is so closely related to the property of inalienability in Mokilese nouns, it has been common to refer to any noun stem that can take possessive suffixes directly as an **inalienable noun**. Possessive classifiers are often called inalienable nouns because they take possessive suffixes directly. The same is true of the relational nouns (like *pooa* 'on it', *pehn* 'under it', and *ipah* 'near it', mentioned in section 3.1). The term **inalienable** has been used here in two ways: to describe the inalienable possession relation; and to refer to those nouns that take possessive suffixes directly.

5.1.1 Loose and Tight Inalienable Nouns

Mokilese inalienable nouns can be divided into two types on the basis of whether the suffixes they use in the first and second persons singular are *-i* ‘my’ and *-mw* ‘your’ or *-ioa* ‘my’ and *-mwēn* ‘your’.² Nouns that use the former are termed **loose inalienables**; those that use the latter are termed **tight inalienables**.

For the most part it is easy to predict whether an inalienable noun will be loosely or tightly inalienable. Objects that are actually attached to their possessor tend to be tightly inalienable (taking the suffixes *-ioa* ‘my’ and *-mwēn* ‘your’), while people or objects less directly related to their possessor are loosely inalienable (taking the suffixes *-i* ‘my’ and *-mw* ‘your’). The former class consists mostly of body parts and the latter of kinship terms. For example:

	Tight		Loose
<i>mijoaioa</i>	‘my face’	<i>joamoai</i>	‘my father’
<i>kilioa</i>	‘my skin’	<i>kijehi</i>	‘my relative’
<i>sioamwēn</i>	‘your ear’	<i>pahioamw</i>	‘your spouse’
<i>poahmwēn</i>	‘your hand’	<i>rioamw</i>	‘your brother’

Nouns representing personal attributes tend to be tightly inalienable, while **relational nouns** (see 3.1) and **possessive classifiers** tend to be loosely inalienable. For some reason, the majority of *n*-third singular (see 5.3.3) and *-ooa* third singular (see 5.3.2.5) inalienable nouns are tightly inalienable. An exception is *kijehi* ‘my relative’.

	Tight		Loose
<i>oadoaioa</i>	‘my name’	<i>iroai</i>	‘my health’
<i>ngenihoa</i>	‘my spirit’	<i>koanoai</i>	‘my food’
<i>mwaroamwēn</i>	‘your title’	<i>ipoamw</i>	‘near you’
<i>koanoahmwēn</i>	‘your catch’	<i>joapwoai</i>	‘my land’

We can conclude that the tight or loose inalienability of a given noun is largely, but not entirely, predictable from its meaning.

5.2 THE POSSESSIVE SUFFIXES

An inalienably possessed noun in a possessive construction has two parts—a **noun stem**, representing the thing possessed, and a **possessive suffix**, representing the possessor. For each personal pronoun (see 3.4.1) there is a corresponding possessive suffix. That is, the suffix changes depending on whether the possessor is first person (the speaker), second person (the hearer), or third person; or singular, dual, plural, or remote plural.

In addition to the possessive suffixes that have pronominal counterparts, there is an additional suffix, called the **construct suffix**, that is used when the possessor is represented by a noun rather than a pronoun. A noun stem with the construct suffix is called a CONSTRUCT FORM. Compare:

- a. *oadoan woallo* ‘that man’s name’
 b. *oadoaioa* ‘my name’
 c. *oadoa* ‘his name’

The construct form *oadoan* ‘name of’ is used in a) because the possessor is represented by the noun *woal* ‘man’.

Below is the complete possessive PARADIGM ³ of the noun *ad* ‘name’.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>oadoasa</i>	<i>oadoasai</i>	<i>oadoahs</i>
exclusive	<i>oadoaioa</i>	<i>oadoama</i>	<i>oadoamai</i>	<i>oadoami</i>
2nd person	<i>oadoamwen</i>	<i>oadoamwa</i>	<i>oadoamwai</i>	<i>oadoamwi</i>
3rd person	<i>oadoa</i>	<i>oadoara</i>	<i>oadoarai</i>	<i>oadoahr</i>
construct	<i>oadoan</i>			

The remote forms of inalienably possessed nouns, like the remote pronouns themselves (see 3.4.1.2), are used infrequently. Many nouns seem to lack remote forms completely, while with others there seems to be some doubt as to what the correct remote forms should be. It is only in the case of the possessive classifiers, some kinship terms, and some body parts that there is little doubt as to the identity of these forms.

Many nouns, particularly those that can only be possessed by non-humans (that is, animals or inanimate objects), appear to have only partial paradigms. In most of these cases only forms for the third person singular and the construct are in common use. For example:

		3rd sing.	construct
<i>soa</i>	'leaf'	<i>soah</i>	<i>soahn</i>
-----	'fruit' ⁴	<i>wah</i>	<i>wehn</i>
<i>pil</i>	'water'	<i>piloa</i>	<i>pilen</i>
<i>koadok</i>	'top'	<i>koadokoa</i>	<i>koadokoan</i>
<i>paj</i>	'nest'	<i>pajin</i>	<i>pajin</i>
<i>dam</i>	'outrigger'	<i>dame</i>	<i>damen</i>

If an imaginative person could conceive of birds or trees talking, then forms like *pajihoa* 'my nest' or *soahioa* 'my leaf' might be possible. Since such situations are rare, the forms themselves are rare also.

In our discussion of roots and affixes in section 2.1.1, we mentioned that in a word consisting of more than one morpheme it is often difficult to decide where to make the division between root and affix. As was pointed out, this is particularly true in the case of the possessive paradigms. In that section we suggested three possible analyses of the possessive forms. Let us review them again here.

5.2.1 Uniform Root Analysis

In this analysis, the division between the root and the possessive suffix would be made so that the root resembles the FREE FORM (unsuffixed form) of the noun as much as possible. In the case of the paradigm for *ad* 'name', the root would be *oad-* 'name'⁵ and the suffixes would be *-oaioa* 'my', *-oamwen* 'your', *-oa* 'his', *-oan* 'construct', and so forth. The major disadvantage of this analysis is that each possessive suffix would have to have a number of different forms. For example, the third person singular suffix would have to have at least four forms; *-oa* in forms like *oadoa* 'his name' (from *ad* 'name'), *-e* in forms like *moange* 'his head' (from *moang* 'head'), *-ah* in forms like *japwah* 'his land' (from *japw* 'land'), and *-in* in forms like *kilin* 'his skin' (from *kil* 'skin').

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5.2.2 Uniform Suffix Analysis

In this analysis, the division between the root and the possessive suffix would be made so that each suffix would have as few different forms as possible. In the case of the paradigm for *ad* 'name', the root would be *oadoa-* and the suffixes would be *-ioa* 'my', *-mwēn* 'your' *-∅* (zero) 'his', and *-n* 'construct', and so forth. In this analysis, the possessive root (e.g., *oadoa-*) would differ from the free form (in this case *ad*) in having an extra final vowel.⁶ However, this analysis has the advantage of reducing the number of different forms of each suffix. It would require only three forms of the third person singular suffix—*∅* (zero) in forms like *oadoa* 'his name' and *moange* 'his head' *-n* in forms like *kilin* 'his skin', and *-a* in forms like *japwah* 'his land' (*japwa* + *a=japwah*).

5.2.3 Stem Formant Analysis

The third possible treatment of the possessive forms is a compromise between the previous two. In it, the root would be given (morphophonemics aside) the same form as that of the free form (as in the uniform root analysis) while the suffixes would be analyzed so as to have as few different forms as possible (as in the uniform suffix analysis). A form like *oadoaioa* 'my name' would be analyzed as *oad+oa + ioa*, in which *oad-* is the root 'name', *-ioa* is the suffix 'my', and *-oa-* is a special stem formant vowel (see 2.1.2.4) that must be inserted between the root and a possessive suffix.

This analysis is not without its problems, however. First, it is not clear whether to treat a form like *oadoa* 'his name' as *oad+oa +∅*, with a zero third person singular possessive suffix, or as *oad+oa*, with no stem formant vowel and *-oa* as the third person singular possessive suffix. Second, in most cases we must know for each noun root which stem formant vowel to use (for example, *-oa-* in the case of *oad-* 'name', but *-e-* in the case of *moang-* 'head'), since the identity of the stem formant vowel is not fully predictable. In this respect, this analysis seems to have little advantage over the uniform suffix analysis discussed above.

The analysis we adopt here is basically the uniform suffix analysis. (At some points, deviations from this analysis will be suggested.) This analysis seems to correspond closely to the history of Mokilese. At one time, most Mokilese words that now

end in consonants ended in vowels. We know this was the case by comparing Mokilese with other Micronesian (and Oceanic) languages that still have these vowels. A word like *ad* 'name' was at one time probably **ada*. (The asterisk here indicates a form that does not exist but might have at one time.) These old final vowels are now preserved in the possessive forms. Thus *oadoaioa* 'my name' was probably originally **ada + i* (to which the suffix *-oa* was later added). While the final /a/ in forms like **ada* was removed by a process called **final vowel deletion**, the same vowel /a/ remained in a form like **ada + i* because there it was not final. For example:

**ada*ada+i*
 Final Vowel Deletion *ad* ———
*ad *ada + i* (later *oadoai*, then *oadoaioa*)

Viewed in the light of the probable history of Mokilese, it is therefore not surprising that a free form like *ad* 'name' should appear as *oadoa-* in the possessive paradigm.

The possessive suffixes are given in the following table, accompanied by a brief review of some of their more important characteristics.

	Singular	Dual	Plural	Remote
1st person				
inclusive		-sa	-sai	-hs
exclusive	-i, <i>ioa</i>	-ma	-mai	-mi
2nd person	-mw, -mwēn	-mwa	-mwai	-mwi
3rd person	-a, -n, -∅	-ra	-rai	-hr
construct	-n			

a. As discussed in 5.1, the difference between the first and second person singular suffixes *-i* and *-mw* and *-ioa* and *-mwēn* reflects the difference between loosely inalienable nouns and tightly inalienable nouns.

b. The three forms of the third singular suffix will be considered in the sections that follow.

c. The plural suffixes are formed by adding *-i* to the dual suffixes.

d. The remote plural forms of the first inclusive and third persons are formed by lengthening the preceding vowel (as shown by the letter *h*) and adding *-s* in the first person inclusive and *-r* in the third person.

5.3 POSSESSIVE PARADIGMS

5.3.1 Third Person Singular

The third person singular possessive forms are those that show the most variation. It is thus possible to classify different possessive paradigms according to the form of the third person singular. They fall into two basic types, those whose third singular ends in *-n* (for example, *kilin* 'his skin' or *kijehn* 'his relative') and those whose third singular ends in a vowel (for example, *oadoa* 'his name', *moange* 'his head', *jamah* 'his father'). The first type can be termed **n-third singular** nouns and the second **vowel-third singular** nouns.

Within each of these major types a number of subtypes can be distinguished according to the stem vowels of the third singular (and, in some cases, the construct form). These varieties are summarized below:

Vowel-third Singular

- oa* stems
- oa*, -*a* stems
- e* stems
- ah* stems
- ooa* stems
- long vowel stems

n-Third Singular

- i* stems
- long vowel stems

Each of these varieties will be discussed in turn in the sections that follow. In each case, a sample paradigm will be given, followed by a list of nouns that follow this paradigm, and a number of explanatory notes. The listed nouns are given in their third singular forms and free forms (if these exist). Unless

otherwise indicated, loosely-inalienable nouns will be marked (L). Nouns not specified as loosely-inalienable (either by (L) or in an explanatory note) are normally tightly-inalienable.

5.3.2 VOWEL THIRD SINGULAR NOUNS

5.3.2.1 -oa STEMS

-oa stems are those nouns in which the vowel *oa* normally appears before all possessive suffixes. An example is *ad* 'name'.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>oadoasa</i>	<i>oadoasai</i>	<i>oadoahs</i>
exclusive	<i>oadoaioa</i>	<i>oadoama</i>	<i>oadoamai</i>	<i>oadoami</i>
2nd person	<i>oadoamwen</i>	<i>oadoamwa</i>	<i>oadoamwai</i>	<i>oadoamwi</i>
3rd person	<i>oadoa</i>	<i>oadoara</i>	<i>oadoarai</i>	<i>oadoahr</i>
construct	<i>oadoan</i>			

Other nouns inflected like *ad* 'name' are:

3rd Singular	Free Form	
<i>pwoaijoa</i>	<i>pwaij</i>	'share, recompense'
<i>alooa</i>	<i>al</i>	'way of life'
<i>oaljoa</i>	<i>alij</i>	'beard'
<i>oawoa</i>	<i>au</i>	'mouth'
<i>joapoa</i>	<i>joap</i>	'cheek'
<i>kahwoa</i>	----	'anus'
<i>loawoa</i>	<i>lau</i>	'tongue'
<i>lokopoa</i>	<i>lokop</i>	'waist'
<i>mwaroa</i>	<i>mwar</i>	'title'
<i>mwarmwaroa</i>	----	'chest'
<i>mwoahroa</i>	<i>mwoahr</i>	'color'
<i>ngoasoa</i>	<i>ngoas</i>	'lip'
<i>oajoa</i>	<i>oaj</i>	'liver'
<i>poalloa</i> (L)	<i>pallali</i>	'partner, opponent'
<i>palwoaroa</i>	<i>palwahr</i>	'body'
<i>pahioa</i> (L)	----	'spouse'
<i>pohnpwoaroa</i>	<i>pohnpwoar</i>	'abdomen'
<i>poaroa</i>	<i>poar</i>	'lungs'
<i>pwoalkoa</i>	<i>pwalik</i>	'foot'
<i>pwoasoa</i>	<i>pwoas</i>	'nail'

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<i>woaloo</i>	<i>woal</i>	'gills'
<i>kaspoa</i>	———	'need'

Some important features of this class are noted in the following remarks.

a. The most common change between free and possessed forms in these items is that of a short /a/ in the free form becoming /oa/ in the paradigm, for example, *ad~oadoa*; *aw~oawoa*; *alij ~ oaljoa*. Exceptions are *mwar~ mwaroa* 'title' and *al~aloo* 'road'.

b. Note that the /ah/ of *palwahr* 'body' becomes short /oa/ in the paradigm, but the first /a/ remains /a/; thus, *palwoarooa* 'his body'. Note also that the final /li/ of *pallali* 'partner' does not appear in the paradigm; thus, *poalloa* 'his body'.

c. In many nonsingular forms, vowel reduction applies to the final vowel of the root. Thus, *oadoasa* 'our names' is often phonetically [ʔdisa]. Words like *palwahr* 'body' and *mwarmwarooa* 'his chest', with an /a/ that does not become /oa/, tend to have two forms for all nonsingular possessives. For example, *palwoarooasa* or *palwarasa* 'our bodies'.

d. If the stem vowel is /a/, the construct may be either *-en* or *-oan*; thus *alen* 'way of', *pahien* 'wife of', *mwaren* 'title of'.

5.3.2.2 -oa, -a STEMS

This class has *-oa* in the third singular, *-en* in the construct, and *-a* before all nonsingular suffixes. An example is *si* 'ear'.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>siasa</i>	<i>siasai</i>	<i>siahs</i>
exclusive	<i>sioaioa</i>	<i>siama</i>	<i>siamai</i>	<i>siemi</i>
2nd person	<i>sioamwen</i>	<i>siamwa</i>	<i>siamwai</i>	<i>siemwi</i>
3rd person	<i>sioa</i>	<i>siara</i>	<i>siarai</i>	<i>siahr</i>
construct	<i>sien</i>			

Other nouns inflected like *si* 'ear' are:

3rd Singular	Free Form
--------------	-----------

<i>ijoa</i>	<i>ijaij</i>	'tribute, gift'
<i>ipoa</i> (L)	-----	'near him'
<i>iroa</i> (L)	-----	'health'
<i>kupwuroa</i>	<i>kupwur</i>	'being'
<i>luoa</i>	-----	'remains, leavings'
<i>ngiloa</i>	<i>ngil</i>	'voice'
<i>pioa</i>	<i>pi</i>	'vagina'
<i>mijoa</i>	<i>maj</i>	'eye, face'
<i>pwijjioa</i>	-----	'navel'
<i>pwukkoa</i>	<i>pwiki</i>	'knee'
<i>pwurroa</i> (L)	<i>pwiri</i>	'stomach, core'
<i>udukoa</i>	<i>uduk</i>	'flesh'
<i>upwoa</i>	<i>upw</i>	'shoulder'
<i>wiloa</i>	<i>wil</i>	'penis'

Some important features of the class are noted in the following remarks:

a. This subclass contains nouns whose nonfinal root vowels are high.

b. The construct form often appears as *-oan* if the preceding vowel is /u/.

c. Note that *ipoa* 'near him' has an alternate form *ipah*.

d. Note that *maj* 'eye' becomes *mij-* in all forms of the paradigm.

e. If the preceding vowel is /u/, there is often some doubt, about the stem final vowel of nonsingular forms. It is often given as /oa/. Thus, *udukoasa—udukasa* 'our flesh'.

5.3.2.3 -e STEMS

This class has *-e* in the third singular. All nouns in this class have a nasal consonant immediately preceding the stem vowel, though why this should be so is still unclear. An example is *mwomw* 'behavior'.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>mwomwoasa</i>	<i>mwomwoasai</i>	<i>mwomwehs</i>
exclusive	<i>mwomwoaioa</i>	<i>mwomwoama</i>	<i>mwomwoamai</i>	<i>mwomwomi</i>
2nd person	<i>mwomwoamwen</i>	<i>mwomwoamwa</i>	<i>mwomwoamwa i</i>	<i>mwomwomwi</i>
3rd person	<i>mwomwe</i>	<i>mwomwoara</i>	<i>mwomwoarai</i>	<i>mwomwehr</i>

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construct *mwomwen*

Other nouns inflected like *mwomw* 'behavior' are:

3rd Singular	Free Form	
<i>denge</i>	<i>deng</i>	'crotch'
<i>moange</i>	<i>moang</i>	'head'
<i>nehnpwunge</i>	<i>nehnpwung</i>	'middle'
<i>pangpange</i>	———	'beside'
<i>soamwe</i>	<i>soamw</i>	'forehead'
<i>wine</i>	<i>win</i>	'feathers, scales'

Some important features of this class are noted in the following remarks.

a. If the preceding vowel is not round (that is, not /u/, /o/, or /oa/) the final stem is /ɛ/ throughout the paradigm. Thus, *dengeioa* 'my crotch'.

b. If the preceding vowel is /oa/ the construct ends in *-oan*. Thus, *moangoan* 'head of'.

c. In the dual and plural forms, where vowel reduction applies to the stem final vowel, the quality of that vowel is difficult to determine.

5.3.2.4 -ah STEMS

All nouns in this class have *-ah* in the third singular. An example is *jamah* 'his father'.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>jamasa</i>	<i>jamasai</i>	<i>jamahs</i>
exclusive	<i>joamoai</i>	<i>jamama</i>	<i>jamamai</i>	<i>jememi</i>
2nd person	<i>joamoamw</i>	<i>jamamwa</i>	<i>jamamwai</i>	<i>jememwi</i>
3rd person	<i>jamah</i>	<i>jamara</i>	<i>jamarai</i>	<i>jamahr</i>
construct	<i>jemen</i>			

Other nouns inflected like *jamah* 'his father' are:

3rd Singular	Free form	
<i>dapah</i>	———	'ear decoration'

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<i>ah</i>	----	'thing'
<i>dipah</i>	<i>dihp</i>	'sin'
<i>inah</i>	----	'mother'
<i>injenah</i>	<i>injen</i>	'privilege'
<i>japwah</i>	<i>japw</i>	'land'
<i>kanah</i>	----	'food'
<i>kiah</i>	----	'mat'
<i>mwarah</i>	----	'garland'
<i>nimah</i>	----	'drink'
<i>ngidah</i>	----	'thing for chewing'
<i>siah</i>	----	'earring'
<i>imwah</i>	<i>umw</i>	'house'
<i>warah</i>	<i>war</i>	'vehicle'
<i>nah</i>	----	'child, small thing'
<i>riah</i>	----	'brother, sister'

All possessive classifiers (or nouns used as classifiers) and most kinship terms are *-ah* stems. The major characteristic of this class is the *-ah* of the third person singular, but a short final stem vowel in all other forms of the paradigm (first and third person remote excepted, of course). This situation seems to have arisen because a third person singular suffix *-a* was not removed by final vowel deletion in these forms. Thus, *jamah* seems to have arisen from *jama-ha*. It was for this reason that an *-a* third person from *jama+a*. It was for this reason that an *-a* third person singular suffix was discussed in 5.2. All nouns in this class appear to be loosely-inalienable.

These nouns have *-en* in the construct form if the preceding consonant is nasal (as is true of *-e* stems) or if the root vowel is high (as in *-oa*, *-a*, stems). The stem vowel is *-a* before all non-singular suffixes (remote forms excepted).

Note the irregular paradigm for *nah* 'his child, small object'.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>nihsa</i>	<i>nih sai</i>	<i>nahs</i>
exclusive	<i>noai</i>	<i>nihma</i>	<i>nih mai</i>	<i>nihmi</i>
2nd person	<i>nihmw</i>	<i>nihmwa</i>	<i>nihmwai</i>	<i>nihmwi</i>
3rd person	<i>nah</i>	<i>nihra</i>	<i>nihrai</i>	<i>nahr</i>
construct	<i>nihn</i>			

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The first and third persons singular and remote show the expected forms, while all other members of the paradigm use the root *nih-*.

Note also that the first exclusive and second person remote of *ah* 'his thing' have the irregular forms *imi* 'our (excl.) thing' and *imwi* 'your thing'. (The vowel /i/ instead of the expected /e/ sometimes seems to occur with other words as well. Thus, *jememwi* or *jimimwi* 'your (remote plural) father'.)

5.3.2.5 -*ooa* STEMS

This small class of nouns has *-ooa* in the third singular, but *-oh-* before all other suffixes. Many speakers, however, give third singular forms in *-oh*, *pwudoh* 'his sweat'. For these speakers, these nouns can be treated as long vowel stems. It was impossible to find remote forms for the nouns of this class. An example of this class is *polo* 'group'.

	Singular	Dual	Plural
1st person			
inclusive		<i>polohsa</i>	<i>polohsai</i>
exclusive	<i>polohioa</i>	<i>polohma</i>	<i>polohma</i>
2nd person	<i>polohmwēn</i>	<i>polohmwā</i>	<i>polohmwai</i>
3rd person	<i>polooa</i>	<i>polohra</i>	<i>polohrai</i>
construct	<i>polohn</i>		

Other nouns inflected like *polo* 'group' are:

3rd Singular	Free form	
<i>kooa</i>	----	'top'
<i>koalooa</i>	<i>koalo</i>	'root'
<i>pooa</i>	<i>puoa</i>	'on top'
<i>mwooa</i>	----	'before, in front'
<i>pwooa</i>	<i>pwo</i>	'smell'
<i>pwudooa</i>	<i>pwudo</i>	'sweat'
<i>sooa</i>	----	'member'

5.3.2.6 LONG STEM VOWELS

Nouns in this class have a long stem final vowel in all forms of the paradigm. An example is *insa* 'blood'.

Singular	Dual	Plural	Remote
----------	------	--------	--------

1st person				
inclusive		<i>insahsa</i>	<i>insahsai</i>	<i>insahs</i>
exclusive	<i>insahioa</i>	<i>insahma</i>	<i>insahmai</i>	<i>insahmi</i>
2nd person	<i>insahmwēn</i>	<i>insahmwa</i>	<i>insahmwai</i>	<i>insahmwi</i>
3rd person	<i>insah</i>	<i>insahra</i>	<i>insahrai</i>	<i>insahr</i>
construct	<i>insahn</i>			

Other nouns inflected like *insa* ‘blood’ are:

3rd Singular	Free form	
<i>koaloah</i>	<i>koalooa</i>	‘penis’
<i>pah (pehn)</i>	-----	‘under’
<i>poah</i>	<i>poa</i>	‘arm, hand, wing’
<i>pwalah</i>	-----	‘chest’
<i>rah</i>	<i>ra</i>	‘branch’
<i>soah</i>	<i>soa</i>	‘leaf’
<i>wah (wehn)</i>	-----	‘fruit’

The nouns *wah* ‘its fruit’ and *pah* ‘under it’ have the roots *weh-* and *peh-* in all forms of the paradigm except the third singular.

5.3.3 *n-* Third Singular Nouns

5.3.3.1 *-i* STEMS

All nouns in this class have stem final *i*. In the second singular, however, it tends to become *u* if preceded by a non-front vowel. Thus, *sapumwen* ‘your back’, *pwukumwen* ‘your bladder’. The combination of stem final *-i* and a following *i* in the first singular suffix results in the creation of a long *ih*. Thus, *kil-i+ioa* becomes *kilihoa* ‘my skin’. To my knowledge, all nouns in this class are considered to be tightly-inalienable. An example is *kil* ‘skin’.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>kilisa</i>	<i>kilisai</i>	<i>kilihs</i>
exclusive	<i>kilihoa</i>	<i>kilima</i>	<i>kilimai</i>	<i>kilimi</i>
2nd person	<i>kilimwen</i>	<i>kilimwa</i>	<i>kilimwai</i>	<i>kilimwi</i>
3rd person	<i>kilin</i>	<i>kilira</i>	<i>kilirai</i>	<i>kilihr</i>
construct	<i>kilin</i>			

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Some *i*-stem nouns are:

3rd Singular	Free form	
<i>dinin</i>	<i>den</i>	'behavior'
<i>doauin</i>	<i>doau</i>	'bower'
<i>ikin</i>	<i>ik</i>	'tail'
<i>ipwihpwin</i>	<i>ipwihpw</i>	'parentage'
<i>jandin</i>	<i>jaid</i>	'finger, toe'
<i>kapin</i>	<i>kap</i>	'buttocks'
<i>kapehdin</i>	<i>kapehd</i>	'stomach, belly'
<i>kidin</i>	<i>kid</i>	'garbage'
<i>kikin</i>	<i>kik</i>	'nail'
<i>kodin</i>	<i>kod</i>	'horn'
<i>kujin</i>	<i>kuj</i>	'semen'
<i>mahlehl</i>	<i>mahlehl</i>	'brain'
<i>mwajahlin</i>	<i>mwajahl</i>	'intestine'
<i>ngenin</i>	<i>ngen</i>	'spirit'
<i>padin</i>	<i>pad</i>	'eyebrow'
<i>sipin</i>	<i>sip</i>	'trunk'
<i>so kin</i>	<i>sok</i>	'stump'
<i>soapwoahdin</i>	<i>soapwoahd</i>	'nose'

The *i*-stem nouns are the largest class of inalienable nouns; hence the list above is far from complete. The *i*-stem class is the productive class of inalienable nouns. By this we mean that when **productive** class of inalienable nouns. By this we mean that when new inalienable nouns enter Mokilese, they are always put into this class. For example, the borrowed word *nuhs* 'news' is an *i*-stem noun. Also, if any noun has two paradigms, or if there is some doubt about what the possessive forms of any inalienable noun should be, that noun is likely to be treated as an *i*-stem.

The productivity of the *i*-stem paradigm, and its extension to forms that also appear with other final vowels,⁷ have lead me to believe that perhaps the *i*-stems are in fact consonant stems to which the vowel /i/ is added as a stem formant (see section 5.2.3) before the possessive suffixes can be added. This fact suggests, then, that an analysis like that of section 5.2.3 above can be adopted for the so-called *i*-stems. I shall not attempt to make a stronger case for this analysis here, however.

5.3.3.2 *n*-THIRD SINGULAR LONG VOWEL STEMS

These nouns are like the *i*-stems discussed above, except that they have a long vowel, rather than *i*, before the possessive suffixes. An example is *e* ‘leg’.

	Singular	Dual	Plural	Remote
1st person				
inclusive		<i>ehsa</i>	<i>ehsai</i>	<i>ehs</i>
exclusive	<i>ehioa</i>	<i>ehma</i>	<i>ehmai</i>	<i>ehmi</i>
2nd person	<i>ehmwēn</i>	<i>ehmwa</i>	<i>ehmwai</i>	<i>ehmwi</i>
3rd person	<i>ehn</i>	<i>ehra</i>	<i>ehrai</i>	<i>ehr</i>
construct	<i>ehn</i>			

Other nouns inflected like *e* ‘leg’ are:

3rd Singular	Free form	
<i>dihdihn</i>	<i>dihdi</i>	‘breast’
<i>kijehn</i> (L)	———	‘relative’
<i>laduhn</i> (L)	<i>ladu</i>	‘male servant’
<i>liduhn</i> (L)	<i>lidu</i>	‘female servant’
<i>ngihn</i>	<i>ngi</i>	‘tooth’
<i>pwijehn</i>	<i>pwije</i>	‘excrement’
<i>sihn</i>	<i>si</i>	‘bone’

5.4 POSSESSIVE CLASSIFIERS

Most nouns in Mokilese are not inalienably possessed and, hence, do not take the possessive suffixes directly. Rather, the possessive suffixes are added to a special noun called a POSSESSIVE CLASSIFIER, which usually precedes the noun that names the thing possessed. The possessive classifier reflects some feature of the meaning of the possessed noun, usually its **use**. Nouns that refer to vehicles usually take the classifier *warah* ‘his vehicle’, those that refer to food take the classifier *kanah* ‘his food’, and so forth.

We might consider the function of possessive classifiers to be somewhat like that of pronouns in that they appear to take the place of nouns. That is, since most nouns cannot have possessive suffixes added to them directly (only inalienable nouns can), the possessive suffixes are added instead to a possessive

5 Possessive Constructions

classifier, which takes the place of the possessed noun in this construction. Unlike pronominal constructions, however, the noun representing the thing possessed does appear in these possessive constructions, usually following the possessive classifier-possessive suffix construction. Some examples of alienable possessive constructions with possessive classifiers are:

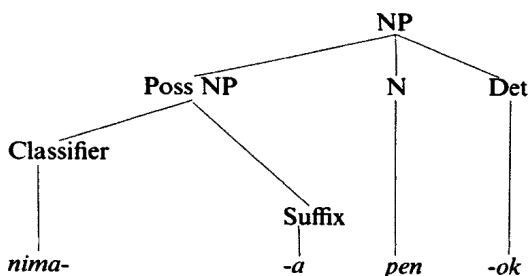
woaroai jidohsahu 'my car'
woaroa + i jidohsa = o
 vehicle my car that

nimah pennok 'his coconuts'
nima + a pen = ok
 drink his coconut those

nihmw pinjellen 'your pencils'
nih + mw pinjel = en
 valuable your pencil that

asai likkoaukai 'our clothes'
a + sai likkoau = kai
 thing our clothes these

This construction can be diagrammed as follows:

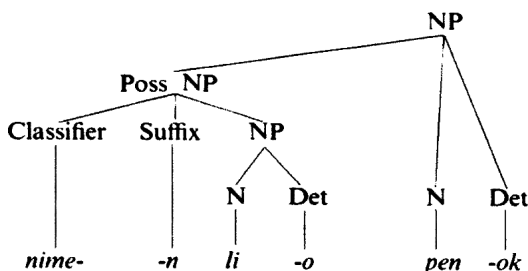


When the possessor is represented by a noun rather than a possessive suffix, the possessive classifier appears in the CONSTRUCT FORM. The construct form of the classifier is followed by the noun indicating the possessor. In such cases, the noun referring to the thing possessed follows the construct possessive classifier-possessor noun construction.

woaroan woallo jidohsahu 'that man's car'

<i>nimen</i>	<i>liho</i>	<i>pennok</i>	'that woman's coconuts'
<i>nihn</i>	<i>jerihen</i>	<i>pinjellen</i>	'that child's pencil'
<i>en</i>	<i>peneineie</i>	<i>likkoaukai</i>	'this family's clothes'

This construction can be diagrammed:



Possessive classifiers are a special subclass of inalienable nouns. They all seem to belong to the *-ah* stem class.⁸ We are justified in calling possessive classifiers nouns because they occur in constructions typical of nouns (for example, they take possessive suffixes) and can often be used alone without the noun that indicates the thing possessed.

As was suggested above, the choice of possessive classifier depends largely on the meaning of the noun indicating the thing possessed and the use to which it is put. Below is a list of the most common possessive classifiers (given in their third person singular form) with an indication of the type of noun with which each is used.

<i>ah</i>	'his thing'
<i>nah</i>	'his child, pet, valuable'
<i>kanah</i>	'his food'
<i>nimah</i>	'his drink'
<i>ngidah</i>	'his chew'
<i>warah</i>	'his vehicle'
<i>imwah</i>	'his house'
<i>mwarah</i>	'his garland'
<i>dapah</i>	'his ear decoration'
<i>siah</i>	'his earring'
<i>kiah</i>	'his mat'
<i>japwah</i>	'his land'
<i>upah</i>	'his sheet'
<i>wilingah</i>	'his pillow'

5 Possessive Constructions

The **general possessive classifier** 'his thing' is used when no other classifier is applicable. The classifier *nah* 'his valuable' is used with a wide variety of nouns, mostly representing objects that are rare or that have special value. *Ngidah* 'his chew' is used for things that are chewed; pandanus keys, for example. The classifier *dapah* 'his ear decoration' is used with nouns representing objects that are worn on or around the ear, while *siah* 'his earring' is used with nouns representing objects worn in or through the ear. *Mwarah* 'his garland' is used for decorative objects worn around the head or neck.

Kinship terms like *jamah* 'his father', *inah* 'his mother', and *riah* 'his brother, sister' can be used as possessive classifiers, as in:

1. Joamoai woallo *doaddoadoahk nehn najjo*.
'My father is working in the boat house.'
2. Inoai liho *onopda asai mwingehu*.
'My mother prepared our food.'

Possessive classifiers may be used without an accompanying noun indicating the thing possessive when the identity of the thing possessed is known or understood. For example:

- 3a. Imwah umwwo *inenin koalik*.
'His house is very big.'
- b. Imwahu *inenin koalik*.
'His house is very big.'
- 4a. *Wahdo* koanoai mwingehn.
'Bring me my food.'
- b. *Wahdo* koanoai.
'Bring me something to eat.'
- 5a. *Ia* woaroamw jidohsahu?
'Where's your car?'
- b. *Ia* woaroamwwo?
'Where's your vehicle?'
- 6a. Joamoai woallo *kijoula Pohnpei*.

'My father went to Ponape.'

- b. Joamoai *kijoula Pohnpei*.
'My father went to Ponape.'

A particular noun can be used with more than one classifier, as in the following examples:

7a. *nimoai pil*
'my water' (for drinking)

b. *oai pil*
'my water' (for washing)

8a. *woaroai warro*
'my canoe'

b. *koanoai warro*
'my canoe' (for eating—as in the case of a piece of candy in the shape of a canoe)

9a. *oai wusso*
'my banana tree'

b. *noai wusso*
'my banana tree that is particularly valuable to me'

5.4.1 ALIENABLE-INALIENABLE NOUNS

With many nouns there seems to be some confusion concerning whether they are to be possessed alienably or inalienably. In all the cases I have noted, the nouns in question vary between treatment as *n*-third singular inalienables or alienable nouns possessed with the general classifier. Consider the noun *paj* 'nest', in:

10 *Ih kapangda pajin mwioakko in kohn niho*.
'He saw the *mwioak*'s nest in the top of the coconut tree.'

11. *Mahnsang kin wiahda ahr paj in kohn suhkoa*.
'Birds build their nests in treetops.'

5 Possessive Constructions

In sentence 10, *paj* ‘nest’ is inalienably possessed, while in sentence 11, it is possessed with the general classifier. The same confusion has been observed with other nouns, including *peneinei* ‘family’, *mahlehl* ‘brain’, *kid* ‘garbage’, and *lidu* ‘female servant’.

This usage is not to be confused with the ability of some nouns, like *dam* ‘outrigger’, to be possessed either alienably or inalienably, depending on the identity of the possessor. As noted earlier, *dam* is inalienably possessed with respect to a noun like *war* ‘canoe’ (*damen warro* ‘that canoe’s outrigger’), because the outrigger is a part of the canoe, but it is alienably possessed with respect to a noun like *woal* ‘man’ (*en woallo dammo* ‘that man’s outrigger’), because the relationship between ‘outrigger’ and ‘man’ is simply ownership.

5.4.2 Benefactive Use of Possessive Classifiers

The possessive classifiers are often used in constructions where English would require the prepositions “for” or “to”. In such sentences, the possessive classifier indicates the person who benefits from the object (or action), rather than its owner.

- 12a. *Ngoah insingehdi kijinlikkoauoaw nihmw.*
‘I wrote a letter *to/for* you.’
- b. *Ngoah insingehdi nihmw kijinlikkoauoaw.*
‘I wrote a letter *to/for* you.’

In this **benefactive** use, the possessive classifier can either precede or follow the noun with which it occurs, though occasionally with a change in meaning. For example:

- 13a. *Ngoah dupukla woaroamw pohspas.*
‘I bought a boat *for* you.’
- b. *Ngoah dupukla pohspas woaroamw.*
‘I bought a boat *from* you.’

As yet, I have no explanation for the conditions under which this change in meaning takes place.

Other examples of the benefactive use of possessive classifiers are:

14. *Ngoah rapahki ih pwa ngoah kioang nah mwaniho.*
'I looked for him to give *him* the money.'
15. *Liho doadoa ah.*
'That woman sews *for him*.'

5.5 MULTIPLE POSSESSIVE CONSTRUCTIONS

It is possible for a noun representing a possessed object in a possessive construction, at the same time, to be the possessor in another, larger possessive construction. In the English noun phrase:

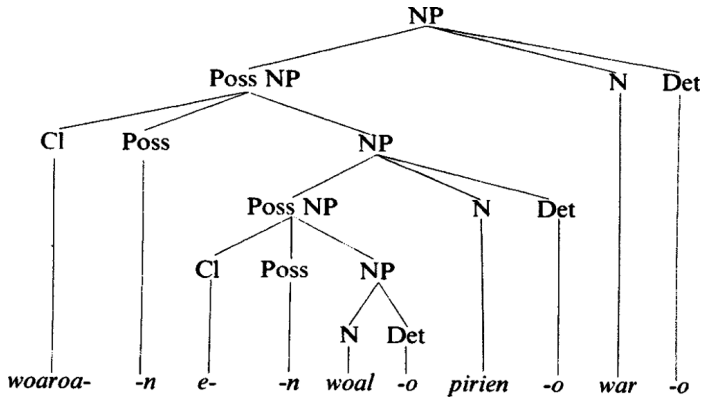
16. *That man's friend's canoe.*

the noun 'friend' is the thing possessed in relation to the noun 'man' (the 'possessor'), but is the possessor in relation to the noun 'canoe'. In other words, the English possessive construction 'that man's friend' is included within the larger possessive construction 'that man's friend's canoe'.

Similar constructions are possible in Mokilese. Consider:

17. *Woaroan en woallo piriенno warro.*
'That man's friend's canoe.'

In this case, however, because both of the possessive relationships in question are considered alienable in Mokilese, possessive classifiers must be used. In example 2, the classifier *en* 'thing of' refers to the noun *pirien* 'friend' in the possessive construction *en woallo piriенno* 'that man's friend'. The classifier *woaroan* 'vehicle of' refers to the noun *war* 'canoe'. Thus, the possessive construction *en woallo piriенno* is completely included within the larger possessive construction *woaroan en woallo piriенno warro*. This construction may be diagrammed:



5.6 ATTRIBUTES OF INALIENABLY POSSESSED NOUNS

Inalienably possessed nouns may take determiners, numerals, suffixes like *-oar* 'only', and other attributes, if the meaning of the noun permits.

18. *Mijoa riawwo widahli ngoahi.*
'His two eyes looked at me.'
19. *Joamoaiohr indoa.*
'Only my father came.'
20. *Poah winan rahpasso koldi ngoahi.*
'His two hairy arms grabbed me.'
21. *Rah roairoaio sipwla.*
'Its long branch is broken.'

It is common, however, to repeat the inalienable noun in its free form before adding attributes, especially if the inalienable noun is in the construct form.

22. *Mijoa maj riawwo widahli ngoahi.*
'His two eyes looked at me.'
23. *Imwen woallo umwpwi mine nehn Kolonia.*
'That man's houses are in Kolonia.'

24. *Poahn woallo poa roairoai rahpasso koldi ngoahi.*
 'That man's two long arms grabbed me.'

5.7 NOUN PHRASES OF CHARACTERIZATION

At the beginning of this chapter, we defined three kinds of possessive relation: **ownership**, **part-whole**, and **kinship**. In the following noun phrases we see constructions that are formally identical with the kinds of possessive constructions we have been discussing so far but which do not seem to represent any of the three relations just mentioned. For example:

<i>doahkin keikei</i>	'biting dog'
<i>woalin nim piha</i>	'bear drinking man'
<i>doakoahn mahn</i>	'deserted island' (literally— island of animals)
<i>puken wadwad</i>	'reading book'
<i>anjoaun jikeng</i>	'test time'
<i>mahnin</i>	'wildlife of Mokol'
<i>Mwoakilloa</i>	
<i>jidohsahn Japahn</i>	'Japanese car'

Noun phrases such as these can be called **noun phrases of characterization**. They express such relations as purpose (*puken wadwad* 'book for reading'), content (*kokonin juke* 'box of sugar'), origin or location, (*jidohsahn Japahn* 'Japanese car', *mahnin Mwoakilloa* 'wildlife of Mokol'), and behavior or characteristics (*doahkin keikei* 'biting dog', *woalin nim piha*, 'beer drinking man').

Noun phrases of characterization consist of a noun in the construct form followed by either another noun:

<i>winihn kihdo</i>	'medicine for ringworm'
<i>doadoahkin li</i>	'woman's work'
<i>oarloapin pukko</i>	'topic of the book'
<i>johnpadahkin</i>	'history teacher'
<i>poadpoad</i>	
<i>wanihmwin umwwo</i>	'the door of the house'

or an intransitive verb (see Section 6.5):

5 Possessive Constructions

<i>sohpin kamwakel</i>	‘cleaning soap’
<i>doahkin jilajil</i>	‘guard dog’
<i>waren joaroak</i>	‘sailing canoe’
<i>pinjelin insing</i>	‘writing pencil’
<i>anjoaun alu</i>	‘time to go’

5.7.1 Construct Suffix in Noun Phrases of Characterization

As pointed out in section 5.3.3.1, the *i*-stem class is the productive class of inalienable nouns. It is not surprising, therefore, that most nouns that are not inalienably possessed (do not have a possessive paradigm) but do have a construct form take the construct form *-in*, since this is the productive (see section 11.3) form of the suffix. In such cases the *-in* construct is often treated as a separate word, rather than as a suffix. For example:

<i>woalin nim piha</i>	‘beer-drinking man’
or	
<i>woal in nim piha</i>	‘beer-drinking man’

When the noun to which *-in* is suffixed ends in a vowel or glide, this contrast is clear. For example:

<i>anjoaun jikeng</i>	‘test time’
or	
<i>anjoau in jikeng</i>	‘test time’
<i>wijahn doadoahk</i>	‘place for working’
or	
<i>wija in doadoahk</i>	‘place for working’

In the case of nouns ending in a glide, the suffixed construct is *-n*, rather than *-in*. The same is true of nouns ending in a vowel, except that the vowel is lengthened before suffixing *-n*. In either case, it appears that the construct marker can also appear as the independent word *in*. When the construct marker appears as an independent word, it is called the **construct particle**. It is possible, in cases such as these, that the suffixed construct particle contracts before the preceding noun, similar to English contractions such as ‘it’s’ (from ‘it is’).

In addition to *in*, there appears to be a second construct particle *en*. Like *in*, it can be used both as an independent word and as suffix. For example:

<i>puken wadwad</i>		‘reading book’
	or	
<i>puk en wadwad</i>		‘reading book’
<i>war en joaroak</i>		‘sailing canoe’
	or	
<i>war en joaroak</i>		‘sailing canoe’

The *en* construct is typically used to indicate the use to which an object is put. The two examples above might be translated ‘book for reading’ and ‘canoe for sailing’. This construct is perhaps related to the benefactive function of possessive classifiers that was discussed in 5.4.2. This relation is more obvious when the ‘possessor’ in a construction with *en* is a noun than it is in the two cases above, in which *en* was followed by intransitive verbs.

<i>rais en Mwoakilloa</i>	or <i>en Mwoakilloa rais</i>	‘rice for Mokil’
<i>raujij en Japahn</i>	or <i>en Japahn raujij</i>	‘pants for Japan’

Note, however, that not all constructions indicating the use of an object require *en*. For example, *imwen kuk* ‘cook house’, but *umwin suhkoa* ‘house for keeping wood’. I have no explanation for these forms. The use of *en* in constructs of use is a tendency, not a rule; *-in* may be used instead under as yet undetermined conditions.

Just as *en* might be related to a possessive classifier, it is possible that *in* is related to the locative particle *in* (see 8.4). Consider:

- a. *pwilin moaio*
‘The sap of the breadfruit tree’
- b. *pwillo in moaio*
‘The sap in the breadfruit tree’

The *in* of b) is the locative *in*. Note that the noun preceding the locative *in* can take a determiner. Now consider the ungrammaticality of

25. **Umwwok in Kolonia suhkoa*.

where the determiner *-ok* ‘those’ is not permitted. While the meaning of the *in* construct is often related to location, it is not clear that it is the same morpheme as the locative particle *in*.

5 Possessive Constructions

Even if the construct particles *in* and *en* began as (and to some extent still have the properties of) independent words, they are largely treated as construct suffixes. This is particularly true if the noun with which they are used has or might have a construct that is similar in form. For example, the noun *umw* ‘house’ has two constructs, *imwen* and *umwin*. The former is either the construct of the possessive classifier, as in:

imwen woallo ‘that man’s house’

or a construct of use, as in:

imwen kuk ‘house for cooking’

Because *umw* already had an *-en* construct (*imwen*) no form **umwen* was created. The location/origin construct in *-in* is formed from the root *umw* (rather than the regular stem *imw-* of the possessive paradigm), because there was no *-in* construct for *umw* in the possessive paradigm itself. Similarly, the use and location/origin constructs of ‘canoe’ are *war en* and *war in*, respectively, formed from the root *war*. These contrast with the construct of the possessive classifier, *woaroan* ‘vehicle of’. It is not at all clear whether the noun *war* ‘canoe’ (with its two constructs *war en* and *war in*) is to be considered to be the same word as the possessive classifier for vehicles, with its own construct *woaroan*. What is clear from cases like *imwen* ‘house of, house for’ and *umwin* ‘house in’ is that constructs of use in *-en* and location/origin constructs in *-in* can often be identified with existing constructs that have the same form (as in the case of the possessive classifier construct *imwen* ‘house of’).

Finally, note that some nouns have competing constructs that have no obvious difference in meaning. For example: *pil* ‘water’, *piloa* ‘its water’, *pilen* ‘water of’, and *pil* ‘water’, *pilin* ‘its water’, *pilin* ‘water of’. This variation can be treated as a case of competing paradigms, as noted earlier.

5.8 THE CONSTRUCT: A SUMMARY

In the preceding sections we have seen the construct form functioning in all types of possessive constructions.

body part sien *eniho* ‘the ghost’s ear’

part-whole	<i>damen warro</i>	'the canoe's outrigger'
kinship	<i>jemen jeriho</i>	'the child's father'
ownership	<i>nihn liho puk joarwi</i>	'the woman's bible'
source	<i>rais in Japahn</i>	'Japanese rice'
use	<i>waren jilahrek</i>	'trawling canoe'
characteristic	<i>woal in nim piha</i>	'beer-drinking man'

What all these constructions have in common is that they consist of two nouns between which one of the above relations holds.⁹ We may conclude that "possessive" relations between two nouns are expressed by a construction consisting of the head noun in the construct form followed by the attributive noun (expressing the "whole" of a part-whole relation, the owner, source, use, or characteristic in question).

