

THE MARSHALLESE COMPLEMENTIZER PHRASE

by

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A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Arts

ARIZONA STATE UNIVERSITY

May 2002

Chapter 1

INTRODUCTION

1.0 Introduction

In this chapter I will give a brief introduction to the Marshallese language. I will first provide general information about Marshallese and its dialects, and then discuss its phonology, morphology and syntax.

1.1 General background

Marshallese is a language spoken in the Republic of the Marshall Islands (RMI) located in Eastern Micronesia. There are about 58,000 native speakers of

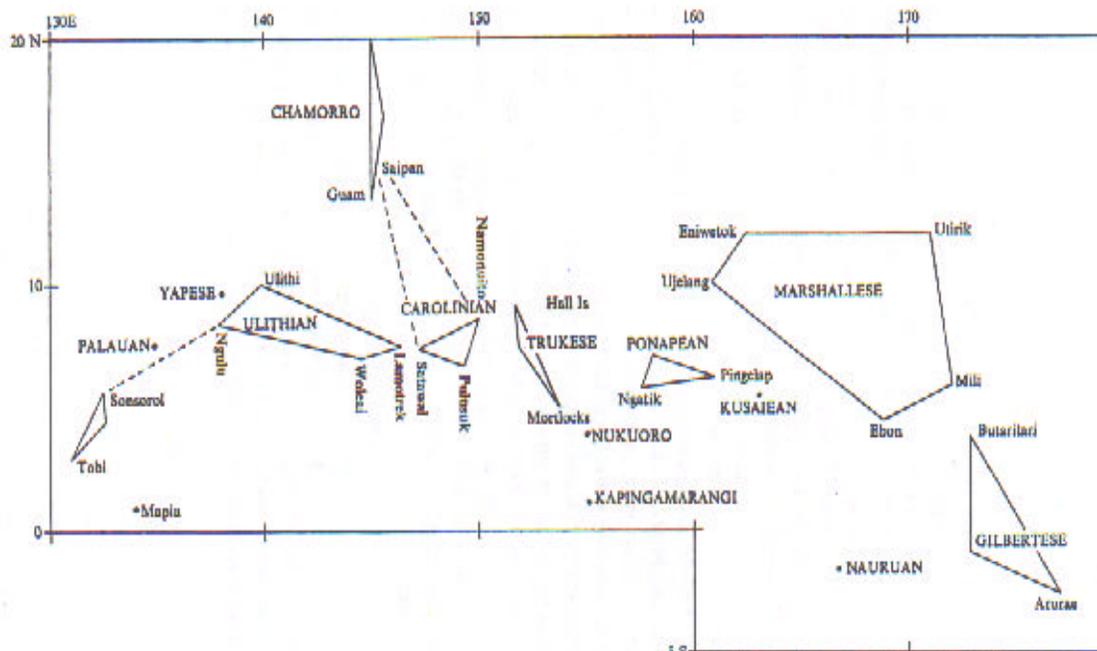


Figure 1. Linguistic map of Micronesia

Marshallese living in the RMI, with small pockets of speakers scattered throughout Micronesia and the United States. The RMI consists of 34 atolls comprising two chains: the Ratak Chain in the east and the Ralik Chain in the west. Each chain has a distinct dialect, although the difference between the two dialects is mainly lexical. However, an interesting phonological difference occurs in words beginning

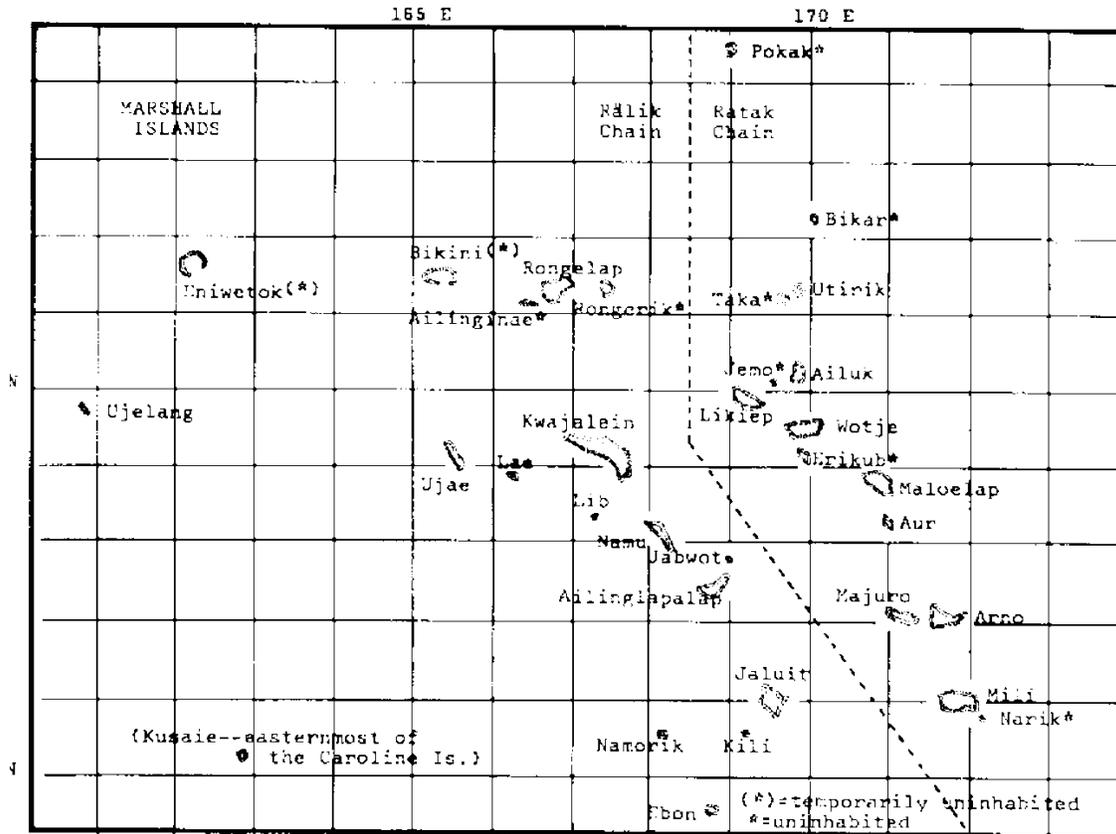


Figure 2. Map of the Republic of the Marshall Islands

with double consonants. In Marshallese pronunciation, two consonants may not occur together. Within words, [ə] is typically inserted between two consonants. But for word initial double consonants, the two dialects differ as to how this phonological constraint is resolved. The Ratak Chain inserts a vowel between the two consonants, while the Ralik Chain adds a vowel before the double consonants (Bender 1969). In the Ralik Chain, a [y] is also added before the vowel when spoken (but not when written). The vowel that is inserted is typically the same one that follows the double consonant, the only exception being *a*, in which case an *e* is added. Below are some examples of this dialectical variation taken from Bender (1969):

(1)	<u>Stem</u>	<u>Ralik</u>	<u>Ratak</u>	<u>Meaning</u>
	kkure	ukkure	kukure	play
	ttoir	ettor	totor	run

Please note that, in the example of *etiōr*, the initial vowel *e* and the second vowel *ō* are phonetically the same, although they are spelled differently.