An exception to this general statement about two-noun constructions involves nouns representing materials; for example, *suhkoa* 'wood', *likkoau* 'cloth', *pahrang* 'metal'. Consider:

- 26a. *Umw suhkoahwa okda.*
'The wooden house burned down.'
- b. *Umwin suhkoahwa okda.*
'The building for keeping wood burned down.'
- 27a. *Ngoah mwehuki ama pahrang jang ama suhkoa.*
'I prefer a metal hammer to a wooden hammer.'
- b. *Ngoah anahne apas amahn pahrang.*
'I need a metal hammer (hammer for metal).'

In sentences 26a and 27a, the nouns *suhkoa* and *pahrang* are used to describe the material of which an object is made. In this sense they follow the noun to which they refer directly, with no intervening construct suffix. In sentences 26b and 27b, where *suhkoa* and *pahrang* refer to the use to which an object is put, the noun to which they refer appears, as expected, in the construct form.

6 Predicates, Verbs, and Verb Phrases

6.1 STRUCTURE OF THE SENTENCE

In section 2.2.1, we described the SENTENCE as the **unit of communication** and showed how it was possible to study sentences by studying the CONSTRUCTIONS (groups of associated morphemes) of which a sentence is made. In the sections that followed, we discussed one very important construction type, the NOUN PHRASE (any construction with a noun as its head) and the various constructions of which it is composed. These earlier sections implied that morphemes (and the information they contain) are put into constructions in such a way as to permit ideas to be communicated. In this manner we showed how various facts about nouns, such as **number, identification** (determiners) and **possession** can be communicated by giving structure to morphemes. Up to this point, however, we have been discussing the structure of parts of sentences only. We have paid little attention to the sentence as a whole and the way it is structured to communicate information.

Many school grammar books tell us that a sentence expresses a complete thought. To see what this means, compare the following sentences 1 to 5 with the parts of sentences (or sentence fragments) 6 to 10.

1. *John mwehuki koaul.*
'John likes to sing.'
2. *Jerimweinno kikimla doahk siksikko.*
'That boy kicked that small dog.'
3. *Mwingehu inen in mum.*
'That food was very tasty.'
4. *Mahnpiwi ohroj nen mehdi ma joh wehn suhkoa ihr en kang.*
'All birds would die if there was no fruit for them to eat.'
5. *Moaiio pel pwurroang uhda.*

'That breadfruit tree stood back up again.'

6. *mwehuki koaul*
'like to sing'
7. *doahk siksikko*
'that small dog'
8. *inenin mum*
'very tasty'
9. *ma joh wehn suhkoa ihr en kang*
'if there was no fruit for them to eat'
10. *moaio pel pwurroang*
'that breadfruit tree again went to'

It is clear that 1 to 5 communicate complete thoughts in a way that 6 to 10 do not. In 6 we do not know **who** wants to sing, in 7 we are not told **what event** the small dog was involved in, in 8 we do not know **what** was tasty, in 9 we are left to wonder **what** will happen if they have no fruit to eat, and in 10 we do not know **what** the breadfruit tree did again.

A sentence as a complete thought must consist of two parts: one describing what is being talked about and the other giving some information about it. The first part is called the SUBJECT of the sentence and the second part is called the PREDICATE. Below, sentences 1 to 5 are divided into their subjects and predicates:

Subject	Predicate
<i>John</i>	<i>mwehuki koaul</i> 'likes to sing'
<i>jerimweinno</i> 'that boy'	<i>kikim doahk siksikko</i> 'kicked that small dog'
<i>mwingehu</i> 'that food'	<i>inenin mum</i> 'was very tasty'
<i>mahnawi ohroj</i> 'all birds'	<i>nen mehdi ma joh wehn suhkoa ihr en kang</i> 'would die if there was no fruit for them to eat'

moaio *pel pwurroang uhda*
 'that breadfruit 'stood back up again'
 tree'

There are a number of things to notice about subjects and predicates in Mokilese. First, in most Mokilese sentences the predicate follows the subject. This is true in examples 1 to 5 above, but is not always the case. Consider:

11. *Doarihla ah doadoahkko rehnnoawe.*
 finish-A his work-D today
 'His work was finished today.'

12. *Mine mwumw nehn jed.*
 be fish in sea
 'There are fish in the sea.'

in which the subjects are *ah doadoahkko* 'his work' and *mwumw* 'fish', respectively. Such sentences will be discussed in more detail in 12.1.

Note that all subjects are noun phrases. This is not surprising since the things we choose to talk about are usually persons or objects, represented by nouns. It is of course also true that it is possible to talk about actions or events, as in:

13. *Loakjid kaperen.*
 'Fishing is fun.'

Words like *loakjid* 'to fish' are normally used as predicates, to describe someone's activities, as in:

14. *Kisai pirin loakjid rehnnoawe.*
 'We'll go fishing today.'

However, such words may also be used as subjects, as in example 14. When used as subjects we can consider them to be nouns. When used as predicates, words like *loakjid* 'to fish' are normally considered VERBS (see section 6.4).

6.2 NOUN PHRASE PREDICATES

If we choose to identify a thing or object, we would normally want to specify it as a member of a particular class of objects. As described in 3.2, such a class is named by means of a noun phrase. In identificational sentences which name the class of objects to which the subject belongs, the principal element of the predicate is a noun phrase identifying that class, as in the following examples:

15. *Pediro* kahdilikmen.
'Pediro is a *Catholic*.'
16. *Kahdilik pel* joauloang.
'Catholics are also *Christians*.'
17. *John* johnpadahkmen.
'John is a *teacher*.'
18. *John* oai johnpadahkwa.
'John is *my teacher*.'
19. *Ih* jerimweinwa ma pokihdi ngoahi.
'He is *the boy who hit me*.'

Sentences that identify one noun phrase (the subject) with another noun phrase (in the predicate), as in the examples above, are often called EQUATIONAL SENTENCES.

6.3 PREDICATES AND VERB PHRASES

As already defined, the PREDICATE is that part of the sentence that gives us information about the subject of that sentence. In section 6.2, we saw that a predicate whose function is to identify the subject normally contains a noun phrase. For example:

20. *Oai piriенno* woalin Peace Corpsmen.
'My friend is a *Peace Corps volunteer*.'

6 Predicates, Verbs, and Verb Phrases

In this sentence the noun phrase *woalin Peace Corpsmen* 'a Peace Corps volunteer' forms the predicate, identifying the subject *oai piriенno* 'my friend'.

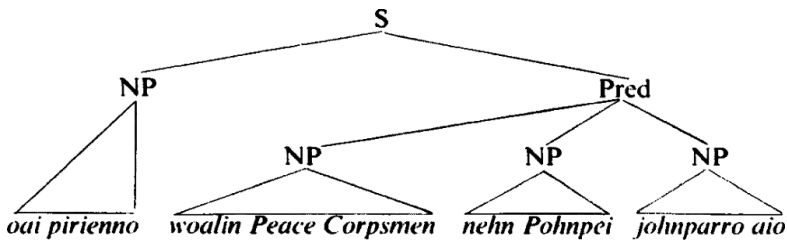
Most predicates, however, contain VERB PHRASES that describe events in which the subject is involved or state characteristics of the subject. The rest of this chapter will be concerned with describing such VERB PHRASES (constructions with VERBS, see section 6.4) as their central element.

Note, though, that predicates often contain extra information that cannot be said to be part of the noun phrase or verb phrase that is central to the predicate. Thus, a predicate often involves other phrases that specify the time or place of an event, for example. Consider:

21. *Oai piriенno woalin Peace Corpsmen nehn Pohnpei johnparro aio.*

'My friend was a Peace Corps volunteer *in Ponape last year.*'

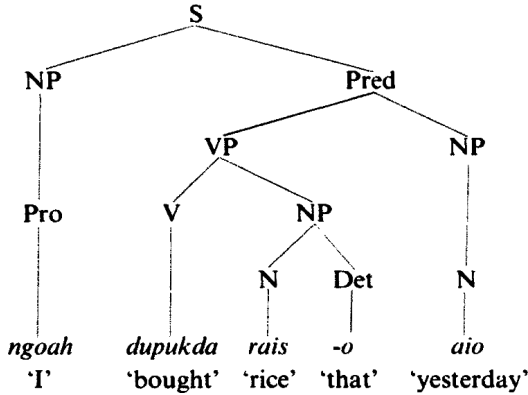
in which the phrases *nehn Pohnpei* 'in Ponape' and *johnparro aio* 'last year' are part of the predicate, but are not necessarily part of the noun phrase identifying the subject. This sentence might be diagrammed:



Similarly, a predicate whose central element is a verb phrase may also contain additional phrases giving this kind of extra information. For example:

22. *Ngoah dupukda raisso aio.*
'I bought that rice yesterday.'

which may be diagrammed:



What is important to note here is that every noun phrase that is part of the predicate is not necessarily also a part of the verb phrase that is the central element of that predicate. A noun phrase like *raisso* 'that rice' is part of the verb phrase in example 22 because it is essential to the meaning of the verb. Even a sentence like:

23. *Ngoah dupukda.*
 'I bought it.'

implies that something was bought, although in this sentence it must be assumed that we know what the object was. A noun phrase like *aio* 'yesterday', on the other hand, gives extra information about the event being described. Its presence is not implied in a sentence like 23. It is assumed to be part of the predicate of sentence 22, but not part of the verb phrase. This distinction should become clear in the sections that follow.

6.4 VERBS

For purposes of the grammar of Mokilese, a VERB is a word that names an **action, event, state, condition,** or **quality.** Some examples of action and event verbs are:

<i>loakjid</i>	'to fish'	<i>indoa</i>	'to come'
<i>pok</i>	'to hit'	<i>pukul</i>	'to make a hole'
<i>poadok</i>	'to plant'	<i>koap</i>	'to grow'
<i>nim</i>	'to drink'	<i>kiroa</i>	'to peel'
<i>padahk</i>	'to teach'	<i>umwwuj</i>	'to vomit'

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<i>je</i>	'to shout'	<i>sipwang</i>	'to break'
<i>alu</i>	'to walk'	<i>inim</i>	'to cook'

The verbs in this group involve events in which the subject takes an active part, usually because he performs the activity of his own free will. Although activities like those named by the verb *umwuwj* 'to vomit' are probably not voluntary, the subject of such verbs is actively involved in the event; he is **doing** something. Verbs naming events in which the subject takes an active part may be called ACTIVE VERBS.

Another type of verb is seen in the following examples:

<i>ohla</i>	'broken'	<i>doh</i>	'far'
<i>mijik</i>	'afraid'	<i>mwakelkel</i>	'clean'
<i>moadoak</i>	'hurt'	<i>kidal</i>	'to know'
<i>mine</i>	'to exist, to be located'	<i>doari</i>	'finished'
<i>peren</i>	'happy'	<i>koahk</i>	'tired'
<i>likammas</i>	'swollen'	<i>sipw</i>	'broken'
<i>dir</i>	'many'	<i>japas</i>	'stretched'
<i>mwehu</i>	'good'	<i>roairoai</i>	'long, tall'
<i>koalik</i>	'big'	<i>molukluk</i>	'forgetful'
<i>wahssa</i>	'red'	<i>apwal</i>	'difficult'

The verbs in this second group do not describe actions, in the sense that the subject of such verbs has direct control over or is actively involved in the events named. Rather, these verbs describe state or qualities that are either the result of some action (as *sipw* 'broken' may be the result of 'breaking') or a natural part of the makeup of a person or object, over which that person or object has little or no control. (Thus, a red ball cannot help but be red and a tall person has no control over the fact that he is tall.) Verbs naming such states, conditions or qualities may be called STATIVE VERBS.

6.4.1 Attributive Function

When a verb appears in the **predicate** of a sentence and gives information about the subject of that sentence, the verb can be said to be used **predicatively**. The emphasized verbs in the following sentences are being used predicatively.

24. *Liho noaisikdi aio.*
'That woman gave birth yesterday.'

25. *Suhkoahu* roairoai.
‘That tree is tall.’
26. *Woallo* mijik.
‘That man is afraid.’
27. *Jerimweinno* poadokdi *suhkoahu*.
‘That boy planted the tree.’
28. *Ngoah* kidal *ih mwehu*.
‘I know him well.’

However, it is also possible to use verbs, particularly (but not exclusively) stative verbs, to modify a noun within a noun phrase. This use is called the **attributive** use or function of a verb, and can be seen in the following sentences.

29. *Li noaisikko johmwehuda*.
woman bear-D sick-A
‘The woman who gave birth got sick.’
30. *Jerimweinno poaloahdi suhkoa* roairoaio.
boy-D chop-A tree tall-D
‘The boy chopped down the tall tree.’
31. *Woal mijikko kia pwili kamai*.
man fear-D not want accompany us
‘The man who was afraid did not want to go with us.’
32. *Noah nainki pwohla wahssahiew*.
I own ball red-D
‘I own a red ball.’
33. *Ih wahdo wini oang jeri johmwehuo*.
he bring medicine to child sick-D
‘He brought medicine for the sick child.’

Verbs used attributively normally follow the nouns they modify, but precede numerals and determiners.

pen koalik limoawwo
‘those five big coconuts’

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jeia korohro waluwwe
'these nine white chairs'

noai jeri sihkei jilmennok
'my three strong children'

When more than one ATTRIBUTE is being used to modify the same noun, these attributes occur in a fixed order. This order can be summarized in the following diagram:

NOUN + MATERIAL + COLOR + SHAPE + SIZE

It appears that attributes describing the material of which an object is made are nouns rather than verbs, since these attributes have the same form as the nouns used to name the materials. (This is also true of most 'materials' in English.)

<i>suhkoa</i>	'wood, wooden'
<i>sakai</i>	'rock, stone'
<i>pahrang</i>	'metal'
<i>kongkiri</i>	'concrete'

The basic order of attributes in a noun phrase may be seen in the following examples.

did sakai korohrohi
wall stone white-D
'this white stone wall'

mwoak soal pwuhshusso
cup black round-D
'that round black cup'

pwohla wahssa siksikko
ball red small-D
'that small red ball'

sehpil suhkoa paspasso
table wooden flat-D
'that flat wooden table'

majmaj pahrang koalikke
spear metal big-D

'this big metal spear'

suhkoa roairoai koalikpas
tree tall big-D
'a big tall tree'

6.4.1.1 PRENOMINAL ATTRIBUTES

A very small number of attributes are placed before the noun they modify. Examples are *soapoan* 'huge' and *leklekin* 'huge', as in:

34. *Ngoah poaloahdi soapoan suhkoahpas.*
'I cut down a huge tree.'
35. *Ih leklekin woalmen.*
'He's a huge man.'

A verb to which the construct suffix *-in* has been affixed can be used as a prenominal attribute in exclamations like:

36. *Perenin woallo!*
'How happy that man is!'
37. *Siksikin jerihe!*
'How small this child is!'
38. *Kapehlin woalmeno wiahda pohsso!*
'How skilled that man was, to have made that boat!'

A similar construction involving suffixes like *-lakoan*, *-dakoan*, and *-dikoan* will be discussed in more detail in section 11.5.3.3. Some examples are:

39. *Perenlakoan ih!*
'How happy he has become!'
40. *Mwosmwodikoan koawoa!*
'How short you seem to have become!'
41. *Soausoaulakoan sakaie!*
'How heavy this rock is!'

This latter construction seems to suggest either a change in condition (as in examples 39 and 40) where we assume that the person in question was not so happy or did not seem so short before) or a degree greater than was expected (as in example 41, where we assume that the speaker didn't think the rock would be so heavy).

6.4.1.2 PERMANENT AND TEMPORARY CONDITIONS

In the following sentences, the attributes *peren* 'happy', *moadoak* 'hurt', and *johmwehu* 'sick' refer to conditions that are not permanent.

42. *Ih woal inenin perenmen rehnoawe.*
'He is a very happy man today.'
43. *Ehioa moadoak pwa ngoah kupla.*
'My leg hurts because I fell.'
44. *Ngoah pirin suhoang oai pirien johmwehuo.*
'I'm going to visit my sick friend.'

In sentence 42, the man is happy today, but perhaps he was not yesterday, or will not be so tomorrow. Similarly, in 43, if the injury is not very serious, my leg will not always hurt. In 44 we have hope that the friend will recover from his illness. Now consider:

45. *Ih woalin perenmen.*
'He's a happy man.' (happy by nature)
46. *Jeriho jerihn moadoakmen.*
'That child is a child who is easy to hurt.'
47. *Ah pirienco armajin johmwehumen.*
'His friend is a sickly person.'

In sentence 45 we are talking about a man who is always happy, in 46 a child who gets hurt all the time, and in 47 a person who never seems to be in good health. In sentences like 45 to 57, an attribute following a noun in the construct form refers to a permanent, rather than a temporary, condition.

6.4.2 Adjectives and Verbs

In many languages active verbs can be distinguished from stative verbs by giving the latter the label **adjective** and restricting the label **verb** to the former (with some exceptions—statives like ‘to exist’ and ‘to know’ would be considered verbs in English, for example). The adjective-verb distinction does not seem particularly important in Mokilese, for the following reasons:

(i) Languages with an adjective class usually require that an adjective used predicatively be accompanied by a **copula verb** like English ‘to be’. Mokilese stative verbs require no copula when used predicatively. Compare:

- 48a. *Ngoah johmwehu aio.*
 ‘I was sick yesterday.’
- b. *Ngoah doadoahk aio.*
 ‘I worked yesterday.’

In English, the **adjective** ‘sick’ in 48a can be distinguished from the **verb** ‘to work’ in 48b by the presence of *was* (a form of the copula ‘to be’). In Mokilese, the **stative verb** *johmwehu* ‘sick’ and the active verb *doadoahk* ‘to work’ are not distinguished.

(ii) In Mokilese, active verbs can often appear as noun phrase attributes. Active verbs cannot usually be used in this way in English.

- 49a. *Liho noaisikdi¹ aio.*
 ‘That woman gave birth yesterday.’
- b. *Li noaisikko johmwehuda.*
 ‘The woman who gave birth got sick.’

(iii) English often has pairs of words, one a verb and the other an adjective, where Mokilese has only a single stative verb.

- 50a. *Ngoah mijik ih.*
 ‘I fear him.’
- b. *Ngoah mijik.*
 ‘I am afraid.’

(iv) In Mokilese, any stative can be preceded by INTENSIFIERS (see 7.1.5) like *inenin* ‘very’, while in English, only adjectives (never verbs) can take ‘very’. For example:

- 51a. *Ih inenin roairoai.*
 ‘He is very tall.’
- b. *Ih inenin kidal poap.*
 ‘He knows how to swim very well.’
 not
 *‘He very knows how to swim’

In 51b, English does not allow ‘very’ to modify the verb ‘to know’ directly. Mokilese has no such restriction.

For reasons like these, it does not appear necessary to distinguish between adjectives and verbs in Mokilese. All can be considered verbs. When it becomes important to make a distinction of this kind, the terms **active** and **stative** (as defined above) can be used. This distinction appears to be truer to the facts of Mokilese grammar than is the distinction between **verbs** and **adjectives**.

6.5 TRANSITIVE AND INTRANSITIVE VERBS

Verbs can be divided into two types on the basis of whether or not they involve a specific OBJECT. Those that do involve a specific object can be termed TRANSITIVE; those that do not can be termed INTRANSITIVE.

Intransitive verbs generally involve only one participant or group of participants—the **subject**. If the verb is ACTIVE, that participant is the ACTOR (or AGENT) who performs the action. Sentences 52 to 57 give examples of active intransitive verbs:

52. *Ngoah pirin ken alu.*
 ‘I’m going to go for a walk.’
53. *Ih inla.*
 ‘He left.’
54. *Armajjok pirin kijoula lakapw.*
 ‘Those people are leaving tomorrow.’

55. *Kisai pirin mwinge akpas.*
'We're going to eat now.'

56. *Joamoai inla loakjid.*
'My father went fishing'

57. *Jeripeinnok koaul.*
'Those girls sang.'

Stative intransitive verbs are those whose subjects are the persons or objects characterized or **affected** by the state or condition named by the verb. Some examples are:

58. *Woaroai warro ohla.*
'My canoe is broken.'

59. *Pukke wahssa.*
'This book is red.'

60. *Ah sohriho dehn.*
'His zoris are worn out.'

61. *Ngoah mwakohko.*
'I'm hungry.'

62. *Rioaio inenin injinjued pwa inamahu woarwoari ih.*
'My brother is very sad because our mother scolded him.'

63. *Ih inenin johmwehu rehnnoawe.*
'He is very sick today.'

TRANSITIVE VERBS name actions or states that are directed towards (transferred to) some specific OBJECT. Transitive verbs normally involve at least two participants or groups of participants. If the verb is active, these are the ACTOR and the OBJECT; if it is stative, the two participants are the AFFECTED and the OBJECT. Examples of active intransitive verbs are:

64. *Ngoah pokihdi jerimwein siksikko.*
'I hit the small boy.'

65. *Kisai ohroj kangla mwumwwok.*

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'We all ate those fish.'

66. *Ih pirin panginda woallok inminjoangge.*
'He will arouse those men in the morning.'

67. *Arai poadokdi suhkoahu rehnoawe.*
'They planted that tree today.'

68. *Doaksoahu doakoahla ngoahi.*
'The doctor gave me an injection.'

69. *John jong widinge ngoahi.*
'John tried to fool me.'

Examples of stative transitive verbs are:

70. *Ngoah mijik John.*
'I am afraid of John.'

71. *Kisai kak rong arai ama arai lallal siksik.*
'We could hear them even though they talked softly.'

72. *Rioaio kidal ih.*
'My brother knows him.'

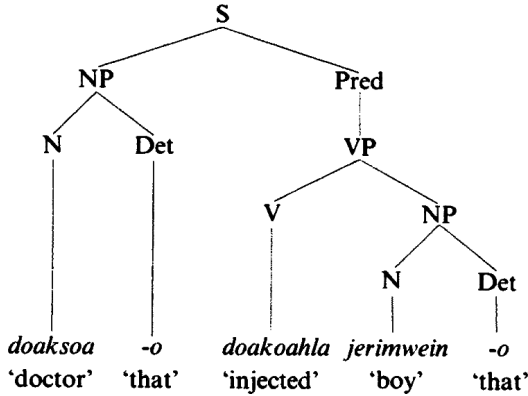
Although transitive verbs always involve an object, this object is not always expressed in Mokilese.

73. *Ngoah daurdi.*
'I climbed for it.'

74. *Ioar oai piriennen ma wahdo.*
'It was my friend who brought it.'

75. *Ngoah kapang.*
'I see (it)!'

The structure of transitive sentences with objects expressed can be seen in tree diagrams like:



The noun phrase representing the object of a transitive verb is a part of the verb phrase whose central element is that verb. This analysis reflects the fact that the object of a transitive verb seems to complete the meaning of that verb by naming the object towards which that activity is directed.

6.5.1 Bi-Transitive Verbs

Many Mokilese verbs have both a **transitive** and an **intransitive form**. The transitive form of the pair is used to name an event that is directed towards a specific object. The intransitive form simply names the activity or state. Although perhaps too simplified, we might want to say that the transitive form of such a verb is used when it is important to know what object the activity (as expressed by the verb) is directed towards. The intransitive form is used when the particular definite object involved is not important; that is, when it is only important to name the activity. These differences can be seen in the following pairs of sentences. Each a) sentence contains an intransitive form and each b) sentence the corresponding transitive form:

76a. *Joamo aio loakjid rehnoawe.*
 'My father fished today.'

b. *Joamo aio loakjidihda² mwumw limmennok rehnoawe.*
 'My father caught those five fish today.'

77a. *Ngoah pirin kodkod akpas.*
 'I'm going to be husking now.'

b. *Ngoah pirin kodomla oaringkai akpas.*
'I'm going to husk these coconuts now.'

78a. *Ih joah ukuhk.*
'He doesn't smoke.'

b. *Ih joah ukla sikahk.*
'He didn't smoke those cigarettes.'

79a. *Koah pirin dokla.*
'You're going to get a shot.'

b. *Doaksoahwa pirin doakoahla koawoa.*
'The doctor is going to give you a shot.'

80a. *Ih oaujoangoan noaroak.*
'He is very greedy.'

b. *Ih oaujoangoan noaroakoa joapwoan woallo.*
'He covets that man's land very much.'

81a. *Ngoah mwehuki doau.*
'I like climbing.'

b. *Ngoah daurdi pennok.*
'I climbed for those coconuts.'

We shall call such paired sets of transitive-intransitive verbs BI-TRANSITIVE VERBS.

6.5.2 Formation of Transitive Verb Forms

Bi-transitive verb pairs in Mokilese can be divided into two basic types: a) those whose transitive form involves the addition of a suffix, usually *-i*; and b) those whose transitive form is basic and whose intransitive form appears to be formed from it.

The former will be referred to here as **i-transitive** verbs and the latter as **root-transitive** verbs.

6.5.2.1 *i*-TRANSITIVES

The *i*-transitive pattern, like the *i*-stem inalienable noun pattern (see 5.3.3.1), is the **productive** (see 11.3) pattern of transitive verb formation. Thus, most borrowed verbs are *i*-transitive. If a verb has two competing transitive forms, one is likely to be an *i*-transitive. Some examples of *i*-transitive verbs are:

<i>adma</i> _i	'to behead (a fish)'
<i>admai</i> _t	'to behead something'
<i>ain</i> _i	'to iron'
<i>aini</i> _t	'to iron something'
<i>japwol</i> _i	'to shovel'
<i>japwoli</i> _t	'to shovel something'
<i>loakjid</i> _i	'to fish'
<i>loakjidi</i> _t	'to fish for'
<i>noaisik</i> _i	'to give birth'
<i>noaisiki</i> _t	'to give birth to'
<i>oak</i> _i	'hidden'
<i>oaki</i> _t	'to hide something'
<i>pidek</i> _i	'to go around'
<i>pideki</i> _t	'to surround something'
<i>pihn</i> _i	'to paint'
<i>pihni</i> _t	'to paint something'
<i>pok</i> _i	'to hit'
<i>poki</i> _t	'to hit something'
<i>widek</i> _i	'to pour'
<i>wideki</i> _t	'to pour something'

Note that the intransitive counterparts of many active transitive verbs are themselves often stative. This is the case in the pair *oak* 'hidden' and *oaki* 'to hide something'.

82a. *Ngoah pirin oaki jahrro.*
'I'll hide that knife.'

b. *Jahrro oak.*
'That knife is hidden.'

It is difficult to predict whether the intransitive form of an active transitive will be active, stative, or both.

6.5.2.2 ROOT-TRANSITIVE VERBS

Comparing the transitive and intransitive forms given below, one notices that the former usually contains an extra vowel (*-e* or *-oa*) or an extra vowel and consonant not found in the latter. Because it is all but impossible to tell which vowel or vowel plus consonant must be added to the intransitive form of these verbs to form the transitive, we shall treat the transitive form as basic and consider the intransitive to be derived from it by deleting the final vowel and consonant (if any). Some examples of root-transitive bi-transitive verb pairs are:

<i>dok</i>	_i	'to stab'
<i>doakoa</i>	_t ³	'to stab something'
<i>doau</i>	_i	'to climb'
<i>daur</i>	_t	'to climb for'
<i>doar</i>	_i	'to protect'
<i>doaroa</i>	_t	'to protect something'
<i>insing</i>	_i	'to write'
<i>insinge</i>	_t	'to write something'
<i>jap</i>	_i	'to cut (with an upward stroke)'
<i>japak</i>	_t	'to cut something (with an upward stroke)'
<i>mwei</i>	_i	'snapped'
<i>mweid</i>	_t	'to snap something'
<i>ok</i>	_i	'to burn'
<i>okoj</i>	_t	'to burn something'
<i>poak</i>	_i	'to defecate'
<i>pakad</i>	_t	'to defecate on'
<i>sipw</i>	_i	'broken'
<i>sipwang</i>	_t	'to break something'
<i>umwwuj</i>	_i	'to vomit'
<i>umwwujoa</i>		'to vomit on'
	_t	
<i>widing</i>	_i	'treacherous'
<i>widinge</i>	_t	'to fool someone'

6.5.3 Other Transitive-Intransitive Pairs

A few verbs have transitive and intransitive forms that differ only in the vowels of the root. Among these are:

- poaloang* _i 'to spread out to dry'
palang _t 'to spread something out to dry'
koaroang _i ⁴ 'to dry over a fire (of leaves)'
karang _t 'to dry (leaves) over a fire'

Other verbs have identical transitive and intransitive forms. For example:

- kang* 'to eat'
nim 'to drink'
nam 'to taste'

Note that the verb *mwinge* 'to eat' is an active intransitive used to name an activity. The verb *kang* cannot so be used.

- 83a. *Ngoah pirin mwinge.*
 'I'm going to eat.'
 b. *Ngoah pirin kang.*
 'I'm going to eat it.'

83b) can only be used when the speaker is going to eat a specific thing. However, the verb *mwinge* cannot be used in **incorporated object constructions** (see section 6.5.6), while *kang* can:

- 84a. **Ngoah pirin mwinge rais.*
 b. *Ngoah pirin kang rais.*
 'I'm going to eat rice.'

For this reason, I conclude that *kang* is both transitive and intransitive, though restricted in its use as an intransitive form.

6.5.4 Reduplicated Intransitives

A number of bi-transitive verbs have both a reduplicated and a nonreduplicated intransitive form, the former being a reduplication of the latter. Some examples are:

- doau* _i 'to fill in'
doaudioau _i 'to fill in'

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<i>daun</i> t	'to fill in something'
<i>jiloi</i> i ⁵	'to guard'
<i>jilajil</i> i	'to guard'
<i>jiloi</i> t	'to guard something'
<i>joai</i> i	'to sharpen'
<i>joaijoai</i> t	'to sharpen'
<i>jaim</i> t	'to sharpen something'
<i>kid</i> i	'to wrap'
<i>kidkid</i> i	'to wrap'
<i>kidim</i> t	'to wrap something'
<i>ne</i> i	'to divide'
<i>nehne</i> i	'to divide'
<i>nehk</i> t	'to divide something'
<i>poi</i> i ⁶	'to weave'
<i>poipoi</i> i	'to weave'
<i>pa</i> t	'to weave something'
<i>poal</i> i	'to chop'
<i>poalpoal</i> i	'to chop'
<i>poaloa</i> t	'to chop something'
<i>pwal</i> i	'to break'
<i>pwalpwal</i> i	'to break'
<i>pwalang</i> t	'to break something'
<i>sip</i> i	'to tie'
<i>sipsip</i> i	'to tie'
<i>sipis</i> t	'to tie something'
<i>wad</i> i	'to read'
<i>wadwad</i> i	'to read'
<i>wadek</i> t	'to read something'

In verbs of this type, the reduplicated form of the intransitive is the most widely used. It is typically (but not always) used actively (with an agent as subject) to name the activity in question (see 9.1). In such cases, the unreduplicated form of the intransitive cannot be used. For example:

85a. *Ngoah joaijoai.*
'I'm sharpening.'

b. **Ngoah joai.*

The most common use of the unreduplicated intransitive is in INCORPORATED OBJECT CONSTRUCTIONS (see section 6.5.6) like:

86. *Ngoah joai jahr.*
 'I am knife-sharpening.'

It is also often used as a stative verb describing the result of the action named by the corresponding active verb.

- 87a. *Ngoah pwalpwal.*
 'I am chopping.'
- b. *Ngoah pwal suhkoa.*
 'I am tree chopping.'
- c. *Suhkoahu pwalpijoang.*⁷
 'The tree has been split apart.'
- d. *Ngoah pwal aio.*
 'I was operated on yesterday.'

Examples 87a and 87b are both active, in which the subject is the person performing the action, while 87c and 87d are stative, where the subject is the person (object) affected by the action. Only the reduplicated intransitive can be used in sentences, like 87a, which name an activity without reference to the object towards which the activity is directed. The simple (unreduplicated) intransitives can only appear in sentences in which the object is expressed (either in incorporated object constructions, or in stative sentences where the affected object is the subject). A possible means of distinguishing those verbs that do have a reduplicated intransitive and those that do not (like *doau* _{i-} *daur* _t 'to climb') will be discussed in 9.1.1.

A number of verbs appear to have only reduplicated intransitives. Among these are:

- ejjej* _i 'to husk (with teeth)'
ijir _t 'to husk something (with teeth)'
joujou _i 'to wait'
jowi _t 'to wait for'
lemlem _i 'to think'
leme _t 'to think about something'

- rujoruj* _i 'to rub'
rujoa _t 'to rub something'
soasoa _i 'to tear'
soahr _t 'to tear something'

It is not yet clear whether verbs like these lack simple intransitives entirely, or whether the simple intransitives do exist but are so rare as not to have been uncovered in the course of the work being described here. Note that in some cases, the reduplicated intransitive can have both active and stative meaning.

- 88a. *Ngoah doapwoa sakaio.*
 'I tugged at the rock.'
- b. *Ngoah doapwdoapw.*
 'I tugged.'
- c. *Sakaio doapwdoapwla.*
 'The rock has been tugged out.'
- 89a. *Ngoah dupukda pohsso.*
 'I bought the boat.'
- b. *Ngoah dopdop pohs.*
 'I went boat buying.'
- c. *Pohsso dopdopda.*
 'The boat has been bought.'

This question requires further investigation.

In addition to bi-transitive verbs lacking a simple (unreduplicated) intransitive form, there are a number of verbs that have only a simple intransitive form, but one that cannot be used in simple active event-naming sentences like 85 and 87 above. Thus, the verb *kohkoa* _t 'to grind something' has an intransitive form *ko* _i that can be used only in incorporated object constructions or stative sentences. For example:

- 90a. *Ngoah kohkoa oaringkai.*
 'I'm grinding these coconuts.'

- b. *Ngoah ko oaring.*
 'I'm grinding coconut.'
- c. *Oaringkai kohla.*
 'These coconuts have been ground up.'
- d. **Ngoah ko.*
 'I'm grinding.'

6.5.5 The *-ek* Intransitive

The suffix *-ek* added to the transitive form of a large number of bi-transitive verbs produces an intransitive form. Some examples are:

Transitive	Intransitive	
<i>awal</i>	<i>awalek</i>	'to replace'
<i>diar</i>	<i>diarek</i>	'to find'
<i>jalad</i>	<i>jaldek</i> ⁸	'to release'
<i>kuruj</i>	<i>kurujek</i>	'to grind'
<i>nikid</i>	<i>nikidek</i>	'to save'
<i>nihd</i>	<i>nihdek</i>	'to drag'
<i>oakoar</i>	<i>oakoaroak</i> ⁹	'to baby-sit'
<i>pakka</i>	<i>pakkahk</i> ¹⁰	'to trim (trees)'
<i>peid</i>	<i>peidek</i>	'to throw'
<i>ukud</i>	<i>ukudek</i>	'to turn over'
<i>wilik</i>	<i>wilikek</i>	'to open'

For verbs in this list, and others like them, the *-ek* intransitive is the only intransitive form possible. However, a large number of other verbs have both a regular intransitive (simple and/or reduplicated, as discussed above) and an *-ek* intransitive. Some of these verbs are listed below.¹¹

Transitive	Intransitive	Intransitive- <i>ek</i>	
<i>ijir</i>	<i>ejjej</i>	<i>ijirek</i>	'to husk (with teeth)'
<i>jaim</i>	<i>joaijoai</i>	<i>jaimek</i>	'to sharpen'
<i>kidim</i>	<i>kidkid</i>	<i>kidimek</i>	'to wrap'
<i>loakjidi</i>	<i>loakjid</i>	<i>loakjidiek</i>	'to fish'

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<i>lukum</i> (<i>lim</i>)	<i>limlim</i>	<i>limmek</i>	'to fold'
<i>okoj</i>	<i>ok</i>	<i>okojek</i>	'to burn'
<i>pid</i>	<i>pidpid</i>	<i>piddek</i>	'to wind (rope)'
<i>piload</i>	<i>pilepil</i>	<i>piloadek</i>	'to pick breadfruit with a pole'
<i>reping</i>	<i>rep</i>	<i>repingek</i>	'to break'
<i>sipis</i>	<i>sipsip</i>	<i>sippek</i>	'to tie'
<i>soahr</i>	<i>soasoa</i>	<i>soahroak</i>	'to make a cut in'
<i>ukoj</i>	<i>ukoik</i>	<i>ukojek</i>	'to push over'
<i>weij</i>	<i>weiwei</i>	<i>weijek</i>	'to pull'
<i>wilian</i>	<i>wiliali</i>	<i>wilianek</i>	'to exchange'

The function of the *-ek* intransitive is yet to be explored in detail. In most cases it seems to be active, rather than stative. Thus:

- 91a. *Ngoah okojda angen majisse.*
'I lit this match.'
- b. *Ngoah okojek angen majis.*
'I am lighting matches.'
- c. *Angen majisse ok.*
'This match is burning.'
- d. **Angen majisse okojek.*
'This match is burning'
- e. *Angen majisse okojekda.*
'This match has been lit.'

The form *okojek* cannot be used in the stative sentence 91d. Note, however, that it can be used in stative sentences like 91e, which describes the result of an action. Thus, 91c simply states that the match is burning, without implying how it got to be burning, while 91e states that the match is burning as a result of the fact that someone lit it. The use of the *-ek* intransitive seems to imply that an agent was involved, even in a stative sentence.

i-transitive verbs, as well as root transitives, have *-ek* forms. Like those forms cited above, these intransitives imply an agent. For example:

- 92a. *Ngoah loakjidihda mwumwwo.*
'I caught that fish.'
- b. *Mwumwwo loakjidiekda.*
'That fish has been caught.'
- c. * *Mwumwwo loakjidda.*
(I cannot yet explain the ungrammaticality of 92c).
- 93a. *Ngoah pihnihla sehpyllo.*
'I painted that table.'
- b. *Sehpyllo pihniekla.*
'That table has been painted.'
- c. *Sehpyllo pihnla.*
'That table is painted.'

Both 93b and 93c are grammatical, but only 93b seems to carry the implication that the state being described is the result of an action performed by someone.

6.5.6 Incorporated Object Constructions

As was pointed out above, intransitive verbs usually involve only one participant, either the actor or the person or object affected by the action or state, as in examples 94 to 97 below:

94. *Oai piriенno kijoula.*
'My friend went away.'
95. *Ara dainj.*¹²
'They danced.'
96. *Pohsso pwih.*
'That boat leaks.'
97. *Nehn umwwo pwirejrej.*
'The house is dirty.'

However, the intransitive form of a bi-transitive verb pair often appears with a following noun object, as in the following examples:

98. *Ngoah dol moai.*
'I was picking breadfruit.'
99. *Ih joai jahr.*
'He was sharpening knives.'
100. *Jerimweinnok sapda roapoan mwinge.*
'The boys began to look for food.'
101. *Kisain pwileiek suhkoa rehnoawe.*
'Let's cut trees today.'
102. *Arai doau lipw.*
'They are filling holes.'
103. *Woal roahmenno wiali likkoau.*
'The two men changed clothes.'

Incorporated object constructions in Mokilese are similar to English 'two-word verbs' like 'to baby-sit' or 'to knife-sharpen'.¹³ The nouns that occur in each are used to name the **class of object** towards which the activity is being directed.¹⁴ An incorporated object construction is still an intransitive verb; it is merely one that names a more specific kind of activity (*joai jahr* 'knife sharpening' rather than simply *joaijoai* 'sharpening', for example). It is as if the addition of a noun refines the meaning of the verb in question, limiting its application to the set of objects named by the noun.

We conclude, then, that these constructions are simply intransitive verbs into which a noun naming the class of objects toward which the activity is directed has been incorporated. This analysis is confirmed by the fact that certain verb suffixes, which precede the object noun in normal transitive sentences (like the a) sentences below), follow the noun in incorporated object constructions (like the b) sentences below). Compare:

- 104a. *Ngoah audohla rimehi.*
'I filled this bottle.'
- b. *Ngoah audohd rimehla.*
'I finished filling bottles.'
- 105a. *Ngoah poadokdi suhkoahi.*

'I planted this tree.'

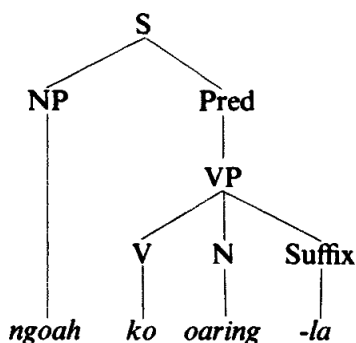
- b. *Ngoah poad suhkoahdi.*
'I finished tree planting.'

106a. *Ngoah kohkoahla oaringgok.*
'I ground up those coconuts.'

- b. *Ngoah ko oaringla.*
'I finished coconut grinding.'

Suffixes like *-la* and *-di* (see section 9.4.0) are added to the transitive verbs *audo* 'to fill', *poadok* 'to plant' and *kohkoa* 'to grind' in the a) sentences, but follow the noun objects in incorporated object constructions in the b) sentences. Since these are verbal suffixes, it appears that incorporated object constructions are treated as ordinary verbs.

A sentence like 106b might be diagrammed:



6.6 PARTICIPANTS IN VERBAL EVENTS

In the preceding sections we have discussed intransitive verbs that involve **one** major participant, either the actor or agent (in the case of active intransitives) or the person or object affected (in the case of stative or result intransitives), and transitive verbs that involve two major participants, the actor (in the case of active transitives) and the object towards which the action or feeling is directed. In the sections that follow we shall be considering operations that can either increase the number

of participants associated with a given verb or change the kind of participants that the verb allows. In this regard we shall consider first the suffix *-ki* and, second, the causative prefix *ka-*.¹⁵

6.6.1 The Suffix *-ki*

The suffix *-ki* functions in different ways depending on the kind of verb with which it is used.

With active verbs (those that have agents or actors) it is commonly used to permit an instrument to be expressed. In the following examples the instruments and the suffix *-ki* are emphasized.

107. *Ngoah insingehki kijinlikkoauo nah pehnno.*
'I wrote that letter *with his pen.*'

108. *Ih pihnihkihla sehpile parnij.*
'He painted this table *with varnish.*'

109. *Ngoah panginki noai mahanno 'Billie'.*
'I called my pet bird *'Billie.'*

110. *Arai kamwingehki ngoahi rais.*
'They fed me *rice.*'

111. *Ngoah mwehuki daknohki poap.*
'I like surfing *with a board.*'

112. *Ih poalpoalki jiloahpas.*
'He is chopping *with an axe.*'

113. *Jerimwein koalikko pokihdi jerimwein siksikko ki suhkoahpas.*
'The big boy hit the little boy *with a stick.*'

The instrument is the object used in a particular event. In example 107, *nah pehnno* 'his pen' is being used; in example 108 it is *parnij* 'varnish' that is being used; in 109, the name 'Billie' is being used to refer to the bird; in 110, *rais* 'rice' is being used to feed the speaker, etc. In Mokilese, the presence of an instrument is marked by *-ki*, which is usually suffixed to the verb. The noun naming the instrument follows the verb or the verb and its object (if one is expressed). Note that in example

113, *ki* is treated as a separate word immediately preceding the noun naming the instrument. While such constructions are possible, they do not appear to be common.

With stative verbs, *-ki* often marks the person, object or event that brought about the state or condition named by the verb. For example:

114. *Ih mehkihdi johmwehuin meleisik.*
 'He died of a heart attack.'
115. *Ngoah koakoahkki oai doadoahk.*
 'I'm tired because of my work.'
116. *Ngoah kupwurohkihla mehk ma ngoah wia.*
 'I'm sorry for the things I did.'

-ki is regularly suffixed to stative verbs that name inherent qualities or permanent conditions to permit the mention of a person influenced by the fact that that condition exists. The person influenced becomes the subject of the sentence, and the object characterized by the state or condition follows *-ki*. Compare:

- 117a. *Inoangpase mwehu.*
 'This story is good.'
- b. *Ngoah mwehuki inoangpase.*
 'I like this story.'
- 118a. *Jeripeinno lel.*
 'That girl is pretty.'
- b. *Ngoah lelki jeripeinno.*
 'I find that girl pretty.'
- 119a. *Wiapoan mehu woahwoa.*
 'How to do that is clear.'
- b. *Ngoah woahwoahki (doahr) wiapoan mehu.*
 'I understand how to do that.'
- 120a. *A h japoang pwung.*
 'His answer is correct.'

- b. *Ngoah pwungki ah japoang.*
 'I agree with his answer.'

121a. *Doadoahkke apwal.*
 'This work is difficult.'

- b. *Ngoah apwalki doadoahkke.*
 'I find this work difficult.'

-ki is also used in deriving **possessive verbs** from inalienable nouns. Thus, *painki* 'to marry', related to *pahioa* 'his spouse'; *adanki* 'to name', related to *oadoa* 'his name'; and *waranki* 'to own a vehicle', related to *warah* 'his vehicle', as in:

122. *Rioaio pirin painki liho.*
 'My brother is going to marry that woman.'

123. *Nihra jeriho adanki Bill.*
 'Their son is named Bill.'

124. *Ngoah waranki pohsso.*
 'I own that boat.'

This construction will be discussed in more detail in 8.6.2.2.

Suffixed to some active intransitive verbs, *-ki* appears to mark the object. For example:

125. *Ih koaulki koaulpas.*
 'He sang a song.'

126. *Ih duhki limw.*
 'He dove for a sponge.'

127. *Ih noaski war ah pohsso.*
 'He bought his boat.'

It is not clear how to interpret the function of *-ki* in these sentences. What is clear is that *-ki* permits these normally one-participant intransitive verbs (*koaul* 'to sing', *du* 'to dive', and *noas* 'to do business') to be used with a second participant. What function the new participant serves in sentences like 125–126 is open to interpretation.

Perhaps *-ki* might best be termed an **associative suffix**, serving to **associate** an extra participant with a given verb. The function of that participant may vary. It may be an instrument, a reason, perhaps even an object. What is important is that it is an extra participant not necessarily associated with the verb in question. For this reason, its presence must be signalled by adding the associative suffix *-ki* to the verb.

6.6.2 The Causative

The causative prefix *ka-* can be added to all stative intransitive verbs and, often depending upon the speaker, to most active intransitive verbs. While its normal value is *ka-*, it often takes the forms *koa-*, *ko-* or *ke-*, as in:

<i>koadoahkoa</i>	'to work on'	from <i>doadoahk</i>	¹⁶ 'to work'
<i>koalohkla</i>	'to spread'	from <i>lohkla</i>	'spread'
<i>koaronge</i>	'to listen'	from <i>rong</i>	'to hear'
<i>koarjoa</i>	'to finish'	from <i>roj</i>	'finished'
<i>koahunopda</i>	'to prepare'	from <i>onopda</i>	'prepared'
<i>koahok</i>	'flammable'	from <i>ok</i>	'to burn'
<i>kopou</i>	'cold'	from <i>pou</i>	'to feel cold'
<i>kouda</i>	'to stand something'	from <i>uhda</i>	'to stand'
<i>kopwung</i>	'to judge'	from <i>pwung</i>	¹⁷ 'correct'
<i>kemwehui</i>	'to improve'	from <i>mwehu</i>	'good'

There is no way to tell which verbs take an altered form of the causative prefix, rather than the regular form *ka-*. It is also difficult to predict which vowel will appear in the altered form. What is clear is that the alternate *ke-* will be associated with roots containing non-low front vowels, and that the alternates *koa-* and *ko-* will be associated with roots containing non-low back vowels. It seems that *ko-* tends to prefix to roots containing *u*, but this is an observation yet to be proven. Note also the irregular causative *kakloaki* 'to enlarge', from *koalik* 'big'.

6.6.2.1 TRANSITIVE CAUSATIVE

A common function of the causative is to permit an agent to be expressed with a stative verb. This agent is typically the person or object that causes the state in question to come about. When

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the person or object described by the state is also expressed (as the object of the causative verb), the verb appears in a transitive form, usually with the suffix *-i*. Consider:

- 128a. *Ah kijou dahr.*
 'He runs fast.' (lit.: 'his running is fast.')
- b. *Ih kadahri ah kijou.*
 'He made his running fast.'
- 129a. *Pahrro loklok.*
 'The bar is bent.'
- b. *Ngoah kaloklokihla pahrro.*
 'I bent the bar.'
- 130a. *Ih pweipwei.*
 'He is stupid.'
- b. *Ngoah kapweipweii ih.*
 'I tricked him.'
- 131a. *Mwingehu l oau.*
 'The food is cooked.'
- b. *Liho kaloai mwingehu.*
 'The woman made sure the food was cooked.'
- 132a. *Jerihok iroakla.*
 'The children are lined up.'
- b. *Johnpadahkko kairoakihla jerihok.*
 'The teacher lined the children up.'

While most transitive causatives are *i*-transitive, there are also a number of root-transitive causatives, ending in *-e*, *-oa* or *-a*.¹⁸ For example:

<i>kadenge</i>	'to pull tight'	from <i>deng</i>	'taut'
<i>kadiroapwoa</i>	'to bother'	from <i>diroapw</i>	'busy'
<i>kainene</i>	'to straighten'	from <i>inen</i>	'straight'
<i>kajle</i> ¹⁹	'to show'	from <i>janjal</i>	'clear'

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<i>kamwakele</i>	‘to clean’	from	‘clean’
19		<i>mwakelkel</i>	
<i>kahlua</i>	‘to lead’	from <i>alu</i>	‘to walk’
<i>kapaia</i>	‘to praise’	from <i>pai</i>	‘lucky’
<i>karara</i>	‘to split’	from <i>rar</i>	‘split’
<i>karaja</i>	‘to compare’	from <i>raj</i>	‘equal’
<i>kamehlele</i>	‘to make sure, to believe’	from <i>mehlel</i>	‘true’

In addition, there are a number of transitive causatives that take no suffix whatsoever.

<i>kadehde</i>	‘to stare at, to testify’	from <i>dehde</i>	‘clear’
<i>kadihdi</i>	‘to breast feed’	from <i>dihdi</i>	‘to suck the breast’
<i>kamwinge</i>	‘to feed’	from <i>mwinge</i>	‘to eat’
<i>kawikla</i>	‘to alter’	from <i>wikla</i>	‘changed’
<i>kajawla</i>	‘to postpone’	from <i>jawla</i>	‘postponed’

For example:

133. *Ngoah kadehde ih.*
‘I stared at him.’
134. *Liho kadihdi nah jeriho.*
‘The woman breast fed her child.’
135. *Ngoah pirin kamwinge jerihok akpas.*
‘I will feed the children now.’
136. *Ngoah ka wikla pihhno.*
‘I blended the paint.’
137. *Arai kajawla mihdinggo lakapw.*
‘They postponed the meeting till tomorrow.’

In quite a few cases there seems to be some confusion on the part of speakers of Mokilese about whether certain causative transitives require a transitive suffix or not. To add to the con-

fusion, not all speakers seem to agree on whether the same word requires the suffix, can have it or not, or can never occur with the transitive suffix. Examples of this confusion are:

- 138a. *Ngoah kapwung noai wajje.*
'I set my watch.'
- b. *Ngoah kapwungi noai wajje.*
'I am setting my watch.'
- c. *Ngoah kapwungla noai wajje.*
'I set my watch.'
- d. *Ngoah kapwungihla noai wajje.*
'I set my watch.'
- 139a. *Ngoah kakun oaio.*
'I put out the fire.'
- b. *Ngoah pirin pwili ih inla kakuni oaio.*
'I'll go with him to put out the fire.'
- c. *Ngoah kakunla oaio.*
'I put out the fire.'
- d. *Ngoah kakunihla oaio.*
'I put out the fire.'
- 140a. *Ngoah kadir rimehi.*
'I am filling this bottle.'
- b. *Ngoah kadiri rimehi.*
'I am filling this bottle.'
- c. *Ngoah ma kadir la rimehi*
'I was the one who filled this bottle.'
- d. *Ngoah kadirihla rimehi.*
'I filled up this bottle.'
- 141a. *Ngoah ma kadeng joallo.*
'I was the one who tightened that rope.'
- b. *Ngoah kadenge joallo.*

'I tightened that rope.'

- c. *Ngoah ma kadengla joallo.*
'I was the one who tightened that rope.'
- d. *Ngoah kadengehla joallo.*
'I tightened that rope.'

All the above sentences were accepted by some speaker of Mokilese, but not all speakers agreed about every sentence. This problem requires a more thorough investigation.

6.6.2.2 -ki AND THE CAUSATIVE

The associative suffix *-ki*, as discussed earlier, can have a function very similar to that of the transitive causative in permitting the expression of the person or object that brings about the state named by the verb. Compare:

- 142a. *Ngoah koakoahk.*
'I'm tired.'
- b. *Ngoah koakoahkki oai doadoahkko.*
'I'm tired because of my work.'
- c. *Oai doadoahkko kakoahki ngoahi.*
'My work tired me.'
- 143a. *Ngoah pwuriamwei.*
'I was surprised.'
- b. *Ngoah pwuriamweiki woallo.*
'I was surprised at that man.'
- c. *Woallo kapwuriamweii ngoahi.*
'That man surprised me.'
- 144a. *Jerimweinnok uruhr.*
'The children laughed.'
- b. *Jerimweinnok uruhrki ngoahi.*
'The boys laughed at me.'
- c. *Ngoah kauruhri jerimweinnok.*

'I made the boys laugh.'

The objects of the b) sentences correspond in a rough way to the subjects of the causative c) sentences. Often there seems to be little obvious difference between them beyond the fact that b) objects are c) subjects. In many cases, however, causative verbs imply action where the corresponding verbs with *-ki* do not. Thus, in 144b) we cannot be sure that the person in question went out of his way to make the children laugh. He might not even have known they were laughing at him. This interpretation might also be true of 144c), but a more common one would be that he did something to try to entertain the boys. The subjects of causative verbs, therefore, are typically agents who purposefully perform the action implied by the causative verbs. This is not true of the objects of corresponding verbs with the suffix *-ki*.

6.6.2.3 STATIVE INTRANSITIVE CAUSATIVE

The causative form of a verb without a transitive suffix produces a new stative intransitive verb. It can be used to describe a person or object often bringing about the state named by the verb, or to name a quality that is likely to cause that state to come about.

<i>kamijik</i>	'frightening'	from <i>mijik</i>	'afraid'
<i>kapwuriamwei</i>	'surprising'	from <i>pwuriamwei</i>	'surprised'
<i>kajohsik</i>	'thrifty'	from <i>johsik</i>	'economical'
<i>kakoahk</i>	'tiring'	from <i>koahk</i>	'tired'
<i>kauruhr</i>	'funny'	from <i>uruhr</i>	'to laugh'

For example:

145. *Inoangin lioasso inenin kamijik.*
'That ghost story is very frightening.'
146. *Kapwuriamwei pwa ih joah indoa.*
'It is surprising that he didn't come.'
147. *Ih woal inenin kajohsikmen.*
'He is a very thrifty man.'
148. *Inenin kakoahk rehnoawe.*
'Today is very tiring.'

149. *Inenin kauruhr pwa da ih wia.*
 'What he did was very funny.'

This construction is particularly common with verbs that describe feelings and emotions. For example:

<i>injinjued</i>	'sad'
<i>pwuriamwei</i>	'surprised'
<i>peren</i>	'happy'
<i>per</i>	'afraid'
<i>sangaj</i>	'lonely'

The causative prefix produces a verb that can be used to describe people or objects that inspire these feelings. For example:

<i>kainjinjued</i>	'sad, saddening'
<i>kapwuriamwei</i>	'surprising'
<i>kaperen</i>	'pleasing, funny'
<i>kaper</i>	'dangerous'
<i>kasangaj</i>	'lonely, causing loneliness'

6.6.2.4 ACTIVE INTRANSITIVE CAUSATIVES

An active intransitive causative can be formed by suffixing *-ek* to a transitive causative. The resulting active intransitives appear to be used only in incorporated object constructions.

- 150a. *Ngoah kamijiki jeripeinno.*
 'I frightened that girl.'
- b. *Ngoah mwehuki kamijikiek jeripein.*
 'I like to frighten girls.'
- 151a. *Ih kapweipweii ngoahi.*
 'He fooled me.'
- b. *Ih kapweipweiiiek armaj anjoau ohroj.*
 'He fools people all the time.'
- 152a. *Wallo kakloakihla imwahu.*
 'That man enlarged his home.'
- b. *Wallo kakloakiek umwla.*

'That man finished house enlarging.'

6.6.2.5 CAUSATIVE WITH ACTIVE INTRANSITIVES

Most of our discussion of the causative so far has been restricted to its use with stative verbs. Many active intransitives, particularly those naming common human functions, like eating or drinking, or those naming activities related to mental states, like laughing or crying, also have causative forms. Some examples are:

153a. *Jerihok* mwinge.
'The children ate.'

b. *Liho* kamwinge *jerihok*.
'The woman fed the children.'

154a. *Ih* nim.
'He drank.'

b. *Ngoah* kanimnimihda *ih*.
'I started him drinking.'

155a. *Jeriho* joang.
'That child cried.'

b. *Jerimwein koalikko* kajoange *jerimwein siksikko*.
'The big boy made the small boy cry.'

c. *Inenin* kajoangjoang *ah johmwehuo*.
'His illness is very sad.'

Some causatives of active intransitives are:

<i>kahlua</i>	'to lead'	from <i>alu</i>	'to walk'
<i>kajapahli</i>	'to take back'	from <i>japahl</i>	'to go back'
<i>kadoadoahki</i>	'to make someone work'	from <i>dadoahk</i>	'to work'
<i>kakoauli</i>	'to make someone sing'	from <i>koaul</i>	'to sing'
<i>kaimwwuji</i>	'to make someone vomit'	from <i>umwwuj</i>	'to vomit'
<i>kapijpiji</i>	'to make someone urinate'	from <i>pijpij</i>	'to urinate'

7 Modality

As was discussed in 6.1, a sentence may be divided into two parts: a **subject** (what is being discussed) and a **predicate** (new information being supplied about the subject). The central element of any predicate may be either a **verb phrase**, in the case of a verbal predicate, or a **noun phrase**, in the case of a nominal predicate. These, however, are not the only structures that can be found within the predicate of a Mokilese sentence. A predicate frequently contains one or more members of a set of words that together can be called MODALS. Modals supply information concerning the general nature of the information given in the predicate or concerning our feelings about that information. They might tell us whether the event is or is not a fact, whether it represents a wish or hope, whether it occurred in isolation or was influenced by other events, whether it is of sudden or lasting relevance, and so on. The **modality**, as this part of the predicate can be called, may be empty (containing no modals) or may contain a number of modals. For example:

1. *Woallo alu.*
'The man is walking.'
2. *Woallo ne pirin ken alu.*
'The man is just about to take a walk.'

Example 1 contains no modals and example 2 contains the modals *ne*, *pirin* and *ken*.

7.1 TYPES OF MODALS

Mokilese modals may be divided into a number of different types, depending on: (i) where they can occur in the predicate, (ii) what other modals they can combine with, and (iii) whether or not they can take suffixes or occur as independent words outside of the modality of a predicate phrase. These types are called: (i) auxiliaries, (ii) pre-predicates, (iii) pre-verbs, (iv) true verbs.

7 Modality

7.1.1 Auxiliaries

Classed as **auxiliaries** are the modals:

- pirin* expressing intention or likelihood
nimen expressing desire or willingness
kak expressing ability and, sometimes, permission

These modals are classed together because:

- a. only one of the set can occur in a given predicate;
- b. they occupy the same position in the modality (before the main verb, but after the pre-predicates);
- c. they can occur with certain verbal suffixes, *-la* 'away' and *-oar* (see 7.3);
- d. the last two, *nimen* and *kak* can occur as independent stative verbs meaning 'be willing' and 'be able' ¹.

7.1.1.1 *pirin*

Pirin is regularly used where English would have a future tense with 'will'.

3. *Lakapw ngoah pirin koaroang pis.*
'Tomorrow I'll dry pandanus leaves.'
4. *Pirin sapda wud apwkanne.*
'It'll start to rain in a little while.'
5. *Majkilahsso pirin kajda ma koah peiddi.*
'Those goggles will break if you drop them.'
6. *Ngoah pirin pwehng ih anjoauwa ma ih pirin indoa.*
'I'll tell him when he comes.'

In examples 3 and 6 above, *pirin* marks the fact that the speaker intends to perform a certain activity. In examples 4 and 5 it expresses the speaker's opinion that the events in question are very likely to occur.

7.1.1.2 *nimen* AND *kak*

The auxiliaries *nimen* and *kak* can be used as modals or as main verbs in sentences like:

- 7a. *Ngoah nimen pwili kamwai.*
'I want to go with you.'
- b. *Ngoah nimen.*
'I want to.', or 'I am willing.'
- 8a. *Ngoah kak wiahla mehu.*
'I can do that.'
- b. *Ngoah kak.*
'I can.', or 'I am able.'

Auxiliaries can also occur with certain verbal suffixes, as in:

- 9. *Ngoah nimenla jang mijkoalkoal.*
'I want to more than before.'
- 10. *Ngoah kakla wia mehu.*
'I came to be able to do that.'

7.1.1.3 NEGATIVE AUXILIARIES

The auxiliaries *pirin* and *nimen* have special negative forms *jehpirin* 'will not' and *kia* 'want not, refuse', as in:

- 11. *Ngoah jehpirin poaloahdi suhkoahkkoaroh anjoauo ma ngoah oaloo mweimwei.*
'I won't cut down those trees until I get permission.'
- 12. *Ngoah kia kileldi.*
'I don't want to be photographed.'

Nimen also has a regular negative with *joah* (see 7.1.4.1):

- 13. *Ngoah joah nimen jeila loakjid rehnoawe.*
'I don't want to go fishing today.'

There is probably a slight difference in meaning between *kia* and *joah nimen*, something like the difference in English between ‘want not’ and ‘don’t want’. It need not delay us here.² The auxiliary *kak* ‘can, be able’ is negated with *joh* (see 7.1.4.5).

It is also interesting to note that these auxiliaries are not the only verbs with special negative forms. Thus, *pwili* ‘to accompany’ has the negative *jehpwili* ‘not accompany’ and *kidal* ‘to know’ has the negative *jehjoa* ‘not know’, as in:

14. *A koah jehpwili?*

‘Aren’t you coming along?’

15. *Ngoah jehjoa pwa ih ne pwoapwoaudla.*

‘I didn’t know that she had already got married.’

7.1.2 Pre-predicates

The following are the pre-predicate modals of Mokilese:

<i>en</i> ‘unaccomplished’	<i>ke</i> ‘explanation’	<i>ne</i> ‘already’
<i>nen</i> ‘prediction’		<i>pe</i> ‘still’

The modals in this set are called **pre-predicates** because they must be the first elements of the predicate of the sentence in which they occur. They precede auxiliaries and pre-verbs. Unlike the latter, they can only occur once in a given predicate.³ Only one pre-predicate from each set may appear in a given sentence (that is, either *en* or *nen* and either *ne* or *pe*) but a predicate may contain more than one pre-predicate as long as they come from different sets and appear in the order presented above.

7.1.2.1 *en*

The pre-predicate *en* often combines with a preceding pronoun to form contractions similar to the English *I’m* for *I am* and *you’re* for *you are*,

<i>ngoah</i>	+	<i>en</i>	becomes <i>ngoan</i>
<i>koah</i>	+	<i>en</i>	becomes <i>koan</i>
<i>ih</i>	+	<i>en</i>	becomes <i>in</i>
<i>kisa</i>	+	<i>en</i>	becomes <i>kisahn</i>
<i>kisai</i>	+	<i>en</i>	becomes <i>kisain</i>

With the dual pronouns like *kisa* ‘we two’, *en* triggers lengthening of the preceding vowel. The combination of *en* and the singular pronouns *ngoah*, *koah*, and *ih* results in a short vowel, even though the vowels of the uncontracted pronouns are long. The contractions *ngoan* and *koan* are the most common. Other contracted forms are used with considerably less frequency.

En is used to indicate that the activity of the predicate in which it occurs is not an accomplished fact, but more a wish, suggestion, or request. It is used commonly in **purpose clauses** (see 10.5.4) and after **verbs of ordering** (see 10.6.6.1).⁴ A simple sentence with *en* often carries the force of a command or request. In this respect, *en* functions much like English ‘should’. For example:

16. *Dendahioaw ngoan wia?*
behavior-what-D I-MOD do
‘How should I behave?’
17. *Koawoa en menlau pakairkihdohng ngoahi.*
you MOD please inform-about-A-to me
‘Please inform me (about it).’
18. *Kisai en pidekihla arai kello.*
‘We should surround their fence.’

En can also be translated into English as ‘to be to’ in sentences referring to future events. Such sentences seem to suggest that the subject is not in control of his own actions but is influenced by external circumstances.

19. *Da koan wia akpas?*
‘What are you to do now?’
20. *Ngoan kihwehng koawoa noai kihe pwa koan kak dilla ma ngoah joh me.*
‘I’ll give you (it is fitting that I should give you) my key so you can get in if I’m not here.’
21. *Ngoan inla imwen wini.*
‘I have to go to the dispensary.’

En is often accompanied by the pre-verb *ken* ‘for that reason’ in the meaning ‘have to, must’, as in:

22. Ngoan ken *dupukda ew injin kapwwo pwa noie ne ohla*.
 'I have to buy a new engine because mine is broken.'
23. *Kisahn ken alu*.
 'We have to leave.'

7.1.2.2 *nen*

Nen is used to express a prediction or an expectation, in contrast with *en*, which implies some purpose or cause, or *pirin*, which implies intention on the part of the subject of the sentence. It is common to use *nen* with verbs and adverbs expressing doubt. For example:

24. *Dapwa ih nen indoa*.
 'Maybe he'll come.'
25. *Ngoah nen pwili arai loakjid, a dapwa ngoah nen pel jehpwili*.
 'I expect to go fishing with them, but maybe I won't.'
26. *Ngoah joah lemehkioang pwa John nen indoa*.
 'I doubt that John will come.'
27. *Ngoah joah kamehlele pwa ih nen indoahroh doari umwwoais*.
 'I'm not sure that he'll come till after the game.'
28. *Ngoah koapwoarpwoarki pwa ih nen wihn*.
 'I hope he'll win.'

In expressing predication or expectation, *nen* is often translated by 'be likely to' or 'expect to', as in example 25 above. Other examples are:

29. *Armajmen nen indoa suhoang ngoahi mwerin jauwajje*.
 'Someone is likely to visit me this afternoon.'
30. *Ih nen kihdoahng ngoahi ekij mwinge, pwa ih pwehng ngoahi pwa ih pirin kihdoa*.
 'He is likely to bring me something to eat because he told me that he would.'

This last example shows the contrast between expectation on the part of the speaker that a certain event will take place (indicated by the use of *nen*) and intention on the part of a third person to perform that activity (indicated by the use of *pirin*).

The pre-predicate *nen* is also common in conditional sentences like:

31. *Ma John wahdo noai pukko, ngoah nen kak kioang koawoa akpas.*

'If John had brought my book, I could have given it to you.'

where *nen* predicts that a certain event would have taken place if certain conditions had held true. Conditional sentences will be treated in more detail in 10.5.5.

7.1.2.3 *ke*

The pre-predicate *ke* is used only in questions, which are then interpreted as requests on the part of the speaker for an explanation of the events described. For this reason *ke* is very common in *why*-questions with *amwda* or *da kahrehda*. For example:

32. *Amwda koah ke kin nauna?*
'Why are you always bad?'

33. *Amwda ih ke jehpwili arai loakjid?*
'Why didn't he go fishing with them?'

34. *Da kahrehda pwa koah ke kos?*
'What caused you to be late?'

Ke is also used after *a* in questions that are more expressions of surprise than requests for information.

35. *A ih ke joah painkihla jeripeinno?*
'You mean to say that he didn't marry that girl?'

36. *A ih ke pwili kisai?*
'Don't tell me he's coming with us!'

7.1.2.4 *ne* AND *pe*

The pre-predicates *ne* and *pe* form a set, only one of which can appear in a given sentence. They comment on the relevance of past events for the present. The former suggests that the effect or influence of a past event or state extends to the present; the latter suggests that the event or state itself (not only its effect) extends to the present. *Ne* can be translated by English as 'already' and *pe* by English as 'still'. Examples are:

37. *Joh kaspoahng Bill en pwehng John pwa ih ne kidal.*
 'There's no need for Bill to tell John because he already knows.'

38. *Ngoah ne wadekla pehn jiluw.*
 'I already read it three times.'

39. *Jippo ne koaroan.*
 'The ship is already near.'

40. *Ngoah pe ukuhk.*
 'I still smoke.'

41. *Ngoah pe wadek pukko.*
 'I'm still reading that book.'

42. *Ih pe pirin indoa.*
 'He's still intending to come.'

In examples 43–46 *ne* can be rendered by the English present or present perfect tenses:

43. *Ngoah ne doadoahk.*
 'I'm employed.'

44. *Ih pirin dupukda injin kapwwoaw pwa nahu ne ohla.*
 'He'll buy a new engine because his is broken.'

45. *Ne pwar.*
 'It's gone through.'

46. *Ne jouruhrda.*
 'It's begun to thunder.'

In other sentences *ne* can be rendered by 'yet' or 'just now'. In all cases, the sense of present relevance remains.

47. *Joh emen ne kak jaikdi suhkoahpase.*
'No one has yet been able to climb that tree.'

48. *Ngoah ne kapang killelle.*
'I'm just now seeing this picture.'

The combination *ne pirin* is common in the meaning 'just about to' or 'ready to'. For example:

49. *Ne pirin sapda wud.*
'It's just about to start raining.'

50. *Kehsso ne pirin kipjang pohn pwiho.*
'That box is just about to fall off the shelf.'

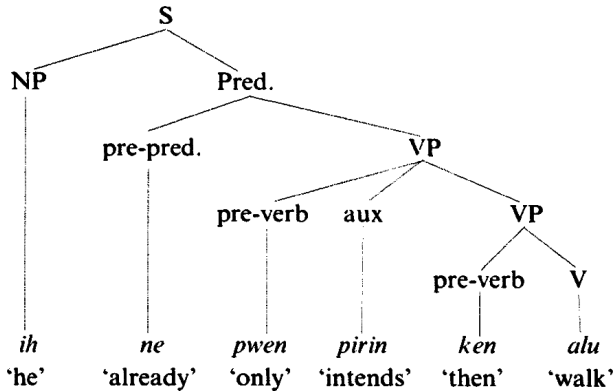
Finally, note that *ne* has an alternate form *no* which is preferred by some speakers.

7.1.3 Pre-verbs

Pre-verbs differ from pre-predicates in that they can occur in more than one position in a given sentence. Rather than occurring in construction with the whole predicate they seem to be in construction with the verb alone. In a predicate containing an auxiliary verb there might be one pre-verb associated with the auxiliary and another associated with the main verb, as in an example such as:

51. *Ih ne pwen pirin ken alu.*
'He's only about to leave.'

where *ne* is a pre-predicate, *pirin* is an auxiliary, and *pwen* and *ken* are pre-verbs. Sentence 51 might be diagrammed:



The following may be considered to be the pre-verbs of Mokilese:

<i>kapwa</i>	<i>ken</i>	<i>pwen</i>	<i>wud</i>	<i>pel</i>	NEGATIVE
	<i>kanah</i>	<i>pwanah</i>		<i>kenemw</i>	

Pre-verbs precede auxiliaries and verbs, but follow pre-predicates. More than one can be used in a given verb phrase, in the order shown here. It is difficult to give any single characterization of the meaning of the pre-verbs. In general they relate events to other events or to other occurrences of the same event. They often mark events either as being the result of other events or as being repeated, delayed, and so forth. In expressing such notions, the speaker's feelings about the activity are often communicated. The use of each of the pre-verbs will be described in the paragraphs that follow.

7.1.3.1 *kapwa*

The pre-verb *kapwa* expresses the fact that the event in question takes place as an alternative to other events, or to indicate that the event represents a kind of exchange for another event. Its reference is usually to an event that has not yet taken place, and it can be translated by words like 'instead', 'in the end', or 'finally'. Some examples are:

52. *Ngoan kapwa wia.*
'I'll do it instead.'

53. *Ngoah kapwa wiliandi oamw doadoahkin aiohwa.*
'I'll work in exchange for your work of yesterday.'

54. *Ih kapwa pwilidihwe kamwai pwa ngoah pirin kos.*
'He'll go with you instead because I'll be late.'
55. *Ngoah nimen koan pwili ngoahi alu, a ma koah joh kak, mihnda ngoah kapwa alu.*
'I want you to go with me, but if you can't I'll go anyway.'
56. *Ngoah kapwa pel rong jang koawoa mwuhr.*
'I expect to hear from you later (in exchange for my letter).'
57. *Ngoah kihdi epwi perehsse a ma koah mwakohko, koah kapwa kang.*
'I'll leave some of these biscuits and if you are hungry you might eat them.'
58. *Ma koah pwa koan kadardo, a ngoah kapwa dupukwe mwuhr.*
'If you say you'll sent it, I'll pay you later.'

Kapwa has an alternate form *pwa*, as in sentences like:

59. *Ih pwa indoa lakapw.*
'He'll come tomorrow instead.'

7.1.3.2 *wud*

The pre-verb *wud* suggests that the event in question is being repeated or has occurred before, but with different participants. Its meaning may be described in English by a phrase like 'take a turn at'. Examples are:

60. *Ngoah wud uk nihmw sikahn.*
'I'd like a puff of your cigarette.' (lit. 'I would have a turn at smoking your cigarette.')
61. *Ngoah ne wud wia mehu.*
'I've already done that.' (had my turn at doing that)
62. *Wallo wud minehla Pohnpei.*
'That man moved to Ponape too.' (had his turn at moving)

7.1.3.3 *pwen*

The pre-verb *pwen* is loosely equivalent to English ‘just’ or ‘only’. It suggests that the event which it qualifies required no special effort, preparation, or background. This is not to say that an event qualified by *pwen* might not have been helped along by other circumstances, but merely that the way in which the event came about or took place suggested accident or free will. Examples are:

63. *Me ohroj me pwen mwehu.*

‘Everything here is just fine.’

64. *Ngoah joah pwehng ih pwa ih ne pwen kidal.*

‘I didn’t tell him because he already knew.’ (The use of *pwen* implies that it did not appear obvious how he had come to know the facts in question.)

65. *Ngoah lemehkioang pwa ih pirin pwen mwomwohd, a pwen joah.*

‘I thought he was intending to stay, but he just didn’t.’

66. *Ih pwen ukuhk.*

‘He’s just smoking.’ (suggesting that the activity is not particularly out of the ordinary)

67. *Arai pwen kapwehse doari.*

‘They just finished.’

In example 67, ‘just’ in the sense of ‘just now’ is an English translation of Mokilese *kapwehse* (see 7.1.5). It is difficult to find an adequate English rendering for *pwen* in this and many similar sentences.

7.1.3.4 *ken*

The pre-verb *ken* suggests that there is a reason for the occurrence of the event that it qualifies, either because that event is the logical result of some other event or because it represents a conscious decision on the part of the individual initiating the event. When it is possible to translate *ken* into English this can be done with adverbs such as ‘therefore’ or ‘then’.

68. *Ih ken pa ink ihla jeripeinno.*

'He finally (after all that) married that girl.'

69. *Mwumwwoaroh ken dir nehkko.*

'There were so many fish that the net filled up.'

70. *Woallo johmwehudahr ken mehdi.*

'That man got sick and then died (because of it).'

71. *Amwdahr kamwa ken daurdi noai pajin mwioakko?*

'What happened that you climbed up to my *mwioak* nest?'

72. *A doar koah ken engdehnnoaroh kisa ken daurdi, doari akpas me enihe pirin ken kangla kisa.*

'And so you just kept on until we climbed that tree, and now the ghost is going to eat us (because of it).'

73. *Pukkoawe uhdahn upwuhpw, a ken wahssahla.*

'This book was originally blue, but it turned red (for some reason).'

In these examples, the use of *ken* suggests that the event in question follows as a consequence of some other event or series of events. In 69, the net is full because there were so many fish, and in 70 the man died as a result of his getting sick. The use of *ken* in 71 suggests that there should have been a good reason for the occurrence of the event described in that sentence. Similarly, in 68 *ken* implies a succession of events not described directly in the sentence that led up to the marriage that is the topic of discussion. The use of *ken* in 73 may be contrasted with that of *pwen* in example 74.

74. *Jaudi jeiahioaw ma ngoah koauwehla, a pwen sehpylloaw.*

'It wasn't a chair that I broke, but rather a table.'

The use of *pwen* implies that an error was made in confusing a table with a chair, objects that in this context have no relation. *Ken*, in 73, suggests that there was a reason for the change from a blue to a red color; in other words, in the context of this sentence there is a relationship of some sort between the two colors, not just an accidental confusion.

The pre-verb *ken* is often used with the pre-predicate *en* to indicate that the subject of the sentence is compelled by circumstances to undertake the activity described in the predicate. In this sense, *en ken* can be translated by 'have to' or 'must'. For example:

75. *Ngoan ken dupukda ew injin kapwwo pwa noaie ne ohla.*
'I have to buy a new engine because mine is broken.'

76. *Koan ken alu.*
'You must leave.'

In example 75 the external circumstance is mentioned in the sentence (the fact that the old engine is broken); in example 76 it must be known from the context in which this sentence is used.

Ken can be used without *en* to suggest that the activity that has been made necessary by external circumstances is to take place immediately, not at some vague time in the future. Thus, parallel to 75 and 76 we find:

77. *Anjoaou ma koah redi, kisai ken alu.*
'When you're ready, let's go!'

78. *Mary, ken indoa!'*
'Mary, come on!'

Ken is also common with *pirin* and *ne pirin* to stress the obviousness or certainty (because of some external sign or reason) of an immediate future event. For example:

79. *Pirin ken sapda jouruhr.*
'It's going to start thundering.'

80. *Poappo ne pirin ken kupla.*
'That board is just about to fall.' (It is obvious that ...)

7.1.3.5 *pwanah* AND *kanah*

The relation between the pre-verbs *pwanah* and *kanah* is similar to that holding between *pwen* and *ken*. In both cases the former implies that the reason or manner in which an activity was performed, or through which a state has come about, is of no conse-

quence, while the latter suggests that the activity is contingent on or is the result of some circumstance external to it. The difference between *pwanah* and *kanah* and *pwen* and *ken* seems to be that the latter treat the description of the manner or cause of the event as a fact, something that was actually observed, while the former seem to suggest that these observations about manner and cause represent the speaker's impressions of what happened, rather than what actually occurred. For example:

81a. *Ngoah ken pwen kang rokumwwoar doari.*

'I just ate crab and that's all.'

b. *Ngoah ken pwanah kang rokumwwoaroh lok.*

'I just ate crab until I was sick.'

Sentence 81a seems to be treated as a statement of describing the importance of crab to the person's diet. It might perhaps be an answer to a question like:

82. *A dir rokumw doakoahioawo ma koah mihmine?*

'Are there many crabs on that island where you were staying?'

Sentence 81b, on the other hand, seems to be more a statement of the speaker's feelings about the importance of crab to his diet rather than a simple statement of his dietary habits. If this is in fact the distinction between the two sentences, it is a difficult one to communicate in English. Some other examples are:

83. *Ara pwen pwa pir in wuddi ke da, a pwanah soalsoalda.*

'They just thought it was going to rain or something, but it just kept getting darker and darker.'

84. *Pwanah joah lipilpil.*

'Don't be so particular.'

In example 83, *pwen* describes the feelings of the participants in the story as if they were facts—a description of what actually happened—while the later occurrence of *pwanah* suggests that the predicate in which it occurs represents the storyteller's impressions of what happened. In 84, the speaker is communicating his own feelings about how his listener should act.

Kanah behaves in a fashion parallel to *pwanah*.

- 85a. *Pwehng ih en kanah indoa ngoan lalloang ih.*
 'Urge him to come so I can talk to him.'
- b. *Pwehng ih en ken indoa ngoan lalloang ih.*
 'Tell him to come so I can talk to him.'

Sentence 85b suggests that external circumstances require that the person in question come, while sentence 85a merely suggests that in the opinion of the speaker it is important that he come.

7.1.3.6 *kenemw*

I have very few examples of *kenemw* (alternately *koanoamw*). It appears that its use is restricted to non-main clauses in complex sentences (see 10.2), as in:

86. *Ih ken rupwupwlahr kenemw kijou.*
 'He tensed himself up and ran right off.'
87. *Ih ken mwindihoar kenemw mwinge.*
 'He sat down and set about eating.'

Kenemw suggests that one event follows another immediately and, moreover, suggests that the second event is begun not only hastily but with vigor.

7.1.3.7 *pel*

The meaning of the pre-verb *pel* can be characterized as 'in addition'. This description captures the fact that its range of meaning covers that of both English 'also' and 'again'.

88. *Ngoah perenkihda asa pel kak suhpene nehn rehn kajeelloawe.*
 'I am happy that we can be together again on this occasion.'
89. *Doari woallo pel pwurroang jeidihla Mwandohn.*
 'Then that man paddled back again to Mwandohn.'
90. *Kihs joh kak mine pohn jampah ma joh joau.*
Mahn pel joh kak mine; suhkoa pel joh kak mine.
 'We could not live on the earth if there was no sun. Animals could also not live; plants could also not live.'

91. *Doar ioar pel nehn inoangpase.*

'So it is also in this story.'

Pel seems to be used in many cases where in English 'also' and 'again' would not be appropriate. In all these cases there is the suggestion that additional events or at least choices of behavior are involved. Some examples are:

92. *Ma woi joah inepwihdi pahrrrok, kisai nen pel kak dupukda jakau.*

'If the government hadn't closed the bars we could still buy liquor.'

93. *Ngoah ne pel lel Hawaii.*

'I've been to Hawaii before.'

94. *Nehn anjoau mwehukije kisain pel kidal pwa jampah pwon pel marainla.*

'At some good time we will know that the whole world is at last enlightened.'

95. *Ngoah nen pwili koawoa, a dapwa ngoah nen pel jehpwili.*

'I might go with you, but maybe I might not.'

The meaning of *pel* is often ambiguous between 'again' and 'also', as in:

96. *Ih pel nimen japahldo.*

'He also wants to come back' or

'He wants to come back again.'

7.1.4 Negatives

The following is a list of verb and verb phrase negatives in Moki-
lese:

<i>joah</i>	'not'
<i>johpwa</i>	'not at all'
<i>johla</i>	'no longer'
<i>kahjik</i>	'not yet'
<i>kahjiko</i>	'not even yet'
<i>joh</i>	'not'

Negatives usually appear immediately before the main verb or verbal group (the main verb and any auxiliaries, modal verbs or intensifiers associated with it). An exception to this generalization is the negative of suggestion (see section 7.1.4.7). Other non-verbal negators will be discussed in 8.6.1 and 12.3.3.

7.1.4.1 *joah*

Joah is the most common and neutral negative marker for main verbs:

97. *Arai pwa arai nen joah indoa.*
'They said they wouldn't come.'
98. *Ih joah poaloahdi suhkoahu.*
'He didn't chop down that tree.'
99. *Diddoawe joah inen.*
'This wall is not straight.'

As has already been pointed out (7.1.1.3), *joah* can be used to negate the auxiliary *nimen* 'to want', but is not found with other auxiliaries. It appears in the negative intensifier (see 7.1.5) *joah pwohd* 'not really, not very'. The element *pwohd* cannot be used without *joah*. Of the other common intensifiers (see 7.1.5), *inenin* and *nohn* may be negated with *joah*, but *oaujoangoan* can never be negated.

- 100a. *Oaujoangoan dir mwani arai wa.*
'They're carrying an awful lot of money.'
- b. *Joah pwohd dir mwani arai wa.*
'They're not carrying very much money.'
- 101a. *Ngoah inenin mwehuki iakiu.*
'I really like baseball.'
- b. *Ngoah joah pwohd mwehuki iakiu.*
'I don't really like baseball.'

Joah is also the simple negative 'no' that is used as a negative answer to a question.

102. *A koah nimen pwili kamai? Joah!'*

'Do you want to go with us? No!'

7.1.4.2 *johpwa*

Johpwa is an emphatic negative meaning 'not at all'.

103. *Ngoah johpwa koauwehla wanihmwsokko.*
'I didn't break the window at all.'
104. *Ihr johpwa kin doadoahk rehn joarwi.*
'They never work on Sundays at all.'
105. *Woallo johpwa nimen pwili kisa.*
'The man doesn't want to go with us at all.'

7.1.4.3 *johla*

Johla can be translated as 'no longer', 'no more' or 'never again'.

106. *Bob johla poki pahioahu.*
'Bob no longer beats his wife.'
107. *Ih johla pirin japahldo me.*
'He'll never come back here again.'

7.1.4.4 *kahjik AND kahjiko*

The behavior of *kahjik* 'not yet' and *kahjiko* 'not even yet' is not yet fully understood. They are used like other negatives in sentences like:

108. *Kisai kahjik kak kadoarihla doadoahkko.*
'We can't finish that job yet.'
109. *Ngoah kahjiko lel Pohnpei.*
'I haven't even been to Ponape yet.'

These two negatives can also appear with the suffix *-oar*, as *kahjikkoar* and *kahjikohr*.

110. *Ih pe kahjikkoar minehla Pohnpei.*
'He still hasn't moved to Ponape.'

It appears that under some circumstances, the forms with the *-oar* suffix must be used:

111. *Ngoah kahjikkoar kin ukuhk.*
'I don't smoke yet.'
112. *Arai kahjikkoar doari doadoahk.*
'They're not finished work yet.'

The meaning and extent of these restrictions is not yet clear to me.

7.1.4.5 *joh*

The negative *joh* (older *joau*) is used to negate the modals *kin* 'habitually' and *kak* 'can', as in:

113. *Ih joh kin kalap indoa me.*
'He seldom comes here.'
114. *Jidohsahpase me joh kak kijou.*
'This car here doesn't run.'

Note, however, the contrast between the a) and b) sentences in the following examples:

- 115a. *Ngoah joh kin ukuhk.*
'I don't usually smoke.'
- b. *Ngoah kin joah ukuhk.*
'I usually don't smoke.'
- 116a. *Ih joh kak wia mehu.*
'He can't do that.'
- b. *Ih kak joah wia mehu.*
'He has permission not to do that.'

The negative *joah* is used in the b) sentences to negate the main verb, but when the negative is placed before the modals *kin* and *kak*, the negative *joh* must be used.⁵ It is very likely that the element *jeh-* that appears in the negative *jeh- pirin* 'will not' and

jehpwili 'not accompany' is related to the negative *joh* that is used with *kin* and *kak*.⁶ The negatives *joh*, *johla*, and *johpwa* can be used as main verbs in existential sentences (see 8.6.1).

7.1.4.6 NEGATIVE COMMANDS AND EXCLAMATIONS

An order or a warning **not** to do something is given in Mokilese by using the negatives *joah*, *johpwa* or *jimwehn pwa*, as in:

117. Joah *doauoang niho*.
'Don't climb that coconut tree.'
118. Johpwa *kos*.
'Don't be late.'
119. Jimwehn pwa *wia mehu*.
'Don't do that.'

Jimwehn may be used without *pwa*, but in this case it must be followed by *en*, as in:

120. Jimwehn en *wia mehu*.
'Don't do that.'

A negative command may also be expressed by putting *kalke* (probably a Ponapean borrowing) before a sentence:

121. Kalke *koah inla o*.
'Don't go there.'

Johpwa, *jaudi* (see 12.3.3), and *jaudi mwehn* or *jaudi mwehn pwa* can be used in negative exclamations like the following:

122. *Johpwa woallo!*
'Not that man!'
123. *Jaudi woallo!*
'Not that man!'
124. *Jaudi mwehn ih!*
'Not him!'
125. *Jaudi mwehn pwa ih!*

'Not him!'

7.1.4.7 NEGATIVE OF SUGGESTION

The negative *joah* appears at the beginning of the predicate (instead of its normal pre-verb position) in sentences that express wishes, suggestions, or inferences. None of the sentences in which this negative of suggestion appears express facts, but, rather, they are statements about ideas that we would like to be true or feel should be true. Some examples of the negative of suggestion are:

126. *Joauo joah pwen ngang rehnnnoawe.*
'I just wish the sun were hot today.'

127. *Ih joah ken pwili kamwai pwa ngoah ne kos.*
'How about if he goes with you, because I'm already late.'

If no pre-verb appears between the negative of suggestion and the main verb, they must be separated by *pwa*:

128. *Ngoah joahpwa waranki apas jidohsahu.*
'I wish I owned a car.'

The pre-verb *wud* (See 7.1.3.2) is also used in suggestion constructions in a manner similar to *joah*.

129. *A ih wud nen wihn?*
'Is it possible he might win?'

Like the negative of suggestion, the *wud* of suggestion appears at the beginning of the predicate, rather than in its usual pre-verb position.

7.1.5 Intensifiers

INTENSIFIERS are used to put emphasis on certain elements of the sentence. The following is a list of the modals that can be classed as intensifiers:

<i>nohn</i>	'rather'
<i>oaujoangoan</i>	'very'
<i>inenin</i>	'very'

<i>pwohd</i>	'very (used only with negatives)'
<i>pein</i>	'self'
<i>kapwehse</i>	'just'
<i>kapwehsen</i>	'just'

The relationship of these elements to other kinds of modals is not clear. They follow pre-predicates, as in:

130. *Ngoah ne inenin koakoahk.*
'I'm already very tired.'

This suggests they might be pre-verbs occupying a position after the negative but before the main verb. However, unlike other pre-verbs, they cannot normally follow auxiliaries.

- 131a. *Ngoah inenin nimen pwili.*
'I really want to go.'
- b. **Ngoah nimen inenin pwili.*

In addition, while they regularly follow pre-verbs, they can precede them, as in:

- 132a. *Ih pwen inenin mwehu.*
- b. *Ih inenin pwen mwehu.*
'He's just really good.'

Because of these facts I have decided to classify the intensifiers as a separate set of modals that appear immediately before the verbal group in the predicate, where the verbal group contains the main verb and associated auxiliaries and main verb modals (see 7.4).

The intensifiers *nohn*, *oaujoangoan*, *inenin*, and *pwohd* are used only with stative verbs. Some examples are:

133. *Ngoah pel inenin koapwoarpwoarki pwa koah pirin indoa.*
'I also really hope that you are going to come.'
134. *Oaujoangoan pwideng pwa ngoah joh kak moairla.*
'It was so hot that I couldn't get to sleep.'

135. *Johpwa nohn dangahnga!*
 'Don't be so lazy!'

They appear to differ in the degree of intensity they express, *nohn* being the weakest and *inenin* the strongest. After the negative *joah*, the intensifier *pwohd* must be used. For example:

136. *Joah pwohd dir mwani arai wa.*
 'They didn't bring very much money.'
137. *Ih joah pwohd kin inla duhdu.*
 'He doesn't bathe very often.'

When an intensifier occurs with a verbal attribute of a predicate noun, some speakers allow the intensifier to appear before the rest of the noun phrase, as in:

- 138a. *Peik pel me inenin kajamwpwalkij ipen mihn Mwoakilloa.*

Peik pel inenin me kajamwpwalkij ipen mihn Mwoakilloa.

b.

'Respect is a very important thing for the Mokilese people.'

The intensifier *pein* 'self' is used to put emphasis on the **subject** as the participant involved in the activity named in the predicate. Some examples are:

139. *Ih pein pwoakda sakaio.*
 'He lifted that rock by himself.'
140. *Woallo pwen pein wiahda mehu.*
 'That man just did that himself.'

Kapwehse marks the event with which it is used as having taken place in the immediate past. It can be translated by the English 'just' in the time sense of that adverb. While the meaning of *kapwehse* is rather different in kind from that of the other intensifiers, it seems to pattern very much like them in sentences.

141. *Ioar kahrehda koski oai insingwe, pwa ngoah kapwehse rapahkihda oamw adreswa.*

'The reason my writing to you was delayed was because I just found your address.'

Kapwehse has the alternates *kapwehsen* (probably originally *kapwehse + ne*) and *kapwehsenpwa*, as in:

142. *Ih kapwehsen mehdihi johmwehuo ma ih wia jang oh mijkoalkoal.*

'He just died from that disease that he had for a long time.'

143. *Ngoah pwen kapwehsen pwa japahldo.*

'I just now got back.'

7.1.6 *Kin* Habitual Marker

Another modal that is difficult to classify is the habitual marker *kin*. Like the intensifiers just discussed it follows the pre-predicates.

144. *Ih pe kin inenin dangahnga.*

'He is still very lazy.'

Unlike the intensifiers, it commonly precedes the set of pre-verbs.

145. *Doari ih kidal pwa uhdahn enihmen kin pwen wihwiahng suhkoahu doahro.*

'Then he knew that it was really a demon that had been making the tree behave in that fashion.'

However, the negative normally precedes *kin*, as in:

146. *Armaj joh kin kang adroauin koaroa.*

'People don't eat *koaroa* eggs.'

Because of these facts it seems best at this stage to treat *kin* as an independent element with special properties.

As has already been suggested, *kin* marks an action or state as habitual or customary.

147. *Rehn ohroj ngoah kin pwohrda kiloak wonow.*

'Every day I get up at six o'clock.'

148. *Winen sakoal* kin soal a pohn moange korohro.
'The feathers of the *sakoal* are black, but its head is white.'
149. *Mihn Mwoakilloa* kin *kajamwpwalki koaunopda mwinge rehn koaunop pwa ihr en kang rehn joarwi*.
'The Mokilese people consider it important to prepare food on Saturday for them to eat on Sunday.'

7.2 TRUE VERBS AND ADVERBS AS MODALS

A number of other modal elements defy classification. *Uhdahn* 'really, for sure' and *dapwa* 'perhaps' add a note of certainty (in the first case) or doubt (in the second) to a whole sentence and, for this reason, appear at the beginning of the sentence. For example:

150. *Uhdahn ih pirin indoa*.
'He'll come for sure.'
151. *Uhdahn pwunginwa me*.
'This is really the solution.'
152. *Dapwa ngoan ken alu, a joah, pwa joh oai anjoau*.
'Perhaps I should go, but I won't because I don't have time.'
153. *Dapwa ngoah kapang warrai warro*.
'Maybe I see their canoe.'

These "adverbs" may also refer to elements within a sentence, rather than to the sentence as a whole. In such cases they precede the element(s) to which they refer.

154. *Da kahrehda ih ke uhdahn pirin inla o, a ih ken indoa me?*
'How come he was really intending to go there, and he came here?'
155. *Ngoah leme pwa dapwa ih nen pwili*.
'I thought that maybe he might attend.'