Marshallese is part of the Eastern Oceanic subgroup of Austronesian languages, as shown in Figure 3, adapted from Ethnologue (Grimes 2001):

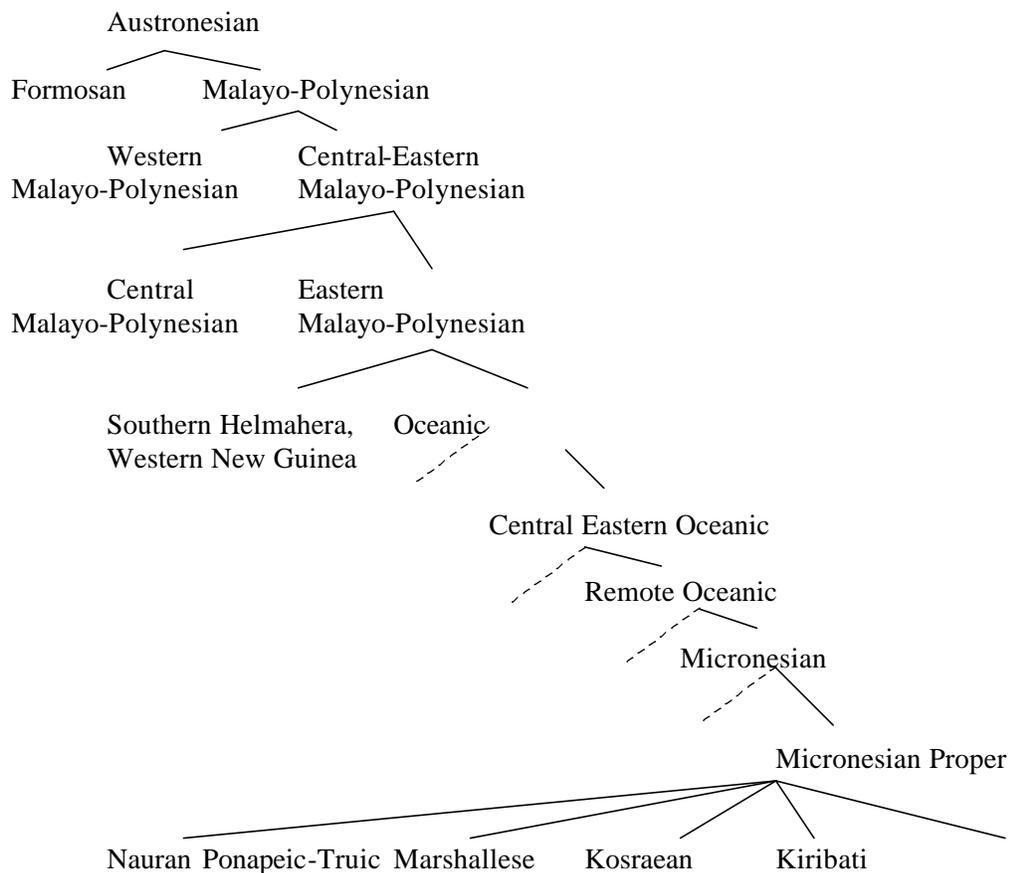


Figure 3. The place of Marshallese in Austronesian

2.0 Methodology

In order to provide an analysis of the Marshallese language, I have relied on previous research in Marshallese along with my own knowledge of the language. However examples were chosen with and reviewed by two native speakers, Lorina Gaiun and Emina Lakjohn. This was done in order to verify the acceptability of the data.

3.0 Marshallese Grammar

In this section, I will present a descriptive analysis of Marshallese grammar, starting with phonology, and will refer to some of the most significant research on Marshallese.

3.1 Phonology

Marshallese was originally described by Bender (1963) as having a 12-vowel system which consisted of the usual nuclear Micronesian 3 x 3 system with an additional height contrast: high /i, ʲ u/, high-mid / e, ɛ, o/, mid /e, ɛ, o/, and low /e, a, ʌ/ (see figure 4).

	Front	Central	Back
			Unrounded Rounded
High	i		ʲ u
High-mid			
Mid	e		ɛ o
Low	e		a

Figure 4: Marshallese vowels

Additionally there was a large consonant system including: labials /b[b^w], p[p^y]; P [ɸ^{m^w], m[m^y], dentals /t, j[t^y]; n[n^y], E,[n]/, velars /k, q[k^w]; g[ʔ], g_ [ʔ^w]/, liquids /l_[l^w], l[l], l[l^y]; r_[r^w], r, d[r^y]/, and glides /y, w/.}

However, analysis of vowel distribution led to a simplified view of the Marshallese phonetic and phonemic system. After careful analysis, Bender showed that the three sets of oral and nasal bilabials were really two sets: one which was velarized before front vowels and the other sounding palatalized before back vowels. He further showed that many of the other consonants had distributional limitations: /k^w, m^w, l^w, r^w/ contrasted with their unrounded counterparts only before front vowels, /w/ was contrastive only before front vowels, and /y/ only before back vowels. Although this analysis demonstrated that all twelve vowels seemed to contrast in CV#, #VC and CV₁V₁C frames, Bender discovered that the CVC construction was the key to understanding the Marshallese system. He found that between any two identical consonants (or any two belonging to the same subset), there was a maximum of four vowel

contrasts, all being a contrast in height. This fact led Bender to what is now the standard Marshallese phonetic and phonemic system.

The revised vowel system consists of only four vowels- [ɨ, ə, a]- and three subsets of consonants in which back unrounded vowels are the norm in the environment of velarized consonants [b, mʔt, nʔk, g, l, r, h]. These vowels are fronted by palatalized consonants [p, m, j, n, l, d, y] and rounded by labialized consonants [g__, r_, n_, l_, q, w].

3.2 Morphosyntax

Like many other Micronesian languages, Marshallese has two sentence types, classified as predicational sentences and equational sentences (Good 1985). Predicational sentences have a main verb as the head of the predicate and follow a SVO order, as in (2) below:

- (2) E-j kajaṅja ṅ kita.
 3rd S-PRES play guitar.
 He plays guitar.

By contrast, in equational sentences both the subject and the predicate are noun phrases in the semantic relation "X is Y":

- (3) Nuknuk eo e-aibujuij.
 Dress DET 3RD S-beautiful.
 The dress is beautiful.
- (4) Eor aō waj.
 3rd S-exists my watch.
 I have a watch.

In equational sentences, the 3rd S form prefixes to either a descriptive word or to a word relating to existence. Thus, it appears that equational sentences lack a verb, since the Marshallese language lacks the verb "to be." Below are some common words used in equational sentences:

- (5) eor exists
 ejjelok nothing/negative form of "eor"
 ebwe OK
 enana bad
 eaibujuij beautiful
 emwij finished

Most of these words can be separated from the 3rd S root and used as full adjectives, such as *nana*, *bwe*, and *aibujuij*. However many of them have become fully fixed to the root, as in *ejjelok*, *emwij*, and *eor*.