Another word often used as a modal is the verb *kalahpwuk* 'alone', which appears as a main verb in sentences like:

156. *Kisa kalahpwuk me.*
'We are alone here.'

As a modal, *kalahpwuk* varies greatly in its position, usually preceding the main verb but often following the subject to which it refers.

157. *Ih kalahpwuk nen indoa.*
'He'll come alone (I predict).'

158. *Ih joah pein kalahpwuk doadoahk.*
'He didn't work alone.'

159. *Ngoah pe kalkalahpwuk wia imwoai umwwe.*
'I'm still building my house alone.'

In example 159, the fact that *kalahpwuk* can be reduplicated is a demonstration of its essentially verbal nature.

Kalap 'often' immediately precedes the verb to which it refers. It is generally used together with *kin*, as in sentences like:

160. *Ih joh kin kalap indoa me.*
'He doesn't come here often.'

161. *Woallo kin kalap likamw.*
'That man often tells lies.'

162. *Dapwa kama nen kin kalapla japahldo me.*
'Maybe we might come back here more often.'

The verbal nature of *kalap* can be seen in this last example, where it occurs with the verbal suffix *-la*.

7.3 FURTHER USES OF AUXILIARIES

The auxiliaries *pirin* or *nimen* can be used together with *ken* and the suffix *-oar*⁷ in a construction that can be translated into English as 'almost', as in:

- 163a. *Arai pirin kennoar sapda doadoahk.*
 b. *Arai nimen kennoar sapda doadoahk.*
 'They almost started working.'
- 164a. *Pirin kennoar joh armaj indoa.*
 b. *Nimen kennoar joh armaj indoa.*
 'Almost no one came.'

It appears that the order *pirinnoar ken* is also possible.

165. *Arai pirinnoar ken sapda doadoahk.*
 166. *Pirinnoar ken joh armaj indoa.*

In these expressions the auxiliaries *pirin* and *nimen* do not refer to any intention or willingness on the part of the subject to perform the activity in question, but refer rather to the whole sentence. Thus, sentence 165 might be put into English as:

167. 'It was intended that they start working.'

Pirin (as an alternate for *mwomwen*) is also used to refer to a whole sentence in examples as:

- 168a. *Pirin pwa poappo nen kupla.*
 b. *Mwomwen pwa poappo nen kupla.*
 'It seems that that board might fall.'

Pirin pwa can also be used within a sentence to mean something like 'seemingly', 'sort of' or 'almost', as in:

169. *War ah pohsso pirin pwa kapw.*
 'His boat is almost new.'
170. *Ih pirin pwa woal perenmen.*
 'He seems like a happy man.'

7.4 SUMMARY

Below is a summary of the order in which major modal classes occur in the predicate. Unusual behavior of particular modals is ignored here.

MODALS				VERBAL GROUP
pre-predicates	<i>kin</i>	pre-verbs	intensifiers	{ VERB auxiliary + VERB MOD + auxiliary + VERB }

8 Directionals and Locative—Possessive Sentences

8.1 ORDER OF VERB SUFFIXES

The following chart summarizes the major verbal suffixes and their relative order.

VERB	<i>i</i>	<i>ek</i>	<i>ki</i>	<i>da</i> <i>di</i>	<i>do</i> <i>la</i> <i>we</i>	<i>oang</i> <i>jang</i>
				<i>pene</i> <i>pjoang</i> <i>jili</i>		
	transitive	intransitive	associative	directional	orientational	

No more than **one** suffix from any vertical column can be used at one time, but it is at least potentially possible to have every column represented at the same time. The order of occurrence of the suffixes is generally fixed, as given in the chart. However, some speakers occasionally allow the associative *-ki* to be misplaced. For example:

- 1a. *Ih mehkihdi johmwehuo.*
 b. *Ih mehdihi johmwehuo.*
 'He died of that disease.'

Cases of misplaced *-ki*, as in 1b, are rare and are not accepted by all speakers.

8.2 DIRECTIONAL SUFFIXES

The Mokilese directional suffixes and their approximate meanings can be summarized as follows:

-da 'upwards'

<i>-di</i>	'downwards'
<i>-do</i>	'towards the speaker'
(<i>-doa</i>)	
<i>-la</i>	'away'
<i>-we</i>	'towards the hearer, in a direction known to both speaker and hearer'
<i>-pene</i>	'together'
<i>-pijoang</i>	'apart'
<i>-jili</i>	'scattered, random'

With verbs that imply **motion**, these suffixes mark the direction of the motion relative to the participants in the event. With non-motion verbs they often have other non-directional uses. These will be discussed in detail in chapter 9.

The directional function of these suffixes can be illustrated with motion verbs (both transitive and intransitive) like *alu* 'to walk', *wa* 'to carry' and *peid* 'to throw'.

<i>aluhda</i>	'to walk up'
<i>aluhdi</i>	'to walk down'
<i>aluhdo</i>	'to walk towards the speaker'
<i>aluhla</i>	'to walk away'
<i>aluwe</i>	'to walk towards the hearer'
<i>aluhpene</i>	'to walk towards one another'
<i>aluhpijoang</i>	'to separate, to walk away from one another'
<i>aluhjili</i>	'to walk around'

<i>wahda</i>	'to carry up'
<i>wahdi</i>	'to carry down'
<i>wahdo</i>	'to carry towards the speaker'
<i>wahla</i>	'to carry away'

<i>peidda</i>	'to throw up'
<i>peiddi</i>	'to throw down, to drop'
<i>peiddo</i>	'to throw to the speaker'
<i>peidla</i>	'to throw away'

8.2.1 *-di* AND *-da*

Most directional uses of *-di* 'down' and *-da* 'up' are fairly straightforward. It is interesting to note that *-di* and *-da* are used to indicate geographical directions, *-di* 'down' being used for westward motion (in the direction of the sunset) and *-da* 'up'

for eastward motion (in the direction of the sunrise). Traveling from Kahlap to Mwandohn or Uhrek is considered *-di* ‘down’, as is traveling from Mokil to Ponape. The trip from Mokil to Pingelap is considered *-da* ‘up’. For example:

- 2a. *Ngoah jeidihla Mwandohn.*
 ‘I paddled to Mwandohn.’
- b. *Ngoah jeidahla Kahlap.*
 ‘I paddled to Kahlap.’

8.2.2 *-do, -la, AND -we*

The suffixes *-do, -la,* and *-we* mark direction towards the speaker, away from the speaker, and towards the hearer, respectively. The changes in meaning they produce can be illustrated by examples like the following:

- 3a. *Ngoah pirin japahldo lakapw.*
 ‘I’ll come back tomorrow.’
- b. *Ngoah pirin jopahlla lakapw.*
 ‘I’ll go back tomorrow.’
- 4a. *John wahdo likkoauo.*
 ‘John brought that cloth.’
- b. *John wahla likkoauo.*
 ‘John took that cloth away.’
- 5a. *Imwahu mine kajapwdokoan¹ sakai koalikko.*
 ‘His house is on this side of the big rock.’
- b. *Imwahu mine kajapwlakoan sakai koalikko.*
 ‘His house is on the far side of the big rock.’

For the most part the suffix *-we* is used like *-do* and *-la,* but expressing motion towards the hearer.

6. *Ngoan aluwe mwuhr.*
 ‘I’m going to come (to where you are) later.’

7. *Ioar kahrehda koski oai insingwe, pwa ngoah kapwehse rapahkihda nihmw adreswa rehnnoawe.*

'The reason my writing (to you) was delayed was that I just found your address today.'

8. *Pwurwe!*

'Turn around!'

In some cases, however, *-we* suggests direction towards a location that is known to both the speaker and hearer but is not necessarily the location of either. This is particularly true in narrative style, as in the following sentences taken from a popular demon story.

9. *Eniho kanah okidekdahwehr ara kanah kipdihoar pakid nehn moange.*

'The demon then lay back there and they just started pulling the lice from his head.'

10. *Ara weirda inenin dir mwinge, doari ara ken idandihwe.*

'They gathered a large amount of food, then they carried it back down.'

In this sense, *-we* can often be rendered by the English word 'back', which also seems to mark motion towards a location previously established in the story.

As was pointed out earlier, it is common for a suffix from the **up-down** set (*-di*, *-da*) to be used together with a suffix from the **participant-relation** set (*-do*, *-la*, *-we*). In this case, the former must precede the latter.

11. *Ih kijoudihla Pohnpei.*

'He travelled down to Ponape.'

12. *Ngoah pirin ken kadardahwehng koawoa epwi.*

'I'll have to send a few up to you.'

8.2.3 *-pene*, *-pijoang*, AND *-jili*

The suffixes *-pene* 'together', *-pijoang* 'apart' and *-jili* 'scattered, around' are never used together with any of the other directional suffixes.

8 Directionals and Locative—Possessive Sentences

The suffix *-pene* indicates either motion of separated objects towards one another or some reciprocal (shared) relationship or activity. It is often translated by ‘together’ or by ‘each other’ or ‘one another’. For example:

13. *A rai suhpene johnparro aio.*
‘They met last year.’
14. *Jerimwein roahmenno kihpene mwingehk.*
‘The two boys gathered together the food.’
15. *Kama koaroanpene.*
‘We are related.’ (literally: close together)
16. *A koah kidal kapsahpene riaw apel jiluw?*
‘Do you know how to add (together) two and three?’
17. *Ara m wehupene.*
‘They like each other.’
18. *Mwehuoang armaj en jauwajpene.*
‘It is good for people to help one another.’

The suffix *-pijoang* is the opposite of *-pene*. It marks movement of persons or objects away from each other, separation or splitting up of a unit, or a difference in relationship. Examples are:

19. *Pukkai inenin wikpijoang.*
‘These books are very different.’
20. *Kamai kin poaloahpijoang war a iuhski poapin dakno.*
‘We split canoes and use them as surfboards.’
21. *Johnpadahkko wilikpijoang pukko a sapda wadek.*
‘The teacher opened the book and began to read.’

The suffix *-jili* marks activities that are diffuse or without obvious pattern. It often carries a sense of aimlessness or purposelessness.

22. *Ih koasoahjili liporrohk.*
‘He scattered the seeds.’

23. *Ngoah johla pwilihjili arai.*
 'I don't hang around with them anymore.'
24. *Ih kadipoahjili ngoahi.*
 'He spread rumors about me.'

8.2.4 Simple Verbs of Motion

The simple verbs of motion, Mokilese equivalents of English 'come', 'go', and so on are a combination of the directional suffixes and what appears to be a root *in-*. These forms are:

<i>indoa</i> ²	'to come'
<i>inla</i>	'to go'
<i>inda</i>	'to go up'
<i>indi</i>	'to go down'
<i>injang</i>	'to come from'

Historically, the element *in-* that is common to these verbs probably represents a gemination of the initial consonant of the directional suffix (as described in 1.3.2.7). That is, the directional suffixes, with their first consonant doubled, seem to have been used as verbs of motion. For example, *indoa* 'to come' might have arisen from *-doa* 'towards the speaker', in the following manner:

<i>doa</i>	
<i>ddoa</i>	Initial Gemination
<i>ndoa</i>	Nasal Adjustment
<i>indoa</i>	Prothetic Vowel Addition

Note that no form **inwe* exists. Where it would be appropriate, *aluwe* is used instead. Note also that although the form *injang* 'to be from' exists, there is no parallel verb based on *-oang* 'to'.

8.3 ORIENTATIONAL SUFFIXES

The suffixes *-oang* 'to' and *-jang* 'from' are used to point to either the person or place towards which the activity is directed (in the case of *-oang*) or away from which the activity is directed (in the case of *-jang*). Sentences 25 to 29 give examples of *-oang*, 30 to 34 give examples of *-jang*.

25. *Ngoah kajapahlihdohng ih.* ³
'I brought it back to him.'
26. *Ih pwehnglahng jerimwein siksikko: "Mine me siksikkij, winehnihpas, koah kidal?"*
'He said to the small boy: "Is there some small thing, some magic, that you know?"'
27. *Ih illahng pohn oaroahrro.*
'He is going towards the shore.'
28. *Ngoah kajlehng ih woaroai warro.*
'I showed him my canoe.'
29. *Joamo aio kioang ngoahi ekij mwani.*
'My father gave me some money.'
30. *Ia koawoa injang?*
'Where are you coming from?'
31. *Ngoah kihjang kanah mwingehu.*
'I took away his food.'
32. *Ngoah padahkihjang joamo aio wia pohs.*
'I learned to make boats from my father.'
33. *Moaio kupdihjang in suhkoahu.*
'The breadfruit fell down from the tree.'
34. *Ngoah japahljang Pohnpei aio.*
'I returned from Ponape yesterday.'

Like *-ki* (as discussed in 6.6.1), *-oang* and *-jang* may be used as independent words separated from the verb, rather than as suffixes attached to the verb. For example:

35. *Ih rikpene oaringkai oang ngoahi.*
'He gathered these coconuts for me.'
36. *Kihdi ekij mwingehu oang lakapw.*
'Save a little food for tomorrow.'
37. *A rmajmen pirapoahla mwaniho jang ih.*
'Someone stole that money from him.'

38. *Ngoah dupukdo woaroai pohsso jang arai.*
'I bought my boat from them.'

8.4 VERBS OF MOTION

A verb of motion does not require the suffix *-oang* 'to' pointing to the place towards which the motion is directed if that place has been reached or is likely to be reached.

39. *Ngoah kijoula Pohnpei en pwili high school.*
'I went to Ponape to attend high school.'
40. *Rehnwa mwerin, ih jeidihla Mwandohn.*
'The following day, he paddled to Mwandohn.'
41. *Ngoah pirin inla Kolonia lakapw.*
'I'll go to Kolonia tomorrow.'
42. *Kamai indahla Imwin Pikko.*
'We went to Imwin Pikko.'

When the goal of a verb of motion (the place to which the motion is directed) is a **place name** (as in examples 39–42 above), the place name follows the verb directly. When the goal is indicated by some noun other than a place name, it cannot follow the verb of motion directly. In such cases, the goal of a verb of motion must be used in construction with a relational noun of location (see 3.1), as in the following examples:

43. *Ih inla pohn oaroahrro.*
'He went to the beach.' (literally: 'He went on the beach.')
44. *Woallo aluhla nehn imwoamwwo.*
'That man walked into your house.'
45. *Ih jeila pohn pereuo.*
'He paddled to the reef.'

A construction consisting of a relational noun of location followed by another noun names a specific part of the object referred to by the second noun. For example: *pohn sehpyllo*

‘on the table, the table top’, *nehn umwwo* ‘in the house, the house’s interior’, *pehn suhkoahu* ‘under the tree’. When such a construction is used as the goal of a verb of motion, the sentence suggests motion towards that specific part of the object. If we wish to be vague about the part of the object towards which motion is directed, the neutral locative marker *in*, rather than a relational noun of location, is used. For example:

46. *Ngoah pirin jeila in doakoahu rehnnoawe.*
‘I’m going to paddle to that island today.’

47. *Ih aluhdahla in dollo.*
‘He walked up to the mountain.’

48. *John indoa in imwoamwwo kiloak jiluw.*
‘John came to your house at three o’clock.’

In contrast to the relational nouns discussed above, *in* does not imply ‘on’, ‘inside’, ‘under’, and so forth, but merely ‘at’. Its use will be described in more detail in 8.5.

When the goal of a verb of motion is a person, rather than a place or object, the relational noun *ipen* ‘near’ is usually used. For example:

49. *Ngoah aluhla ipen John.*
‘I walked to where John was.’

50. *Ih jeila ipen woallo.*
‘He paddled to where that man was.’

Ipen can also be used with non-human nouns in the meaning ‘near’.

51. *Uhda ipen sehpillen.*
‘Stand near that table.’

52. *Ih kihdi ipen wanihmwwo.*
‘He left it near the door.’

The locative marker *in* is not used after a verb of motion with nouns representing humans.

The noun *wija* ‘place’, though not a place name, follows a verb of motion directly.

53. *Ih inla wijahu.*
'He went to that place.'

It is not yet clear whether there are any other nouns with this property. In the following sentences, the nouns *sukuhl* 'school', *sidowa* 'store', and *pank* 'bank' appear to be used in a similar fashion.

54. *Ih indoa sukuhl.*
'He came to school.'

55. *Ih inla sidowa.*
'He went to the store.'

56. *Ih inla pank.*
'He went to the bank.'

Note, in contrast to the use of *wija* in example 53, that these sentences are not grammatical if the nouns in question are followed by a determiner like *-o* 'that'.

- 57a. **Ih indoa sukuhllo.*
b. **Ih inla sidowahu.*
c. **Ih inla pankko.*

This seems to suggest that the items in question are, in fact, being used as verbs, in a manner similar to the use of *loakjid* 'to fish' and *duhdu* 'to bathe' in:

58. *Ih jeila loakjid.*
'He went fishing.'

59. *Ih inla duhdu.*
'He went to bathe.'

The fact that these items can be used as verbs is shown by the following example:

60. *Ngoah sukuhlihdi ih poaloang pohs.*
'I taught him to build boats.'

8 Directionals and Locative—Possessive Sentences

When the suffix *-oang* is used with a verb of motion it suggests motion in the **direction** of some place or object without implying that the place or object was or will be reached. The difference between a verb of motion with and without *-oang* is similar to the difference in English between the prepositions 'towards' and 'to'. For example:

- 61a. *Ih jeidihla Mwandohn.*
'He paddled to Mwandohn.'
- b. *Ih jeidihlahng Mwandohn.*
'He paddled towards Mwandohn.'
- 62a. *Ngoah aluhla Kolonia.*
'I'm going to Kolonia.'
- b. *Ngoah aluhlahng Kolonia.*
'I'm going in the direction of Kolonia.'

Nouns other than place names may follow a verb with *-oang* directly but may also be used with a relational noun or with *in*, as in the following sentences:

- 63a. *Ih indoahng umwwo.*
- b. *Ih indoahng in umwwo.*
'He came towards the house.'
- 64a. *Ngoah kijoulahng doakoahu.*
- b. *Ngoah kijoulahng in doakoahu.*
'I travelled towards that island.'
- 65a. *Oai piriенno aluhlahng wanihmwwo.*
- b. *Oai piriенno aluhlahng in wanihmwwo.*
'My friend walked towards the door.'
- 66a. *Jeriho aluhlahng inahu.*
- b. *Jeriho aluhlahng ipen inahu.*
'The child walked towards his mother.'

While the a) and b) sentences in examples 63 to 66 are not fundamentally different, it appears that the a) sentences suggest motion towards a physical object, while the b) sentences suggest motion towards a location. For example, 63b might be better translated:

67. 'He came towards where the house is.'

8.5 LOCATIVE NOUNS AND NOUN PHRASES

In the preceding sections we outlined a number of different types of locative nouns. They will be summarized here:

a. place names: *Mwoakilloa, Kahlap, Pohnpei, Kolonia, Hawaii*;

b. relational nouns and noun phrases with relational nouns:
pehn 'under', *pohn* 'on', *ipen* 'near', *nehn* 'in', *mwohn* 'before';

c. inherently locative nouns such as *wija* 'place';

d. nouns preceded by the locative marker *in* ⁴

The notion 'location' is interpreted much more strictly in Mokilese than in English. Consider, for example:

68. *Umwwo mering.*
'That house is old.'

69. *Nehn umwwo pwirejparla.*
'That house is dusty.'

In sentence 68, 'old' refers to the entire house, while in 69 *pwirejparla* 'dusty' does not imply that the house is made of dust or that dust is clinging to the inside and outside walls, the roof, and the floor, but merely that the interior of the house is dusty. In both English and Mokilese this is the sense of sentence 69, but in Mokilese it is expressed literally through the use of the relational noun *nehn* 'inside of'. That is, Mokilese distinguishes between the use of a noun to name an **object** (as in 68) and its

8 Directionals and Locative—Possessive Sentences

use to name a **location** (as in 69). In the latter case, the noun must be made locative by the use of *in* or of a relational noun. Other examples are:

70. *Koakonno kipjang pohn sehpyllo.*
'The box fell off the table.'
71. *Nehn woallo kaper.*
'That forest is dangerous.'
72. *Warro kijoudahdo pohn pereuo.*
'That canoe came over the reef.'
73. *Ngoah kiroahd nehn dallo.*
'I scraped the plate.'
74. *Ngoah lujla pohn kello.*
'I jumped over the fence.'
75. *Ngoah lujda pohn kello.*⁵
'I jumped onto the fence.'

In many cases, either locative or non-locative noun phrases can be used in similar sentences. The latter would suggest a physical object and the former a location. For example:

- 76a. *Ngoah koddooang in diddo.*
'I bumped into the wall.'
- b. *Ngoah koddooang diddo.*
'I bumped the wall.'
- 77a. *Suhkoahu koappoang in kello.*
'That tree is growing towards the fence.'
- b. *Suhkoahu koappoang kello.*
'That tree is growing around the fence.'
- 78a. *Ngoah koaroannoang in wanihmwwo jang koawoa.*

'I am nearer to the door than you are.'
- b. *Ngoah koaroannoang wanihmwwo jang koawoa.*
'I am nearer the door than you are.'

A large number of nouns occur most frequently in their locative form. With such nouns, it is rare to refer to the object in question as a physical object. Examples are:

79. *Moadoak nehn kapehdihoa.*

'I have a stomachache.'

80. *Ngoah aluhla pohh maddo.*

'I walked to the reef.'

81. *Inenin soamwoan sakoal pohh madau rehnoawe.*

'The ocean is very rough today.'

In many cases I have been unable to isolate the simple form of the noun. One such example is *nehnwoal* 'forest', where there does not appear to be a corresponding noun **woal* meaning 'forest'.

8.6 EXISTENTIAL, LOCATIVE, AND POSSESSIVE SENTENCES

8.6.1 Existential and Locative Sentences

The verb *mine* 'to exist, to be located', its negative *joh* 'to not exist' (and *johla* 'to no longer exist') and a small number of other verbs (among which are: *dir* 'to be many', *doari* 'to be finished', *roj* 'to be empty', etc.) are used in a large number of existential, locative, and possessive sentences. Consider, for example, the following EXISTENTIAL SENTENCES:

82. *A mine armaj me ma kidal?*

'Is there anyone here who knows?'

83. *Mine laian nehn Aperika.*

'There are lions in Africa.'

84. *Mine pukkoaw ma ngoah kihdi me aio, a ngoah joh kak rapahkihda akpas.*

'There was a book I left here yesterday, and I can't find it now.'

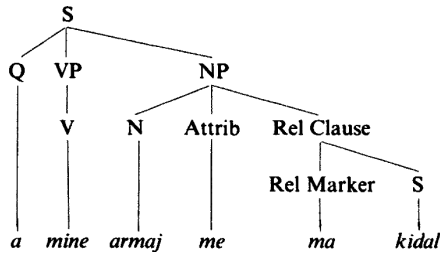
Such sentences say nothing more about the persons or objects they discuss than that those persons or objects exist.

The topic of an existential sentence is usually a generic noun (as in 82 and 83), but may be a specific indefinite noun (as in 84) and, less often, a definite noun. For example:

85. *Pe minehr noai pukkok.*
'Those books of mine are still around.'

86. *Doari doadoahkko.*
'That job is finished.'

Definite nouns in existential sentences are considered strange by most speakers, particularly when the verb *mine* is being used, but they are possible given the proper context. The topic of an existential sentence usually follows the verb (see 12.1) although definite nouns may precede it. The structure of a sentence like example 82 might be diagrammed:



A sentence with a definite noun preceding *mine* and a locative noun phrase following is understood to be locative. For example:

87. *Pukko mine pohh sehphillo.*
'That book is on the table.'

88. *Ih mine Hawaii.*
'He is in Hawaii.'

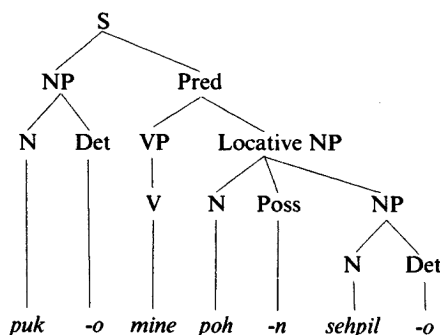
89. *Oai peneineio mine Kahlap.*
'My family is on Kahlap.'

90. *John mine nehn imwahu.*
'John is in his house.'

91. *Mwoakilloa mine pehn pwalaikin United States akpas.*
 'Mokil is under the American flag now.'

92. *Mehu mine in suhkoahu.*
 'That thing is on the tree.'

The structure of a sentence like example 87 might be diagrammed:



All sentences containing locative noun phrases do not contain *mine*. When a locative noun phrase is used to identify an object rather than to stress its location, *mine* is not used. Compare:

93a. *Dahkij pohн sehпилlo?*
 'What is on the table?'

b. *Pukkoaw pohн sehпилlo.*
 'A book is on the table.'

and

94a. *Dahkij mine pohн sehпилlo?*
 'What is on the table?'

b. *Pukkoaw mine pohн sehпилlo.*
 'A book is on the table.'

95. *Oadpoa sakaiok nehn poahioa?*
 'How many stones are in my hand?'

and

96. *Oadpoa sakaiok mine nehn poahioa?*
'How many stones are in my hand?'
- 97a. *Ia noai pinjelwa?*
'Which is my pencil?'
- b. *Nihmw pinjelwa me.*
'Your pencil is here.' or 'Your pencil is this one.'

and

- 98a. *Ia mine noai pinjelwa?*
'Where is my pencil?'
- b. *Nihmw pinjelwa mine me.*
'Your pencil is here.'

The difference between identificational locative and pure locative sentences is seen most clearly by comparing examples 97 and 98. In most identificational locative sentences, in contrast to pure locatives, the location of the objects in question should be obvious. A sentence like 95 would be appropriate as a request to count the stones I am holding, while 96 would be used to ask someone to guess the number of stones I am holding in my closed fist. The full extent of the distinction between these two types of sentences is still not completely clear to me, however.

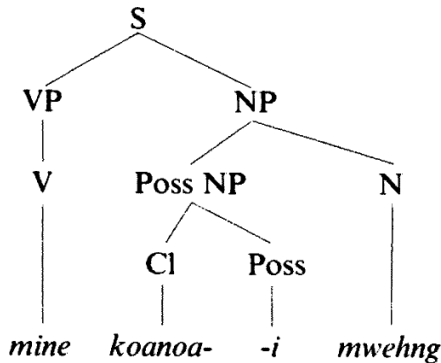
8.6.2 Possessive Sentences

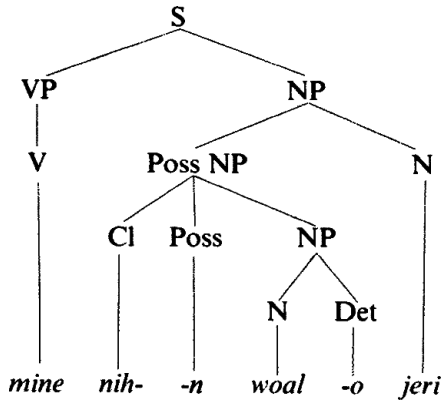
The simplest kind of possessive sentences resemble existential sentences very closely. Consider:

99. *Mine koanoai m wehng.*
'I have taro.'
100. *Mine nah koaroahmen.*
'He has a *koaroa*.'
101. *Mine woaroan woallo war.*
'That man has a canoe.'

102. *Mine en liho wurohj kapwwoaw.*
 'That woman has a new skirt.'
103. *Mine rioai jerimwein.*
 'I have brothers.'
104. *Mine nihn woallo jeri.*
 'That man has children.'
105. *Pe minehr noai pukkuk.*
 'I still have those books.'

A possessive sentence of this type has three basic elements: the verb *mine* (or some other existential verb), a possessive noun phrase identifying the possessor, and a noun phrase identifying the thing possessed. The restrictions on the position and definiteness of this last element are the same as those on the topic of an existential sentence. The structure of simple possessive sentences like 99 and 104 might be diagrammed:





8.6.2.1 POSSESSOR SUBJECT SENTENCES

When the possessor in a simple possessive sentence is represented by a **noun** (rather than a possessive suffix, pronoun, etc.), it may appear in subject position (see 12.2) at the beginning of the sentence. For example:

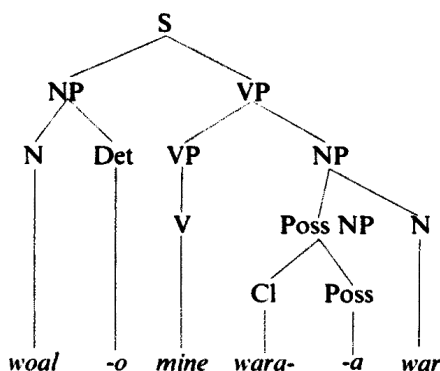
106. *Wallo mine war ah war.*
‘That man has a canoe.’
107. *Liho mine ah wurohj kapwoaw.*
‘That woman has a new skirt.’
108. *John mine ah raujj.*
‘John has pants.’
109. *Jerimweinno mine nah pwohla.*
‘That boy has a ball.’

These sentences are related to:

110. *Mine woaroan wallo war.*
‘That man has a canoe.’
111. *Mine en liho wurohj kapwoaw.*
‘That woman has a new skirt.’
112. *Mine en John raujj.*
‘John has pants.’

113. *Mine nihn jerimweinno pwohla.*
 'That boy has a ball.'

Sentences 106–109 differ from 110–113 in that where the latter have possessive phrases consisting of the construct form of a possessive classifier plus a noun phrase, the former have a third person form of the possessive classifier. That is, *woaroan woallo* 'that man's vehicle' in 110 corresponds to *warah* 'his vehicle' in 106. In the possessor subject sentences 106–109, the noun indicating the possessor appears at the beginning of the sentence, rather than within the possessive noun phrase. The structure of possessor subject sentences can be diagrammed:



The structure of such sentences will be considered again in 12.2.

8.6.2.2 POSSESSIVE VERBS

When the possessed object in a possessive sentence is specific or definite, the verb of that sentence is likely to be one of a set of possessive verbs formed from inalienable nouns (or possessive classifiers) by means of the suffix *-nki*. Compare:

- 114a. *en woallo raujijjo.*
 'that man's pants'
- b. *Woallo anki raujijjo.*
 'That man owns those pants.'
- 115a. *woaroan woallo pohsse.*
 'that man's boat'

- b. *Woallo waranki pohsse.*
'That man owns this boat.'

In possessive sentences with such possessive verbs, the possessor is the subject of the sentence and the thing possessed is the object. The verbs themselves can usually be translated into English by the verb 'to own'. Often, however, the English verbs 'to treat as', 'to use as', or 'to use' are more appropriate.

116. *Ngoah jamanki woallo.*
'I treat that man like a father.'
117. *Ih waranki poappo.*
'He used that board as a vehicle.'
118. *Ngoah nainki nah pinjelle rehnoawe.*
'I am using his pencil today.'

The *-ki* in *-nki* appears to be related to the associative suffix *-ki* (see 6.6.1). As such, it seems to indicate that the 'object' noun is related to the subject in some manner described by the verb; for example, in sentence 116 'as a father' and, in sentence 117, 'as a vehicle'. Consider:

119. *Ngoah pallanki John.*
'John is my opponent.'
120. *Noai mahnno adanki 'Joe'.*
'My bird is named 'Joe'.'

In 119, John is related to the speaker as an opponent. In 120, 'Joe' is related to the speaker's bird as a name. Thus, these possessive verbs might better be termed **associative verbs**. Some examples are:

anki 'to have as a possession', from *ah* 'his thing'
nainki 'to have as a valuable', from *nah* 'his valuable'
kananki 'to have as food', from *kanah* 'his food'
nimanki 'to have as a drink', from *nimah* 'his drink'
waranki 'to have as a vehicle', from *warah* 'his vehicle'
ngidanki 'to have to chew', from *ngidah* 'his chaw'
imwanki 'to have as a shelter', from *imwah* 'his house'

- jamanki* 'to treat as a father', from *jamah* 'his father'
inanki 'to treat as a mother', from *inah* 'his mother'
rianki 'to treat as a sibling', from *riah* 'his sibling'
painki 'to be married to', from *pahioa* 'his spouse'
adanki 'to be named', from *oadoa* 'his name'
pallanki 'to be a counterpart of', from *poalloa* 'his counterpart'
sianki 'to use as an ear decoration', from *siah* 'his ear
 decoration'

8.6.2.3 THE RELATIONAL NOUN *ipah* 'IN HIS POSSESSION'

The possessive constructions we have been discussing so far, either with *mine* or with a possessive verb, express relations like ownership or association. For example:

121. *John mine nah puk.*
 'John has (owns) books.'
122. *Ngoah rianki Bill.*
 'I treat Bill as my brother.'
123. *Ngoah pirin sianki rohssso.*
 'I will use that flower as an ear decoration.'

In these cases, the thing possessed is not necessarily present, or even in the same location as the possessor. In sentence 121, the books we are discussing might be in John's house or in his office, while John is here with us. When we wish to express that the possessor has the object in question with him, the relational noun *ipah* 'near him, in his possession' is used.

- 124a. *Pukko mine ipah.*
 b. *Ih mine pukko ipah.*
 'He has the book with him.'
- 125a. *Mine kandi ipoai.*
 b. *Ngoah mine kandi ipoai.*
 'I have candy with me.'

A definite noun or pronoun may appear in subject position in these sentences, as in 124a and b, and 125b.

8 Directionals and Locative—Possessive Sentences

This same notion may also be expressed by the verb *kol* 'to hold'.

126. *Ih kol nah pukko.*
'He has his book with him.'
127. *Ngoah kol kandi.*
'I'm holding some candy.'

9 Aspect

In English each time we use a verb there are several decisions we have to make about the event being described before we can pick the correct form of the verb. One of the most important decisions we have to make concerns the time of the action—whether it is happening at the present time, or has happened in the past, for example. In using a verb like ‘look for’, we must use a different form in sentence 1a (present time) from the one we use in sentence 1b (past time).

- 1a. I’m looking for him here.
- b. I looked for him yesterday.

If we translate these sentences into Mokilese we get:

- 2a. *Ngoah rapahki ih me.*
- b. *Ngoah rapahki ih aio.*

In the Mokilese sentences 2a and 2b, the form of the verb *rapahki* ‘look for’ is the same in spite of the fact that one sentence describes present time and the other past. Mokilese, therefore, does not demand that we make a decision about the time of the event whenever we use a verb.

While English verbs seem to focus on the time distinction, Mokilese demands that decisions be made about other features of an event. For example, every time we use a Mokilese verb we have to decide whether the verb is merely naming an event or is stating that the event is actually in progress.

- 3a. *Ngoah raprapahki ih me.*
‘I’m looking for him here.’
- b. *Ngoah raprapahki ih aio.*
‘I was looking for him yesterday.’

Sentences 2a and 2b name the action of ‘searching, looking for’, while 3a and 3b state that it actually is/was going on. This distinction can be expressed in English (as indicated by the different translations for *rapahki* ‘looked for’ in 2b, and *rapraphki* ‘was looking for’ in 3b, but more often is not.¹

Here, then we have an example of Mokilese neutralizing (collapsing, not expressing in a distinct way) a distinction that seems to be always made in English—that between present and past tense—and of English neutralizing a distinction that is always made in Mokilese—that between ongoing events and events in which ongoingness is not important.

Mokilese also demands that we express how far an event has gone towards the attainment of its final goal. In the case of the verb *rapahki* ‘to look for’, the final goal is obviously to find the object one is looking for. If that goal has been reached, we must mark that fact in the verb.

- 4a. *Ngoah rapahkihda ih me.*
‘I found him here.’
- b. *Ngoah rapahkihda ih aio.*
‘I found him yesterday.’

In this example, English uses an entirely different verb, ‘to find’, in order to express an idea that is shown in Mokilese merely by adding a suffix. In other cases English expresses a similar idea by means of adverbs like ‘up’.

- 5a. *Ngoah kang raisso.*
‘I ate that rice.’
- b. *Ngoah kangla raisso.*
‘I ate up that rice.’

Sentence 5a does not tell us how much of the rice was eaten, while 5b states that all the rice was eaten, this being the logical goal or conclusion of eating rice.

It is to such characteristics of an event as its ongoingness and goal attainment that we give the term ASPECT. The former, ongoingness, we call PROGRESSIVE ASPECT. It is expressed in Mokilese by the process of REDUPLICATION (see 2.1.5). The latter, goal attainment, we call PERFECTIVE ASPECT. It is normally ex-

pressed in Mokilese by the addition of directional suffixes to the verb. These processes and their use will be discussed in more detail in the sections that follow.

9.1 DENOTATIVE OR ACTION-NAMING VERBS

A verb form that is neither marked as ongoing nor as having reached some level of attainment is called a DENOTATIVE VERB FORM. This is the form of the verb that simply names an activity without saying anything more about it. It is normally the un-reduplicated, un-suffixed form of the verb.

- 6a. *Ih daun makahu.*
'He is filling in that trench.'

as opposed to

- b. *Ih dahdahdaun makahu.*
'He is in the process of filling that trench.'
- c. *Ih daunla makahu.*
'He filled up that trench.'

This action-naming function can be seen more clearly in the case of intransitive verbs and, particularly, intransitive incorporated object constructions:

- 7a. *Ara pwoapwoaud.*
'They are married.'
- b. *Ara pwoapwoaudla.*
'They got married.'

Sentence 7a simply names the state *pwoapwoaud* 'married', while 7b asserts that it was attained (i.e., they weren't married before and now they are)

- 8a. *Wallo doau.*
'That man is climbing.'
- b. *Wallo doahdoahdoau.*
'That man is climbing.'

Sentence 8a again names the activity, 'climbing', while 8b asserts that climbing is actually in progress. Similarly:

- 9a. *Ngoah pirin rik sakai.*
'I will gather stones.'
- b. *Ngoah pirin rikrik sakai.*
'I will be gathering stones.'

In 9a and 9b, the distinction between denotative and progressive verb forms is also apparent in the English translations. These examples also show that aspect is independent of time specification. Both sentences are future; 9a names a future event while 9b asserts that that event will be ongoing at some time in the future.

9.1.1 Reduplicated Denotative Forms

We stated above that the denotative verb form is usually unreduplicated and unsuffixed. There is, however, a large class of verbs whose denotative form must be reduplicated. These verbs have already been summarized in 6.5.4. Examples are:

<i>doaudioau</i>	'to fill'	related to	<i>daun</i>
<i>ejjej</i>	'to husk'	related to	<i>ijir</i>
<i>joaijoai</i>	'to sharpen'	related to	<i>jaim</i>
<i>poaiipoai</i>	'to weave'	related to	<i>pa</i>
<i>kirakir</i>	'to peel'	related to	<i>kiroa</i>
<i>koskos</i>	'to cut'	related to	<i>koso</i>
<i>oppop</i>	'to pull'	related to	<i>oapi</i>

All the verbs of this class are intransitive verbs paired with transitives. It is interesting to note, however, that not all such bi-transitive verbs have reduplicated intransitives. For example:

<i>doau</i>	'to climb'	related to	<i>daur</i>	'to climb for'
<i>poak</i>	'to defecate'	related to	<i>pakad</i>	'to defecate on'
<i>widing</i>	'to be treacherous'	related to	<i>widinge</i>	'to fool'

Moreover, the unreduplicated form of reduplicated denotative intransitives is found in incorporated object constructions.

joai jahr 'to knife sharpen'

<i>poai rohp</i>	'to weave mats'
<i>oap joal</i>	'to pull rope'
<i>kos pis</i>	'to cut pandanus'

It appears that in the verbs in question there is a very special relationship between the verb and its object, so that the simple denotative form of the verb cannot appear unless the object is expressed. I call this class of verbs **object-oriented verbs**. In the case of a verb pair like *doau-daur* 'to climb', the simple intransitive can be used to name the event 'climbing' without reference to the goal of the climbing, but in the case of the pair **joai-jaim* 'to sharpen', the simple intransitive cannot be used to name an event 'sharpening' without reference to a class of objects that are sharpened, like *jahr* 'knife'. The distinction between object-oriented verbs and other verbs lies completely in the kind of event described.

It appears, however, that this distinction has been lost in Mokilese as a true difference in meaning and has left traces of its former importance in the existence of a class of reduplicated denotative intransitives. I have found no evidence that speakers of Mokilese still recognize these two classes of intransitive verbs as being different in meaning. At present, it seems that the difference is completely one of form.

9.2 PROGRESSIVE ASPECT

As pointed out in the preceding sections, a verb inflected for progressive aspect asserts that an action is, was, or will be in progress at a given time.

- 10a. *Ngoah wadwadek pukko akpas.*
'I'm reading that book now.'
- b. *Ngoah wadwadek pukko anjoauo ih japhaldo.*
'I was reading that book when he came back.'
- c. *Ngoah nen wadwadek pukko lakapw.*
'I will be reading that book tomorrow.'

Most verbs inflect for progressive aspect by reduplicating the first syllable (usually CVC) of the verb.

<i>wadek</i>	'to read, count'	<i>wadwadek</i>	'to be reading'
<i>doapwoa</i>	'to pull'	<i>doapwdoapwoa</i>	'to be pulling'
<i>piload</i>	'to pick breadfruit'	<i>pilpiload</i>	'to be picking breadfruit'

If the first syllable of the verb contains a long vowel, that vowel (and a preceding consonant if there is one) is reduplicated.

<i>kohkoa</i>	'to grind coconut'	<i>kohkohkoa</i>	'to be grinding coconut'
<i>soahroak</i>	'torn'	<i>soahsoahroak</i>	'to be tearing'

A verb of the form (C)VV-, where the two vowels are different, reduplicates the first syllable ((C)V-) to form the progressive. In such cases, however, the reduplicated vowel becomes long; for example, *diar* 'to find' *dihdiar*. The same pattern holds if the second vowel is a glide. Thus, *pouje* 'to connect' *pohpouje*, *dauli* 'to pass by' *dahdauli*.²

Some speakers allow CVG reduplication in such words, *audo* 'to fill' *auaudo* or *ahaudo*; and some allow (C)Vh-reduplication with all verbs, *onop* 'to prepare' *onnonop* or *ohonop*, *nikid* 'to save' *niknikid* or *nihnikid*. All speakers do not seem to agree on the correctness of such extensions, however.

9.2.1 Reduplication and Semantic Classes

The progressive reduplication, as we have pointed out several times above, is used to mark ongoing activity. This is true of a wide range of verbs: transitive and intransitive active verbs and stative verbs. Some examples of progressive active verbs are:

11. *Liho doddoli wussok.*
'That woman is picking those bananas.'
12. *Ngoah pokpoki rioaie.*
'I am beating my brother.'
13. *Kamai allalu raun.*
'We are walking around.'
14. *Amwda ih ke urruruhr?*
'Why is she laughing?'

A progressive reduplication for stative verbs often carries a somewhat different meaning, to be treated in section 9.2.3. In some other cases, the progressive reduplication for statives carries a meaning that seems related to ongoing action but is difficult for English speakers to grasp. For example.

- 15a. *Ngoah pwudo.*
'I feel sweaty.'
- b. *Ngoah pwudpwudo.*
'I am sweating.'
- 16a. *Oai ohlahu moadoak.*
'My wound hurts.'
- b. *Oai ohlahu moadmoadoak.*
'My wound is hurting (is acting up).'

The meaning of the progressive reduplication of statives is often a total mystery to me. One such case is:

- 17a. *Pwukke soang.*
'This knot is tight.'
- b. *Pwukke soangsoang.*
'This knot is tight.'

I am not yet able to characterize the difference between 17a and 17b.

9.2.2 Semelfactive Verbs

In one class of verbs, the denotative verb indicates a single occurrence of an action, and the progressive reduplication, multiple occurrences.

- 18a. *Ih roar.*
'He shuddered (a single shudder).'
- b. *Ih roar roar.*
'He shook (more than one shudder).'
- 19a. *Pwohlahu kak.*

'That ball bounced (one bounce).'

- b. *Pwohlahu kakkak.*
'The ball bounced.'

With these verbs, which name a single sudden action, the on-goingness expressed by the progressive form is interpreted to mean multiple occurrences of that action. The term SEMELFACTIVE has been used to describe such verbs.

9.2.3 Triplication

Monosyllabic verbs (but not monosyllabic forms used in incorporated object constructions) normally form their progressive by **triplication**—reduplication of the appropriate segments of the verb in question twice. Examples are:

Denotative		Progressive
<i>kang</i>	'to eat'	<i>kangkangkang</i>
<i>doau</i>	'to climb'	<i>doaudoau</i>
<i>soal</i>	'black'	<i>soalsoal</i>
<i>daun</i>	'to fill'	<i>dahdahdaun</i>
<i>pwa</i>	'to say'	<i>pwahpwahpwa</i>
<i>koaul</i>	'to sing'	<i>koahkoahkoaul</i>

As these examples show, triplication applies to both transitive and intransitive, active and stative verbs. It involves both #CVC- and #CVh-reduplication. It is not completely clear why these verbs must triplicate. A probable answer is that if simple reduplicated forms for these verbs did exist, they would be taken to be derived stative verbs (see 11.7.2). This theory is likely since other verbs of this type have a reduplicated form with a stative meaning.

- 20a. *jahk* 'bend'
jahjahk 'able to bend'
jahjahjahk 'bending back and forth'
- b. *moair* 'sleep'
limoahmoair 'usually sleeping'
moahmoahmoair 'sleeping'

What is not clear in this analysis is why stative verbs, such as *soal* 'black', must triplicate. One possibility is to preserve the similarity between the progressive forms of all monosyllabic verbs. Since many statives are reduplicated to start with; for example, *siksik* 'small', and *pwilpwil* 'sticky', we would expect them to have triplicated progressives; thus, *siksiksik*, *pwilpwilpwil*. Another possibility is that the triplications of many stative verbs are not, in fact, **progressive**, but represent another aspect, the **continuative** (see 9.3). Some statives (like *soang* 'tight') appear to distinguish three non-perfect aspects—denotative, progressive, and continuative—while others, like *soal*, distinguish only two, the denotative and the continuative. These verbs, then, for some reason lack a form for the progressive aspect. We shall return to the subject of continuative aspect in 9.3.

A major set of exceptions to the rule of triplication for monosyllables are the semelfactive verbs discussed above. These verbs seem to distinguish clearly between a denotative (single occurrence), a progressive (multiple occurrences) and a continuative (see below) aspect; thus, *kak* 'jump', *kakkak* 'bounce' and *kak kakkak* 'keep bouncing'.

9.3 CONTINUATIVE ASPECT

As we mentioned in 9.2, the reduplicated forms of many stative verbs are associated with the continuation of or persistence of the state. This function may be termed CONTINUATIVE ASPECT.

21. *Soalsoalsoalda mijen loangge.*
'The sky got blacker and blacker.'
22. *Pahrangkije pe pwespwespwes.*
'This piece of iron is still warm.'

Although usually a feature of statives, other kinds of verbs can have continuative forms. They are commonly distinguished from progressive aspect in incorporated object constructions like:

- 23a. *Ngoah nim pen.*
'I am drinking coconut.'

- b. *Ngoah nimnim pen.*
'I am drinking coconut.'
- c. *Ngoah nimnimnim pen.*
'I continue to drink coconut.'
- 24a. *Kamai rik sakai.*
'We are gathering stones.'
- b. *Kamai rikrik sakai.*
'We are gathering stones.'
- c. *Kamai rikrikrik sakai.*
'We continue to gather stones.'

Other types of verbs normally do not distinguish continuative from progressive aspect, though some speakers will regularly triplicate such verbs when used in obviously continuative contexts.

25. *Arai loakloakloakjiddoarah lel inrehn.*
'They kept on fishing till morning.'
26. *Ngoah pe mijmijmijikkoar ih.*
'I'm still afraid of him.'

This triplication does not appear to be necessary in these cases.

Verbs that regularly distinguish continuative aspect are:

	Semelfactive	Statives	Incorporated Object	Others
Denot.	<i>kak</i>	<i>soal</i>	<i>nim pen</i>	<i>poadok</i>
Prog.	<i>kakkak</i>	---	<i>nimnim pen</i>	<i>poadpoadok</i>
Cont.	<i>kakkakkak</i>	<i>soalsoal</i>	<i>nimnimnim pen</i>	<i>poadpoadpoadok</i>

9.4 PERFECTIVE ASPECT

Both the form and function of the PERFECTIVE ASPECT in Mokilese are still poorly understood. For the most part it seems to be used when the unfolding of an event or state or the relation of an event to its goal is being emphasized. Consequently, it is used to express the fact that an event or state has come about and is now in effect, or that an event has reached or is on its way

towards reaching some kind of conclusion. Perfective verbs are concerned for the most part with the result of an action or with a change of state.

27. *Ih lioasla.*
'He got angry.'
28. *Arai kangla raisso.*
'They ate up that rice.'
29. *Ngoah loakjidihda mwumw koalikmen.*
'I caught a big fish.'

Example 27 describes a change of state, from 'not angry' to 'angry', and examples 28 and 29 describe the results or conclusions of two actions. In one case, 'eating' ended with the end of the rice and, in the other, 'catching' ended with the final landing of the fish.

Some speakers of English may be tempted to equate perfective aspect with the past tense in English. While it is true that perfective verbs often describe actions that took place in the past (since they emphasize the completion, conclusion, or result of an action), they may also refer to other times. Consider 30 and 31 (corresponding to 28 and 29):

30. *Arai pirin kangla raisso.*
'They will eat up the rice.'
31. *Ngoah pirin loakjidihda mwumw koalikmen.*
'I will catch a big fish.'

The verbs in these examples look forward to the conclusion of the events in question, but since these events have not yet taken place, the verbs are also future. Perfective aspect refers not to the time of an event but to its completion or result, whether or not the event has yet taken place.

As should be obvious from the examples given above, perfective aspect is expressed in Mokilese by means of the **directional suffixes**. Which suffix is used depends in part on the verb and in part on the way in which the verb is being used. Many verbs can have several different perfective forms, each using a

different suffix and varying somewhat in meaning. This area of Mokilese grammar is yet to be explored in depth, but some examples will be given in 9.4.4.

9.4.1 Perfective and Imperfective

Verb forms that are not inflected for perfect aspect are called imperfective. The denotative verb forms that merely name an action or state are therefore imperfective, since they do not refer to the conclusion or result of an event. Progressive verbs are, for the most part, also imperfective since they talk about an ongoing event, again without reference to its result or conclusion.³

To understand the function of perfective verb forms it might be wise to compare some perfective and imperfective forms of the same verb to exemplify the difference in meaning between them.

9.4.1.1 CONNOTATIVE VERBS

In a large class of verbs, the imperfective is used to describe the events leading up to a critical point at which the event can be considered completed. This critical point usually involves a sudden change of state or turn of events. For example:

- 32a. *Ngoah rapahki woalmeno wija ohroj.*
 'I looked for that man everywhere.'
- b. *Ngoah rapahkihda woalmeno.*
 'I found that man.'

Here, the imperfective verb *rapahki* 'look for' describes the activity leading up to the sudden critical point at which the man we are discussing was found. This completion or logical result of the action of 'looking for' is expressed by the perfective verb *rapahkihda* 'find'. Other examples are:

- 33a. *Kisahn loakjidi mwumwwo.*
 'Let's fish for that fish.' or 'Let's try to catch that fish.'
- b. *Kisa loakjidihda mwumwwo.*
 'We caught that fish.'

34a. *Ngoah poahj noai pehnno.*

'I'm feeling around for my pen.' or 'I'm trying to reach my pen.'

Ngoah poahjda noai pehnno.

b.

'I got hold of my pen.'

35a. *Ih sipis joallo.*

'He's tying (trying to tie) that rope.'

Ih sipisdi joallo.

b.

'He tied that rope.'

With verbs of this type, the meaning of the Mokilese imperfective can often be expressed in English by using the verb 'try to'. This is reflected in the translation for examples 33–35. Note also that example 32a above could be translated 'I tried to find that man everywhere'. In some way, then, 'look for' is equivalent to 'try to find'. Verbs of this type, in which the imperfective can be seen as describing attempts leading up to the final successful result, expressed by the perfective, are often called CONNOTATIVE VERBS.

9.4.1.2 VERBS OF EMOTION AND DECLARATION

Verbs like *inoau* 'to agree', *pakair* 'to inform', *ngud* 'to whisper', *peren* 'to be happy', *pwuriamwei* 'to be surprised', *mehk* 'to be embarrassed', express either the act of making a statement about something or an emotional reaction towards some state of affairs. They show a rather different contrast between imperfective and perfective forms than that of the connotative verbs just described. The imperfective of such verbs is used to describe the **event** of making a statement or declaration or to emphasize the emotional state itself, while the perfective is used to emphasize the **content** of the declaration or the circumstances causing or lying behind the emotional state. This difference should be clear, at least to speakers of Mokilese, from the following examples:

36a. *Ngoah inoauoang koawoa.*

'I made an agreement with you.'

Ngoah inoauki pwa ngoah pirin pwili.

b.

'I agree to go.'

c. *Ngoah inoaukihdi pwa ngoah pirin pwili.*

'I agreed to go.'

37a. *Ih pakairkioang kisai ohroj pwa jippo ne kijoudo.*

'He is making an announcement to us all that the ship has already arrived.'

Ih pakairkihda pwa jippo ne kijoudo.

b.

'He announced that the ship had arrived.'

38a. *Ih lehmsikki pwa ih koapwoahpwoa.*

'He is boasting that he's rich.'

Ih lehmsikkihla pwa ih koapwoahpwoa.

b.

'He boasted that he was rich.'

39a. *Ngoah pwuriamwei pwa dir mwumwwok ih loakjidihda.*

'I'm surprised because he caught a lot of fish.'

Ngoah pwuriamweikihla pwa dir mwumwwok ih

b. *loakjidihda.*

'I'm surprised that he caught a lot of fish.'

9.4.1.3 MEANS-MARKED VERBS OF MOTION

All verbs of motion except those belonging to the simple *indoa*, *inla* set suggest the means by which the motion is carried out. Thus, *alu* 'walk' implies use of the feet, *jei* 'paddle, go by boat' implies travel in a vehicle on water, *kijou* 'travel, run' implies either use of a vehicle or strenuous use of the legs and feet, *sang* 'fly' implies either wings or an airborne vehicle. Such verbs can be called **means-marked verbs of motion**. They are of interest here because they can be used both with and without directional suffixes. With directional suffixes they emphasize the goal of the motion (the place reached); when used

without directional suffixes they emphasize either the activity of changing location or the means of locomotion (walking as opposed to going by canoe, for example).

- 40a. *Ngoah jeidihla Mwandohn.*
 'I paddled to Mwandohn.'
- b. *Ngoah jeioang Mwandohn.*
 'I am paddling in the direction of Mwandohn.'
- c. *Ngoah jeijejei.*
 'I kept paddling.'
- 41a. *Jippo pirin kijoula Pohnpei.*
 'The ship is going to go to Ponape.'
- b. *Jippo kijekjouoang Pohnpei.*
 'That ship is on its way to Ponape.'
- 42a. *Kisain aluhdihla Jokojkoa.*
 'Let's walk down to Jokojkoa.'
- b. *Kamai pwen allaluhjili.*
 'We're just walking around.'

The a) sentences in the examples above show emphasis on the goal or result of some motion activity, that is, reaching a new location, while the b) and c) sentences emphasize the activity itself. In these sentences the directional suffixes are being used in two ways: first, in the purely directional sense typical of verbs of motion and, second, in an aspectual sense to mark emphasis on the completion (goal) of the activity expressed by the verb of motion. In examples like these and, I am sure, in many more that could be cited, it is very difficult to separate the aspectual and directional functions of the directional suffixes. This fact suggests that, at some level at least, the two functions are the same—perhaps to be summarized as **pointing towards a goal** in both a directional and an aspectual sense.

9.4.1.4 ASPECT IN TIME EXPRESSIONS

Certain time expressions are interpreted differently depending on the aspect of the verb with which they are used. Consider:

- 43a. *Ngoah pihnihki sehpyllo minis rieijek.*
'I painted the table for twenty minutes.'
- b. *Ngoah pihnihkihla sehpyllo minis rieijek.*
'I painted the table in twenty minutes.'
- 44a. *Ngoah kaujki ih awahioaw.*
'I chased him for an hour.'
- b. *Ngoah kaujihdi ih awahioaw.*
'I caught up to him in an hour.'

The time expressions in 43a and 44a (*-ki ... minis rieijek* and *-ki... awahioaw*) express the duration of the activity named by the imperfective verbs. In 43b and 44b the same time expressions describe the amount of time that passed until the goal of the activity described by the perfective verb was reached. This difference between **duration** and **lapsed time** is expressed in English by the use of the prepositions 'for' and 'in'. In Mokilese, the same difference results from the change from imperfective to perfective aspect.

9.4.2 Choice of Perfective Suffix

The choice of perfective suffix appears to be determined by the compatibility between a general sense carried by each suffix and the meaning of a given verb. That is, if the activity named by a verb can be thought of in terms of some feature of meaning carried in the suffix, then that suffix can be used with the verb in question. This, I hope, will become clear as we give examples of the use of each suffix.

Some verbs are commonly used with only one suffix while others take a variety of suffixes. In some cases the suffixes change the meaning of the verb; in others, the choice of suffix is determined by the context in which the verb appears. The whole issue of the meaning of aspectual suffixes has not yet been studied in great detail. Consequently, I can present here only the beginnings of an analysis of this part of the Mokilese aspect system.

9.4.3 Suffixes with Transitive Verbs

9.4.3.1 THE SUFFIX *-da*

The basic meaning of the suffix *-da* seems to be that there has been progress towards the attainment of the goal of the action in question. This meaning can be seen in perfective forms like:

<i>audohda</i>	'to work towards filling'
<i>ijirda</i>	'to have begun husking'
<i>jaunda</i>	'to have been feeding the fire'
<i>padahkihda</i>	'learned'
<i>pidda</i>	'to turn on, turn up'
<i>pwileida</i>	'to cut grooves in'

With other verbs this 'progressive' sense of *-da* seems to suggest creating, bringing into being or bringing to light.

<i>daurda</i>	'to make a net'
<i>diarda</i>	'to find'
<i>dupukda</i>	'to buy'
<i>irda</i>	'to string (a lei)'
<i>piroakihda</i>	'to make braids'
<i>lemehda</i>	'to recall, come to mind'
<i>onopda</i>	'to prepare, to make ready'
<i>poahjda</i>	'to reach'

Another related sense of *-da* is that of random or scattered activity, perhaps in the sense of moving towards the attainment of some complete goal:

<i>doakoahda</i>	'to stab repeatedly'
<i>poadokda</i>	'to plant randomly'
<i>pihnihda</i>	'to daub on paint'
<i>pwukulda</i>	'to make random holes in'

In other cases, *-da* seems to be used because the action involves upward motion:

<i>pangehda</i>	'fished with a pole'
<i>soangkihda</i>	'to hang up'
<i>jarekda</i>	'to pull up'
<i>roakihda</i>	'to serve up'
<i>loakjidihda</i>	'to fish up'

Further research may show that verbs like these can be related in meaning to the other senses of *-da* described above.

9.4.3.2 THE SUFFIX *-di*

The basic meaning of *-di* seems to be that the activity in question is directed towards a goal that limits or constrains its object, often detracting from it, removing it from its environment or fixing its location. In this way, it is used with verbs of *catching, holding, killing* and so forth. Examples are:

<i>pwilijdi</i>	'to fasten with glue'
<i>kihdi</i>	'to put down, to leave'
<i>koldi</i>	'to hold'
<i>jipoardi</i>	'to catch'
<i>kojukdi</i>	'to shoot, to kill'
<i>ariarihdi</i>	'to hook'
<i>daurdi</i>	'to climb, to pick'
<i>daundi</i>	'to fill in (a hole)'
<i>widingehdi</i>	'to fool'
<i>inewihdi</i>	'to forbid'
<i>wiliandi</i>	'to change position'
<i>widekihdi</i>	'to spill out'
<i>wadekdi</i>	'to count' (perhaps counting is taken to be some form of limiting)
<i>poadokdi</i>	'to plant, set in the ground'

As will *-da*, some uses of *-di* seem to be for the most part directional:

<i>kurujdi</i>	'to grind down' (take apart by grinding)
<i>wijdi</i>	'to pull down'
<i>daulihdi</i>	'to pass on the way down'
<i>irdi</i>	'to push down on while stringing'

This last example is a case where it is difficult to tell if the use of *-di* is conditioned by the downward motion inherent in the action or by the sense of restraint or pressure put upon the objects being strung. In examples like these, we can perhaps find the directional source of this kind of aspectual meaning.

9.4.3.3 THE SUFFIX -LA

The basic meaning of *-la* is that an activity has been brought to a conclusion either by exhaustion of the object or completion of the task. It often suggests that a period of time has elapsed during which movement has taken place or distance covered.

<i>daulihla</i>	'to go past, surpass'
<i>doapwoahla</i>	'to pull away'
<i>kangla</i>	'to eat up'
<i>jaimla</i>	'to have sharpened'
<i>kiroahla</i>	'to peel off'
<i>nikidla</i>	'to put aside, to save'
<i>oarihla</i>	'to poke through'
<i>poujehla</i>	'to connect up'
<i>pwilihla</i>	'to join, take sides'
<i>wadekla</i> ⁴	'to read, read through'

9.4.4 Perfective Paradigms

The meaning differences inherent in the use of different suffixes can perhaps best be described by showing the changes in meaning produced by using different suffixes with the same verb. Consider:

45. *doli* 'to pick'
 a. *Ngoah dolihda epwi rohssok.*
 'I gathered some flowers.'

The use of *-da* here might reflect the upward motion of gathering, but more likely suggests that the flowers are going to be put to some use. The event thus represents progress towards some ultimate goal.

- b. *Ngoah dolihla rohssok.*
 'I picked those flowers.'

This sentence suggests that all the flowers in a particular place have been exhausted, or that the picking of a predetermined number of flowers has been completed.

- c. *Ngoah dolihdi rohssok.*
 'I plucked that flower.'

This suggests the removal of the flower from its natural location.

- d. *Ngoah dolihjang wusso.* (see 9.4.5)
'I picked that banana.'
- e. *Ngoah dolihpijoang wusso.* (see 9.4.5)
'I pulled that banana apart.'

This suffix emphasizes that the result of the action is the disruption or breaking of the banana.

- 46. *doakoa* 'to stab'
- a. *Ih doakoahda nehn jeddo.*
'He speared around in the water.'

This example was discussed in 9.4.3.1.

- b. *Doaksoahu doakoahla ngoahi.*
'The doctor gave me an injection.'

This use of *-la* seems to emphasize the penetration of the skin by a needle.

- c. *Ih doakoahkihdi ngoahi jahrpas.*
'He stabbed me with a knife.'

The use of *-di* emphasizes the injurious, possibly fatal effects of the action.

- 47. *dupuk* 'to pay'
- a. *Ngoah nimen dupukda injinnoaw.*
'I want to buy a motor.'

The use of *-da* seems to suggest that the object purchased is, in some sense, brought into existence by the buyer through the act of buying.

- b. *Ngoah kapwehse dupukla imwoai umwwo.*
'I just paid off (finished paying for) my house.'

This sentence implies that the paying is finished, either the whole sum was paid at once or in installments.

- c. *Ngoah pwen dupukdioar doari.*
'I only put a down payment on it and that's all.'

The use of *-di* suggests that some money changed hands to prevent the sale of the article in question to someone else.

48. *pid* 'to wind'
a. *Ngoah pidda lahmmo.*
'I turned on (up) the lamp.'

With *-da* this verb implies that light is being made or that some activity (like turning on a machine) is being started.

- b. *Ngoah pididi lahmmo.*
'I turned the lamp down (off).'

With *-di*, the verb implies that the activity is being diminished or stopped.

- c. *Ngoah pidla joallo.*
'I wound that rope.'

With *-la*, the verb implies that a number of turns are necessary to wind the object in question.

49. *poki* 'to hit'
a. *Ih pokihdi ngoahi.*
'He hit me.'

The suffix *-di* suggests the injurious effect of a blow.

- b. *Ih pokihla ngoahi.*
'He beat me up.'

The use of *-la* suggests an exaggeration of the action, probably involving a severe or prolonged beating.

50. *poakok* 'to plant'
a. *Ih poadokdi suhkoahu.*
'He planted that tree.'

As suggested earlier, this use of *-di* implies the fixing of the location of the tree.

- b. *Ih poadokda suhkoahk.*
 'He planted those trees.'

This sentence suggests that the job of planting is not finished, either because some trees haven't been planted or because they were planted for no purpose or in no obvious arrangement.

- c. *Ih poadokla wijahi.*
 'He planted over this place.'

The use of *-la* suggests that the goal of the planting, that of filling a pre-determined area with trees, has been reached.

51. *pwilei* 'to cut'
 a. *Ih pwileida suhkoahu.*
 'He cut grooves in that wood.'

This use of *-da* again suggests randomness or incompleteness of the task.

- b. *Ih pwileila suhkoahu.*
 'He cut through that wood.'

This example suggests the penetration of the wood.

- c. *Ih pwileidi suhkoahu.*
 'He cut up that wood.'

This verb suggests that the original whole piece has been in some sense deformed.

9.4.5 Other Suffixes in the Perfective

While *-da*, *-di*, and *-la* are the most commonly used aspect suffixes, other suffixes can be used in this way. For example, *-pijoang* is used to suggest that the result of an action is the breaking up of something previously whole.

<i>pwalangpijoang</i>	'to break apart'
<i>dupukpijoang</i>	'to buy and share'
<i>nehkpijoang</i>	'to divide'
<i>wilikpijoang</i>	'to open (something with a lid or cover)'

lukumpijoang 'to unfold'

-pene suggests that something becomes or is used as a whole.

dupukpene 'to buy communally'

lukumpene 'to fold in half'

sipispene 'to tie together'

pwihnpene 'to form a team'

Suffixes like *-do* 'towards the speaker' and *-we* 'towards the hearer' are used when an activity is seen as directed towards or benefiting one of the participants in a conversation. This use is particularly common in imperatives.

52. *Doapwoahdo sakaio.*
'Pull that rock here.'

53. *Wijwe!*
'Pull it for yourself.'

54. *Peiddo!*
'Throw it (to me)'

55. *Dupukwehng ih!*
'Pay it to him.'

Finally, the suffix *-jang* 'from', as was suggested in one of our earlier examples, is used to emphasize the source of the object of an event.

56. *Ih dolihjang wehn suhkoahu ohroj.*
'He picked all the fruit from that tree.'

9.4.6 Suffixes with Intransitive Verbs

9.4.6.1 BI-TRANSITIVE VERBS

The intransitive member of a bi-transitive pair (see 6.5.1) selects perfective suffixes in different ways depending on whether the verb is meant to describe the result of an action or the action itself. In the former case it is likely that the subject of

the sentence will be the object acted upon; in the latter case the subject is likely to be the agent. Some examples of resultative intransitives of the first type are:

57. *Woallo diarekda.*
'That man has been found.'
58. *Ngoah pirin dokla rehnnoawe.*
'I will get an injection today.'
59. *Jahrro ne jaimekla.*
'That knife has already been sharpened.'

Some examples of active intransitives of the second type are:

60. *Ngoah ne doaudioaula.*
'I've already finished filling.' (as of holes)
61. *Jeriho dok mwumwda.*
'That child just started spear fishing.'
62. *Ngoah oakoaroak jerihla.*
'I'm finished baby sitting.'

Intransitive verbs appearing in resultative constructions (with the affected object as subject) seem to select perfective suffixes in exactly the same manner as the corresponding transitive verbs, in accordance with the character and result of the action performed on the object.

- 63a. *Rahu sipwpijoang.*
'That branch has been snapped.'

corresponding to

- b. *Ih sipwangpijoang rahu.*
'He broke that branch in two.'
- 64a. *Raisso dopdopda.*
'That rice has been bought.'
- b. *Ih dupukda raisso.*
'He bought that rice.'

- 65a. *Lahmmo ne pidpidi.*
'The lamp has already been turned down.'
- b. *Ngoah pirin pididi lahmmo.*
'I'm going to turn down the lamp.'

Intransitive verbs (without a specified agent) that describe the outcome of some action, as in these examples, select the same suffixes, as do the corresponding transitive verbs.

The choice of perfective suffixes in active intransitive constructions has barely been investigated. It seems to rest on how far the action has progressed towards termination, rather than on the result of the action. If the action has just begun, or is being undertaken for the first time, the suffix *-da* is normally used.

66. *Ngoah oakoaroak jerihda.*
'I started baby sitting (for the first time).'

If the action is terminated, particularly after a period of time has passed, the suffix *-la* seems common.

67. *Ngoah ne parai mwumwla.*
'I finished frying fish.'

It appears that many intransitive verbs do not tolerate an agentive interpretation in their perfective forms. Often, if there is such an interpretation, the suffixes get a directional meaning.

68. *Ih dok mwumwdihla.*
'He went down there spear fishing.'
69. *Ngoah irrekla.*
'I went away stringing.' (as of a lei)

Here, the use of these suffixes seems to be creating a set of verbs of motion. This is one aspect of Mokilese grammar that requires much more investigation.

9.4.6.2 STATIVE VERBS

The principles for the selection of perfective suffixes with stative verbs are essentially the same as for active verbs. Movement towards a new state is expressed by the suffix *-da*. With stative verbs a *-da* perfective is often translated into English with the word *become* or *get*. Examples are:

<i>dipwdipwda</i>	'getting overgrown'
<i>akmaida</i>	'becoming argumentative'
<i>kopouda</i>	'getting cold'
<i>mwelingda</i>	'getting spoiled'
<i>rojda</i>	'becoming empty'

This particular use of the suffix *-da* is often called **inchoative aspect**, from a Latin word meaning 'to begin'.

With some other statives, usually signifying states that cannot be entered gradually but involve more or less sudden change, *-da* indicates this change of state. This interpretation is true for diseases and other similar physical conditions, for example:

<i>apsasda</i>	'got an abcess'
<i>johmwehuda</i>	'got sick'
<i>arda</i>	'ran aground'
<i>lomwda</i>	'got soaked'
<i>malauda</i>	'became happy'

The suffix *-di*, as with transitive verbs, is used to indicate a change that is seen as decay, constraint or removal from natural environment or previous location.

<i>mehdi</i>	'dead'
<i>inepwdi</i>	'forbidden'
<i>mwosmwosdi</i>	'became too short'
<i>rojdi</i>	'emptied'
<i>dikoankoandi</i>	'gone soft (too soft)'
<i>doarihdi</i>	'held up, stopped (for now)'
<i>doahngdi</i>	'stopped growing'

The suffix *-la* indicates that a new state has been attained, often after a period of change. It carries neither the positive, creative sense of *-da* (see 9.4.3.1) nor the negative sense of *-di*.

<i>doapwla</i>	'got calm'
<i>diroapwla</i>	'became busy'
<i>mengla</i>	'turned brown (of leaves)'
<i>mwehula</i>	'got better'
<i>mwosmwosla</i>	'became short'
<i>pwungla</i>	'act correctly, become correct'

With verbs of sudden change of state taking *-da*, the suffix *-la* can be used to mean that the state is no longer in force.

<i>johmwehula</i>	'was sick, completely sick'
<i>lojla</i>	'had a bleeding nose'

With verbs expressing permanent conditions or qualities (those that cannot easily be thought of as being gradual) the suffix *-la* has an extreme sense. It can be translated into English as 'too' or 'more'.

<i>dohla</i>	'too far'
<i>inihepla</i>	'covered in spots'
<i>domwla</i>	'balding than before'
<i>adpwalla</i>	'too impatient'
<i>daidla</i>	'jammed full'
<i>kidalla</i>	'finally found out' (as opposed to <i>kidalda</i> 'came to know')
<i>minehla</i>	'moved' (as opposed to <i>minehda</i> 'came to be in a place')

As with transitive verbs, then, the suffix *-la* indicates finality, in the sense of bringing to an end (after some time has passed), or reaching a logical (often extreme) result. This, of course, is only an approximation of its meaning and will explain its use in many, but not all cases. More work is required before the selection of perfective suffixes is fully understood.

9.4.6.3 INTRANSITIVE ACTIVE VERBS

The selection of perfective suffixes for intransitive active verbs parallels what has been said about transitive and stative verbs. At this point I will offer only a few examples.⁵

du 'to dive'

duhdi 'to dive down', a directional use of the perfective

suffix *-di*.

duhla 'to drown', put underwater', an extreme use of *-la*

mohng 'to breathe'

mohngda 'to inhale, bring in air', more or less the progressive, creative sense of *-da*.

mohngdi 'to exhale, expel air', more or less the removal-from-environment sense of *-di*.

kuj 'to flow'

kujda 'to bubble up, begin to flow'

kujla 'to overflow, to flow away'

kujdi 'to flow down, run out (of a container)'

With this, and many other verbs, it is difficult to separate the directional and non-directional meaning of the suffixes

koaul 'to sing'

koaulda 'to begin singing'

koaul la 'to have finished singing'

At the present state of our investigations into the Mokilese perfective aspect system, no more systematic conclusions than those discussed above can be made.

10 Complex Sentences

10.1 THE SIMPLE SENTENCE—A REVIEW

In section 6.1 we discussed the structure of the simple sentence. We pointed out that simple sentences usually have two parts—the **subject** and the **predicate**. The subject gives us the topic of the sentence and the predicate tells us something about it. In:

1. *Wallo ne aluhla.*
'That man has left already.'

wallo 'that man' is the subject and the predicate is *ne aluhla* 'has left already'. In:

2. *Joangoan mahnno kin moair in kohn ni.*
'That type of bird usually sleeps in coconut trees.'

the subject is *joangoan mahnno* 'that type of bird' and the predicate is *kin moair in kohn ni* 'usually sleeps in coconut trees.'

The subject of a simple sentence is usually a noun phrase (see 4.3.2) consisting of a head noun and a number of optional elements—attributes, numerals, determiners, possessive phrases.¹ The subject noun phrase of example 1 above consists of a head noun *wal* 'man' and a determiner *-o* 'that'; that of example 2, a head noun *mahn* 'animal', a possessive phrase *joangoan* 'type of' and a determiner *-o* 'that'.

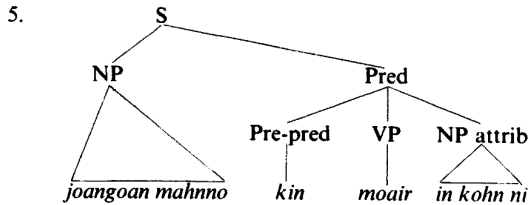
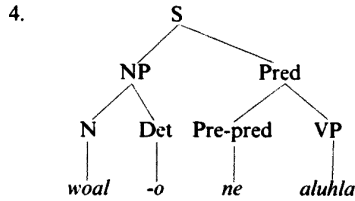
The internal structure of predicates was described in chapters 6 and 7. In chapter 6 we noted that the central element of a predicate is either noun phrase, as in the following example.

3. *Johnpadahkwa mihn waimen.*
'The teacher is an American.'

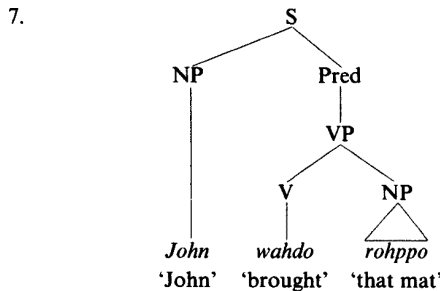
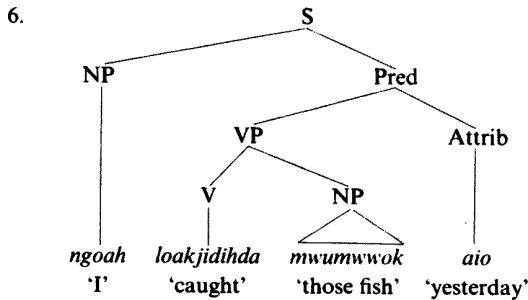
where the subject is the noun phrase *johnpadahkwa* 'the teacher' and the predicate is the noun phrase *mihn waimen* 'an American', or a verb phrase, as in examples 1 and 2 above.

10 Complex Sentences

Predicates can also contain other elements; for example, attributive phrases or the pre-predicates and modals discussed in chapter 7. The central element of a verb phrase is, of course, the verb. A verb phrase containing an intransitive verb usually contains no other elements. This is true of examples 1 and 2 above, as can be seen in the tree diagrams 4 and 5.



Verb phrases with transitive verbs usually contain a noun phrase object of the verb, as in:

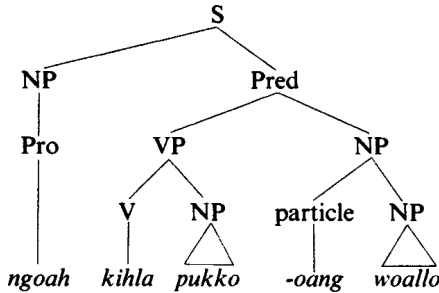


In sentence 6, the verb phrase consists of the verb *loakjidihda* 'fished' and the object noun phrase *mwumwwok* 'those fish'; in 7 it consists of the verb *wahdo* 'brought' and the object noun phrase *rohppo* 'that mat'.

In addition to subject and object it is possible to include other noun phrases (expressing instrument or goal, for example) in a simple sentence. In most cases such noun phrases are predicate attributes rather than parts of the verb phrase. Thus:

- 8a. *Ngoah kihlahng woallo pukko.*
- b. *Ngoah kihla pukko oang woallo.*
'I took the book to the man.'

c.



The goal noun phrase *oang woallo* 'to the man' is usually moved inside the verb phrase, as in 8a, but can stand outside it, as in 8b.

10.2 COMPLEX SENTENCES—A DEFINITION

In the preceding section we reviewed some of the characteristics of simple sentences, in particular the fact that they can contain a large number of noun phrases, each having a different function in the sentence. On the other hand, each of the simple sentences considered contained one and only one predicate. It is this characteristic that differentiates simple sentences from complex sentences. A simple sentence is one that contains only one predicate. A complex sentence contains more than one predicate. The sections that follow discuss types of complex sen-

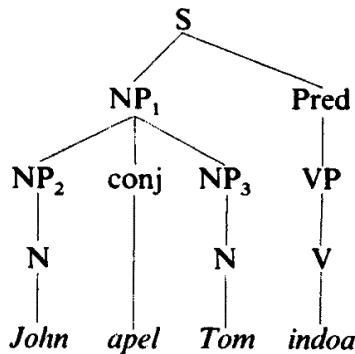
tences—coordinate constructions, implicational constructions, background clauses², relative clauses, attributive clauses, and complement clauses.

10.3 COORDINATION

It is possible to combine sentences 9a and 9b into 9c because both *John* in 9a and *Tom* in 9b stand in the same relation to the verb *indoa* 'came'. They are both NP subjects.

- 9a. *John indoa.*
'John came.'
- b. *Tom indoa.*
'Tom came.'
- c. *John apel Tom indoa.*
'John and Tom came.'

The process of joining constructions of the same type and function is called COORDINATION. Thus, 9c is an example of the coordination of noun phrase subjects. It may be diagrammed:



The noun phrase subject of 9c has two parts, NP₂ and NP₃, both of which are noun phrases. The parts of a coordinate construction like NP₁ are said to be **conjoined**, and the morpheme that joins them (in this case *apel* 'and, in addition') is called a **coordinate conjunction**.

Any two constructions of the same type and function can be conjoined.

10. *Arai koaul apel kahlek rehnno ohroj.*
'They sang and danced all day.'
11. *Ngoah lopworla likkoauok apel inimla mwingehu.*
'I washed the clothes and cooked the food.'
12. *Epwi jerihok padahki insing, a epwi wadwad puk.*
'Some of the children are learning to write, and some are reading books.'

Example 10 is an example of conjoined verbs; example 11, conjoined predicates; and example 12, conjoined sentences.

10.3.1 Coordinate Conjunctions

10.3.1.1 THE CONJUNCTION *a*

The use of *a* implies that there is no necessary logical connection between the two constructions to be joined—either their connection is an accident or is contrary to what we expected. For this reason it is often best translated into English by 'but'.

13. *Dapwa ngoan pwili a joah, pwa joh oai anjoau.*
'Maybe I should go, but I won't because I don't have time.'
14. *Sakaie siksik a soausoau.*
'This rock is small, but heavy.'
15. *Woallo pwongihdi ah doadoahk, a ih kahjikkoar kadoarihla ah doadoahkko.*
'That man worked all day, but he hasn't finished his work yet.'
16. *Ngoah nimen oaloap pwihhno en wahdo wus, a oaloap moai.*
'I want half of the group to bring bananas and half breadfruit.'

In 16, *a* is translated in English as 'and'. This is not a contradiction of what was said above. In this sentence the speaker wants two things—half the group to bring bananas and half the group to bring breadfruit. The fact that the second half is to bring breadfruit can be viewed as completely independent of the actions of the first group, so that the conjunction *a* is used.

10 Complex Sentences

The independence of the elements conjoined is also true in the case of the complex conjunctions *apel* 'and, and also' and *apwen* 'but just, however, in any case' formed with *a* and the pre-verbs *pel* 'also' and *pwen* 'just'.

17. *Kamai kang mwehng joalloahki moangoar apel pinike.*
'We ate taro with flying fish and vinegar.'

18. *Pillappoawo loal, apwen mwakelkel piloa.*
'That river is deep, but the water in it is still clean.'

19. *Koah pwa pwung apwen japwung.*
'You said it's right, but it's just wrong.'

The elements of which *apel* and *apwen* are formed may be separated, as in:

20. *Ngoah inlahr o, a ngoah pel indoa.*
'I went there and then I came back.'

As indicated in 20, *a* can often be translated by 'then'. Another such example is:

21. *Ma koah joah rapahkihda woallo, a koah kapwa idoak ipen John, pwa ih kidal pwa ia woallo mine.*
'If you don't find that man, then ask John because he knows where that man is.'

10.3.1.2 THE CONJUNCTION *ke*

The conjunction *ke* joins constructions that represent a choice. It can be translated by English 'or', as in:

22. *Ngoah pel inenin malauki ma kisai nen kak wiahda pukin Mwoakilloa ke insingin Mwoakilloa.*
I'll be very happy if we can make Mokilese books or Mokilese writing.

23. *Menlau wahdohng ngoahi epwi wussen ke ekij pihlohlohn.*
'Please bring me some bananas or some *pihlohlo*.'

24. *Ngoah jehjoa pwa ngoah nen kak pwili ke joah.*
'I don't know whether I can come or not.'

25. *Emen in John ke Bob pirin jējuweje koawoa.*
 ‘Either John or Bob will help you.’

10.3.1.3 SENTENCE INTRODUCERS

In addition to the conjunctions we have been discussing, Mokilese has two **sentence introducers** that serve as a bridge between the sentence in which they occur and the previous sentence. In contrast with coordinate conjunctions, they join only sentences (not noun phrases or other constructions). Also, they seem to be more closely associated with the second of the two sentences they connect. They introduce this second sentence.

These sentence introducers are *doari* ‘then’, which suggests that the events of the second sentence follow those of the first in time, and *doar* ‘so’, which suggests that the events of the second sentence result from those of the first. For example:

26. *Ih wahdo oai mehk. Doari, ih pel japahlla.*
 ‘He brought my things. Then, he went back.’

27. *Ih pwalangpijoang kilahsso; doar, akpas me kisai joh kak iuhs.*
 ‘He broke the mirror, so now we can’t use it.’

10.3.2 Implicational Constructions³

10.3.2.1 SIMPLE IMPLICATIONS

If we compare the sentences:

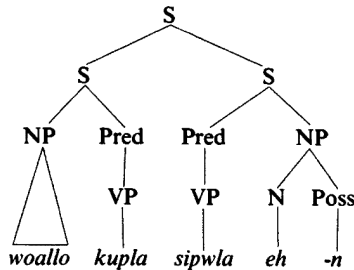
- 28a. *Ih peiddi pleisso ken pwalpijoang.*
 ‘He dropped the plate and it broke.’
- b. *Ih peiddi pleisso a joah pwalpijoang.*
 ‘He dropped the plate but it didn’t break.’

we note that 28b differs from 28a in that the second clause contains a negative verb *joah pwalpijoang* ‘it didn’t break’, and the two clauses are connected by *a*. If we examine the difference in meaning between 28a and 28b we note that the second clause of 28a expresses the expected result of the activity expressed in the first clause; that is, if someone drops a plate we expect it to break. In 28b, however, the second clause describes an un-

expected result of the first; namely, that the plate didn't break. The two clauses of 28a seem to form a single event, because the second is the logical result of the first. A complex sentence of this type is said to be an **implicational construction** (because the first clause 'implies' the second). A second example of an implicational construction is:

29. *Wallo kupla sipwla ehn.*
'That man fell down and broke his leg.'

The predicates in an implicational construction do not require a marker of any kind to link them (but, refer to footnote 3). Sentence 29 may be diagrammed:



The use of implicational constructions is severely restricted, however. These restrictions are summarized in the following paragraphs.

A. *Logical cause-effect relation*

The second predicate in an implicational construction must be a **logical result** of the event described by the first predicate. In sentence 28a, we expect that if a plate is dropped, it is logical for it to break. Similarly, in 29, when a man falls we are not surprised that the result is some injury to him. The difference between predicates that show this logical consequence relation and those that do not can be seen in the apparent unacceptability of sentences like:

30. **Wallo kakla sipwla ehn.*
'That man jumped and broke his leg.'
31. **Th peiddi pleisso okda.*
'He dropped the plate and it caught fire.'

In 30, jumping does not seem to imply injury as a logical result, nor, in 31, does dropping a plate seem to imply it will catch fire.

B. Common Topic

The idea expressed by 28a can be conveyed by the two sentences:

- 32a. *Ih peiddi pleisso.*
'He dropped the plate.'
- b. *Pleisso pwalpijoang.*
'The plate broke.'

We can view these two sentences as the parts that have been joined to form 28a. Note that 32a and 32b share the **common topic** *pleisso* 'the plate' which is the object in 32a and the subject in 32b. Unless the two predicates of an implicational construction share such a common topic, they cannot be combined in this way.

33. **Ngoah peiddi angen majesso rohppo okda.*
'I dropped the match and the mat caught fire.'

is unacceptable, even though dropping a match suggests that a fire might start, because the sentences of which 33 is made do not share a common topic:

- 34a. *Ngoah peiddi angen majesso.*
'I dropped the match.'
- b. *Rohppo okda.*
'The mat caught fire.'

If we consider example 29 to be composed of:

- 35a. *Woallo kupla.*
'The man fell.'
- b. *Ehn woallo sipwla.*
'The man's leg broke.'

we see that these sentences also have a common topic—*woallo* ‘that man’—which is the subject of 35a and the possessor in 35b.

In a sentence like:

36. *Johnpadahkko wilikpijoang pukko wadek.*

‘The teacher opened the book and read from it.’

where both verbs are transitive (*wilikpijoang* ‘opened’ and *wadek* ‘read’), there are two common topics—*johnpadahkko* ‘the teacher’ is the subject of both verbs and *pukko* ‘the book’ is the object of both. When both predicates in an implicational construction are transitive, they must have both subject and object in common.

37. **Johnpadahkko wilikpijoang pukko ngoah wadek.*

is unacceptable because the two verbs, though sharing the same object, have different subjects.

Now consider:

38. *Ngoah iuhs noai jahrro kosohki mehu.*

‘I used my knife to cut that thing.’

This sentence is derived from:

39a. *Ngoah iuhs noai jahrro.*

‘I used my knife.’

b. *Ngoah kosohki mehu noai jahrro.*

‘I cut that thing with my knife.’

In 38 *jahrro* ‘that knife’ is the object of *iuhs* ‘use’ but in the instrument of *koso* ‘cut’. This structure is sufficient to make *jahrro* a common topic. However:

40. **Ngoah kosohkihdi jahrro sipwla.*

‘I cut it with the knife and it (the knife) broke.’

is unacceptable. From this we must conclude that the common topic must be either subject or object in the first (cause) sentence (that is, it cannot be the instrument.), but it can be the instrument in the second (effect) sentence, as in example 38 above.

If a common topic noun phrase follows the first predicate of an implicational construction, no other noun phrase can occur between the two predicates.

41. **Ngoah peiddi pleisso pohn palanggo pwalpijoang.*
 'I dropped the plate on the floor and it broke.'

Sentence 41 is unacceptable, because the noun phrase *pohn palanggo* 'on the floor' separates the common topic *pleisso* 'the plate' from the second predicate.

10.3.2.2 IMPLICATIONAL CONSTRUCTIONS—A SUMMARY

The predicates in an implicational construction must show a logical cause-effect relationship. The constructions have the following basic shape:

NP₁ -V₁ - (NP₂) -V₂ - (NP₃)

where the second and third NP's do not always appear. Thus, we find two kinds of implicational construction; first, those of the form

- a. NP₁ - V₁ - V₂ - (NP₂),

where the subjects are the same and the objects do not differ (that is, they are either the same, or one or both of the verbs does not have an object) and, second, those of the form

- b. NP₁ -V₁ - (NP₂) -V₂ - (NP₃)

where NP₂ is the object of V₁ and subject or instrument, of V₂, in which case V₂ may, in addition, have an object NP₃.

10.3.3 Backgrounding

In the implicational constructions we examined in the last section, the event described by the second predicate is a logical result of the event described by the first. That is, if event A took place, then we expect event B to follow as a result. Events related in this way (and fitting the other specifications of the construction) can be related in an implicational construction. It is also possible to construct complex sentences from two predicates that must have taken place one before the other, although the second is not necessarily the logical result of the first. Thus, in example 42, the first event must have preceded the second in time in order for the sentence to make sense:

42. *Ih kakkoang pohn warah warrohr jeidihla.*
 he jump-to on his canoe-D-and paddle-down-away
 'He jumped into his canoe and paddled off.'

To put these events in the opposite order would be strange.

43. *?Ih jeidihlahr kakkoang pohn warah warro.* ⁴
 'He paddled off and jumped into his canoe.'

That is, in a case like 42 in which we are discussing someone getting into a canoe and paddling off in it, we assume that he boarded the canoe before he left. The nature of the two events suggests that the first must have preceded the second if the two events are to be related at all. Note that this is not true of the two events in:

44. *Kisai nimnim pen apel mwingmwinge.*
 'We were drinking coconut and eating.'

In this case, it does not matter which event took place first, the eating or the drinking. In fact, it is probable that they alternated—drinking then eating, more drinking then more eating, and so on, or even the other way around—eating, then drinking. In such a case, there is no logical order between the two events.

The kind of logical relation between events that holds in sentences like 42 is expressed by suffixing *-oar* or *-oarah* to the first predicate. ⁵ We can view this relationship in a number of ways.

First, we might consider the second event as setting out a limit or a boundary for the first event. In this view, the first event is in force until the second event takes over. Consider:

45. *Ih onohnnoaroh doari ah doadoahk.*
 'He stayed until his work was finished.'
46. *Ngoah pe wadwadekkoar pukke.*
 'I'm still reading this book.'
47. *Umwwo pe illilloahr lel akpas.*
 'That building is still the tallest.'

In 45, the event *onohn* 'stay' lasts until the event *doari ah doadoahk* 'his work is finished' comes into effect. In this way, the first event is bounded in time by the second. In 46, the event *wadwadek* 'be reading' is bounded by the present, the time at which the sentence was uttered. This boundary is represented by the pre-predicate *pe* 'still'. Note that the same sentence, without a boundary for the event *wadwadek* (that is, without *pe*) is less acceptable.

48. *?*Ngoah wadwadekkoar pukke.*

Example 47 is similar to 46, in that the state described in the first predicate is bound again by the present, which is marked by *pe* 'still' and by the second clause *lel akpas* 'up to now, reaching now'. A verb to which *-oar* or *-oaroh* has been suffixed can be thought of as supplying the background to another event or state. Consider:

49. *Arai jipwoaldohr kapangda kisai.*
 'They looked back and saw us.'
50. *Wuddo wiahr ngoah ken joh kak kapang Mwandohn.*
 'While it was raining I couldn't see Mwandohn.'

The emphasized clause in each example provides background to the rest of the sentence, in that it describes the events leading up to or going on at the same time as the events of the following clause. In 49, the fact that they looked back was what led to their seeing us. In 50, the rain was responsible for my not being able to see Mwandohn. Note that 50 also suggests that I was not able to see Mwandohn for the whole time it continued raining;

that is, the two events were simultaneous. Thus, the event described by the clause to which *-oar* is attached does not have to be completed before the event described in the second clause begins. It merely provides the background (either a preceding or an accompanying event) to the event of that clause. If the verb in the *-oar* clause is perfective, it will generally be interpreted as having reached some conclusion before the next event begins (as in example 49); if imperfective, the events are likely to be interpreted as simultaneous (as in 50).

10.3.3.1 -dakoahr

The suffix *-oar*, together with the suffix *-dakoah*, can be used in a similar type of backgrounding construction. For example:

51. *Ih jipdakoahr jeriho lo.*

‘He reached up and caught the child.’

52. *Woal lioasso pokdakoahr sehpyllo mwoardi.*

‘The angry man hit the table and it crumbled.’

In sentences of this types, both predicates must be intransitive. It is understood that the activity expressed in the first (backgrounding) clause has as its result the event or state of the following clause. Thus, in 52, the act of hitting resulted in the table crumbling. I have no further examples of this construction.

10.3.3.2 POSITION OF - oar

It is normal for *-oar* to be suffixed to the verb of the first clause in the sentence in which it is used, whether or not that verb has an object.

53. *Woallo kaklahr pohn kello sipwla ehn.*

‘That man jumped over the fence and broke his leg.’

54. *Ih risingdahr kello mahnnok kaula.*

‘He opened the cage and the birds escaped.’

55. *Ngoah umwwoaiskioar pwohlaha nohno pokihla ngoahi.*

‘I was playing with that ball and mommy beat me.’

56. *Woal manmanno japoanglahr ih wiahla kasmn.*

‘The magician changed him into a cat.’

Some speakers, however, seem to allow *-oar* to be suffixed to the entire first clause. Consider examples 57–60, corresponding to 53–56.

57. *Woallo kakla pohn kellohr sipwla ehn.*

‘That man jumped over the fence and broke his leg.’

58. *Ih risingda kellohr mahnnok kaula.*

‘He opened the cage and the birds escaped.’

59. *Ngoah umwwoaiski pwohlahuoar nohno pokihla ngoahi.*

‘I was playing with the ball and mommy beat me.’

60. *Woal manmanno japoangla ihoar wiahla kasmn.*

‘The magician changed him into a cat.’

Those who accept sentences like 57–60 feel that they differ in meaning from the corresponding sentences 53–56. In 59, for instance, they feel that the ball had something to do with the mother’s beating the child—perhaps she didn’t want him playing with it—while 55, they feel, does not carry this implication. In 56, there is a suggestion that perhaps the magician did not intend to change his subject into a cat, but somehow that was what happened, while 60 suggests that making him a cat was in fact his intention. Because speakers seem to differ as to the acceptability of sentences like 57–60, such sentences remain somewhat mysterious to me.