Hale (1998) argues that these 3rd S forms in equational sentences are dummy subjects. This is based on the analysis of the following sentence from Hale (1998):

- (6) E-buromuij iroj ro.
 3rd S-sad chief DET-PL.
 The chiefs are sad.

(6) lacks agreement between the 3rd S form and the subject, *iroj ro*. This lack of agreement can only be accounted for through the classification of *e-* as a "dummy subject."

Hale also suggests that a dummy subject accounts for the *verb- subject* word order of some equational sentences. For example, sentence (3) can also be stated as (7):

- (7) E-aibujuij nuknuk eo.
 3RD S-beautiful dress DET.
 The dress is beautiful.

This V-S word order is not found in predicational sentences. Thus Hale again analyzes *e-* in (7) as a dummy subject.

3.2.1 Subject Markers

Marshallese is unusual in that it employs a set of subject markers. Song (1994) explains that these subject markers are attached to the first element of the verb phrase, whether it is an aspect marker, tense marker, negative or main verb. These subject markers may also attach to adjective-like words in equational sentences, as in (3) and (4) above. Marshallese subject markers are:

(8)	<u>PERSON</u>	<u>SINGULAR</u>	<u>PLURAL</u>
1		i	kim (exclusive) je (inclusive)
2		kwo	kom
3		e	re

When these subject markers are used, a noun may or may not occupy the subject position in a sentence, as illustrated in sentences (9), (10), and (11):

- (9) John ej etal.
 John 3rd S-present go.
 John he is going.

(10) R-ar jab itok.
3rd PL-PAST NEG come.
They didn't come.

(11) Ij-jab bed imweo im̄.
1st S-NEG stay house my.
I'm not at my house.

However, as might be anticipated, the subject position may only be empty when the subject is clear to the speaker and listener; both parties need to understand who "they" are in sentence (10) in order for it to lack a subject.

It should be noted that it is unclear whether or not these subject markers are full pronouns or simply agreement markers affixed to auxiliaries, verbs, etc. Although Bender (1969) and Song (1994) analyze them as agreement markers, Zewen (1977) analyzes them as subject personal pronouns that have cliticized with the verb, much like the English "I'm." There is evidence that supports the pronoun categorization. For instance, in most sentences, a subject marker must be included. Sentence (12) below is ungrammatical because it lacks a subject marker.

(12) *John ar etal.
John PAST go.
John went.

However, in a very limited number of circumstances, the auxiliary *ar* may occur without a subject marker¹:

(13) Won ar le-woj waj ne am?
Who PAST gave-toward listener watch near listener 2nd P-POSS?
Who gave you your watch?

¹ A full explanation of this construction will be given in chapter 3. However it should be noted that *ear* can be used instead of *ar* in sentence (13). It is proposed that *won* exists in the subject position and that the lack of subject marker is due to the fact that the speaker is unclear as to whether or not *won* is singular or plural. Thus there is no subject marker. Hale (1998) also shows that unergative intransitive predicate clauses can exist with a plural subject and a singular subject marker, which was discussed previously.

Additionally, spelling variations among native speakers occasionally separate the subject marker from the verb:

- (14) E kōnaan bed ibben John.
 3rd S want stay with John?
 S/he wants to stay with John.

The fact that these subject markers can occur alone in some circumstances seems to suggest that they exist as distinct pronoun entities.

However in order to accept this interpretation, one must then account for the inclusion of both a noun and a pronoun in the subject position of a sentence, as in sentence (9) above. Additionally, the affixing of an auxiliary or a verb to a pronoun is marked in terms of grammatical forms throughout languages. Given the limited evidence, the question of the classification of subject markers has not yet been fully answered.

Certain of the subject markers- *e*, *kim*, *je*, and *kom*- may also be suffixed to specify the number of people or things. When this takes place, small phonological changes occur in the subject marker. Below is a list of subject markers that can take number suffixes and an example of their use.

	<u>1st person EX</u>	<u>1st person IN</u>	<u>2nd person</u>	<u>3rd person</u>
(15) Singular	i	i	kwo	e
2	kimro	kijro	komro	irro
3	kimjil	kijjil	komjil	irjil
4	kimuij	kijuij	komuij	iruij

- (16) Kimronaj etal.
 1st PL- EX-FUT go.
 We two (not including listener) will go.

For five or more, the plural form is used.

Having already presented a few auxiliaries, I now give the full set of auxiliaries and modals that affix to subject markers:

(17)	<u>Auxiliaries</u>			<u>Modals</u>	
	Present Progressive	Future	Past	Command	Ability
	-j	-naj	-ar	-n	-maron

3.3 Marshallese Determiners

Closely tied to subject markers is the Marshallese determiner system. This system can be divided into three categories: singular, plural human, and plural non-human. Morphological forms for each category are closely linked. All plural human and plural non-human forms are nearly identical, the exception being that plural human forms begin with *r-*, and plural non-human forms begin with *k-*:

(18)	<u>singular</u>	<u>plural human</u>	<u>plural non-human</u>
	eo	ro	ko
	e	ra	ka
	in	rein	kein
	ne	rane	kane
	en	ran	kan
	uweo	roro	koko

These categories also contain information about the location of a person or thing in relation to the speaker and listener. In the section that follows, only singular forms will be discussed, since the rules governing singular forms also apply to plural forms.

eo- In English, *eo* would be loosely translated as "the." It is used for objects that are not visible or that are in the past. "Not visible" refers to items whose location is not known to the speaker, as in sentence

(19).

- (19) E-aibujuij nuknuk eo.
3rd S-beautiful dress DET.
The dress is beautiful.

The "beautiful dress" in (19) is familiar to both speaker and the listener. However its location at the time of the utterance is unknown. The use of *eo* provides no information about the location of an object or person. Therefore, it is an "empty set" as far as location is concerned.

e- *E* can be classified as the 1st person exclusive form, meaning close to the speaker. It would be translated as "this."

in- *In* is the 1st person inclusive form, meaning close to both the speaker and listener. It would also be translated as "this." The distinction between exclusive and inclusive is not unusual in Marshallese and

shows, as Bailey (1967) describes, the close semantic parallel between subject markers and determiners.

Thus the distinction between *in/e* is parallel to determiners *je-* which is 1st PL IN- and *kim-* 1st PL EX.

ne- *Ne*, 2nd person, means close to the listener.

en- *En* means away from both the speaker and the listener and is the 3rd person determiner. English does not make the distinction between 2nd and 3rd person determiners, such as Marshallese does in *ne* and *en*.

The English word for both these categories is "that."

uweo- *Uweo* is also considered a 3rd person form but is used for distant, yet visible items. Thus there is a distinction in the 3rd person forms describing how far away the object is from the speaker and listener.

As shown in the above examples, specification of location is important in the Marshallese language. Below are examples of the determiner system in sentences. Each example gives specific information about the location of the object or person.

(20) Le-tok buk ne.
Give-towards speaker book 2nd S-DET.
Give me the book (by you).

(21) Nejin won leddik ra?
3rd S POSS- child who girl 1st EX PL-PER-DET?
Whose daughter is this?

(22) Ear le-lok pinjil kein.
3rd S-PAST gave-away pencil 1st IN-PL-THING-DET.
S/he gave away these pencils.

These determiners are often used in conjunction with *ewi*, which is translated as *where (is)*. Consider the following questions and answers.

(23) Ewi laddik eo?
Where boy DET?
Where is the boy?

(24) Erki pinjel ko aō?
Where pencil PL-THING-DET 1st S-POSS?
Where are my pencils?

(25) E bed ijuweo.
He stay way-over-there.
He is way over there.

- (26) Re bed ije.
They stay close-to-speaker.
They are here (by me).

Due to the fact that the location is unknown, the general forms- *eo* and *ko*- must be used when asking where something/someone is. In response, the derivational prefix *ij*- is added to the determiner to form an adverb of place, as in (25) and (26). However, these place adverbs employ the singular form and are not inflected for plurality. Sentence (26) shows that the plurality of "pencils" is reflected in the subject marker.

As demonstrated by many examples in the above section, Marshallese determiners follow the nouns they modify. The correct order for this system is N + DET + POSS. When a possessive occurs after the noun, a determiner from the above-described system must follow the noun.

Chapter 2

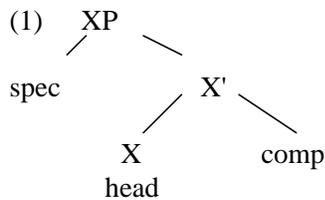
MINIMALIST THEORY

1.0 Introduction

This chapter will include a brief summary of minimalist theory, starting with X' theory and then moving on to the IP and the CP in sentences, relating each structure to Marshallese and English. More recent minimalist work has attempted to do away with X'. However, I will continue to use X' theory but include minimalist checking.

2.0 X' Theory

With the introduction of generative grammar, linguists began looking for a way to generalize how phrases were formed. The result was X' theory. This theory replaced phrase structure rules and gave a uniform way of viewing phrases across languages. This theory supposes that every phrase has the same basic structure. Thus a phrase- XP- consists of a specifier-[Spec, XP], a head- [Head, XP], and a complement- [Comp, XP]. This basic structure is shown below in (1):



In this structure, the head determines the category of the projection. Thus XP is the maximal projection of the head of the phrase. XP also includes the X' node, making the head a sister to [Comp, XP].

This structure applies to all phrases, regardless of the lexical or functional category of the head. Included among lexical categories are N, V, A and P. In looking at the prepositional phrase *at the store*, the preposition *at* is the head of the phrase, while *the store* is in the comp position. As this phrase shows, the spec position can be empty. The comp position can also be empty, as in the phrase "she left." Because of their properties, words from these four lexical categories tend to occupy the head positions of phrases. These phrases-NP, VP, AP, or PP- constitute the lexical information in sentences.

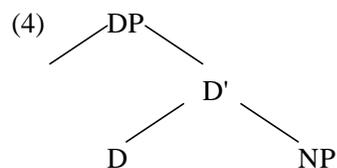
Since Chomsky (1986), it has been assumed that functional categories such as complementizers, inflections and determiners can also serve as heads of phrases. In English, [Head, IP] can be filled with a modal or auxiliary. Marshallese also fills this position in a similar way, using an auxiliary or modal from (17) in chapter 1 affixed with a subject marker. Typically, the head position of the CP in a sentence is filled with a complementizer- "that, which," etc.- and has an IP as its complement. [Spec, CP] can be filled by a *wh*- word and is in complementary distribution with [Head, CP]. In English, it is ungrammatical to fill both the spec and head of a CP in a sentence, as in sentence (2) below:

(2) *I wonder what that he thought.

[Head, CP] can be empty not only when [Spec, CP] is occupied but also when [Spec, CP] is empty:

(3) I'm surprised [CP [IP he's late.]

The DP can be found in spec or comp of a sentence. The basic structure of the DP in English is:

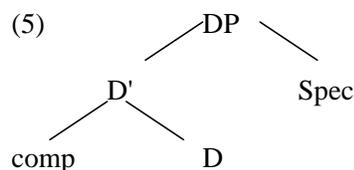


[Spec, DP] can also be empty, as is shown in (4).

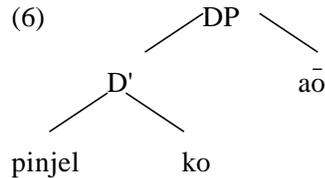
3.0 Parameters

As stated above, X' theory gives a basic structure for phrases across languages. However languages differ in the order of the spec, head, and comp within a phrase. This concept is known as headedness or the Head Parameter. The Head Parameter determines whether a language is a VO or OV language. In VO languages, the verb- [Head, VP]- precedes its object- [Comp, VP]. This is known as head initial. By contrast, in head final languages, [Head, VP] follows its object.

Structure of a DP phrase is another parameter of languages. In many head final languages, D follows its comp:



(5) shows the structure of the Marshallese DP. As was discussed in section 3.3 of chapter 1, the determiner follows its comp and can then be followed by a possessive (if necessary). This comp + head + spec order seems to suggest that Marshallese is a spec final language. If this is the case, (6) is the structure then for the DP from sentence (24) of chapter ,:



However, this interpretation is complicated by sentences (7) and (8), in which the possessive precedes the NP and a determiner is not used.

(7) Eor ke am waj?
 Exists Q your watch?
 Do you have a watch?

(8) Ej-jelok āo waj,
 3rd S-none my watch.
 I don't have a watch.

In accounting for the difference in structure, the issue of definiteness and indefiniteness is of central importance. In sentence (7), the existence of a watch is in question; in other words, the watch is an indefinite item. By contrast, the pencils from (6) are definite items; both speaker and listener know the pencils exist and know which ones are being referred to.

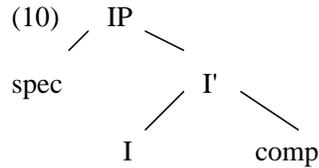
Thus, in Marshallese, the determiner follows its comp when it is a definite item, while it precedes its comp for an indefinite item. A determiner may also be excluded if the item is indefinite and a possessive is used. This interpretation is further supported by sentence (9).

(9) Le-tok juon buk
 Give-toward speaker one book.
 Give me a book.

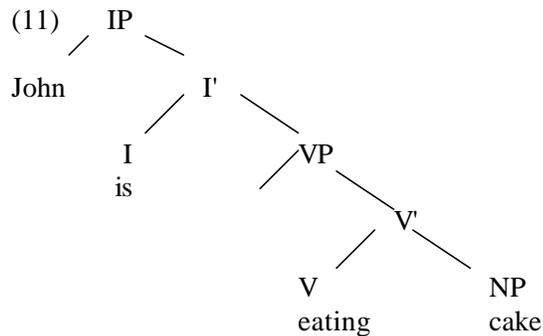
Juon is an indefinite article, and it precedes the noun. In this construction of definite vs. indefinite, Marshallese is similar other Micronesian languages such as Kosraean (Lee 1975).

4.0 IP

Having discussed the phrasal elements of a sentence, I now turn my attention to the structure of the entire sentence. X' bar theory can account for the structure of sentences. The inflection is the head of a sentence and IP the maximal projection, as in (10).