10.3.3.3 *-oaroh*

The suffix *-oaroh* differs from *-oar* in that it implies duration or extent. It most often suggests a passage of time, either because the first event continued for some time or because there was a delay between the two events.

61. *A rai poalpoalloaroh kupla suhkoahu.*

‘They kept chopping at it until the tree fell.’

62. *Arai pwen koahkoahkoaulloaroh armaj ohroj moairla.*

‘They kept on singing until everyone fell asleep.’

63. *Ih nen joah indoahroh doari ah doadoahk.*

‘He won’t come until his work is finished.’

64. *Ngoah koammoalloaroh ih japahldo.*

'I rested until he came back.'

-oaroh is most often translated into English as 'until', which implies the same kind of passage of time.

In cases where the second clause suggests a prior occurrence of the first, it often appears that the duration or extent of the first event was necessary to bring about the second event. In 61 there is an implication that a lot of chopping was necessary to fell the tree. Similarly, in 62, it appears to have been the duration of the singing that put the people in question to sleep. This is also true in:

65. *Mwumwwoaroh dir nehn nehkko.*

'The fish kept coming until the net was full.'

where it is the amount of fish that brought about the filling of the net.⁶

It appears that *-oaroh* must always be suffixed to an entire predicate, rather than just to the verb. For example:

66. *Ngoah poki pahi oaioaroh moadoakda poahioahi.*

'I beat my wife until my hand was sore.'

67. *Kisa sikesikkoang araioaroh jippo kijoula.*

'We talked with them until the ship left.'

The position of *-oaroh* often leads to its being treated as a separate word, rather than as a predicate suffix. For example:

68. *Arai kauj woallo oaroh jaikdi ih.*

'They chased that man until they caught him.'

In spite of this tendency, *-oaroh* seems to be primarily a suffix.

10.4 RELATIVE CLAUSES

A RELATIVE CLAUSE is a sentence used within a noun phrase as an attribute (see 6.4.1) of a noun or pronoun. Some examples (in which the relative clauses are emphasized) are:

69. *Ngoah kangla mwingehu* ma koah kihdoahng ngoahi aio.
'I ate the food that you gave me yesterday.'

70. *Jeriho* ma peik *pel mine ah johjo*.
'The child who is respectful will get his inheritance.'

71. *Me* ma kin doh *kin mwomwen siksik*.
'Something that is far away seems small.'

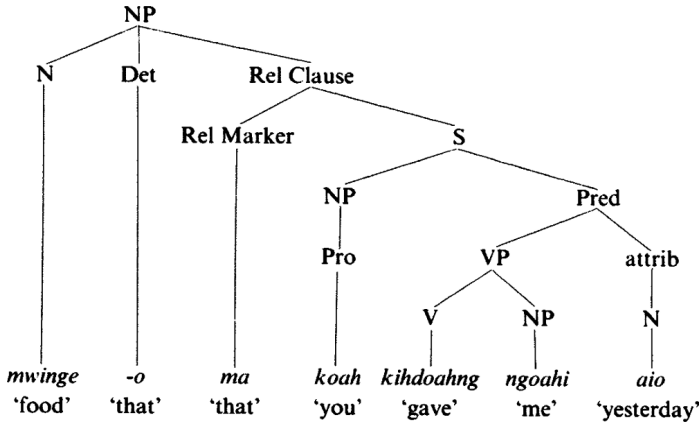
72. *Ioar joangwa* ma kin mine joaroakin.
'It was the kind that has a sail'

73. *Arai uruhrki ih* ma lujdihwe nehn pillo.
'They laughed at him, the one who had dived into the water.'

In sentence 69, the relative clause *ma koah kihdoahng ngoahi aio* 'that you gave me yesterday' identifies the food that was eaten. Similarly, in sentence 70, the relative clause *ma peik* 'who is respectful' describes some quality of the child being discussed. In sentence 73, the relative clause *ma lujdihwe nehn pillo* 'who had dived into the water' further specifies the person referred to by the pronoun *ih* 'him'.

The structure of a relative clause within a noun phrase can be seen in the following diagram:

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10.4.1 The Relative Marker *ma*

In Mokilese, a relative clause is the last element of the noun phrase in which it occurs. Relative clauses are usually preceded by the relative marker *ma* 'that', as in the above examples. It appears, however, that the relative marker is *always* optional in Mokilese.⁷ Thus, example 74 is equivalent to example 69 above:

74. *Ngoah kangla mwingehu koah kihdoahng ngoahi aio.*
 'I ate the food you gave me yesterday.'

The following are examples of sentences in which the Mokilese relative marker *ma* may be deleted but the corresponding English 'that' or 'who' must remain. The optionality of *ma* is indicated by putting it in parentheses; thus, (ma):

75. *Jeriho (ma) peik pel mine ah johjo.*
 'The child *who* is respectful will get his inheritance.'
76. *A mine armajmen (ma) kidal?*
 'Is there someone *who* knows?'
77. *Koakonno (ma) kupjang pohn sehpyllo ohla akpas.*
 'The box *that* fell off the table is broken now.'

10.4.2 Pronouns in Relative Clauses

A complex sentence containing a relative clause may be viewed as two coordinate (see 10.3) sentences combined in a very special way. Example 78, loosely equivalent to example 75 above, consists of the two sentences 79a and b joined by the coordinate conjunction *a* ‘and, but’.

78. *Jeriho peik a jeriho pel mine ah johjo.*
 ‘That child is respectful and that child will get his inheritance.’

79a. *Jeriho peik.*
 ‘That child is respectful.’

Jeriho pel mine ah johjo.
 b. ‘That child will get his inheritance.’

Because both sentences 79a and 79b discuss the same person, represented by the noun phrase *jeriho* ‘that child’, they may be combined in a relative clause construction. That is, sentence 79a may be treated as an attribute of the noun phrase *jeriho* ‘that child’ in 79b, since it describes one of the child’s qualities (in this case, the fact that he is respectful). However, if we try to combine the two sentences as:

80 **Jeriho ma jeriho peik pel mine ah johjo.*

the result is not a grammatical sentence. It is normal for a second occurrence of a noun phrase (in this case, the noun phrase *jeriho* ‘that child’ in *ma jeriho peik* ‘that that child is respectful’) to be replaced by the corresponding pronoun (see 3.4). If we **pronominalize** the second occurrence of *jeriho* ‘that child’ in 80, the result is the grammatical sentence:

80. *Jeriho ma ih peik pel mine ah johjo.*
 ‘The child who is respectful will get his inheritance.’

in which the noun phrase *jeriho* has been replaced by the pronoun *ih* ‘he’ in the relative clause.

Consider:

82. *Woallo ma John pokihla ih mine nehn imwen wini.*
'The man that John beat up is in the hospital.'

83. *Jeripeinno ma ngoah suhoang ih aio mihn Pohnpeimen.*
'The girl that I met yesterday is a Ponapean.'

84. *Ngoah jeuweje woallo ma ih kioang ngoahi mwinge.*
'I helped the man who brought me food.'

In sentence 82, the pronoun *ih* in the relative clause *ma John pokihla ih* 'that John beat him up' refers to the preceding noun phrase *woallo* 'that man'. Similarly, *ih* in example 83 refers to *jeripeinno* 'that girl' and *ih* in example 84 refers to *woallo* 'that man'.

Note also, however, that these pronouns may be freely deleted from the relative clauses in which they occur. Thus, example 75 above is equivalent to example 81 with the pronoun *ih* deleted. Similarly, examples 82-84 may be rendered:

85. *Woallo ma John pokihla mine nehn imwen wini.*
'The man that John beat up is in the hospital.'

86. *Jeripeinno ma ngoah suhoang aio mihn Pohnpeimen.*
'The girl I met yesterday is a Ponapean.'

87. *Ngoah jeuweje woallo ma kioang ngoahi mwinge.*
'I helped the man who gave me food.'

10.4.3 Possessive Constructions in Relative Clauses

There is one case in which a pronoun within a relative clause may not be deleted, even though it refers to the noun phrase of which the relative clause is an attribute. These are cases in which the element in question is the possessor in a possessive construction within a relative clause. Consider:

88. *Jemen woallo koapwoahpwoa, a noai jeripeinno painki woallo.*
'The father of that man is rich, and my daughter married that man.'

Since both occurrences of *woallo* 'that man' in example 88 refer to the same person, it is possible to change

- 89a. *Jemen woallo koapwoahpwoa.*
'That man's father is rich.'

into a relative clause referring to the noun phrase *woallo* 'that man' in:

- 89b. *Noai jeripeinno paink i woallo.*
'My daughter married that man.'

Without pronominalizing *woallo* in 89a, the result is the strange sentence:

90. *Noai jeripeinno painki woallo ma jemen woallo koapwoahpwoa.*

If we pronominalize the second occurrence of *woallo*, the result is the ungrammatical sentence:

91. **Noai jeripeinno painki woallo ma jemen ih koapwoahpwoa.*

In order to pronominalize the possessor noun phrase in a possessive construction, we must choose the appropriate possessive suffix and affix it to the possessed noun or classifier. The entire possessive noun phrase *jemen woallo* 'that man's father' in 90 must be replaced by *jamahu* 'his father'. That is to say, we have replaced the noun *woal* by the possessive suffix for third person singular (in this case *-a* 'his') and made appropriate changes to the noun meaning 'father'. The result is:

92. *Noai jeripeinno paink i woallo ma jamahu koapwoahpwoa.*
'My daughter married that man whose father is rich.'

Obviously, the possessive suffix *-a* in examples such as 92 cannot be deleted in the same way as can the independent pronouns of examples such as 82 to 84. Pronominal deletion cannot apply within a relative clause when the pronominal element to be deleted is the possessor in a possessive construction. Other examples of such possessive noun phrases in relative clauses are:

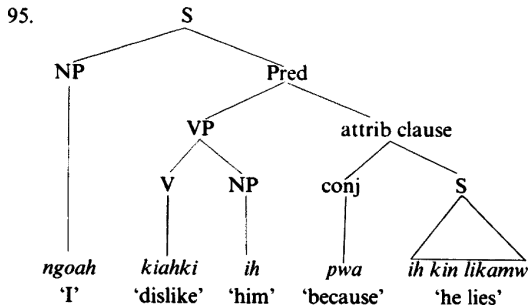
93. *Jeripeinno ma ngoah kihjang nah pwohlahu joangjoangjoang.*
'The girl whose ball I took is crying.' (literally: 'The girl who I took her ball is crying')

94. *Kihdoahng ngoahi mwoakko ma ngoah widekihla piloa jang nehn loaloo.*

'Bring me the cup that I poured the water out of.' (literally: 'Bring me the cup that I poured its water from inside.')

10.5 ATTRIBUTIVE CLAUSES

An ATTRIBUTIVE CLAUSE is one that gives extra information about the events described in the main clause of the sentence; for example, when these events took place, why they took place, or how they were performed. The structure of sentences with attributive clauses can be seen in examples like:



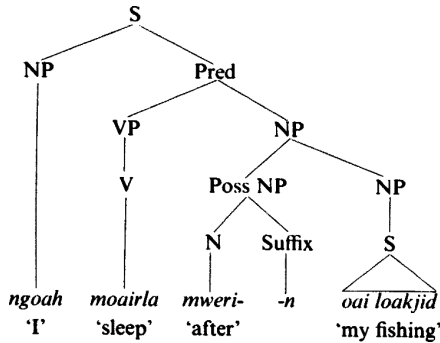
Attributive clauses are introduced by **attributive conjunctions**, like *pwa* 'because' in example 95. These conjunctions specify what information is given in the attributive clause, whether it specifies the time of event, its reason, cause, and so forth. These different types of attributive clauses will be discussed in the sections that follow.

10.5.1 Time Clauses

Time clauses are introduced by the relational nouns *mwohn* 'before' or *mwerin* 'after' followed by a nominalized sentence (see 10.6.5), or the noun *anjoau* 'time' followed by a relative clause. These nouns function as conjunctions in time clauses. Examples are:

96. *Ngoah suhoang John anjoau ma ngoah inla sidowa.*
'I met John when I went to the store.'

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10.5.2 Manner Clauses

Manner clauses describe the way in which an event is performed. They answer the questions *mindoa*? ‘how?’ or *iamwomwen?* ‘in what way?’. Manner clauses are introduced by *doahr* ‘like, as, the way that’ and *doahrroar* ‘in the same manner as’. *Doahr* and *doahrroar* are usually followed by a nominalized sentence, as in:

101. *Ngoah wiahda pohsso doahr oamw pwehng ngoahi.*
 ‘I made that boat like you told me.’

102. *Kisai pirin wihn in iakiu doahrroar asai wihn wihkko aio.*
 ‘We’re going to win at baseball just like we won last week.’

but may be followed by a simple sentence, as in:

103. *Kadoarihla mehu doahr ngoah kajlehng koawoa.*
 ‘Finish that like I showed you.’

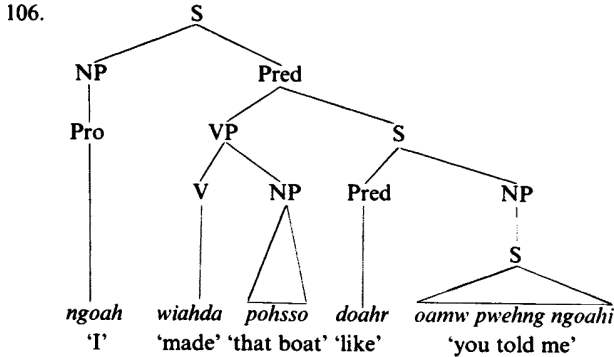
In fact, *doahr* and *doahrroar* are verbs and, as such, can appear in the predicate of a simple sentence. For example:

104. *Ih doahrroar jamahu.*
 ‘He is just like his father.’

Their essentially verbal nature can be seen in the fact that they can occur with auxiliaries, even when used in attributive clauses.

105. *Ngoah pirin wiahda pohsso pirin doahrroar oamw pwehng ngoahi.*
 'I'll make that boat to be the very same as you told me.'

The structure of sentences with attributive *doahr* clauses can be seen in the following diagram.



Since attributive *doahr* and *doahrroar* (in contrast with their use as main verbs) need not be followed by a nominalized sentence, example 107 is equivalent to 106.

107. *Ngoah wiahda pohsso doahr koah pwehng ngoahi.*
 'I made that boat like you told me.'

Also related to *doahr* are the adverbs *doahre* 'like this, in this way', *doahr en* 'like you are doing, in that way', and *doahro* 'like that, in that way', as in:

108. *Johpwa wia doahr en.*
 'Don't do it like that.'

Similar to *doahr* and *doahrroar* are *mwomwen*, 'like' and *mwomwennoar* 'just like', which refer to the appearance of a person or object, rather than to the manner in which an activity is performed. They must be followed by nouns.

109. *Ngoah pirin wiahda oaie mwomwennoar minno ma koah wiahda aio.*
 'I'm going to make mine just like the one you made yesterday.'

10.5.3 Clauses of Cause and Result

Clauses of cause and result are introduced by the conjunctions *pwa* 'because', *pwoadoar* (or *pwa pwoadoar*) 'for fear that, so as not to, lest', and *kahrehda* 'so that, with the result that'. Examples are:

110. *Ngoah risingdi wanihmwwo pwa ukeng.*

'I closed the door *because* it's windy.'

111. *Ngoah nen pwili kamwai, a joah pwa joh oai anjoau.*

'I should go with you but I won't *because* I don't have time.'

112. *Ih lallal koalik kahrehda arai kak rong.*

'He was speaking loudly *with the result that* they were able to hear.'

113. *Ngoah nim koahpi mwohn oai pirin moair kahrehda ngoah joh kak moair la.*

'I drank coffee before going to sleep, *with the result that* I couldn't get to sleep.'

114. *Ngoah pirin ken pwohrda pwoadoar ngoah kosla.*

'I'll get up early so I won't be late.'

115. *Johpwa wia pwoadoar joamoamwwo kidalda.*

'Don't do it *in case* your father finds out.'

10.5.4 Purpose Clauses

A purpose clause describes the purpose of an activity or its intended result. Purpose clauses resemble cause clauses in that they are introduced by *pwa* 'so that'. Unlike cause clauses, however, purpose clauses require the modal *en* (see 7.1.2.1). Some examples of purpose clauses are:

116. *Ngoah kihjang nah pehnno pwa ngoan insingki.*

'I took his pen *so that* I could write with it.'

117. *Ngoah rapahki ih pwa ngoan kioang nah mwanihe.*

'I looked for him *to* give him his money.'

118. *Ih wiahda sehpyllo pwa en oaujoangoan sihkei.*

'He made that table *so that* it would be very strong.'

119. *John pwa ih pirin wahdo ah koandoauo pwa ngoan iuhs a ih moalkoahla.*

'John said he'd bring his ladder *for* me to use, but he forgot.'

10.5.5 Conditions

Conditional sentences, as the name implies, describe events that take place only if certain conditions are met. These conditions are expressed by a conditional clause introduced by *ma* 'if'. For example:

120. *Ma wud lakapw kisai joah jeila loakjid.*

'If it rains tomorrow we won't go fishing.'

121. *Ma John indoa, koah pwehng ih pwa ngoah ne inla.*

'If John comes, tell him that I already left.'

122. *Ma ih joah wahdo mwingehn jauwaj in aiohwa, nen joh mehkij kisai kang.*

'If he hadn't brought lunch yesterday, there wouldn't have been anything for us to eat.'

123. *Ma koah jeuweje ngoahi, kisa nen pispis in doari.*

'If you helped me, we could finish in a hurry.'

124. *Ma woallo kajapahlihdo noai injinno, ngoah nen kak kioang koawoa akpas.*

'If that man had returned my motor, I could give it to you now.'

The conditional *ma*-clause in a conditional sentence is usually stated first, though it may follow the main clause. The main clause normally contains the pre-predicate *nen* (see 7.1.2.2), as in examples 122 to 124, regardless of the time reference (past, present or future). If the main clause is a command (as in example 121), or a very strong statement (as in 120), *nen* is not used.

The predicate of the *ma*-clause usually contains no modal, but can take *nen* or *pirin* if it refers to the future.

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125. *Dapwa ngoah nen pwili ma nen mine oai anjoau.*
'Maybe I'll go if I have time.'

126. *Ma ih pirin kioang koawoa ekij mwaniho, a koah kapwa dupukkoang ngoahi.*
'If he gives you some money you can pay me then.'

The distinction between *nen* and *pirin* in *ma*-clauses is unclear to me.

10.5.6 Clauses of Concession

Related to conditional clauses are clauses of concession, marked by *ama* 'what if, even if, so what if'.

127. *Ama ih ken indoa, da ih en wia?*
'Even if he comes, what's he going to do?'

128. *Ama ngoah inla o , ih ne pirin ken lioasla?*
'What if I go there and he gets angry?'

129. *Ama ih uhdahn oamw pirienwa, ih ne pwen joah mwehuoang doadoahkkoawo?*
'So what if he's your friend, he still isn't any good in that job.'

A sentence with *ama* suggests that even if certain facts were true (those presented in the *ama*-clause), certain other facts (those of the main clause) are still a problem.

The adverb *mihnda* 'never mind, it's all right', used with *ma*, has a similar function.

130. *Mihnda ma ih kahjik lel me, kisai ken alu.*
'Even if he hasn't arrived, we have to go.'

131. *Mihnda ma koah joah mwehuki ih, a koah pirin pwen painki.*
'Even if you don't love her, you'll still marry her.'

Mihnda can also be followed by *pwa*, as in:

132. *Mihnda pwa ngoah nimen moair, a ngoah pirin pwen doadoahk.*

'Even though I want to sleep, I'll still work.'

The clause following *mihnda pwa* is stated as a fact, rather than a condition, and *mihnda* may then be translated 'although' or 'even though'. Note that *mihnda* can also appear in main clauses, as in:

133. *Ngoah nimen koan pwili ngoahi alu, a ma koah joh kak, mihnda ngoah kapwa alu.*
'I want you to go walking with me, but if you can't, I'll go in any case.'

In this use, *mihnda* suggests that no circumstances will be or have been allowed to stop the event. It may be translated by adverbs such as 'in any case, anyway'. Note that *nen* is not normally used in the main clause following a clause introduced by *mihnda*.

10.6 COMPLEMENTATION

10.6.1 Coordinate, Attributive, and Complement Sentences

In the preceding sections we have discussed several kinds of **coordination** (simple coordination, implication, and backgrounding), whereby two separate sentences are linked together because of some relationship between them—common topic, cause-result, order in time. Later we discussed **attributive clauses**—those which give additional information about the events described in the main clauses. In all these cases, the information carried by the second of two clauses (the attributive clause, background clause, effect clause, etc.) was in some sense extra information. These clauses could have been removed and the remaining main clauses would still have been sentences that communicated some information (though, granted, less information than the original complex sentence).

In the constructions we shall be examining in this section, the second (non-main) clause is a necessary part of the sentence in which it appears. That is, the clause in question is the topic or object of the sentence. Thus, in:

134. *Ngoah pwa pwa ih nen indoa.*
'I said that he would come.'

the clause *pwa ih nen indoa* 'that he would come' is the **object** of the verb *pwa* 'say'. It tells what was said. A clause that has this kind of function in a complex sentence is called a **COMPLEMENT CLAUSE**.

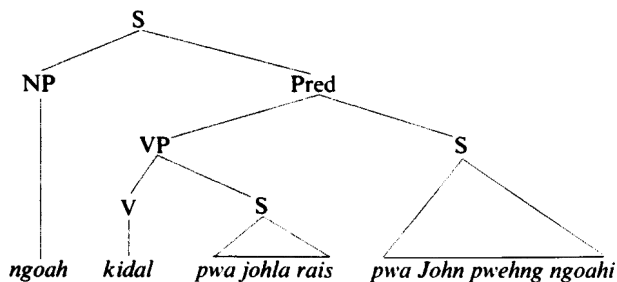
10.6.2 *Pwa* Complements

10.6.2.1 **NONCOMPLEMENT** *pwa*

Complement sentences are most frequently introduced by *pwa* 'that', as in example 134 above. From the beginning, however, we must be careful to distinguish between complement sentences introduced by *pwa* and attributive sentences in which *pwa* means 'because' or 'so that'. In an example like 135, we see both a complement sentence introduced by *pwa* and an attributive clause with *pwa*:

135 *Ngoah kidal pwa johla rais, pwa John pwehng ngoahi.*
'I know *that* there is no more rice *because* John told me.'

That is, *pwa johla rais* 'that there is no more rice' is a complement sentence object of *kidal*, and *pwa John pwehng ngoahi* 'because John told me' is an attributive clause of cause. The sentence may be diagrammed:



In an example like this, it is easy to tell the difference between complement and noncomplement sentences with *pwa*. In other cases this difference may not be so clear, particularly to a non-native speaker of Mokilese. Consider:

136 *Ngoah peren pwa ngoah pirin kijoula Pohnpei.*
'I am happy *because* I am going to go to Ponape.'

The native speaker of Mokilese will recognize, I hope, that this is a noncomplement use of *pwa*. It is often possible to tell apart the two uses of *pwa* from the structure of the sentence in which *pwa* is used. In what follows, these structural differences will be pointed out whenever obvious. In other cases, however, the reader must pay attention to the meaning of the sentence to know which *pwa* is being used. *Pwa*-complement constructions will be discussed below in terms of the kind of verb with which they are used.

10.6.2.2 TOPIC COMPLEMENTS

An entire sentence can function as the topic of verbs such as *mwomwen* 'it seems' or *kapwuriamwei* 'it is surprising'.

137. *Mwomwen pwa ih pirin japahldo lakapw.*
'It seems that he will return tomorrow.'

138. *Kamijik pwa inenin dir armaj mehdi nehn melmello.*
'It is frightening that so many people died in that storm.'

139. *Kapwonpwon pwa doahrma japoangek riawwo pwung.*
'It is confusing that both those answers seem right.'

10.6.2.3 VERBS OF MENTAL STATE

Many verbs of thinking, knowing, and so forth, as well as verbs of saying and telling, take *pwa* complements:

140. *Ngoah kidal pwa jampah pwhsuhs.*
'I know that the earth is round.'

141. *Ih leme pwa johnpwunggo wiawihdahjang jih.*
'He believes that the moon is made of cheese.'

142. *Arai pwehng ngoahi pwa jippo pirin kijoudo.*
'They told me that the ship was going to come.'

143. *Ngoah jaikdi pwa ngoan ken joah peidek.*
'I caught on that I shouldn't ask questions.'

144. *Kisai kalelpoak pwa pwehllok ohroj sipdi.*
'We made sure that all the ropes had been tied.'

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It is possible to delete the *pwa* in sentences such as 140–144. This deletion is particularly common after the verb *pwa* ‘to say’.

145. *Arai pwa dapwa ih nen indoa.*
‘They said maybe he would come.’

10.6.3 *Ma* Complements

The verb *jehjoa* ‘to not know’ can be followed by *ma*, rather than *pwa*, to suggest that there is some doubt about the truth of the statement made in the complement sentence.

- 146a. *Ngoah jehjoa pwa ih pirin indoa.*
‘I didn’t know *that* he was coming.’
- b. *Ngoah jehjoa ma ih pirin indoa.*
‘I don’t know *whether* he’ll come.’

I am not aware of any other verbs that show this contrast.

10.6.4 *-ki pwa* Complements

Intransitive verbs of mental state or speech, and nouns similarly used, require the suffix *-ki* when used with a *pwa* complement. For example:

147. *Ih perenkihda pwa kamwa koapwoapwoaud.*
‘He is happy that you got married.’
148. *Arai pakairkihla pwa jippo pirin kijoudo.*
‘They announced that the ship will come.’
149. *Kisa inoaukihdi pwa kisah suhpene lakapw.*
‘We agreed to meet tomorrow.’

In such sentences there is normally a sharp difference between the use of the imperfect and the perfect with the main verb. The imperfect is used to give the event a sense of immediacy, to make a declaration, or to describe a dominant emotion. For example:

150. *Ngoah woahwoahki pwa koan ken kijoula, a ngoah jehpirin inepwihdi koawoa.*

'I understand that you have to go and I won't stop you.'

151. *Ngoah pakairkioang kamwai ohroj pwa jampah paspas.*
'I declare to you all that the earth is flat.'

152. *Ih lehmsikki pwa ih koapwoahpwoa.*
'He's boasting that he is rich.'

When the imperfect is used to emphasize an activity (particularly a speech activity) it appears to be necessary, or at least preferable, to mention the person towards whom the activity is directed (in the case of a speech activity, the hearer). This is the case in example 151, where the suffix *-oang* 'to' points to the hearer. Other examples are:

153 *Ngoah inoaukioang koawoa pwa ngoah pirin pwili.*
'I promise that I'll come.'

154 *Ih ngudngudkioang ngoahi pwa ioar woallo ma wahla mehu.*
'He whispered to me that it was that man who took it.'

The suffix *-oang* 'to' is used in many other cases to indicate the person towards whom an activity is directed.

155. *Ngoah ma kinehng oadoan jeriho.*
'I was the one who made up that child's name.'

156. *Ngoah lemehkioang pwa ih pwung.*
'I thought that he was correct.'

In 155, *-oang* points towards the child, the one who got the name. In 156, it seems to point to *ih*, the person to whom the thought is directed. Note that in examples like 156, *-oang* is only necessary if the speaker is thinking about another person, not himself.

157. *Ngoah lemehki pwa ngoah pwung.*
'I thought I was right.'

I might add that I am not clear about the difference between *leme* 'think, believe' used with a *-ki pwa* complement and with a simple *pwa* complement (as in example 141).

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The verbs of mental state and speech discussed in these sections appear more often in the perfective aspect before a complement sentence. When used in this way, emphasis seems to be placed on what was said, thought, or felt (on the **content** of the complement sentence), rather than on the speech act or mental state itself.

158. *Kamai inoaukihdi pwa ih japwungla.*
'We agreed that he had made a mistake.'
159. *Arai pakairkihla pwa sidowahu pirin risdi.*
'They announced that the store was going to close.'
160. *Kama kupwurohkihla pwa ih johmwehu.*
'We are sorry that he is sick.'
161. *Ngoah koapwoarpwoarkihla pwa ngoah nen kak pwili.*
'I hope that I'll be able to attend.'

The choice of perfective suffix is determined by the considerations outlined in chapter 9.

10.6.4.1 *-ki pwa* COMPLEMENTS OF TRANSITIVE VERBS

A few transitive verbs indicating speech events or opinions, and whose object is the person who is being discussed, can take a *-ki pwa* complement to describe the content of the discussion or opinion.

162. *Ih kopwungi ngoahi.*
'He judged me.'
163. *Ih kopwungihki ngoahi pwa ngoah pirap.*
'He judged that I was a thief.'

I am not certain how many other transitive verbs can appear in this construction.

10.6.5 Nominalized Complements

When the complement sentence **describes** the action or state, rather than simply asserting that it is a fact, that complement appears as a NOMINALIZED SENTENCE.

A nominalized sentence is a complete sentence (containing both a subject and a predicate) that has been converted into a possessive noun phrase so that it can be used as the subject or object of another sentence. Thus, a sentence like:

- 164a. *Ngoah poadokdi suhkoahu.*
'I planted that tree.'

can be nominalized into:

- b. *oai poadokdi suhkoahu*
'my planting that tree'

which can then appear as the topic of a sentence like:

165. *Inenin pispis oai poadokdi suhkoahu.*
'My planting that tree was very fast.'

The subject of the sentence to be nominalized becomes the possessor of the possessive noun phrase that results from nominalization. The subject *ngoah* 'I' of 164a becomes the possessor *oai* 'my' in 164b. The possessor in a nominalized sentence always takes the general possessive classifier. Other examples are:

- 166a. *Bob pok i pahioahu.*
'Bob beat his wife.'

- b. *Ngoah widahli en Bob poki pahioahu.*
'I watched Bob beat his wife.'

- 167a. *Koah poaloahdi suhkoahu.*
'You chopped down that tree.'

- b. *Ngoah kidal oamw poaloahdi suhkoahu.*
'I know about you cutting down that tree.'

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168a. *Ih doau.*
'He climbed.'

b. *Ah doau woaroain awa pahw.*
'His climbing lasted four hours.'

The emphasized portions of the b) sentences are nominalizations of the a) sentences.

As we mentioned above, nominalized sentences are also common after the relational nouns *mwohn* 'before' and *mwerin* 'after', and the words *doahr* 'like, as, the way that' and *doahrroar* 'in the same manner as', as in:

169. *Ngoah kamwingehk pijla mwohn en nohno japahldo.*
'I finished feeding the pigs before mommy came back.'

170. *Koah nen kak wahla amahu mwerin oai iuhs.*
'You can take the hammer after I use it.'

171. *Ngoah pihnihla woaroai pohsso doahrroar en mihn*
Mwoakilloa kin pihniek pohs.
'I painted my boat the way the Mokilese paint boats.'

The contrast between *pwa* complements and nominalized complements can be seen in examples like:

172a. *Ngoah kidal pwa John pihnihla sehpyllo.*
'I know that John painted that table.'

b. *Ngoah kidal en John pihnihla sehpyllo.*
'I know about John painting that table.'

173a. *Kisai ohroj kidal pwa wanihmwwo ohla.*
'We all know that the window is broken.'

b. *Kisai ohroj kidal en wanihmwwo ohla.*
'We all know about the window's being broken.'

174a. *Ngoah leme pwa jampah paspas.*
'I believe that the earth is flat.'

b. *Ngoah leme en jampah paspas.*

'I am thinking about the earth being flat.'

Some verbs seem to require nominalized complements: *mahkki* 'to forgive', *jarohki* 'to be ashamed', *ngidngidki* 'to insist', for example.

175. *Ngoah mahkki ah wia mehu.*
'I forgive him for doing that.'
176. *Ngoah jarohk ihdi oai pokihla woallo.*
'I'm ashamed of beating up that man.'
177. *Ih ngidngidki ah oaloo mehu.*
'He insists on taking that.'

10.6.6 Reduced Complements

All the complement structures we have examined so far are marked in some way, by the words *pwa* or *ma*, or by the use of a nominalized construction. In this section we shall examine complements that are not so marked. For example:

178. *Ngoah pwehng ih en wahdo epwi sakaio.*
'I told him to bring some rocks.'
179. *Ngoah kioang ih en iuhs.*
'I gave it to him to use.'

The reduced complement structures exemplified in 178 and 179 involve commands, desires, or purposes, rather than actual facts. Compare:

- 180a. *Ngoah pwehng ih en indoa.*
'I told him to come.'
- b. *Ngoah pwehng ih pwa John ne indoa.*
'I told him that John had come.'

The complement of 180b describes an event that actually happened, while that of 180a describes an event that the speaker wants to happen. Because complements of this type do not involve facts, their predicates are marked by the pre-predicate *en* (see 7.1.2.1).

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A comparison of examples of 178 and 179 with examples 181 and 182 below should make it clear why the former are called reduced complements.

181. *Ngoah pwehng ih pwa ih en wahdo epwi sakaio.*
'I told him that he should bring some rocks.'

182. *Ngoah kioang ih pwa ih en iuhs.*
'I gave it to him so that he could use it.'

Examples 178 and 179 are formed from examples 181 and 182 by deleting the word *pwa* and the subject of the complement clause (but only when it is identical with the object of the main clause). Under these conditions, complement clause reduction is common in purpose clauses (like 179 and 182) and, for many speakers, obligatory in command clauses (like 178 and 181). Such speakers find example 181 quite strange.

10.6.6.1 COMPLEMENTS AFTER VERBS OF ORDERING OR WISHING

Reduced complements appear after verbs such as *pwehng* 'to tell', *kahreng* 'to force', *poaki* 'to ask for', *ipong* 'to force', *inepwi* 'to forbid', *mwehuki* 'to want', *nimen* 'to want' that express desires or orders. For example:

183. *Ih kahrehng ngoahi en pwili ih.*
'He forced me to go with him.'

184. *Arai inepwihjang jerimweinnok en nim ihs.*
'They forbid those boys from drinking yeast.'

185. *John poaki ah piriенno en pwili ih.*
'John asked his friend to go with him.'

186. *Ngoah nimen koan jeuweje ngoahi.*
'I want you to help me.'

187. *Arai joh kak iponggoang ngoahi en wia mehu.*
'They can't force me to do that.'

Included in the examples above are transitive verbs such as *inepwi* and *poaki*, intransitive verbs that are used with *-oang* plus a noun to indicate the person towards whom the action is

directed, and intransitive verbs such as *nimen* 'to want', that never seem to allow a noun object under any circumstances, but do allow reduced complements.

10.6.6.2 REDUCED PURPOSE CLAUSES

Reduced complements expressing the purpose of an event can be found after *kaspoa* 'useful', *mwehu* 'good', *kioang* 'give', and so forth, in sentences like:

188. *Joh kaspoahng ngoan pwehng koawoa.*
'There is no need for me to tell you.'
189. *Inenin mwehuoang armaj ohroj en padahk i poap.*
'It's very good for everyone to learn to swim.'
190. *Ngoah kioang ih en iuhs.*
'I gave it to him to use.'

10.6.7 Like-subject Complements

Many (but not all) verbs can be followed directly by another verb when the subject of the first verb is also the subject of the second. The resulting construction resembles the implicational construction discussed in 10.3.2. It is used with verbs of motion, auxiliaries (see 7.1.1), and verbs like *pwili* 'to accompany', *padahki* 'to learn', and *jauwaj* 'to help'. For example:

191. *Ngoah inla dupukda rais.*
'I went to buy rice.'
192. *Ngoah nimen kijoula Pohnpei.*⁸
'I want to go to Ponape.'
193. *A rai pirin pwili loakjid.*
'They're going to go fishing too.'
194. *Ih pirin jauwaj doadoahk.*
'He's going to help with the work.'

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This list of verbs that require neither a complementizer nor an expressed subject is probably not exhaustive, but represents only the data available at present.

10.6.8 *-oang*, *in*, and *-ki* Complements

Other verbs require a suffix (*-oang* or *-ki*) or the particle *in* to link them with a following verb with which they share a common subject. The complements in most such cases do not indicate real events, but hopes, fears, desires, or purposes. Many verbs take *-oang* to denote purpose.

195. *A rai pokonpenehng doadoahk.*
'They assembled to work.'

196. *Ngoah karawarohng wahla mwingehu.*
'I hurried to deliver the food.'

Other verbs, like *pwur* 'to turn' take *-oang* without expressing purpose or desire.

197. *Ngoah pwurroang kijoula Hawaii.*
'I went to Hawaii again.'

Pwurroang means 'to do again'.

A large number of verbs require *in* before a following verb, particularly verbs denoting physical effort or mental state.

199. *Ngoah jong in kadoarihla doadoahkko.*
'I tried to finish the work.'

200. *Wallo moalkoahlahn wahdo ah nehkko.*
'That man forgot to bring his net.'

201. *Ngoah mijik in poaplahroh lel Mwandohn.*
'I'm afraid to swim all the way to Mwandohn.'

202. *Ngoah inenin peren in indoa.*
'I'm very happy to come.'

203. *Ih mwomwohd in koammoal me.*
'He stayed to rest here.'

With verbs of emotion like *mijik* 'to fear' or *peren* 'to be happy', either *in* or *-ki* may be used before the complement verb when the subject of the verb of emotion is expressed. The difference between the use of *in* or *-ki* in such cases is unclear to me.

10.6.9 Questions as Complements

When a question is used as a complement, as after verbs of mental state or verbal activity, the complement is introduced by *pwa*. For example:

204. *Ngoah kidal pwa inje kadardo kijakijjo.*
'I know who sent that present.'

205. *Kama jong pwa ia loalin pillappo.*
'We measured how deep the river is.'

206. *Ngoah jehjoa pwa amwda koah ke nimen ngoan jeuweje koawoa.*
'I don't know why you want me to help you.'

11 Word Formation

11.1 WORDS AND MORPHEMES

In chapter 2 we stressed that words are not the smallest units that can have meaning, and that even words can have parts. A word such as *kemwehui* ‘to improve’ has three parts—the causative prefix *ke-*, the root *mwehu* ‘good’ and the transitive suffix *-i*. One of these parts, *mwehu* ‘good’, is itself an independent word that can appear alone. The other two are affixes, which must always be attached to some root. To all such meaningful units, whether they are independent words or affixes, we give the term MORPHEME. Thus, *ke-*, *mwehu*, and *-i* are all morphemes.

The study of word formation involves two closely related topics: the study of how morphemes combine to make words; that is, **the internal structure of words**; and the study of how words can change to make new words; that is, the **relationships between words**.

As described in chapter 2, there are two basic components of a word—the ROOT (the heart of the word) and AFFIXES, which modify the meaning of the root. A word can consist of a root alone, with no affixes, as in the case of the word *mwehu* ‘good’, or of a root with a number of affixes, as in the case of a word like *kemwehulikla* ‘to become improved’, which consists of the root *mwehu* ‘good’ and the affixes *ke-* ‘causative’, *-i* ‘transitive’, *-ek* ‘intransitive’, and *-la* ‘perfective’.

Affixes can be divided into a number of different types, outlined in chapter 2. For our purposes here we may consider three affix types—PREFIXES like *ke-*, that precede the root; SUFFIXES like *-i*, that follow the root, and REDUPLICATION, as in *poadpoadok* ‘to be planting’ (from *poadoak* ‘to plant’) or *pikapik* ‘sandy’ (from *pik* ‘sand’), that repeats part of the root.

We cannot study the relationships between words without also studying the internal structure of words, because the changes that words undergo in making new words usually involve some kind of affixation. From the word *sohrohr* ‘different’ we can derive the word *aksohrohr* ‘to show independence’ by

means of the prefix *ak*, and from this word we can derive *liak-sohrohr* 'uncooperative' by means of the prefix *li-*. However, all relationships between words do not involve affixation. For example, a word like *kodkod* 'to husk', which is normally a verb, can be used as a noun in a sentence such as example 1, with no change in form: ¹

1. *Ah kodkoddō inenin pispis.*
 'That husking of his was done very fast.'

11.2 FUNCTIONS OF WORD-BUILDING PROCESSES

The study of word formation is the study of **complex** or **altered** words. These words are complex either because they consist of more than one morpheme or because they are being used in unusual, untypical ways (as in the case of *kodkod* 'to husk' above). Many of the processes we will be discussing here have already been treated in detail in other sections of the grammar; for example, the formation of transitive and intransitive verbs. These processes will be referred to here only as examples of word building processes, without repeating those details of their syntax and semantics that have been treated elsewhere.

Complex words might be created for a number of different reasons:

a. to express obligatory categories. For example:

i) kinship terms must be possessed

<i>joamoai</i>	'my father'
<i>pahioa</i>	'his wife'
<i>riasa</i>	'our brother'

ii) numbers used with nouns must contain a classifier

<i>roahmen</i>	'two animates'
<i>jilpas</i>	'three long objects'
<i>pahw</i>	'four ordinary things'

b. to change the meaning of the root. For example:

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the prefix *ja-* creates a new word with a meaning nearly opposite that of the root

<i>sihkei</i>	'strong'
<i>jasihkei</i>	'weak'

c. to signal grammatical functions, for example, transitive and intransitive verb suffixes

d. to signal semantic functions, for example, the suffix *-ki* marking the following noun phrase as an instrument

e. to change the word class of a root, for example, to permit a verb to function as a noun

11.3 PRODUCTIVITY OF WORD-BUILDING PROCESSES

A **productive** word-building process is one that can be used freely to derive new words. This is not to say that any word in Mokilese can be made to undergo such processes. Only words belonging to the class to which that process applies can normally be made to undergo it. An example is the causative prefix *ka-*, which is added to stative verbs (occasionally, but rarely, to active intransitive verbs) to allow the cause of that state to be expressed. **Causativization** (as we might call the causative verb-building process) is productive in Mokilese because it can apply to any stative verb.

A **nonproductive** word-building process is one that is restricted to only a few items of the class of words to which it applies. An example is the negative prefix *ja-*, which also affects stative verbs. Unlike the causative *ka-*, the negative *ja-* cannot be added to all statives. We can say *kalelpoak* 'to make sure' (from *lelpoak* 'dependable') and *jalelpoak* 'undependable', and *kamijik* 'frightening' (from *mijik* 'to be afraid') but not **jamijik*.

11.4 INFLECTION AND DERIVATION

Word formation processes are commonly divided into two types — **inflectional processes** and **derivational processes**. These terms are intended to capture the distinction that most of us

feel between what are different forms of the same word and what are essentially different, but related, words. Processes that create different forms of the same word are termed INFLECTION; those that create different words are termed DERIVATION.

It is not always clear which processes are to be considered derivational and which inflectional. Some criteria have been proposed to separate the two, but none are foolproof. We must still depend on the judgment of speakers of the language as to how to treat a given process. Unfortunately, as so often happens, in many cases the judgment of the native speaker is not clear. It has been proposed that derivational processes are:

- a. those that change word class membership. Yet, for example, the suffix *ja-* added to a stative verb creates what most of us would consider to be a different word without changing the word class: *mum* 'tasty', *jamum* 'not tasty'.
- b. those that are not productive. Yet, most people would consider the rather productive process of adding *-ki* 'with' to a noun to create a verb meaning 'to use as ...' to be derivational; for example *ama* 'hammer', *amahki* 'to use as a hammer'.

In short, although the distinction between inflection and derivation seems to be a valid one, the difficulties in determining whether a given process is derivational or inflectional make it a distinction that is very hard to use.

11.5 NOMINAL PROCESSES

In this section we will review those word formation processes that result in the creation of new nouns, either from other nouns or from words belonging to other classes. Numeral formation will be discussed here also.

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11.5.1 Inalienable Possession

The expression of possessive-like relations through suffixation was treated thoroughly in chapter 5. It involves the addition of personal suffixes to nominal or nominalized roots. If the nominal root has no free (unpossessed) form or if it involves a final vowel not present in the free form, the following suffixes are added:

	Singular	Dual	Plural	Remote
1st person				
inclusive		-sa	-sai	-hs
exclusive	-i(oa)	-ma	-mai	-mi
2nd person	-mw(en)	-mwa	-mwai	-mwi
3rd person	θ, -a	-ra	-rai	-hr
construct	-n			

If the nominal or nominalized root is consonant final, the following suffixes are added:

	Singular	Dual	Plural	Remote
1st person				
inclusive		-isa	-isai	-ihs
exclusive	-ihoā	-ima	-imai	-imi
2nd person	-imwen	-imwa	-imwai	-imwi
3rd person	-in	-ira	-irai	-ihr
construct	-in			

Details of the possessive paradigms may be found in chapter 5.

11.5.2 Numerals

The formation of numerals and numeral nouns involves the addition of the following prefixes to a series of **countable bases**:

one	<i>e-, a-</i>
two	<i>ria-, roah-, rah-, riah-, rie-</i>
three	<i>jilu-, jil-</i>
four	<i>pah-</i>
five	<i>limoa-, lim-</i>
six	<i>wono-, won-</i>
seven	<i>iju-, ij-</i>
eight	<i>walu-, wal-</i>
nine	<i>duoa-, doh-</i>

There are three classes of countable bases:

a. counting classifiers

-w	'general object'
-men	'animate'
-pas	'long object'
-kij	'bit, part'

b. higher numbers

-ijek	'ten'
-pwiki	'hundred'
-kid	'thousand'
etc.	

c. numeral nouns

-pak	'times'
-pwong	'days hence'

Numeral formation is treated in detail in chapter 4.

11.5.3 Nominalizations

Any process by which a verb, verb phrase, or sentence is converted into a noun or noun phrase can be termed NOMINALIZATION.²

11.5.3.1 EVENT NAMING

Any intransitive verb phrase (intransitive verb, incorporated object construction, intransitive verb and following noun phrase) may be used as a noun to name an event. Such nominalizations may appear as sentence subjects, in possessive constructions, and so forth. For example:

2. Loakjid *inenin kaperen*.
'Fishing is a lot of fun.'

3. Kodkod oaring *oaujoangoan doadoahk koalik*.
'Husking coconuts is very hard work.'

4. Doauoang dollo *kakoahk*.
 ‘Climbing that mountain was tiring.’

11.5.3.2 DESCRIPTIVE AND RESULT NOMINALIZATIONS

In chapter 10 we described the process of SENTENTIAL NOMINALIZATION (with both transitive and intransitive verbs) in which the doer of the action (the agent) can be expressed.

5. En liho *lopwor likkoauok woaroin awahioaw*.
 ‘The woman’s washing those clothes took an hour.’

In this example, the possessive phrase *en liho* ‘the woman’s’ names the agent, or doer, of the action.

In this section we will consider a second type of nominalization—one that provides a description either of the event itself or of its results.

6. Lallalin oawoa *oaujoangoan koalik*.
 ‘He talks big.’
7. Pokpokin jeriho *kamehk*.
 ‘The way that child was beaten is shameful.’
8. Loakjidin joangoan *mwumwoawe apwal*.
 ‘Fishing for that kind of fish is difficult.’
9. Kodkodin oaringgok *jadahr*.
 ‘The way those coconuts are being husked is slow.’
10. Poadin suhkoahu *jasoangsoang*.
 ‘That tree planting is loose.’
- 11a. Kurujekin mwehnggo *masak*.
 ‘The taro grounds are coarse.’
- b. Kurujekin mwehnggo *apwal*.
 ‘The way that taro was ground was difficult.’

Descriptive and result nominalization involves the creation of an inalienably-possessed noun from the intransitive form of the verb by adding consonant-stem personal suffixes.

It is sometimes very difficult to separate the descriptive and result functions of this nominalization type. In sentence 6, for example, the nominalization *lallalin oawoa* ‘the speaking of his mouth’ might refer to what he says or to the way he says it. Similarly, *pokpokin jeriho* in example 7 might be translated ‘the way that child was beaten’ or, simply, ‘the beating of that child’. In example 10, *poadin suhkoahu* seems to refer only to the result of the activity ‘planting’; that is, to the planted tree. But in example 11, we see *kurujekin mwehnggo* referring to either ‘the grounds’, the physical result of the activity of grinding, or to the way in which the grinding was done.

The intransitive root used in forming these nominalizations is usually reduplicated, when used to describe an event, unless the intransitive is formed by suffixing *-ek* or the intransitive root has two syllables.

Noneventive nominals are not normally reduplicated. Thus, corresponding to the essentially eventive nominal *lallalin* ‘the way he talks’ we find the noneventive *lalin* ‘language of’. Similarly, corresponding to the eventive *kodkodin* ‘husking of’ we find the noneventive *kodin* ‘husking stick for.... Some verbs seem to have only noneventive nominals; for example, *poadin* ‘planting of’. Nominalizations of stative verbs are normally noneventive and, therefore, unreduplicated; for example, *dak in* ‘brightness of’. The distinction between nominals that describe events (eventive nominals) and those that describe objects, results, or conditions (noneventive nominals) seems to be an important one but is as yet poorly understood.

The possessor noun phrase in a descriptive or result nominalization usually represents the person or object towards which the activity is directed. However, particularly in the case of active intransitive verbs, it may also refer to the agent. For example:

12. *Rahrahuin liho kadiropwoa ngoahi.*

could be translated either:

- 13a. ‘The way *that woman* screamed bothered me.’ or
 b. ‘The screaming about *that woman* bothered me.’

An agentive interpretation of such nominalizations formed from transitive verbs is allowed by some speakers, but others insist that such an interpretation is impossible. These latter speakers will not accept a sentence like:

14. *?Kodkodin woallo kapwuriamwei.*
 'The way that man is husking is surprising.'

11.5.3.3 DESCRIPTIVE NOMINALS OF PERFECTIVE VERBS

Descriptive nominals are regularly formed from intransitive perfective verbs by adding the suffixes *-koa* 'third person singular' or *-koan* 'construct'. For example:

15. *Dakdakoan joauo inenin ling.*
 'The sunrise is very pretty.'
16. *Ioar doahr koajoandikoan ah lallal.*
 'That was the basis of what he said.'
17. *Ngoah pel inenin pwuriamweikihla pwa inoangpase nauna imwllakoa.*
 'I too was very surprised that the story ended badly.'
- 18a. *Pwurlakoan wijahn.*
 'The other side of that spot.'
- Pwurdokoan wijahn.*
- b.
 'This side of that spot.'

Descriptive nominals of perfective verbs are often used in exclamations as:

19. *Soaplakoan woallo!*
 'The size of the man!'
20. *Soausoaulakoan sakaio!*
 'How heavy that rock is!'
21. *Kijoulakoan jerim weinno!*
 'The way that boy runs!'

n-third singular (see 5.3.3) nominals can also be formed from perfective verbs, particularly in the case of result nominalizations.

- 22a. Ohlahn *wanihmwwo koalik*.
'The break in the door is big.'
- b. Ohlakoan *wanihmwwo koalik*.
'The break in the door is big.'

11.5.3.4 DESCRIPTIVE NOMINALS OF STATIVE VERBS

n-third singular nominals are freely created from stative verbs, as, for example:

<i>dirin</i>	'amount of'	(from <i>dir</i> 'many')
<i>woaroain</i>	'duration of'	(from <i>woaroai</i> 'to last')
<i>mwehuin</i>	'goodness of'	(from <i>mwehu</i> 'good')
<i>roairoain</i>	'length of'	(from <i>roairoai</i> 'long')
<i>loalin</i>	'depth of'	(from <i>loal</i> 'deep')
<i>apwalin</i>	'difficulty of'	(from <i>apwal</i> 'difficult')

These nominalizations are of particular interest because they frequently combine with the suffix *-oar* in a comparative construction similar to the English 'as ... as' construction.

23. *Wijahkije loalinnoar wijahkijo*.
'This place is *as deep as* that place.'
24. *Koanoahi mwumwkai dirinnoar koanoahmwkan*.
'I caught *as many* fish as you did.'
25. *Ia koaroaninnoar Mwoakilloa oang Pohnpei?*
'How *far* is Mokil from Ponape?'

11.5.3.5 TRANSITIVE OBJECT NOMINALS

The suffixes *-poa* '3rd person' or *-poan* 'construct' can be added to some imperfect transitive verbs to form nominals related to the accomplishment of the activity in question: either its result, some object used in bringing about the result, or the cause of that result. For example:

<i>audopoa</i>	'Its contents'	(from <i>audo</i> 'to fill')
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<i>karajapoa</i>	'an example'	(from <i>karaja</i> 'to explain')
<i>wiapoa</i>	'its construction'	(from <i>wia</i> 'to make')
<i>iroapoa</i>	'boundary, limitation'	(from <i>iroa</i> 'to limit')
<i>kahrepoa</i>	'its reason'	(from <i>kahrehda</i> 'to cause')
<i>koauwepoa</i>	'difficulty, hindrance'	(from <i>koauwehla</i> 'to break, to hinder')

Note that in the last two examples the suffix *-poa* must be added to an imperfective verb form, with the perfective suffix removed. This nominalization process does not seem to be a fully productive one.

11.5.3.6 AGENT AND INSTRUMENT NOMINALS

An intransitive verb can be used with the construct nouns *john* 'person who' and *mihn* 'thing for, person from' to derive agent, instrument and nationality nouns.

john

<i>johnpadahk</i>	'teacher'
<i>johndor</i>	'defender'
<i>johndoadoahk</i>	'worker'
<i>johnpei</i>	'soldier'

mihn 1

<i>mihn kurujek</i>	'grinder'
<i>mihn kasaman</i>	'souvenir'
<i>mihn pwuropwur</i>	'drill'

mihn 2

<i>mihn wai</i>	'American'
<i>mihn Japahn</i>	'Japanese'
<i>mihn Mwoakilloa</i>	'Mokilese'

11.6 VERBAL PROCESSES

In this section we will discuss these word-building processes that derive new verbs, either from existing verbs or from roots belonging to other word classes.

11.6.1 Transitivity

As pointed out in 6.5.2.1, many transitive-intransitive verb pairs have an unaffixed intransitive form and a transitive form with the suffix *-i*. For example:

<i>loakjid</i> _i ³	‘to fish’
<i>loakjidi</i> _t	
<i>alij</i> _i	‘to aim’
<i>aliji</i> _t	
<i>kadeik</i> _i	‘to accuse’
<i>kadeiki</i> _t	
<i>oak</i> _i	‘to hide’
<i>oaki</i> _t	

This process of deriving transitive verbs by means of a suffix like *-i* can be termed **transitivity**.

It is difficult to determine the class of verbs that take *-i* to form the transitive. The process is particularly common in the derivation of causative transitives, as, for example, *karosi* ‘to darken’ (from *ros* ‘dark’), although many derived causative transitives show a root vowel rather than the suffix *-i*; for example, *koarjoa* ‘to empty’ (related to *roj* ‘empty’). The suffix *-i* is also freely used to derive transitive verbs from nouns. For example:

<i>didi</i>	‘to wall in’	(from <i>did</i> ‘wall’)
<i>piki</i>	‘to sand, to spread sand’	(from <i>pik</i> ‘sand’)
<i>japwoli</i>	‘to shovel’	(from <i>japwol</i> ‘shovel’)
<i>jukei</i>	‘to add sugar’	(from <i>juke</i> ‘sugar’)
<i>dalenmoangi</i>	‘to shave the head’	(from <i>dalenmoang</i> ‘smooth head’)

The meaning of such noun-derived transitives varies from example to example but in general these verbs refer to an activity that uses the object to which the noun refers.

11.6.1.1 FINAL VOWEL DELETION AND TRANSITIVIZATION

Many Mokilese words that today end in consonants at one time ended in vowels and many that now end in short vowels once ended in long vowels. We assume this to have been the case because these historical final vowels are often preserved in inflected or derived forms in which the old final vowel was 'preserved' by following sounds. Consider the following phonological derivations.⁴

Historical Form	<i>*ada</i>	<i>*ada + V</i> ⁵	<i>*ada + ni</i>
Vowel Adjustment	———	<i>oadoa + V</i>	<i>oadoa + ni</i>
Final Vowel Deletion	<i>ad</i>	<i>oadoa</i>	<i>oadoan</i>
	'name'	'his name'	'name of'
Historical Form	<i>*insaa</i>	<i>*insaa + V</i>	<i>*insaa + ni</i>
Final Vowel Deletion	<i>insa</i>	<i>insah</i>	<i>insahn (*insaan)</i>
	'blood'	'his blood'	'blood of'
Historical Form	<i>*pika</i>	<i>*pika + ni</i>	<i>*pika</i>
Reduplication	———	———	<i>pikapika</i>
Vowel Adjustment	———	<i>pika + ni</i>	———
Final Vowel Deletion	<i>pik</i>	<i>piken</i>	<i>pikapik</i>
	'sand'	'sand of'	'sandy'

As we see from these examples, the historical final vowel is often preserved in possessive and reduplicated forms, though lost in the root. Traces of historical final vowels are also found in some transitive verb forms.

Historical Form	<i>*inoange</i> _n	<i>*inoange + V_t</i> ⁶
Final Vowel Deletion	<i>inoang</i> _n	<i>inoange</i> _t
	'a story'	'to tell a story about'
Historical Form	<i>*doko</i> _i	<i>*doko + V_t</i>
Final Vowel Deletion	<i>dok</i> _i	<i>doko</i> _t
Vowel Adjustment	———	<i>doakoa</i> _t
	'to spear'	'to spear something'

When a root undergoes transitivization (either in deriving a causative transitive form or a simple transitive verb), the historical final vowel reappears in the derived form if its identity is

known. If the identity of the final vowel is not known, the suffix *-i* is used. Thus, the vowel *-oa* that appears in the causative transitive *koarjoa* ‘to empty’ (related to *roj* ‘empty’) can be identified with the historical final vowel of the root (perhaps an earlier **rojo*). In a case like *jukei* ‘to sugar’ (from *juke* ‘sugar’) the suffix *-i* is added in the transitive form because this word is a borrowed word and, therefore, cannot be assumed to have ever lost a vowel.

It is interesting that derived transitives often can have two forms, one showing the historical final vowel and one assuming its identity to be unknown, and therefore taking the suffix *-i*. For example, both *pikoa* and *piki* ‘to spread sand’ (from *pik* ‘sand’), and both *karoasoa* and *karosi* ‘to darken’ (from *ros* ‘dark’) are in use. This variation reflects the changing status of the historical final vowels in these forms.

11.6.2 Intransitivization

Intransitive counterparts of bi-transitive verbs can be derived from transitive roots by a variety of processes, as outlined in 6.5. Among these are:

- a. deletion of the final vowel and consonant, if any

<i>daur</i> _t	‘to climb for’
<i>doau</i> _i	‘to climb’
<i>pakad</i> _t	‘to defecate on’
<i>poak</i> _i	‘to defecate’ ⁷
<i>insinge</i> _t	‘to write (something)’
<i>insing</i> _i	‘to write’

- b. as (i), accompanied by reduplication

<i>kodom</i> _t	‘to husk (something)’
<i>kodkod</i> _i	‘to husk’
<i>sikoa</i> _t	‘to talk about’
<i>sikesik</i> _i	‘to converse’

- c. numerous other ‘irregular’ changes

<i>palang</i> _t	‘to dry clothes’
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<i>poaloang</i> _i	'to dry clothes'
<i>pihj</i> _t	'to urinate on'
<i>pijpij</i> _i	'to urinate'

d. addition of the suffix *-ek* to the transitive

<i>kuruj</i> _t	'to grind (something)'
<i>kurujek</i> _i	'to grind'
<i>pina</i> _t	'to cover (something)'
<i>pinahiek</i> _i	'to cover'
<i>kamehki</i> _t	'to shame (somebody)'
<i>kamehkiek</i> _i	'to shame'

The suffix *-ek* is used productively to derive intransitive causatives, as in the last example, even when the transitive causative has the suffix *-i*. (Note that there seems to be a correlation between the suffix *-ek* and an **eventive**, as opposed to a stative or characterization interpretation of intransitive verbs. This notion is yet to be fully explored, however.)

11.6.3 Causativization

Causative verbs, both stative and active, can be formed from most stative verbs and a limited number of active verbs. From the verb *mijik* 'afraid', we can derive the following forms.

- a. a stative causative *kamijik* 'frightening'
- b. a transitive causative *kamijiki* 'to frighten'
- c. an eventive intransitive causative *kamijikiek* 'to frighten'

Details of the form and function of causative verbs have already been given in 6.6.2.

11.7 VERBS AND NOUNS

There are many examples of Mokilese words of exactly the same form with both verbal and nominal meanings. In many cases most Mokilese would feel that the verbal meaning is central and

that the nominal meaning is derived from it. In other cases the opposite might be true, and in still others it is difficult to decide. Some examples are:

<i>aproa</i> _n	'his shoulder'
<i>aproa</i> _v	'to carry on the shoulder'
<i>inapnap</i> _n	'a cushion'
<i>inapnap</i> _v	'to cushion'
<i>deidei</i> _n	'a man-made taro patch'
<i>deidei</i> _v	'to dig'
<i>kojuk</i> _n	'a gun'
<i>kojuk</i> _v	'to shoot'

Keeping this problem in mind, let us consider processes that allow words to change their word class membership. In section 11.5.3, we discussed various **nominalization** processes, by which a verb can be converted into a noun. In the following section we will review several forms of the opposite process, that is, nouns being converted into verbs.

11.7.1 Verbalization

One verbalization process has already been discussed: the creation of transitive verbs from nouns by the addition of the suffix *-i*.

In other cases, nouns can be used as verbs with no change in form. For example, nouns referring to clothing can be used as verbs in the meaning 'to wear...':

26. *Ngoah ju.*
'I'm wearing shoes.'
27. *Ngoah raujij.*
'I'm wearing pants.'

Nouns naming materials can be used to describe other nouns, as in:

28. *umw suhkoahioaw*

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'a wooden house'

29. *did sakaio*
'that stone wall'

Nouns naming professions or groups into which people are classified can be used as predicates:

30. *Ih wool.*
'He is manly.'

31. *Ih doaksoa.*
'He is a doctor.'

Besides the transitive suffix *-i*, other verbal suffixes can be used to derive verbs from nouns. Instrumental verbs can be derived from nouns by adding *-ki*. Such verbs can be translated 'to use as...'

ama _n 'a hammer'
amahki _v 'to use as a hammer'

32. *Ngoah amahki sakaie.*
'I used this rock as a hammer.'

- 33 *Ngoah jeiahk i kehso.*
'I used that box as a chair.'

The perfective suffix *-la* may be added to nouns to derive verbs meaning 'to become...':

34. *Ngoah pirin doaksoahla.*
'I'm going to become a doctor.'

11.7.2 Stative Verb Derivation

Mokilese has a number of largely unproductive processes deriving stative verbs from items belonging to all word classes. Some of these processes are outlined in the following sections.

11.7.2.1 FINAL -CVC REDUPLICATION

This process most frequently derives stative verbs from nouns.

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<i>sakai</i> _n	‘rock’
<i>sakaikai</i> _v	‘rocky’
<i>no</i> _n	‘wave’
<i>nohno</i> _v	‘full of waves’
<i>pik</i> _n	‘sand’
<i>pikapik</i> _v	‘sandy’
<i>koalo</i> _n	‘root’
<i>koalohlo</i> _v	‘full of roots’
<i>loang</i> _n	‘fly’
<i>loangloang</i> _v	‘full of flies’
<i>al</i> _n	‘line’
<i>alahl</i> _v	‘striped’
<i>dikol</i> _n	‘lump’
<i>dikolkol</i> _n	‘lumpy’
<i>si</i> _n	‘bone’
<i>sihsi</i> _v	‘bony’
<i>soa</i> _n	‘leaf’
<i>soahsoa</i> _v	‘leafy’
<i>mwei</i> _n	‘spot’
<i>mweimwei</i> _v	‘spotted’

Final -CVC reduplication occasionally applies to verbs also:

<i>piroaki</i> _t	‘to braid’
<i>piroakroak</i> _i	‘braided’
<i>kadipoa</i> _t	‘to betray’
<i>kadipedip</i> _i	‘traitorous’
<i>moalkoahla</i> _t	‘to forget’
<i>molukluk</i> _i	‘forgetful’

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<i>koajoane</i> _t	'to arrange'
<i>koajoanjoan</i> _i	'arranged'

11.7.2.2 THE SUFFIX *-an*

This suffix can be added to a few nouns to derive stative verbs with the meaning 'full of...', 'covered with...', and so forth. For example:

<i>uduk</i> _n	'flesh'
<i>udukan</i> _v	'fleshy'
<i>win</i> _n	'hair'
<i>winan</i> _v	'hairy'
<i>alij</i> _n	'beard'
<i>aljan</i> _v	'heavily bearded'
<i>pis</i> _n	'pandanus leaf'
<i>pisan</i> _v	'full of leaves'
<i>dipah</i> _n	'his sin'
<i>dipan</i> _v	'sinful'

In some cases, reduplication must accompany this suffix:

<i>pad</i> _n	'depression'
<i>padpadan</i> _v	'ruttled'
<i>pwok</i> _n	'hole'
<i>pwokpwokan</i> _v	'full of holes'

Often, vowels other than /a/ appear in this suffix. For example:

<i>il</i> _n	'new shoot'
<i>ilin</i> _v	'full of shoots'
<i>pwoar</i> _n	'hole'
<i>pwoarpwoaroan</i> _v	'full of holes'

As with -CVC reduplication, the suffix *-an* is also used with a few verbs to derive statives.

<i>pakad</i> t	‘to defecate’
<i>pakadahn</i> i ⁸	‘constantly defecating’

11.7.2.3 THE PREFIX *li-*

The prefix *li-*, together with final -CVC reduplication is used with some verbs (both stative and active) to derive stative verbs meaning ‘given to..., prone to..., characterized by..., ...-able’, and so forth. Some examples are:

<i>sipw</i> i	‘broken’
<i>lisipwasipw</i>	‘breakable’
<i>joang</i> i	‘to cry’
<i>lijoangjoang</i>	‘prone to crying’
<i>kak</i> i	‘to jump’
<i>likakkak</i>	‘bouncy’
<i>pil</i> i	‘to choose’
<i>lipilpil</i>	‘choosy’
<i>pok</i> i	‘to hit’
<i>lipokpok</i>	‘prone to hitting’
<i>keikei</i> i	‘to bite’
<i>likeikei</i>	‘prone to biting’

11.7.2.4 THE PREFIX *ja-*

The prefix *ja-* (sometimes *ji-*, *je-* or *joa-*) can be added to many (but not all) statives to derive a stative nearly opposite in meaning from the original. For example:

<i>mum</i>	‘good-tasting’
<i>jamum</i>	‘bad-tasting’
<i>sihkei</i>	‘strong’
<i>jasihkei</i>	‘weak’

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<i>dahr</i>	'fast'
<i>jadahr</i>	'slow'
<i>kon</i>	'suitable'
<i>jakon</i>	'unsuitable'
<i>dir</i>	'many'
<i>jadir</i>	'few'
<i>koahlok</i>	'tired'
<i>joakoahlok</i>	'tireless'
<i>mwoahmwoa</i>	'rich'
<i>joamwoahmwoa</i>	'poor'
<i>kenken</i>	'respected'
<i>jekenken</i>	'not respected'

11.7.2.5 INTENSIVE INFLECTION

Many stative verbs have a special intensive form, derived in one of two ways. If the stative is reduplicated, its intensive is formed by lengthening the vowel of the first syllable (the second if the form in question is more than two syllables in length), and increasing its pitch if the form is reduplicated. The intensive form of an unreduplicated stative is reduplicated (on a pattern as yet unclear to me). The vowel of its second syllable (the first if the intensive form is only two syllables in length) is then lengthened and its pitch is increased.

The intensive form has the meaning 'very..., really...'. Some examples are:

<i>siksik</i>	'small'
<i>sihksik</i>	'really small'
<i>pwilpwil</i>	'sticky'
<i>pwihlpwil</i>	'really sticky'
<i>ringoangoai</i>	'thin'
<i>ringoahingoai</i>	'really thin'
<i>inen</i>	'straight'

<i>inehninen</i>	‘really straight’
<i>koalik</i>	‘big’
<i>koalihkoalik</i>	‘really big’
<i>moad</i>	‘full’
<i>moahdmoad</i>	‘really full’
<i>jikahk</i>	‘in bloom’
<i>jikahkjikahk</i>	‘really blooming’
<i>mwehu</i>	‘good’
<i>mwehumwehu</i>	‘really good’
<i>dehn</i>	‘old’
<i>dehndehn</i>	‘really old’
<i>dahr</i>	‘fast’
<i>dahrdahr</i>	‘really fast’
<i>mwahl</i>	‘bad’
<i>mwahlmwahl</i>	‘really bad’

11.7.2.6 STATIVES WITH *nimen* ‘TO WANT’

Another stative forming process, as yet almost completely uninvestigated, is the use of *nimen* ‘to want’ with eventive verbs to derive a noneventive stative meaning. For example:

- 35a. *Ih moair.*
 ‘He is sleeping.’
- b. *Ih inenin nimen moair.*
 ‘He is very sleepy.’
- 36a. *Ih kin akmaiki mehu.*
 ‘He always argues about that.’
- b. *Ih nimen akmai.*
 ‘He is argumentative.’

The volitional (wanting) sense of *nimen* allows such verbs to be used as characterizations.

11.7.3 Other Verbal Processes

11.7.3.1 THE PREFIX *ak-*

The prefix *ak-* can be added to a large number of stative verbs to derive verbs meaning ‘to display the characteristic...’ or ‘to pretend to be...’, usually in a derogatory sense. Some examples are:

<i>laplap</i>	‘important’
<i>aklaplap</i>	‘cocky’
<i>pwung</i>	‘correct’
<i>akpwung</i>	‘to self-justify’
<i>siksik</i>	‘small’
<i>aksiksik</i>	‘humble’
<i>sohrohr</i>	‘different’
<i>aksohrohr</i>	‘to act independent’
<i>sihkei</i>	‘strong’
<i>aksihkei</i>	‘to feign strength’

11.7.3.2 THE PREFIX *pak-*

Some verbs can take the prefix *pak-* to derive verbs meaning ‘to have a contest in...’ or ‘to compare...’.

<i>wajejjej</i>	‘to skip stones’
<i>pakwajejjej</i>	‘to have a stone-skipping contest’
<i>waiel</i>	‘to be a sharpshooter’
<i>pakwaiel</i>	‘to have a shooting contest’
<i>roairoai</i>	‘tall’
<i>pakroairoai</i>	‘to compare heights’

11.7.3.3 THE WORD *mwahl* 'BAD'

Most intransitive verbs (and the intransitive forms of bitransitive verbs) can form compounds with *mwahl* 'bad'. The resulting verbs describe an activity that is purposeless, of no value, badly done, and so forth. Some examples are:

alu mwahl

37. *Ih all alu mwahljili.*
'He is wandering around.'

sip mwahl

38. *Woallo sip mwahlihdi kakonno.*
'That man tied that box up badly.'

doadoahk mwahl

39. *Ih kin doadoahk mwahl.*
'He always does useless work.'

11.7.3.4 THE SUFFIX *-ki*

The instrumental use of *-ki* has already been referred to in 11.4. As was pointed out in 6.6.1, *-ki* can also be suffixed to intransitive verbs of mental state to form verbs of emotional reaction. For example:

mwehu 'good'
mwehuki 'to like'

ling 'pretty'
lingki 'to find pretty'

kijrad 'hateful'
kijradki 'to hate'

This appears to be a productive process within this class of verbs.

11.7.3.5 OBJECT INCORPORATION

This process, as described in 6.5.6, creates an intransitive verb from a compound of the intransitive form of a bi-transitive verb (often a special unreduplicated 'combining form' in the case

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of reduplicated intransitives) and a noun. These incorporated object constructions are analogous to English two-word verbs like 'baby-sit'. For example:

<i>dok mwumw</i>	'to spear-fish'
<i>oakoarok jeri</i>	'to baby-sit'
<i>poad suhkoa</i>	'to plant trees'
<i>rik sakai</i>	'to gather stones'

On occasion, the elements of an incorporated object construction are bound so tightly as to become one word phonologically:

johnoai 'to make a fire'
(from *jaun* 'to feed a fire' + *oai* 'fire')

jileimw 'to watch the house'
(from *jiloa* 'to watch' + *umw* 'house')

Details of the syntax of incorporated object constructions have already been given in 6.5.6.

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12.1 BASIC SENTENCE ORDER

In chapter 6, we divided the verbs of Mokilese into two basic types. **Intransitive verbs** are those that involve only one principal participant. That participant may be either the one performing the action (often called the **agent**), the experiencer of a mental state (often called the **experiencer**), or the person or object found in a physical state (often called the **object**). **Transitive verbs** are those that involve both an agent (or experiencer) and an object or goal. The goal may be either the object towards which the action is directed, in the case of an agent-goal verb, or the person or object towards which a feeling is directed, in the case of experiencer-goal verbs.

Some examples of intransitive sentences are:

agent intransitive

- 1a. *Jerihok kjkijou.*
'The children are running.'
- b. *Kisai doadoahk a io.*
'We worked yesterday.'

experiencer intransitive

- c. *Ngoah per en.*
'I am happy.'
- d. *Ih pwuriamwei.*
'He is surprised.'

object intransitive

- e. *Liho lijaianda.*
'That woman got pregnant.'
- f. *Mine noai jeri.*
'I have children.'

- g. *Inenin pispis ah doadoahk.*
'He worked very quickly.'

Some examples of transitive sentences are:

agent-goal transitive

- 2a. *Nanmwarkiho moalkoahla ah jepjepin koauo.*
'The Nanmwarki forgot his tackle box.'
- b. *Koah en menlau kardoahng ngoahi mehk.*
'Please send me those things.'
- c. *Arai wiahda pohspas.*
'They built a boat.'
- d. *Charlie poadokdi suhkoahu.*
'Charlie planted that tree.'

experiencer-goal transitive

- e. *Ngoah pwanah kidal ih.*
'I know him well.'
- f. *Woallo kin mijik pwehk.*
'That man is afraid of bats.'

The three principal elements of transitive sentences, as for example the sentences of 2 above, always occur in the same relative order; that being, AGENT (or EXPERIENCER) + VERB + OBJECT. This is the basic order of elements in simple transitive sentences.

In 6.1, we defined the term SUBJECT as the topic of the sentence, the person or thing that is being discussed. We also pointed out that the subject always precedes the verb, in exactly the same way as the agent (or experiencer) always precedes the verb in a simple transitive sentence. We can thus conclude that the agent (or experiencer) of a simple transitive sentence is always the subject of that sentence.

Intransitive sentences like those of example 1 have only one principal participant, whether it be agent, experiencer, or object. Note, however, that the principal participant (or topic)

in an intransitive sentence can either precede the verb (as in 1a to 1e) or follow it (as in 1f and 1g). That is, the relative position of topic and verb in an intransitive sentence is variable.

In intransitive sentences with agent topics (sentences whose main verb names an **action** rather than a **state** or **condition**), the basic word order is AGENT + VERB.

- 3a. *Ngoah alu.*
'I walk.'
- b. *Woallo koaul.*
'That man sings.'
- c. *Kisai doadoahk.*
'We worked.'

These sentences cannot appear in the opposite order:

- 4a. **Alu ngoahi.*
- b. **Koaul woallo.*
- c. **Doadoahk kisai.*

In intransitive sentences involving permanent physical states or conditions (sentences in which the principal participant might be termed an **object**), the topic of the sentence may either precede or follow the verb. That is, the basic word order in such sentences is either OBJECT + VERB or VERB + OBJECT. For example:

- 5a. *Sakaie soausoau.*
'This rock is heavy.'
- b. *Soausoau sakaie.*
'This rock is heavy.'
- 6a. *Pukko wahssa.*
'That book is red.'
- b. *Wahssa pukko.*
'That book is red.'

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In sentences involving experiencer subjects (sentences in which the main verb is a mental state verb, for example) or in sentences describing states that are the result of actions, the basic word order is usually EXPERIENCER (or OBJECT) + VERB, as in:

- 7a. *Liho injinjued.*
'That woman is sad.'
- b. *Liho lijaian.*
'That woman is pregnant.'
- c. *Padillo sipw.*
'That paddle is broken.'

However, when verbs such as these are used in sentences that describe a change of state, rather than the result of that change, the basic word order is either EXPERIENCER (or OBJECT) + VERB or VERB + EXPERIENCER (or OBJECT). In these cases the verb in question is usually in the perfective aspect. For example:

- 8a. *Liho injinjuedla.*
b. *Injinjuedla liho.*
'That woman became sad.'
- 9a. *Liho lijaianda.*
Lijaianda liho.
'That woman became pregnant.'
- 10a. *Padillo sipwla.*
b. *Sipwla padillo.*
'That paddle broke.'

If the topic of an intransitive sentence is a *pwa* complement, the complement always follows the verb.

11. *Kapwuriamwei pwa ih pe pwili sukuhl.*
'It is surprising that he is still going to school.'
12. *Mwehu pwa arai pirin kijoudo.*
'It is good that they are coming.'
13. *Inenin woahwoa pwa John kia pwili.*
'It is very clear that John doesn't want to come.'

If the topic of an intransitive sentence is a nominalized complement (see 10.6.5), that complement usually follows, but may precede, the verb.

14. *Dahrla ah kijou.*
'He ran faster.'
15. *Inenin kakoahk ah doadoahk.*
'His work was very tiring.'

However, if the topic of an intransitive sentence is a nominalized complement referring to a definite event (used with a definite determiner), the complement usually precedes the verb.

16. *Inenin pispis ah kodkod.*
'He husks very quickly.' but
17. *Ah kodkoddo inenin pispis.*
'That husking that he did was very quick.'

VERB + OBJECT order is preferred in sentences containing a small class of verbs that might be termed **existential** (because they make observations about the existence of an object—see 8.6.1). Among such verbs are:

<i>mine</i>	'to exist'
<i>joh</i>	'to not exist'
<i>dir</i>	'to be many'
<i>r oj</i>	'empty'
<i>doari</i>	'finished'

Some examples of existential sentences are:

18. *Mine oai sohri.*
'I have zoris.'
19. *Dir koanoahn woallo.*
'That man caught a lot of fish.'
20. *Johla mwani.*
'There's no more money.'
21. *Roj pilen mwoakke.*

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'There's no more water in this glass.'

The noun phrase object of an existential sentence is likely to be, but is not necessarily, a non-definite noun phrase. With *mine*, an existential sentence containing a definite noun phrase is likely to be interpreted as statement about the **location** of that object. In this locative sense, the definite noun phrase object of *mine* regularly precedes *mine*. In nonlocative existential sentences, even a definite noun phrase regularly follows the verb. For example:

22. *Woallo mine nehn najjo.*
'That man is in the boathouse.'
23. *Ne doari en liho doadoahkko.*
'That woman's job is already finished.'
24. *Pe minehr noai pukkuk.*
'I still have those books.'

The order of basic sentence elements may be summarized:

a. transitive sentences

$$\left\{ \begin{array}{l} \text{agent} \\ \text{experiencer} \end{array} \right\} + \text{verb} + \text{object}$$

b. intransitive sentences

i) active verb

agent + verb

ii) physical state verb

$$\left\{ \begin{array}{l} \text{object} + \text{verb} \\ \text{verb} + \text{object} \end{array} \right\}$$

iii) mental state or resultant state

$$\left\{ \begin{array}{l} \text{object} \\ \text{experiencer} \end{array} \right\} + \text{verb}$$

$$\left\{ \begin{array}{l} \left\{ \begin{array}{l} \text{object} \\ \text{experiencer} \end{array} \right\} + \text{verb-perf.} \\ \text{verb-perf.} + \left\{ \begin{array}{l} \text{object} \\ \text{experiencer} \end{array} \right\} \end{array} \right\}$$

iv) complement sentence as topic

verb + *pwa* complement

$$\left\{ \begin{array}{l} \text{verb} + \text{nominalized complement} \\ \text{nominalized complement} + \text{verb} \end{array} \right\}$$

v) existential sentences

verb + object (in true existential sentences)

object-det + verb (in locative sentences)

12.2 SUBJECT FORMATION

As described earlier, the subject of a sentence is the main topic of that sentence, and must precede the verb. In the last section we showed that the subject of all agentive sentences is the agent. The subject of most experiencer and resultant state sentences is the experiencer or the object. In such sentences, these are the noun phrases that must precede the verb.

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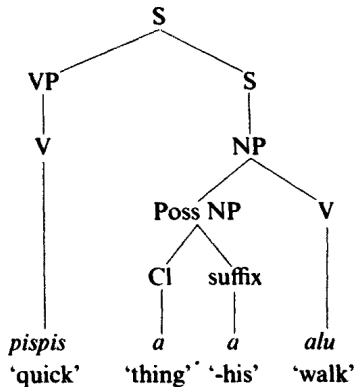
In sentences where the basic word order is VERB + OBJECT it is perhaps correct to say that these sentences have no subject, since the subject, as defined above, must precede the verb. In the case of sentences where the order of basic elements is variable (e.g. VERB + OBJECT or OBJECT + VERB), we can say that these sentences only have subjects when the verb is not the first major element. I would like to claim that in such cases, the order VERB + OBJECT is the basic order and that the order OBJECT + VERB is the result of a rule of **subject formation**, which moves noun phrases into subject (pre-verbal) position. Let us first examine a few clear cases of the operation of this rule.

12.2.1 Subject Formation from a Nominalized Complement.

In the previous section we discussed intransitive sentences having nominalized complements as topics. For example:

26. *Pispis ah alu.*
'He walked quickly.'

which may be diagrammed:

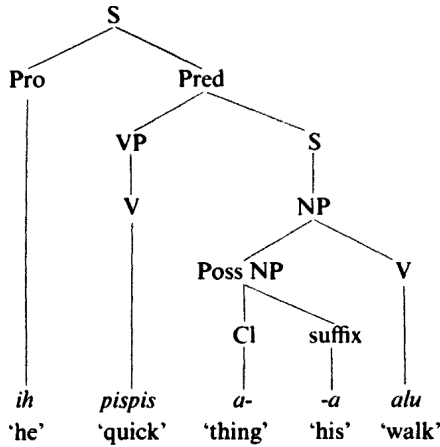


The nominalization operation has converted the sentence *ih alu* 'he walked' into *ah alu* 'his walking', so that it may appear in construction with the verb *pispis* 'quick'.

Now consider the sentence:

27. *Ih pispis ah alu.*
'He walked quickly.'

which differs from 26 only in the appearance of the subject *ih* 'he'. In the analysis to be presented here, sentence 27 is the result of applying the rule of subject formation to 26. In this case, subject formation creates a subject that is identical to the possessor of the nominalized sentence (the agent of the original sentence *ih alu*). We may diagram the resulting sentence as follows:



The same operation may be said to have taken place to relate 28a and 28b:

- 28a. *Ne doari en woallo doadoahk.*
'That man's work is already finished.'
- b. *Woallo ne doari ah doadoahk.*
'That man has already finished his work.'

As a result of subject formation in 28b, the possessive noun phrase *en woallo* 'of that man' has been replaced by the appropriate third person singular possessive form *ah* 'his'. This is the same operation we have already seen in 10.4.3.

12.2.2 Subject Formation from a Simple Possessive Phrase.

Subject formation may also take place from a possessive noun phrase that is not a nominalized sentence. Consider:

- 29a. *Rojjang pilen mwoakko.*
'There is no more water in that cup.'

- b. *Inenin mum nimen mwumwwo.*
'That fish tastes delicious.'
- c. *Moadoakda kapehdihoa.*
'My stomach aches.'

and the related sentences:

- 30a. *Mwoakko rojjang piloa.*
'That cup has no more water in it.'
- b. *Mwumwwo inenin mum nime.*
'That fish tastes delicious.'
- c. *Ngoah moadoakda kapehdihoa.*
'My stomach aches.'

The examples in 30 are related to the corresponding sentences in 29 by the operation of subject formation from a possessive phrase, where the possessor becomes the subject.

12.2.3 Subject Formation in Other Possessive and Locative Sentences.

As has already been described in 8.6.1., locative and existential sentences differ in that the nonlocative noun phrase associated with existential sentences is usually **nondefinite**, while the nonlocative noun phrase associated with locative sentences is always **definite**. Notice also that the definite noun phrase in a locative sentence always occurs in subject position. In terms of the analysis presented here, subject formation is **obligatory** in locative sentences. Compare the existential sentences of 31 with the locative sentences of 30.

- 31a. *Mine laian nehn Aperika.*
'Lions are found in Africa.'
- b. *Mine puk pohn sehpille.*
'There are books on this table.'
- 32a. *Laianno mine nehn Aperika.*
'That lion is in Africa.'

- b. *Pukko mine pohn sehpile.*
'That book is on this table.'

Simple possessive sentences resemble existential sentences:

- 33a. *Mine koanoai mwumw.*
'I have fish to eat.'
- b. *Joh en jeriho pinjel.*
'That child doesn't have a pencil.'

Subject formation is optionally permitted in such sentences when the possessor is a noun, rather than a pronoun.

- 34a. *?Ngoah mine koanoai mwumw.*
'I have fish to eat.'
- b. *Jerihoh joh nah pinjel.*
'That child doesn't have a pencil.'

where 34a is strange but 34b is acceptable.

12.2.4 Subject Formation and Intransitive Sentences

It has been suggested above that OBJECT + VERB order in most intransitive sentences is the result of applying the rule of subject formation to a sentence with basic VERB + OBJECT order. Thus, 35a and 35b are related by subject formation.

- 35a. *Koapwoahpwoa woallo.*
b. *Woallo koapwoahpwoa.*
'That man is rich.'

in the same way that 36a and b are related.

- 36a. *Soal mwoaroan mwioakko.*
b. *Mwioakko soal mwoaroa.*
'The *mwioak* is black in color.'

Note that subject formation may also apply to the whole noun phrase in 36a, giving:

- 36c. *Mwoaroan mwioakko soal.*
 'The color of the *mwioak* is black.'

Subject formation does not seem to be a neutral operation. By moving a whole noun phrase or part of a noun phrase into subject position, the sentence is being given a topic.

- 37a. *Sipwla ehn.*
 'His leg is broken.'
- b. *Ih sipwla ehn.*
 'He broke his leg.'
- c. *Ehn sipwla.*
 'His leg is broken.'

Example 37a is neutral as to the topic of the sentence. Emphasis seems to be placed on the verb itself rather on the noun phrase. It is perhaps for this reason that verb + object order is so common in the second clause of a complex sentence (for example, in the implicational constructions discussed in 10.3.2), where the topic of the whole sentence has already been stated in the first clause. In 37b, the topic is *ih* 'he' and what is being said about him is that his leg is broken. In 37c, the topic is *ehn* 'his leg'. It appears, then, that intransitive sentences in Mokilese may occur either with or without a subject (topic), while agentive and experiencer sentences (as described in 12.1) must have a subject (topic).

12.3 TOPIC AND FOCUS

12.3.1 Topic

In 6.1 we discussed the notions **subject** and **predicate**, the subject most often being the thing under discussion and the predicate being what is said about it. In the last section we also used the term TOPIC to refer to what is being discussed. We also pointed out that in the case of agentive and experiencer sentences, the subject (that element that appears immediately before the predicate) **must be** the agent or the experiencer. It is also common that in such sentences we may want to emphasize that something other than the agent or experiencer is the main

topic. Since we cannot show this by subject formation in these cases, we must use other means. The most common is to place such a topic at the beginning of the sentence and give it special emphasis. For example:

38. *Nihra jerimweinno, ara kdarla ih Pohnpei.*
'Their son, they sent him to Ponape.'
39. *Woalmeno ngoah kiahki.*
'That man I don't like.'

This process is called TOPICALIZATION. It is also possible to topicalize the subject of a sentence for special emphasis.

40. *Bob, ih kin poki pahioahu.*
'Bob, he beats his wife.'
41. *Pukke, dupukoa koalik.*
'This book, it costs a lot.'
42. *Suhkoa roairoaio, oadoa masnoki.*
'That tall tree, it is called a *masnoki*.'

12.3.2 Focus

The main piece of new information in a sentence is called the **focus** of that sentence. In most sentences the focus is the last construction in the predicate. In the following example, the emphasized element is the focus.

43. *Ngoah noaisikdi pohn Pohnpei.*
'I was born in Ponape.'
44. *A rai pwili Pohl.*
'They went with Pohl.'

Determining the principal focus of a sentence is a more complex issue than this, but it would go far beyond our purpose here to discuss it in greater depth. What is important for us to know is that it is possible to give emphatic focus to any construction in a sentence by moving that construction to the beginning of the sentence and treating the remainder of the

sentence as a **relative clause** (see 10.4). The emphasized elements in the a) sentences of the following examples are **focused** in the b) sentences.

- 45a. *Ngoah wahdo mwingehu.*
 'I brought the food.'
- b. *Ngoah ma wahdo mwingehu.*
 'I was the one who brought the food.'
- 46a. *Ngoah wahdo mwingehu.*
 b. *Mwingehu ma ngoah wahdo.*
 'It was the food that I brought.'
- 47a. *Ngoah kijoula Pohnpei johnparro aio.*
 'I went to Ponape last year.'
- b. *Johnparro aio ma ngoah kijoula Pohnpei.*
 'It was last year that I went to Ponape.'
- 48a. *Arai pirin loakjid rehnnoawe.*
 'They are going fishing today.'
- b. *Loakjid ma arai pirin wia¹ rehnnoawe.*
 'Fishing is what they're going to do today.'

12.3.3 *ioar*

The word *ioar* is probably the last survivor of a set of 'pointing determiners'. These are still used in Ponapean—*iet*, *ien*, *io*,—to point out or otherwise draw attention to the topic of a discourse. *Ioar* is most common in identificational sentences where English would have 'there is/are'. For example:

49. *Ioar woaroai pohsso.*
 'There's my boat.'
50. *Ioar nihmw jeriok.*
 'There are your children.'
51. *Ioar rioai jerimweinno, minmeno.*
 'There's my brother, that one.'

In these examples, *ioar* points to or identifies a person or object that has been previously mentioned in the conversation.

We may think of the construction following *ioar* as being both the **focus** and the **topic** of the sentence. The new information in such sentences is the identification of the topic phrase. *Ioar* serves to focus, as well as topicalize, a following phrase by pointing it out or identifying it.

A sentence like:

52 *Ioar woallo ma wia mehu.*

can have two senses, corresponding to the English sentences

53a. There's the man who did it.

which points to a person previously discussed, and

b. It was that man who did it.

which identifies the person who did it as 'that man'.

Ioar has a negative form *jaudi*, used to deny that a certain person or object is the topic/focus of some statement.

54. *Jaudi minpasen.*
'It is not that one.'

55. *Jaudi woalmene ma wia mehu.*
'It wasn't this man who did it.'

56. *Jaudi John oai johnpadahkwa.*
'John isn't my teacher.'

57. *Dapwa jaudi ih mihn Mwoakilloahmen.*
'Maybe he isn't a Mokilese.'

Placed at the beginning of a sentence, *jaudi* negates the focus of that sentence.

58. *Jaudi ih kapwehsen indoa, ih indoa oh apwkan.*
'He didn't just come, he came a long time ago.'

where *jaudi* negates *kapwehsen* 'just', and:

59. *Jaudi ih nimen kang mwehng; ih nimen kang wus.*

'He doesn't want to eat taro, he wants to eat banana.'

where *jaudi* negates *mwehng* 'taro'. *Jaudi* has an alternate form *audi*:

60a. *Jaudi ngoahi ma pirin wahdo mwingehu.* or

b. *Audi ngoahi ma pirin wahdo mwingehu.*

'It's not me who's going to bring the food.'

Jaudi may also be used with *mwehn* or *mwehnpwa*, as in:

61. *Jaudi mwehnpwa ih ma koauwehla ah inoauo.*

'It certainly wasn't him who broke the agreement.'

Note that *jaudi* is used to negate the noun phrase predicate of an equational sentence (see 6.2).

62a. *Ih oai johnpadahkwa.*

'He is my teacher.'

b. *Ih jaudi oai johnpadahkwa.*

'He isn't my teacher.'

63a. *Pohsso minwa ma ngoah nimen dupukda.*

'That boat is the one I want to buy.'

b. *Pohsso jaudi minwa ma ngoah nimen dupukda.*

'That boat isn't the one I want to buy.'

Under some circumstances, a focused noun phrase may be set off at the beginning of the sentence for emphasis.

64. *Me, ioar woalwa ma wia mehu.*

'This is the man who did it.'

65. *Ih, jaudi mihn Pohnpeimen.*

'He isn't a Ponapean.'

Not all speakers appear to agree about the correctness of sentences with fronted focused noun phrases.

12.4 QUESTIONS

12.4.1 Yes-No Questions

The syntax of questions that can be answered with the words *eh* 'yes' or *joah* 'no' (called YES-NO QUESTIONS) is basically the same as that of the corresponding statements. Often the only difference is a rising intonation in the question, although it is also common to place the word *a* at the beginning of a yes-no question. For example:

- 66a. *Koah sihkei.*
'You are well.'
- b. *A koah sihkei?*
'Are you well?'
- 67a. *Kamwa pirin jeila loakjid rehnnoawe.*
'You are going fishing today.'
- b. *A kamwa pirin jeila loakjid rehnnoawe?*
'Are you going fishing today?'
- 68a. *Ioar Wilson ma pwehng ih mehu.*
'It was Wilson who told him that.'
- b. *A ioar Wilson ma pwehng ih mehu?*
'Was it Wilson who told him that?'

The order of basic sentences elements in a yes-no question is the same as that of the corresponding statement.

12.4.1.1 NEGATIVE QUESTIONS

In Mokilese, as in English, the answer to a positive question is *eh* 'yes' if the hearer agrees with the content of the question and *joah* 'no' if he disagrees. For example:

- 69a. *A koah nimen pwili kasdo?*
'Do you want to go to the movies?'
- b. *Eh, ngoah nimen pwili.*
'Yes, I want to go.'

- c. *Joah, ngoah kia pwili.*
 'No, I don't want to go.'

If the question 69a were put negatively, as:

70. *A koah k ia pwili kasdo?*
 'Don't you want to go to the movies?'

an answer affirming that you do want to go might be:

71. *Eh, ngoah nimen pwili.*
 'Yes, I want to go.'

If, on the other hand, you wanted to give an answer stating that you do not want to go, that answer might be either.

- 72a. *Eh, ngoah kia pwili.*
 b. *Joah, ngoah kia pwili.*
 'No, I don't want to go.'

There seems to be some confusion in Mokilese concerning how to answer a negative question. An answer like 72a, with *eh* 'yes' is a statement that it is true that the person in question does not want to go. It uses *eh* 'yes' to **agree** with the negative tone of the question. An answer like 72b, with *joah* 'no', is a firm statement of unwillingness to go. It uses *joah* 'no' to negate the facts lying behind the original statement; in this case, the possibility that the person in question might go. This second pattern is the one commonly used in English. Most Mokilese seem undecided about which of the two patterns to follow.