The subject of the sentence is typically contained in [Spec, IP] at spell out, and the VP fills the [Comp, IP] position in English. [Spec, IP] has strong features, and thus must be filled in a sentence. In languages such as English, the subject fills spec. This is not the case in all languages. For example, Spanish allows a null subject position filled by *pro*, which will not be discussed at this point. In summary, a typical English sentence such as "John is eating cake" has the following structure:



As the head of the IP phrase, the inflection has very important features such as tense and agreement, which help with the interpretation of the sentence. Pollock (1989) theorized that the IP is actually composed of two elements: a tense phrase (TP) and a subject agreement phrase (AGRsP). This classification is more useful in some languages, such as French, rather than others, such as English. In his analysis of Marshallese intransitive clauses, Hale (1998) includes this distinction. However, the TP in his analysis is used only as an intermediate landing spot for V and [Spec, VP] on their way to AGRsP. Thus TP is not a final landing spot in movement. In my analysis of Marshallese, I will use IP rather than separating it into TP and AGRsP, as such a separation is not useful to the analysis of the Marshallese CP.

Note that this is the basic structure of a sentence. A sentence can become much more complicated with the inclusion of CP, adverbials, prepositional phrases, etc. as will be shown later.

4.1 Checking and Movement

Chomsky (1995) includes another important aspect of Minimalism, the concept of feature checking. Lexical items of a language carry certain features inherent to the lexical or functional category to which they belong. For example, nouns carry features such as case and person, and verbs carry features for tense, aspect or agreement. Within a sentence, these features must be checked in order for a sentence to be grammatical. For instance, improper feature checking causes the ungrammaticality of sentences such as (12) and (13).

(12) *Me is late.

(13) * I are late.

The above examples show that [Spec, IP] is checked for case. The inflection must be checked by a subject with nominative features. So in a sentence, the nominative features of [Spec, IP] are checked with the features of its head. If the features match, the sentence is grammatical. At the same time, person features are also checked, as in sentence (11). The singular properties of "John" are checked against the singular features of "is", and the sentence is grammatical. In (12), the [+nom] features of the verb conflict with the [+obj] features of "me." Similarly, the person features of the subject and verb in (13) cause ungrammaticality.

Checking can often be the motivation behind movement. According to Chomsky (1986), there are two types of movement: substitution and adjunction. Substitution has the following characteristics: 1) movement cannot take place to a complement position, 2) only a head can move to another head position, and 3) only a maximal projection can move to a spec position. These rules determine what will move where and play an important part in spec-head checking in IP and also for *wh*- questions, the latter of which will be analyzed in the next section.

In discussing movement for spec-head agreement in IP, the VP-internal subject hypothesis must be explained. According to this theory, the subject of a sentence originates in [Spec, VP]. This is

supported by the theory that all lexical material in a sentence is contained within the VP, while all functional material, such as tense, originates in IP. If this is the case, the subject moves from [Spec, VP] to the [Spec, IP]. The reason behind this movement is provided by feature checking, namely [Head, IP] must be checked for case.

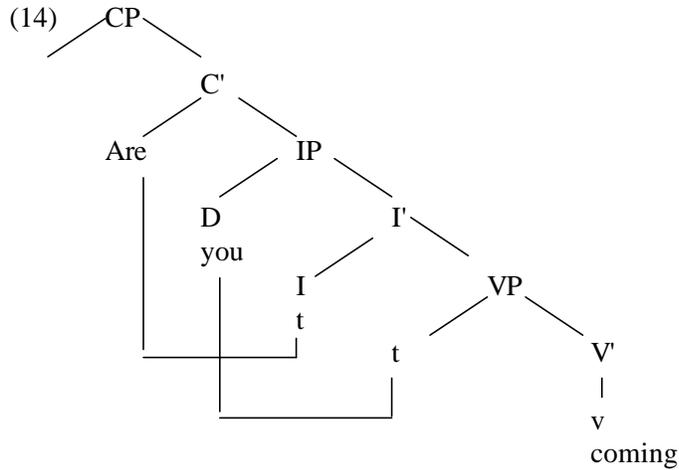
In addition to feature checking, movement can also be motivated by strong features. As explained in Chomsky (1995), if a position in a sentence has strong features, it must be filled. For example, [Head, CP] in English questions must be filled and motivates the movement of I from [Head, IP] to [Head, CP]. At this point, an investigation of the CP is necessary.

5.0 CP

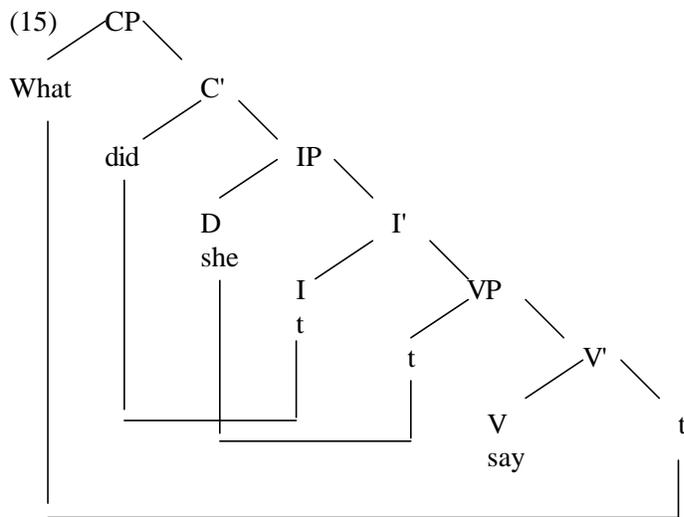
I have already briefly touched upon some of the features of a CP, but a more complete explanation is needed in order to analyze the Marshallese CP. In this section, I will address the English CP only, as chapters 3 and 4 are devoted to the Marshallese CP.

Complementizers encode particular sets of grammatical properties. A CP can typically occur in one of two positions in a sentence: 1) as a VP complement introducing an embedded clause or 2) before the IP. In the second case, the IP occupies [Comp, CP]. This structure is the typical English question structure, as the CP codes for questions.

When the CP is filled in questions, movement is involved. In English yes/no and *wh*- questions, [Head, IP] moves to the [Head, CP] to satisfy strong features. This process is known as inversion. This head-to-head movement follows Chomsky's rules on substitution. (14) shows inversion in an English sentence.



As outlined in Chomsky (1977), *wh*- movement can occur in *wh*- questions, relative clauses and other constructions. In *wh*- questions, [Spec, CP] also has strong features. These strong features are able to attract a *wh*- word or phrase to the CP.



As sentence (15) illustrates, "what" originates in the [Comp, VP] position but moves to the [Spec, CP] position.

In the case of a *wh*- phrase, the whole phrase undergoes movement through the process of pied piping. This term refers to the movement of part or all of a phrase with the movement of an element. This accounts for the grammaticality of (16) versus the ungrammaticality of (17).

(16) Which book do you want?

(17) *Which do you want book?

In these instances, the whole phrase must move in order for the sentence to remain grammatical.

In the case of a prepositional phrase, the preposition may be pied piped or stranded, as in (18) and (19).

(18) To whom did you speak?

(19) Who did you speak to?