Note that the word *ioar* is often used to affirm the facts of a negative question. For example:

- 73a. *A koah kia nim kohpi?*
 'Don't you want to drink coffee?'
- b. *Ioar, ngoah nimen nim kohpi.*
 'Yes, I want to drink coffee.'

12.4.2 New Information Questions

NEW INFORMATION QUESTIONS inquire into the identity of the participants in an event, the nature of the event itself, its cause, location, and so forth. They can never be answered by 'yes' or 'no'.²

Some examples of new information questions in Mokilese are:

74. *Inje wahdo adroauok?*
'Who brought those eggs?'
75. *Ia kamwai inla?*
'Where are you going?'
76. *Da ih wia?*
'What is he doing?'
77. *Ngehd ih pirin doari ah doadoahk?*
'When will he finish his work?'
78. *Amwda koah he kos?*
'Why are you late?'

In Mokilese, as in English, the question words in new information questions are normally placed in topic (initial) position in the sentence.

12.4.2.1 THE QUESTION WORD *ia*

Ia has three basic meanings. First, it is used to question the location of an event. In this sense it translates as English 'where'.

79. *Ia koawoa injang?*
'Where do you come from?'
80. *I a pissok mine ma ngoah kihdi me aio?*
'Where are the pandanus leaves I left here yesterday?'

The suffix *-oang* may be added to *ia* to ask about the relationship holding between two people.

81. *Iahng koawoa ih?*

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'What are you to him?'

Ia also appears in the expression *Kohjang ia* 'how come?', 'what is the identity of?' as used in sentences like:

82. *Kohjang ia ma ioar pwunginwa me?*
'How come it's like this?'
83. *Kohjang ia woalmeno?*
'Now who's that man again?'

Ia is also used in questions of degree or extent, in which case it can be translated into English as 'how?' or 'how much?'

84. *Ia woahr dupukoa?*
'How much does it cost?'
85. *Ia loalinnoar me?*
'How deep is it here?'
86. *Ia uhen pil nehn rimehu?*
'How much water is in that bottle?'
87. *Ia dirinnoar nihmw puk?*
'How many books do you have?'

In this sense, *ia* is used with expressions indicating extent, such as *woahr* 'same size as', *woaroain* 'extent of', *uhen* 'amount of', *dirin* 'number of, amount of', and in expressions containing the limiting suffix *-oar* 'up to'.

The third use of *ia* is in questions about the identity or characteristics of a **definite noun**. In this case it can be translated into English as 'which?'

88. *Ia pohsso koah mwehuki?*
'Which boat do you like?'
89. *Ia oadoamwwen?*
'What is your name?'

12.4.2.2 THE QUESTION WORD *da*

Da is used in much the same way as the English word 'what'. In a sentence like:

90. *Da koah pirin wiahng suhkoahpaso?*
'What are you going to do with that tree?'

it asks a question about an activity. The new information in the answer to such a question is usually a verb that names an activity.

91. *Ngoah pirin poaloang warki suhkoahu.*
'I'm going to build a canoe with that tree.'

Da can also be used to refer to an object, rather than to an activity. In this case it is generally followed by the indefinite article. The new information in the answer to such a *da* question is an indefinite noun in all the examples I have noted.

- 92a. *Dahkij pohn sehpyllo?*
'What is on the table?'
- b. *Pukkoaw pohn sehpyllo.*
'There's a book on the table.'

Da is often suffixed to a noun in the meaning 'what kind of'. It may be followed by an indefinite article, in which case it makes an enquiry about the characteristics of some specific indefinite noun, or it may be followed by nothing, in which case it makes an enquiry about the characteristics of some class of objects (a generic use—see 3.3.1.1).

- 93a. *Pohsda koah mwehuki?*
'What kind of boats do you like?'
- b. *Ngoah mwehuki pohs in Mwoakilloa.*
'I like Mokilese boats.'
- 94a. *Pohsdahpas koah mwehuki?*
'What kind of boat do you want?'
- b. *Ngoah mwehuki pohs in Mwoakilloahpas.*
'I want a Mokilese boat.'

The suffix *-da* cannot be followed by a definite determiner.

95. **Pohsdahu koah mwehuk i?*

Because of the restriction of *-da* to nondefinite nouns we might consider it the indefinite counterpart of the question word *ia* 'which' described in the preceding section.

12.4.2.3 *amwda* AND *da kahrehda*

Both *amwda* and *da kahrehda* can be translated into English as 'why'. *Da kahrehda* is a request for an explanation of some event in terms of a **cause**.

96a. *Da kahrehda koah ke kos?*
'Why are you late?'

b. *Ngoah kos pwa inenin kos oai pwohrda.*
'I'm late because I got up very late.'

Amwda is a request for an explanation of some event in terms of a **purpose**.

97a. *Amwda koah ke indoa?*
'Why did you come?'

b. *Ngoah indoa pwa ngoan poaki koawoa mehkij.*
'I came to ask you for something.'

As pointed out in 7.1.2.3, sentences with *amwda* or *da kahrehda* may have the pre-verb *ke*.

12.4.2.4 *mindoaahr*

Mindoaahr (alternately *imdoahr*) 'how' is interesting in that the sentence following it must be nominalized (see section 10.6.5).

98. *Imdoahr oamw wiahda pohsso?*
'How did you build that boat?' not

99. **Imdoahr koah wiahda pohsso?*

12.4.2.5 paid

The interrogative *paid* ‘and who else’ follows the subject in sentences like:

100. *Koah paid jeila loakjid?*
‘You and who else went fishing?’

12.4.2.6 doapoa

Doapoa ‘how many’ normally follows the noun to which it refers.

101. *Puk doapoa pohn sehpyllo?*
‘How many books are on the table?’

The form *oadpoa* ‘how many’ normally precedes the noun to which it refers. It seems to have the same relation to *doapoa* as the word *epwi* ‘some’ has to the suffix *-pwi* ‘some’, the first being nonspecific indefinite and the second, specific indefinite (see 3.3.2.5).

102. *Oadpoa pukkuk pohn sehpyllo?*
‘How many books are on the table?’

12.4.2.7 inje, kouj, AND -je

The question word *inje* ‘who’ is used to inquire about the identity of a person. For example:

103. *Inje kio ang koawoa mwingehu?*
‘Who gave you that food?’
104. *Inje koah pirapoahjang mehu?*
‘Who did you steal that from?’

The word *kouj* ‘who’ is used only to question the identity of the person being addressed. Thus:

105. *Kouj men?*
‘Who are you?’ (literally ‘Who’s there?’)

The suffix *-je* is a contraction of *inje* ‘who’ and can be added to the construct form of any inalienable noun to mean ‘whose’.

- 106a. *Imwen inje umwwo?* or
b. *Imwenje umwwo?*
'Whose house is that?'
- 107a. *Woaroan inje jidohsahu koah dako?* or
b. *Woaroanje jidohsahu koah dako?*
'Whose car are you driving?'

12.4.2.8 QUESTION WORDS AND RELATIVE CLAUSES

Any sentence-initial question word can be followed by a relative clause (see 10.4) rather than by the rest of the sentence directly. For example:

108. *Inje ma wahdo mwumwkai?*
'Who was it who brought these fish?'
109. *Ngehd ma koah pirin kijoula?*
'When was it you were going away?'
110. *Ia ma pukko koah mwehuki?*
'Which was the book you liked?'

Questions formed in this way seem to suggest that the speaker knew the answer to the question at one time, but has since forgotten it.

Appendix A

WRITTEN MOKILESE

A.1 STANDARD SPELLING

Mokilese is used very little for writing. Most of the written material available to the Mokilese is either Ponapean or English, so that there are no models to follow for writing Mokilese. As a result, most Mokilese use either Ponapean or English for writing. If they use Mokilese, it is usually heavily influenced by Ponapean. It is hoped that the appearance of this Mokilese Reference Grammar and the Mokilese Dictionary will lead to more extensive use of Mokilese as a written language.

A standard spelling system is a set of rules and conventions for writing a language. The existence of such a system provides a ready answer to the question, "How should I write this word?". For languages with a standard spelling system, one need only consult a dictionary to find out how a given word should be spelled. Standard spelling systems usually do not arise overnight, however. To become established, such a system requires that it be accepted by speakers of the language and, most important, that it be used by them.

Mokilese lacks the written tradition that has given rise to most standard spelling systems for the world's languages and consequently, lacks a standard spelling system. For this reason, we have had to make some essentially arbitrary decisions concerning the spelling system used in this Grammar and the Mokilese Dictionary. Such decisions had to be made for the sake of consistency. While they are based, I feel, on sound scientific principles, they are not intended to provide a firm and final statement of how Mokilese is to be written. This can be done only by the Mokilese people themselves, as they use their language. What we have tried to do here is simply to provide a starting point.

A.2 SYMBOLS USED

The letters used in the Mokilese alphabet were chosen through a study of the sound system of Mokilese, as described in chapter 1 of this Reference Grammar. They are:

a, e, i, o, oa, u, d, j, k, l, m, mw, n, ng, p, pw, r, s, w, h

The digraphs *oa*, *mw*, *pw*, and *ng* are intended to represent single sounds, although they consist of two letters.

The first six symbols represent vowel sounds, as described in section 1.3.3 of this Reference Grammar. In the system used here, the letter *e* represents two different sounds; the sound (phonetically [ɛ]) in words like:

<i>pel</i>	‘also’
<i>pweipwei</i>	‘tuna’
<i>en</i>	‘thing of’

and the sound (phonetically [e]) in words like:

<i>pei</i>	‘to fight’
<i>pweipwei</i>	‘stupid’
<i>ngenin</i>	‘his spirit’

These sounds are not distinguished because, first, there is no obvious symbol to use to distinguish them, and, second, because the sound [e] is of low frequency.¹

The symbol *h* is written after a vowel to indicate that it is to be pronounced **long**.

<i>pwel</i>	‘swamp’
<i>pwehl</i>	‘string’
<i>koap</i>	‘to grow’
<i>koahp</i>	‘yam’

A doubled, or **geminate**, consonant is indicated by writing the consonant twice:

<i>nappa</i>	‘cabbage’
<i>wahssa</i>	‘red’
<i>likkoau</i>	‘cloth’

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Geminate versions of the consonant digraphs *mw*, *pw*, and *ng* are written *mww*, *pww*, and *ngg*.

<i>umwwoais</i>	‘to play’
<i>japwwo</i>	‘that land’
<i>onggong</i>	‘to wring out’

It was decided to double the second, rather than the first, letter of such digraphs because doubling the first would have created forms like **nng*. If such were the case it would have been impossible to tell whether a form like *ngenngen* ‘distant’ should be pronounced [ŋɛŋɛŋ] (as it should be), or [ŋɛŋŋɛŋ].

A.3 GLIDES

There are two glides (see section 1.5 in this Reference Grammar) in Mokilese; the sound of *i* in *oai* ‘fire’ and that of *u* in *pwoapwoaud* ‘married couple’ or *w* in *wa* ‘to carry’.

The first glide, phonetically [y], is written everywhere as *i*:

<i>iahia</i>	‘rainbow’
<i>kapaia</i>	‘to praise’
<i>ngoahi</i>	‘I’

As discussed in section 1.5.3 of this Reference Grammar, there is some evidence that the second glide, phonetically [w], is in fact two distinct sounds, a consonant *w* and a glide originating as the vowel *u* or *o*. Between vowels within the same **morpheme** (see 2.1 of this Reference Grammar) the consonant is pronounced as single [w], the glide (from a vowel) as geminate [ww]. (Recall that *i* between vowels always sounds geminate, though written single.) Compare *jawa* ‘sweet taro’ and *jauwaj* ‘help’. In general, the following procedures have been adopted for representing [w]:

(i) before a vowel, *w* is used:

<i>wa</i>	‘to carry’
<i>jowi</i>	‘to wait’

(ii) before a consonant or at the end of a word, *u* is used:

Appendix A

<i>joau</i>	'sun'
<i>doaudioau</i>	'to fill'
<i>jaun</i>	'to feed a fire'

(iii)geminate [ww] is written *uw* in the same morpheme.

(iv)geminate [ww] created by adding loosely-bound suffixes (see 2.1.2 of the Mokilese Reference Grammar) is not indicated:

<i>joau</i>	'sun'
<i>joauo</i>	'that sun'
<i>doau</i>	'to climb'
<i>doauoang</i>	'to climb to'

where the non-final *u*'s are pronounced geminate.

(v) no **transition glides**, arising between *u* or *i* and some following vowel, are written:

<i>sioa</i>	'his ear'
<i>luoau</i>	'bracelet'

The only exception to rule (ii) above is that the general counting classifier (see section 4.1.2 of this Reference Grammar) is always written *w*, even when it appears at the ends of words:

<i>ew</i>	'one'
<i>riaw</i>	'two'
<i>waluw</i>	'eight'

Syllable-final *u* changes to *w* before tightly-bound suffixes beginning with a vowel when the glide in question does not become geminate. For example:

<i>au</i>	'mouth'
<i>oawoa</i>	'his mouth'
<i>joujou</i>	'to wait'
<i>jowi</i>	'to wait for'

A.4 VOWEL QUALITY

It is common for Mokilese vowels to vary in backness (see 1.6 of this Reference Grammar) when preceded or followed by certain consonants. Thus, it is not clear whether the *u* in *jiluw* ‘three’ is pronounced [u] or [i] or something in between. Similarly, the *o* in *jowi* ‘to wait for’ is sometimes [o], sometimes [e]. The number ‘one’, *ew*, has the vowel [ɛ] when used as a separate word, but usually has the vowel [oa] when used as a suffix; *pukkoaw* ‘one book’. Spelling decisions relating to this variation have been made only in a few individual cases. Thus, *ew* ‘one’ is the independent word and *-oaw* ‘one’ is the suffix; *umw* ‘house’ becomes *imw-* before possessive suffixes, as in *imwen* ‘house of’. I have found no way, as yet, to handle other cases.

A.5 SUFFIXES

A suffix is an element added to the end of a word to change the meaning of that word. Suffixes in Mokilese can be divided into two types:

- i) those that affect the immediately preceding sound
- ii) those that do not affect the immediately preceding sound

The latter include:

- a. possessive suffixes

<i>kil</i>	‘skin’	<i>kilin</i>	‘his skin’
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- b. the transitive suffix *-i* and the intransitive suffix *-ek*

<i>pok</i>	‘to strike’	<i>poki</i>	‘to strike something’
<i>kuruj</i>	‘to grind something’	<i>kurujek</i>	‘to grind’ ²

- c. nominalizing suffixes *-poa* and *-koa*

<i>wia</i>	‘to do’	<i>wiapoa</i>	‘the way to do it’
<i>dak da</i>	‘to rise’	<i>dak dak oa</i>	‘its rise’

Appendix A

- d. the stative forming *-an*
uduk 'flesh' *udukan* 'fleshy'

Suffixes that do affect the immediately preceding sound include:

- a. determiners

	singular	plural
near speaker	<i>-e, -i</i>	<i>-kai, -ak</i>
near hearer	<i>-en, -n</i>	<i>-kan</i>
distant	<i>-o, -u</i>	<i>-ok, -k</i>
aforementioned- <i>wa</i>		<i>-koa</i>

- b. number 'one' suffixed to a noun

-oaw, -men, -pas, -kij (but not the numbers above 'one', which are separate words)

- c. plural marker *-pwi* suffixed to a noun

- d. question suffix *-da* 'what', and forms built on *-da* (*-dahioaw*, etc.)

- e. directional suffixes

<i>-da</i> 'up'	<i>-do (-doa)</i>	'towards speaker'	<i>-pene</i>	'together'
<i>-di</i> 'down'	<i>-we</i>	'towards hearer'	<i>-pijoang</i>	'apart'
	<i>-la</i>	'away'	<i>-jili</i>	'scattered'

- f. other verbal suffixes

<i>-ki</i>	'with'
<i>-oang</i>	'to'
<i>-jang</i>	'from'
<i>-oar</i>	'and then'
<i>-oaroh</i>	'until'

Such suffixes, if vowel-initial, cause an immediately preceding consonant to geminate:

woal 'man'

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woalle 'this man'

If consonant-initial, they cause an immediately preceding vowel to become long:

poani 'to hammer'
poanihki 'to hammer with'

This gemination or lengthening is always indicated, except when the word to which the suffix is attached ends in a glide *i* or *u*:

joau 'sun'
joauo 'that sun'
woi 'turtle'
woio 'that turtle'

All suffixes are written attached to the word to which they are suffixed. However, the verbal suffixes *-oang* 'to', *-jang* 'from' and *-ki* 'with' are written as separate words when separated from the verb by morphemes other than verb suffixes.

Ngoah poanihki suhkoahu amahu.
'I'm hammering that tree with that hammer.'

Ngoah poani suhkoahu ki amahu.
'I'm hammering that tree with that hammer.'

The construct particle *in* is always written as a suffix when it follows a word ending in a vowel; for example, *jerihn Mwoakilloa* 'the children of Mokil'. When it takes the form *-n* after a glide it is also written as a suffix; for example, *wein Japahn* 'government of Japan'. Following a word ending in a consonant it is written as a suffix only when it is part of a **possessive paradigm** (that is, when it can also be added to a noun to mean 'its') for example, *kilin* 'skin of, its skin'. When not part of a possessive paradigm (when used in a **noun phrase of characterization**—see section 5.7 of the Mokilese Reference Grammar—for example) it might best be considered a separate word; thus, *pohs in Mwoakilloa* 'Mokilese boat'. As a nominalizer for verbs, *in* is always written as a suffix; *kurujekin mwehng* 'taro grating'. It was difficult to make consistent decisions regarding the status of *in*, however.

A.6 EXCRESCENT AND REDUCED VOWELS

An excrescent vowel is a vowel that is inserted in rapid speech between two consonants to make the sequence easier to pronounce. Such vowels appear between the non-italic consonants in words like:

pwungla 'to become correct'
pakrikrik 'to coax'

Excrescent vowels are never written.

A reduced vowel is a vowel that disappears or loses its quality because of its position in the word. Examples are:

kanara 'their (two) food', where the second *a* is reduced
molukluk 'forgetful' and *moalkoahla* 'to forget' where the *u* between *l* and *k* has been reduced
alij 'beard' and *oaljoa* 'his beard', where the *i* has been reduced
rong 'to hear' and *koaronge* 'to listen', where the *o* is reduced

Whether or not to indicate a reduced vowel is perhaps the most difficult problem in Mokilese spelling. In the spelling system used here, reduced vowels are never indicated **unless**:

- i) related forms exist in which the vowel is not reduced
- ii) speakers of Mokilese recognize these forms as related.

Of course, it is possible that, in many cases, the related forms mentioned in i) have not yet been identified. Also, it is very difficult to determine whether speakers of a language consider two words to be related. These problems have led to many inconsistencies in the treatment of reduced vowels.

Even if both conditions i) and ii) hold, a reduced vowel is **usually** not written if it has been obliterated entirely. Thus, reduced vowels are written in:

kurujek 'to grind', from *kuruj* 'to grind something'
kanara 'their (two) food', related to *kanah* 'his food'

but not in:

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maldek 'to unfold', from *malad* 'to unfold something'
moalkoahla 'to forget', related to *molukluk* 'forgetful'

where the vowels in question have been obliterated.

This system is far from satisfactory and many inconsistencies regrettably remain. Any modifications must await further research.

A.7 COMPOUNDS

A compound word is a single word formed from two (or more) words. In Mokilese there are two common types of compounds:

i) simple compounds

ukeng 'windy', from *uk* 'to blow' and *eng* 'wind'

ii) locative nouns and other construct + noun compounds
formed from a relational noun or particle and another noun

inmadau 'towards the open sea', from *in* 'at' and *madau* 'ocean'

johnpadahk 'teacher', from *john* 'person of' and *padahk* 'to teach'

All the above compounds have been written as single words because it was felt that speakers of Mokilese consider them to be single words. As always, of course, it is very difficult to make decisions about what speakers of a language think. The following guidelines have been used, in part, to make decisions about whether a compound is to be written as a single word. This was done when:

- i) the meaning of the compound differed from the sum of the meanings of its parts; for example, *ukeng* 'windy', from *uk* 'to blow' and *eng* 'wind'
- ii) if one (or both) of the parts of the compound is not an independent word; for example, *pohnang* 'into the wind', from *pohn* 'on' and *-ang*, related to *eng* 'wind'

Appendix A

iii) if the compound involves sound changes; for example, *jileimw* 'to watch the house', from *jiloa* 'to watch' and *umw* 'house'

Compounds of the second type are not written as single words when they are felt to be phrases, rather than single words. For example, in:

Ih kin doadoahk inrehn.
'He works during the day.'

inrehn 'during the day' is written as a single word because it is felt to be a single relational noun describing when the activity in question takes place, while in:

Ih koddooang in sehpyllo.
'He bumped into that table.'

in sehpyllo 'at the table' is written as two words because it is felt to be a phrase whose structure is dictated by the grammar of Mokilese.

Incorporated object constructions (see section 6.5.6 in the Mokilese Reference Grammar) are written as separate words unless they involve sound changes; for example, *dok mwumw* 'to spear fish', *rik sakai* 'to gather stones', but *jileimw* 'to guard the house'.

A.8 PUNCTUATION AND CAPITALIZATION

English punctuation practices were followed throughout. The following elements were capitalized:

- i) the first letter of the first word of sentences
- ii) the names of people and places

Items **not** capitalized, in contrast to English usage, include the first person singular pronouns *ngoah* and *ngoahi* and names of the days of the week and the months of the year.

A.9 SUMMARY

Symbols Used

1)The Mokilese alphabet is as follows:

a, e, i, o, oa, u, d, j, k, l, m, mw, n, ng, p, pw, r, s, w, h

2)The letter *e* is used to represent both the [ɛ] in *pel* 'also' and the [e] in *pei* 'fight'

3)Long vowels are indicated by *-h* following the vowel. Thus, *kil* 'skin', but *kihl* 'keel'.

4)Doubled consonants are indicated by writing the consonant in question twice. Doubled *mw*, *pw* and *ng* are written *mww*, *pww* and *ngg* respectively.

Glides

5)The sound [w] is indicated by *w* before a vowel and by *u* before a consonant or at the end of a word: *wa* 'carry', *daur* 'to climb for', *doau* 'to climb'

6)The general counting classifier is always written *-w*: *-oaw* 'one', *riaw* 'two'

7)Geminate [ww] is written *uw* within a morpheme: *jauwaj* 'afternoon'

8)Gemination of glides *u* and *i* is not otherwise indicated.

9)No transition glides are written: *sioa* 'his ear'

Suffixes

10)All suffixes are written attached to the word they follow.

11)-*ki*, *-oang* and *-jang* are written as separate words when separated from the verb by morphemes other than verb suffixes.

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12) The construct particle *in* is written as a separate word following a word ending in a consonant in characterization constructions.

Excrescent and Reduced Vowels

13) Excrescent vowels are never written.

14) Reduced vowels are written only when:

- i) related forms exist in which the vowels are not reduced
- ii) the vowel is reduced, not completely silent

Compounds

15) Compounds are written as single words if:

- i) the meaning of the compound differs from the sum of its parts, or
- ii) one or both of the parts of the compound has/have no independent existence, or
- iii) the compound involves sound changes

Punctuation and Capitalization

16) English punctuation practices are followed.

17) The only capitalized elements are:

- i) the first letter of the first word of a sentence
- ii) names of people and places

Appendix B

GLOSSARY

This glossary contains short definitions of all the technical terms that were in small capitals in the text. Following each definition a reference is given to the section of the grammar in which the term is defined and exemplified.

Active Verb

A verb whose subject is the performer or doer of the action named by the verb. 6.4.0

Actor or Agent

The performer or doer of the action named by a given verb. 6.5.0

Affected

The person or thing that feels or is influenced by a given state or condition. 6.5.0

Affix

A morpheme that can be added to a root to alter the meaning of that root. 2.1.1

Affricate

A stop consonant that is followed immediately by a fricative made at the same point of articulation. 1.3.2.2

Agent

See **Actor**.

Alienable possession

A possessive relationship that is not viewed as permanent and indestructable. In Mokilese it is expressed by possessive constructions that employ possessive classifiers. 5.1

Allophone

A variant of a phoneme. Replacing one allophone by another allophone of the same phoneme in some word will not change the meaning of that word. 1.3.1

Alveolar

A sound produced by narrowing the speech tract at the alveolar ridge. 1.2., 1.3.2.1

Articulatory phonetics

The study of the way speech sounds are produced by the human speech organs. 1.2

Articulation

See **Points of Articulation**.

Aspect

Information about the general character of the event described by a verb; for example, whether the event is still in progress or has already been completed.

Assimilation

Any process making some sound more like a neighboring sound. 1.8.1

Attribute

A verb or sentence used within a noun phrase to name some event or quality that will help to identify the person or object named by the head noun of that noun phrase. 6.4.1.0

Attributive clause

A clause that gives extra information about the events described in the main clause of the sentence in which it appears. 10.5.0

Bi-transitive verb

In Mokilese, a verb that has both a transitive and an intransitive form. 6.5.1

Bound morpheme

A morpheme that can only be used together with some other morpheme, never alone. 2.1

Clause

A construction containing a predicate. 10.2

Coordination

The process of joining together constructions of the same type and function. 10.3

Complement clause

A clause that serves as either subject or object of the main verb of the sentence in which it appears. 10.6

Connotative verb

A verb whose nonperfective (imperfective) forms are used to describe attempts at performing the activity named by that verb and whose perfective forms are used to describe a successful completion of that activity. 9.4.1.1

Consonant

A sound produced with a major constriction (narrowing) in the speech tract. 1.3.2

Consonant Cluster

A sequence of two or more consonants. 1.7, 1.8

Construct form

In Mokilese, the form a noun takes when used in construction with an immediately following noun. It always involves an -n suffix. 5.2, 5.8

Construction

see **Phrase** 2.2.1

Continuative aspect

A verb form used to suggest the persistence or continuation of an event. 9.3

Countable base

In Mokilese, any of a number of root morphemes to which numeral prefixes can be added directly. 4.1.4

Definite

A term applied to any noun, noun phrase, or determiner that identifies a person(s) or object(s) known to both speaker and hearer. 3.3.2.2

Demonstrative

A determiner that points to a person or object. 3.3.2.3

Denotative verb form

A verb form that names an activity without giving any information as to its ongoingness or completion. 9.1

Dental

A sound produced by narrowing the speech tract at the teeth. 1.2

Derivation

The process of creating new words from previously existing words. 11.4

Descriptive grammar

A grammar whose purpose is to describe the way people use their language. 0.1.1

Determiner

A morpheme used to identify the referent of a noun by pointing to the location of the person or object to which the noun refers or by otherwise identifying it as someone or something with which we should be familiar. 3.3

Environment

The sound segments, boundaries, morphemes, or words preceding or following a given sound segment, morpheme, or word. 1.3.1

Equational sentence

In Mokilese, a sentence in which both the subject and the predicate are noun phrases. 6.2

Excrescent vowel

A vowel inserted either before or between the consonants in a consonant cluster to make that cluster easier to pronounce. 1.7.0., 1.8

Existential sentence

A sentence that makes a statement about the existence of a person or object. 3.3.1.3, 8.6

Experiencer

The person who feels or experiences a mental state named by a verb. 12.1

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Free form

In Mokilese, the form of an inalienably possessed noun that can appear alone without any possessive suffix. 5.2.1

Free morpheme

A morpheme that can stand alone as an independent word. 2.1.0

Fricative

A consonant produced without complete closure of the speech tract. 1.3.2.2

Geminate consonant

A consonant prolonged to approximately twice its normal length. 1.3.2.6

Generic

A noun or noun phrase referring to a whole class of persons or objects rather than to any particular member(s) of that class. 3.3.1.1

Glide

A vowel-like sound not functioning as the nucleus (heart) of a syllable. 1.5

Inalienable possession

A possessive relationship viewed as permanent and indestructible. In Mokilese it is expressed by possessive constructions in which possessive suffixes are attached directly to noun roots. 5.1

Incorporated object construction

In Mokilese, a verbal construction formed from an intransitive verb followed by a generic noun. It identifies an activity involving a particular class of objects. 6.5.6

Indefinite

A noun, noun phrase, or determiner that singles out one or more objects from a class of objects, without suggesting that the exact identity of the object is known to both speaker and hearer. 3.3.2.1

Inflection

Any process that produces different forms of a single word. 11.4

Intensifier

A morpheme used to emphasize elements of a sentence. 7.1.5

Intransitive verb

A verb that cannot be followed by a specific object. 6.5

Labial

A sound produced by narrowing the speech tract at the lips. 1.2, 1.3.2.1

Language family

A group of languages that share a common ancestor. 0.2.1

Lateral

A sound produced by allowing air to escape over the sides of the tongue. 1.3.2.4

Metathesis

Any process that reverses the order in which two sound segments are produced. 1.8.2

Minimal pair

A pair of words with different meanings that are alike except for one sound. 1.3.3.3

Appendix B

Modal

A morpheme that gives information about the speaker's feelings and attitudes towards an event.

Morpheme

The smallest meaningful unit in language. 2.1

Morpheme boundary

The point at which two morphemes used in construction with one another meet. 2.1.2

Morphology

The study of morphemes and their patterns of combination.

Morphophonemic change

A change in the phonological shape of a morpheme triggered by the presence of other morphemes. 2.1.2.4

Nasal

A sound produced by allowing air from the lungs to escape through the nasal passage. 1.3.2.3

New information question

A question that cannot be answered by using the words *yes* or *no*. The answer contains new information about the events described in the question. 12.4.2

Nominalization

A process which creates nouns or noun phrases. 11.5.3

Nominalized sentence

A sentence changed into a noun phrase to permit it to appear in certain syntactic contexts. 10.6.5

Appendix B

Noun

A word naming persons or objects. 3.0

Noun phrase

A phrase with a noun as the central element (head). A phrase used in environments typical of noun phrases. 3.2

Numeral classifier

In Mokilese, any of a number of morphemes to which numeral prefixes may be added and which appear with nouns in numeral constructions (constructions giving the exact number of persons or objects being referred to). 4.1.2

Object

A noun or noun phrase identifying the person or object towards which an activity is directed. 6.5

Orthography

The usual writing system of a language. A set of symbols and conventions (rules) for their use. 1.1

Palatal

A sound produced by narrowing the speech tract at the palate. 1.3.2.1

Paradigm

A chart or other listing of the forms a given root, usually with reference to a particular grammatical category. For example, a possessive paradigm is a list of all possessive forms of a given word or word class. 5.2

Perfect aspect

A verb form used to indicate that an event has been brought to a logical conclusion. 9.4

Appendix B

Personal pronoun

Pronouns used to identify persons or objects in terms of the participants in a speech event; the speaker the hearer, or neither of these. 3.4.1

Phoneme

A sound whose replacement by another sound in a given word would lead to a change in meaning. 1.3.1

Phonetic symbols

A set of symbols meant to represent actual speech sounds. 1.1

Phonology

The study of speech sounds as they are used in language. 0.1.2

Phrase

A group of closely associated words or morphemes acting together to identify person(s), object(s), or event(s). 2.2.1

Plural

A plural noun, noun phrase, or determiner is one that refers to more than one person or object. 3.3.2.1

Points of articulation

Places along the speech tract at which it can be narrowed to produce distinct sounds. 1.2

Possessive classifier

In Mokilese, any of a number of morphemes that can appear with nouns in possessive constructions (constructions naming the possessor of the person or object named by the head noun) and to which possessive suffixes can be added. 5.4

Appendix B

Predicate

That part of a sentence giving information about the subject. 6.1

Prefix

An affix that can be added to the beginning of a root. 2.1.1.2

Prescriptive grammar

A grammar whose purpose is to regulate or direct the way people use their language. 0.1.1

Progressive aspect

A verb form used to indicate that an event is ongoing or in progress. 9.2

Pronoun

A word that can be substituted for a noun or noun phrase. 3.2.3.4

Prothetic vowel

A vowel added, under certain conditions, at the beginning of a word. 1.3.2.7

Quantifier

In Mokilese, any of a number of morphemes referring to quantity or amount, without stating a specific number. 4.2

Reduplication

The repetition of some portion of a root or word to produce a new word with altered meaning. 2.1.5

Relational noun

In Mokilese, a noun referring to location in time or space. 3.1

Relative clause

A sentence used as an attribute to the head noun of a noun phrase. 10.4

Root

The heart of any word, that portion of the word carrying its central meaning. 2.1.1

Round

A sound produced with the lips rounded. 1.3.3.1

Semantics

The study of the meanings associated with words and sentences. 0.1.2

Semelfactive verb

A verb whose denotative form suggests a single occurrence of an activity. 9.2.2

Sentence

A group of words strung together to communicate an idea. 2.2.1

Sentential nominalization

The process of changing a sentence into a noun phrase. 10.6.5

Singular

A singular noun, noun phrase, or determiner is one that refers to only one person or object. 3.3.2.1

Specific

A term applied to any noun, noun phrase, or determiner identifying a particular object, without suggesting that its identity is known to the hearer. 3.3.2.5

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Speech tract

The passage from the lungs through the nose and mouth whose shape can be modified to produce different speech sounds. 1.2

Stative verb

A verb that names a state, condition, or quality. 6.4

Stem formant

A phonological segment that must be added to certain roots before affixes can be added. 2.1.2.4

Stop

A sound produced with complete closure of the speech tract. 1.3.2.1

Subject

A noun or noun phrase that tells what the sentence is about. 6.1

Suffix

An affix that can be added to the end of a root. 2.1.1.2

Syllable

A combination of a vowel and surrounding consonants and glides. It might also be termed the unit of speech production. 1.4

Syntax

The study of the structure of sentences. 0.1.2

Topic

A noun or noun phrase, set off from the rest of the sentence naming a person, object, or event of particular importance to the events described. 12.3.1

Appendix B

Topicalization

The process by which some element of a sentence is set off as the topic of that sentence. 12.3.1

Transcription

Any written representation of an utterance. Transcriptions may be phonetic, phonemic, or orthographic. 1.1

Transitive verb

A verb that may be followed by a specific object, towards which the event described by the verb is directed. 6.5

Velar

A sound produced by narrowing the speech tract at the velum. 1.2, 1.3.2.1

Verb phrase

A phrase with a verb as the central element (or head). 6.3

Voiceless

A sound produced without vibration of the vocal cords. 1.3.3.2

Voicing

The sound quality produced by vibrating the vocal cords. 1.2

Vowel

A sound that is produced without any major constriction (narrowing) in the speech tract. 1.3.2.0, 1.3.3.

Word

The smallest unit in language that can normally be uttered in isolation. 0.1.2, 2.1

Appendix B

Word class

A set of words that can be used in the same syntactic environment. 2.2.2

Yes-no question

A question that can be answered with the words *yes* or *no*.
12.4.1

Notes

1 THE PHONOLOGY OF MOKILESE

1. In phonetic transcription these words are [ɲenin] and [jɛd]. A complete list of the phonetic symbols used in this book can be found in figure 5. The meaning of these symbols will be explained in section 1.3.
2. In fact, *th* in these words represents two different sounds—[θ] in *thought* and *through*, and [ð] in *though*.
3. The asterisk is used here to mark hypothetical older forms. Note that the asterisk is also used to mark ungrammatical structures (see section 0.1.1).
4. Note that though we are representing these vowels by the letters we use to write them, it is really the **sounds** of the vowels that we are discussing.
5. The high vowels /i/ and /u/ sometimes function as consonants—see section 1.5.
6. Note, however, that *w* is used to represent the same sound as the glide *u* in some circumstances.
7. The spelling conventions for glides are discussed in more detail in Appendix A.3.
8. The change of *ka-* to *koa-* is explained by another process.
9. Of course, other changes have taken place too; the change from /a/ to /oa/, for example.
10. Some guidelines concerning the writing of these reduced vowels can be found in Appendix A.6.

11. See note 10.

2 WORDS AND MEANINGFUL UNITS

1. Note that under some circumstances it is possible to combine less-tightly-bound suffixes (but never more-tightly-bound suffixes). From *kamijik* ‘frightening’, we get both *kamijiki* ‘to frighten someone’ and *kamijikiek* ‘to frighten’.
2. The change in the root vowel has already been noted.
3. If they are loosely-bound they also trigger boundary lengthening.
4. A construction or phrase is any group of words or morphemes that is associated as a thought or meaning unit, in the sense described in this chapter.

3 NOUNS AND REFERENCE

1. The construction *ah raujij kapwwo* actually contains two nouns—the second being *ah* ‘his’. The function of such nouns will be discussed in section 5.4.
2. In these examples, all the noun phrases in question are followed by the VERB PHRASE *pirin jeila loakjid* ‘is going to go fishing’.
3. The reference of a noun is the object or objects, out of all the possible objects in the world that a noun could refer to, that it in fact does refer to.
4. The determiner *-o* frequently indicates past time—see 3.3.4.
5. The determiners *-e* ‘this’ and *-en* ‘that (near you)’ can also be used referentially; *-e* to create a sense of expectation or immediacy, or to refer to some object that is particularly re-

lated to the speaker; *-en* to refer to some object particularly related to the hearer. These uses will not be treated in detail here.

6. Emphatic determiners do not seem to be formed with the definite determiner *-wa*. I suspect that the function of *-wa* is not compatible with the function of the emphatic determiners, but I have not yet investigated this question in detail.
7. For an explanation of the notion PREDICATE, see 6.1.

4 QUANTIFICATION

1. It is also likely that *ehd* 'unit' is a compound of *e-* 'one' and *-ed* 'unit'. This is impossible to prove, however, since the morpheme *-ed* never combines with any other numeral prefix (except *e-*) and is never used in counting.
2. As noted in 2.1.3, *-oar* becomes *-r* when suffixed to a word ending in a vowel, and the vowel in question becomes long.

5 POSSESSIVE CONSTRUCTIONS

1. *nihmw* consists of two morphemes—the suffix *-mw* 'your' and the POSSESSIVE CLASSIFIER stem *nih-* (see section 5.2)
2. The elements *-oa* and *-en* are probably related to the determiners *-e* 'this' and *-en* 'that'.
3. A **paradigm** is a chart of all the forms that a given word can have. Thus, a **possessive paradigm** is a chart of all the possessive forms of a given word.
4. This noun does not appear to have a free (unpossessed) form.

5. Morphophonemic changes (phonological changes in morphologically different forms of the same word) like the changes of /a/ in *ad* 'name' to /oa/ in *oadoa* 'his name' are common in Mokilese possessive paradigms. They will be illustrated further below when the different paradigms are described in detail.
6. The vowels of the possessive forms might also differ from those of the free forms.
7. For example: *wina* 'to pluck, to scale', *wine* 'its feathers' (also *winin*), and *rong* 'to hear', *koaronge* 'to listen', but *rongin* 'news of him'.
8. In fact, there appears to be a special relationship between *-ah* stems and the use of nouns as possessive classifiers. For example, the same noun, *si* 'ear', has two sets of possessive forms. As an *-oa*, *-a* stem it is a simple inalienable noun (*sioaioa* 'my ear', *sioa* 'his ear'), while as an *-ah* stem it is a possessive classifier (*sioai* 'my earring', *siah* 'his earring'). Why this should be so is not yet clear.
9. In the final example, *nim piha* 'drink beer' functions as a noun. Any IN TRANSITIVE VERB OR INCORPORATED OBJECT CONSTRUCTION (see 6.5.6) can function as a noun in such circumstances.

6 PREDICATES, VERBS, AND VERB PHRASES

1. The use of suffixes like *-di* and *-da* will be discussed in 9.4.
2. See footnote 1.
3. There is often a change of vowel between the transitive and intransitive form of bi-transitive verbs. While it seems possible to predict some of these changes, the necessary rules would be of such a complex nature that they will not be given here.

4. *koaroang* is actually the combining form used in **incorporated object constructions** (see 6.5.4). The regular intransitive is *koarangoang*.
5. The final vowel of the transitive occasionally does appear in the intransitive forms, as in *jiloat jilajil i* 'to guard'. This is particularly true when the final vowel is non-high and the preceding vowel is high. Another example is *kiroa t kirakir i* 'to peel'.
6. In this verb, an *-i* seems to have been added in the intransitive form. The same is true of *keikei t koa i* 'to bite'. I can offer no explanation for these verbs.
7. Intransitive statives that describe the result of an action often require suffixes like *-pijoang* 'apart'.
8. Vowel reduction (see 1.7) has applied to *awalek* to produce *awlek*.
9. When *-ek* is suffixed to a word all of whose other vowels are *oa*, *-ek* tends to become *-oak*. In careful speech, this word is likely to be pronounced *oakoarek*.
10. The changes caused by *-ek* when suffixed to a vowel final word are discussed in 2.1.3.
11. The regular intransitive is, in most cases, given in its reduplicated form, if one exists.
12. This example has a dual subject *ara* 'they two'. Intransitive verbs may have dual or plural subjects without violating the one participant restriction, so long as the people or objects involved are either all **actors** or all **affected**.
13. Object-incorporation is much more productive in Mokilese, however.

14. The noun that is used as the object of an intransitive verb in an incorporated object construction can never refer to a specific person or object (but only to a class) and, thus, can never be used with any determiner.
15. The suffixes *-oang* 'to, towards' and *-jang* 'from' that often serve to increase the number of participants in a sentence will be discussed in 8.3.
16. Note that the causative form is not reduplicated.
17. *pwung* 'correct' has a second, regular causative *kapwung* 'to correct'.
18. In such cases, these vowels might reflect an old suffix that is no longer in use.
19. See note 16.

7 MODALITY

1. The failure of *pirin* to occur as an independent verb is still a mystery.
2. Note that *kia* used with the suffix *-ki* can be followed by a noun:

Ngoah kiahki mwingehu.

'I don't like that food.'

3. Pre-verbs can precede both the auxiliary and the main verb in a given predicate.
4. The use of *en* in complex sentences will be discussed in chapter 10.
5. There is often a slight difference in meaning according to the position of the negative. We shall not be considering this issue here.

6. The use of *joah*, rather than *joh*, to negate the auxiliary *nimen* ‘want’ is a problem in the grammar of Mokilese, since we would expect all auxiliaries to negate in the same way. What lies behind the behavior of *nimen* is still not clear.
7. The suffix *-oar* can also be used with *kak* ‘to be able’, as in:

Ih kakkoar ken inla, pwa kamwai kapwroa ih jang oh apwkan.

‘He just left because we had been making fun of him for a long time.’

8 DIRECTIONALS AND LOCATIVE—POSSESSIVE SENTENCES

1. The functions of the suffixes *-dokoan* and *-lakoan* will be explained in section 11.5.3.3.
2. Note that the suffix has the form *-doa* rather than *-do*. The same is true of the verb *kihdoa* ‘to bring’.
3. The use of *-hng* (*-ng* with lengthening of the preceding vowel) after vowels has been discussed in 2.1.3.
4. Note that *in* is also used with nouns referring to divisions of time; for example, *rehn* ‘day’, *pwong* ‘night’, *minjoang* ‘morning’, *jauwaj* ‘afternoon’ and *joausik* ‘evening’.

<i>inrehn</i>	‘during the day’
<i>inpwong</i>	‘at night’
<i>inminjoang</i>	‘in the morning’
<i>injauwaj</i>	‘in the afternoon’
<i>injoausik</i>	‘in the evening’

5. Note that in examples 74 and 75, the sense of English ‘over’ and ‘onto’ is carried by the directional suffixes *-la* and *-di*. The relational noun *pohn* expresses the fact that it is the top surface of the fence that is involved in the action. This can be seen if we substitute *nehn* for *pohn* in example 74, giving:

Ngoah lujla nehn kello.

‘I jumped inside the fence’ or ‘I jumped the fence.’

9 ASPECT

1. Both *rapahki* in 2a and *raprapahki* in 3a are translated into English as ‘am looking’. The simple present tense ‘look’ cannot be used in such sentences as a translation of *rapahki*.
2. Monosyllables of the form CVG regularly reduplicate CVG-CVG. Being monosyllabic these forms usually **triplicate** in the progressive—see 9.2.3.
3. Note, however, that some verbs can be both progressive and perfective. For example:

Jerimweinno roairoairoaila

‘That boy got taller and taller.’

In this sentence, both the change of state, ‘getting taller’, and its ongoingness are being expressed.

4. Note that with the suffix *-la* the verb *wadek* has the sense of a continuous action, ‘reading’ brought to a final conclusion. The same verb with *-di*, as we described above, suggests some limit placed on the object. In this case it was translated ‘count’.
5. The selection of suffixes by verbs of motion has been discussed in 8.2.

10 COMPLEX SENTENCES

1. The internal structure of noun phrases is discussed in chapters 3 to 6.
2. The term *CLAUSE* can be used to refer to a *CONSTRUCTION* (see 2.2.1) containing a predicate. We might describe a complex sentence as one consisting of more than one clause.
3. Many speakers of Mokilese find the implicational constructions we are to discuss in this section somewhat strange if the implicational pre-verb *ken* or *kanah* ‘then, therefore’ does not appear in the second clause. I have, however, not included *ken* or *kanah* in all the examples used here. The reader should bear in mind, then, that different speakers will have different reactions to these sentences.
4. The question mark? used at the beginning of examples like 43 indicates that the sentence in question is somewhat odd if not completely ungrammatical.
5. The difference between *-oar* and *-oarah* will be discussed in section 10.3.3.3.
6. In example 65, *-oarah* is suffixed to the noun *mwumw* ‘fish’. Recall the use of *-oar* with nouns, discussed in 4.3, which this use of *-oarah* parallels.
7. In English, the relative marker ‘that’ may be deleted in some circumstances, but must be present in others.
8. Compare:

Ngoah nimen ih en kijoula Pohnpei.

‘I want him to go to Ponape.’

where the subject of the second verb is different from that of the first verb.

11 WORD FORMATION

1. The addition of *-o* 'that', or some similar suffix, does not invalidate this claim, because the primary purpose of such suffixes is not to make verbs into nouns.
2. This type of SENTENTIAL NOMINALIZATION has been discussed in chapter 10.
3. The subscript _i marks intransitive verb forms and the subscript _t transitive verb forms.
4. Note that changes in the vowels, like /a/ becoming /oa/ or /ε/, are explicable in terms of other processes not directly relevant here.
5. V is meant to represent an old third person singular suffix we assume to have existed. It was removed without a trace by the process of Final Vowel Deletion.
6. In this and the following derivation, V is meant to represent an old historical transitive suffix removed by Final Vowel Deletion. In such cases, transitive verbs (related to intransitive verbs or nouns) preserve final vowels where these vowels have been lost in the related intransitive or nominal forms.
7. Note that vowel changes, such as /a/ to /oa/ often accompany this process.
8. I cannot account for the long vowel in this form.

12 SENTENCE PROCESSES

1. Whenever the main verb of the sentence, or some construction containing the main verb, is focused, the main verb must be replaced by the verb *wia* 'do'.

Notes

2. In English grammar, questions of this type are often called *wh-* questions, because most of the question words used in them begin with *wh*—*who, what, when, why, where*.

APPENDIX1

1. In the Mokilese dictionary, the sound [e], as in *ngenin*, is frequently written in roman type in places where the rest of the form in which it appears uses boldface or italic type. Thus, **ngenin** or *ngenin*. This convention is intended for the aid for users of the Dictionary only.
2. The intransitive *-ek* causes the final consonant of a one syllable word containing a high vowel to geminate; for example, *lim* 'to fold something', *limmek* 'to fold'.