According to Principles and Parameters theory, a language will either allow *wh*-movement or allow *wh*- to remain *in situ*. This is explained by the Economy Principle, which states that movement will not take place unless there is a reason for it. In English and other languages with *wh*- movement, strong [Spec, CP] features require that this position be filled (refer to (15)). If the features are not strong, the *wh*- word will not move. This movement is referred to as overt movement. However it has been shown by Huang (1982) and many others that, in *wh- in situ* languages, the *wh*- word or phrase moves to the [Spec, CP] position at LF. This movement at LF is called covert movement.

In the case of *wh*- movement in English, multiple *wh*- movement is not possible; only one *wh*- word may move to [Spec, CP]. In light of the economy principle, which calls for the least amount of movement possible, the first *wh*- word in a sentence must be moved. This accounts for the ungrammaticality of both (20) and (21).

(20) *When_i where_j do you plan t_i to go t_j?

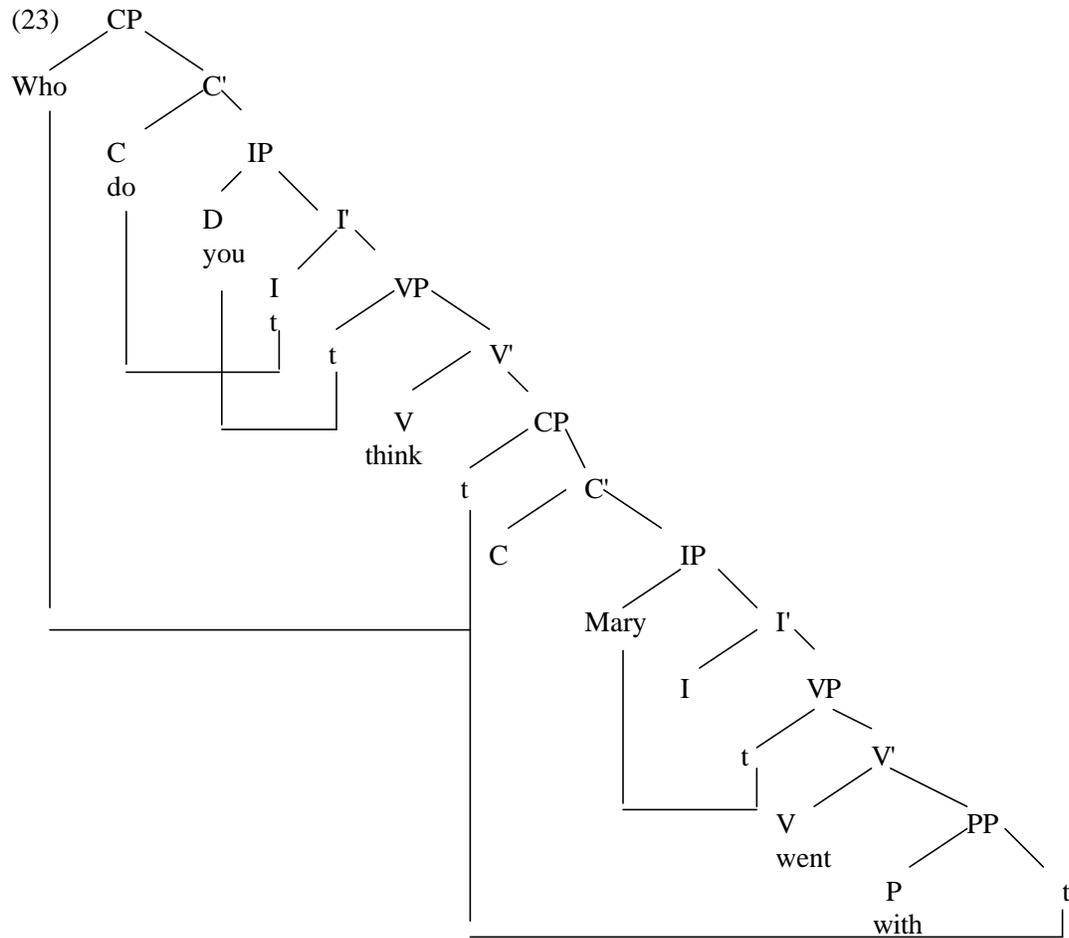
(21) *Where_i do you plan when to go t_i?

(20) is ungrammatical due to multiple *wh*- movement, and (21), to economy. By contrast many languages allow multiple *wh*- movement, which would render sentence (20) grammatical.

In light of all these facts, the path of a *wh*- question word as it moves to [Spec, CP] is important. Consider the following sentence:

(22) Who do you think Mary went with?

As "who" moves through the sentence, it cannot move to the initial [Spec, CP] without first landing in the intermediate [Spec, CP]. This first landing site is an empty CP head whose complement is occupied by the IP "Mary went with", as shown below.



6.0 Conclusion

In this chapter, I have outlined some basic theories of principles and parameters and minimalism, including X' theory, IP and CP. These theories will be used in chapters 3 and 4 as I discuss the structure of the Marshallese CP.

Chapter 3

THE MARSHALLESE CP IN QUESTIONS

1.0 Literature Review

Most of the research that has been done on Marshallese has examined phonology, such as Bender (1963), (1968). Even less has been written describing morphology, such as Bender (1991) and Song (1997). And an even smaller body of work exists relating to Marshallese syntax and the CP. There are however two works on Marshallese grammar that do address Marshallese questions: Zewen's 1977 dissertation The Marshallese Language: A Study of its Phonology, Morphology and Syntax, and Bender's 1969 work, Spoken Marshallese.

In his dissertation, Zewen (1977) dedicates a surprisingly small section to question structure considering the size of the chapter devoted to syntax. In this section he identifies four Marshallese question types: 1) yes/no questions, 2) confirmation questions, 3) information questions, and 4) leading and alternative questions. Both yes/no and confirmation questions use the question particle *ke*. But yes/no questions can lack the question particle, using rising intonation instead. One difference between these two types of questions is that in yes/no questions, the speaker does not anticipate a specific answer, which can be either yes or no. By contrast, in confirmation questions the speaker expects that the answer will be yes. Thus, this question type occurs when the speaker utters a statement and wants to have it confirmed by the listener. These two question types also differ in structure, which will be discussed in section 2. By contrast, information questions usually include *wh*- question words and request specific information. Finally, leading and alternative questions are similar to information questions in that they use a *wh*-question word. However, they also include a subject or predicate and the question particle *ke* at the end of the sentence. The purpose of this construction at the end of the sentence is to lead the listener to a particular answer or to offer two or more alternative answers. (1)- (4) below from Zewen (1977) show examples of each question type.

- (1) Yes/no
 E-aibujij ke nuknuk eo?
 3rd S-beautiful Q dress DET?
 Is the dress beautiful?
- (2) Confirmation
 E metak ke?
 3rd S hurt Q?
 It hurts, right?
- (3) Information
 Won enaj jibañ iō?
 Who 3rd S-FUT help me?
 Who will help me?
- (4) Leading and alternative
 Won enaj jambo ibbam, ña ke?
 Who 3rd S-FUT stroll with you, me Q?
 Who will stroll with you, me?

Beyond this classification of four question types, Zewen does not give any information regarding the structure of Marshallese questions. Although this classification can be instructive on how to form questions, it does not give any real linguistic explanation of structure.

Unlike Zewen's dissertation, which classifies and describes Marshallese, Bender's grammar is a Marshallese learning text. He therefore presents the basic forms of Marshallese questions but gives no syntactic or linguistic analysis of them. Additionally, he rarely gives translations for his examples, which renders his work nearly incomprehensible to readers who have little or no previous knowledge of Marshallese. Due to the lack of linguistic information, Bender's grammar is of little help in analyzing Marshallese question structure.

Because of this scarcity of syntactic information, a more detailed analysis is needed in order to describe Marshallese grammar and structure. Since a complete description of Marshallese is beyond the scope of this work, I will limit my analysis to the CP in questions and embedded sentences. In looking at Marshallese questions, I will first examine the general structure of each of Zewen's question types, fitting them into X' theory, then turn my attention to more complex issues regarding Marshallese question

structure. I will argue that Marshallese has strong [Head, CP] features that must be filled in questions and that this position is filled by the question particle *ke* in yes/no and confirmation questions and by a determiner in *wh*- and leading and alternative questions. I will further argue that certain Marshallese *wh*-question words are complementizers themselves and originate in [Head, CP].

2.0 Marshallese question structure

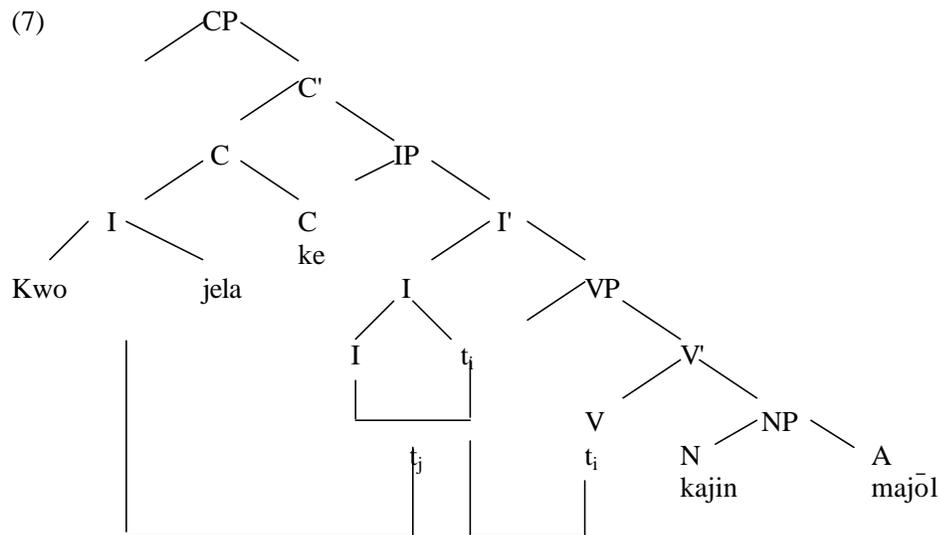
2.1 Yes/no questions

Marshallese yes/no questions are created through the insertion of the question particle *ke* after the verb in predicational sentences, as in (5), and after the subject marker/adjective combination in equational sentences, as in (6).

(5) Kwo jela ke kajin majōl?
 2nd S know Q language Marshallese?
 Do you know Marshallese?

(6) Eor ke am buk in al?
 Exists Q 2nd S- POSS book of song?
 Do you have a song book?

The basic structure of yes/no questions is:



2.2 Confirmation questions

The structure of confirmation questions is similar to yes/no questions except that *ke* is found at the end of the sentence.

- (8) Kwo jela kajin Majōl ke?
 2nd S know language Marshallese Q?
 You know Marshallese, right?

In discussing structure, it should be noted that negative questions are similar to confirmation questions in that the question particle *ke* must occur at the end of the sentence. For this reason I have included them under the heading of confirmation questions. (9) shows the placement of *ke* in negative sentences:

- (9) Kwoj-jab etal nan Rita ke?
 2nd S-PRES-NEG go to Rita Q?
 Aren't you going to Rita?

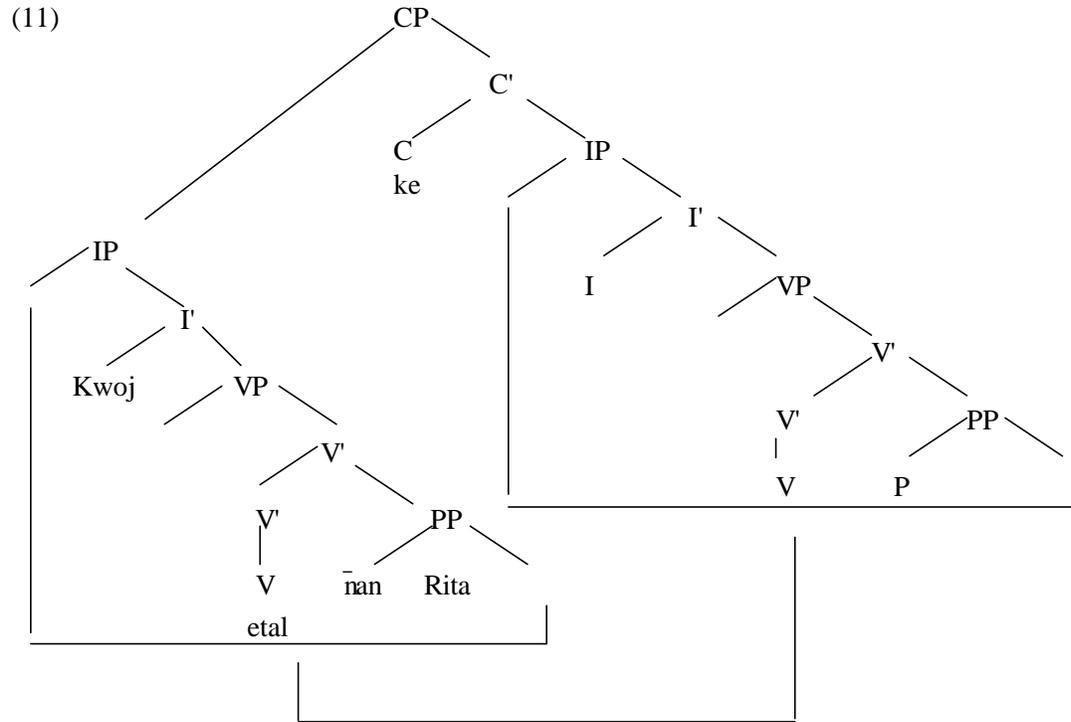
This construction suggests that all negative questions can be classified as confirmation questions.

However, negative questions can be answered with either "yes" or "no," which suggests that (9) is a yes/no question. Based on the fact that both answers are possible, I propose that negative questions are yes/no questions. The structure of confirmation questions allows for the grammaticality of (9). However, the ungrammaticality of (10) must be accounted for.

- (10) *Kwoj-jab etal ke nan Rita?
 2nd S-PRES-NEG go Q to Rita?
 Aren't you going to Rita?

Rizzi (1990) argues that negation often blocks A' chains and the association of the inflectional morpheme with a lexical verb in English. Although his examples involve different constructions, I purport that the principle of a negative acting as a block to certain constructions is the same. In Marshallese, the negative acts as a block against the movement of [Head, IP] and [Head, VP] common in yes/no questions. Instead, the whole sentence must be moved.

At this time, I provide the structure for confirmation and negative questions. Please note that a tree is provided for confirmation questions only, since I have already argued that the structure is identical. The placement of *ke* in yes/no questions demands further attention and will be discussed in section 3.



(11) shows the movement of the entire IP into [Spec, CP]. This structure accounts for the placement of *ke* at the end of the sentence².

2.3 *Wh*- questions

In *wh*- questions throughout languages, *wh*- words and phrases may either remain *in situ* or move to [Spec, CP]. Languages generally select one construction over the other. Based on my conclusions in the previous chapter regarding strong spec and head CP features, I conclude that Marshallese favors movement in *wh*- questions, as in sentence (12).

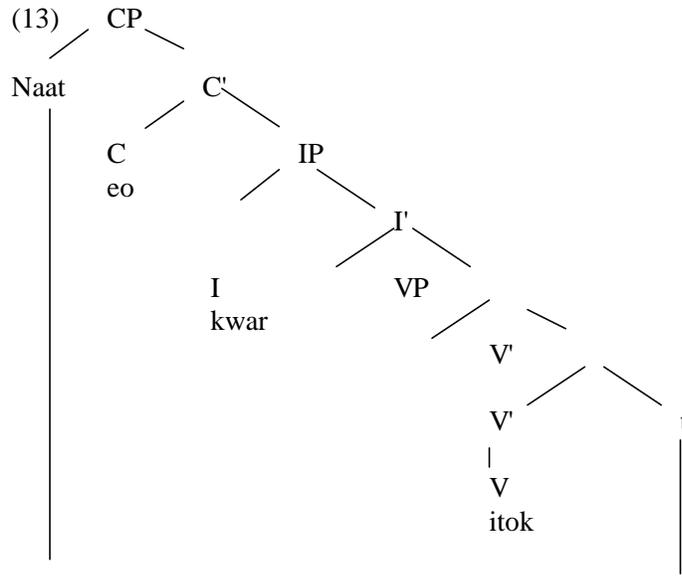
- (12) Naat eo kw-ar itok?
 When DET 2nd S-PAST come?
 When did you come?

In this sentence, the *wh*- question word *naat* has moved to [Spec, CP] in order to fill this position's strong question features. Chomsky (1995) describes this movement as attract/move. In other words, the strong features of [Spec, CP] attract the *wh*- word, causing movement. (12) also shows that in *wh*- questions, the

² Kayne (1994) allows for movement of the IP in order to account for final complementizers in the linear correspondence axiom, which purports that all languages have spec, head, comp word order.

question particle *ke* is not used. In its place, a determiner is inserted in [Head, CP]. The inclusion of a determiner will be further discussed in section 3.2.

The structure of (12) is shown below:



The movement of *wh*- question words is also common in other Micronesian languages, such as this Chamorro example from Chung (1994).

- (14) Hayi *hinalomña* si Maria [t pumānak t i pägun]?
 Who? WH.assume Maria WH.spank the child
 Who does Maria assume spanked the child?

This structure is similar to Marshallese but uses a system of agreement and referentiality which Marshallese lacks.

2.4 Leading and alternative questions

Leading and alternative (L&A) questions also use the question particle *ke*. They are similar to confirmation questions because *ke* is found at the end of the sentence and because the speaker is already anticipating a specific answer, as in (15) taken from Zewen (1977).

- (15) Won eo enaj jambo ibbam, ña ke?
 Who DET 3rd S-FUT stroll with you, I Q?
 Who will stroll with you, me?

He argues that head final complementizers are caused by the movement of IP to [Spec, CP]. The data from Marshallese would seem to support Kayne's conclusion.

The speaker anticipated answer is shown by the suggestion $\bar{n}a$ at the end of the sentence. The distinction between confirmation questions and L&A questions is that L&A questions employ a *wh*- question word and then provide one or more possible answers. The structure is therefore a combination of the structures of *wh*- questions and confirmation questions. Thus L&A questions, although consisting of only one sentence, can be regarded as two separate questions structurally and would be diagrammed as such. Since I have already shown the structure of *wh*- and confirmation questions, I will not show the structure of (15) at this time.

In this section, I have provided a basic description of the structure of Marshallese questions. However, this description is simplistic and does not address any of the complexities behind these structures. I now turn my attention to these more complex issues. Please note that I will address yes/no, confirmation and L&A questions as a single unit under the heading of yes/no questions in section 3.1, since the issues surrounding their structures all relate to the question particle *ke*.

3.0 Issues in Marshallese questions

3.1 Position of *ke*

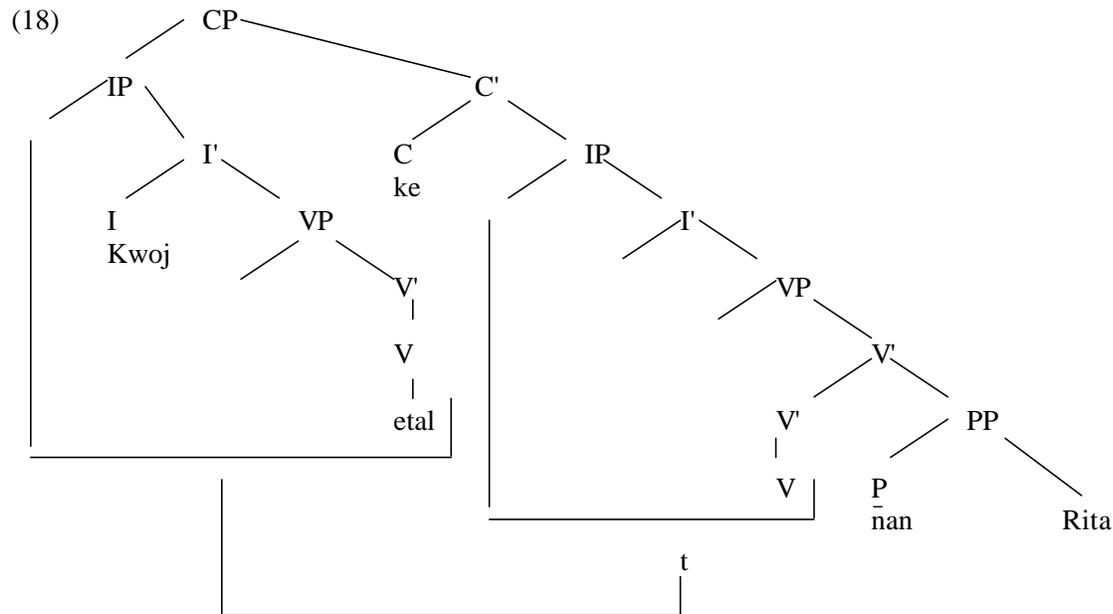
Regardless of whether *ke* occurs after the verb or at the end of the sentence, the placement of the Marshallese question particle is unusual. Throughout languages, question particles often occur in [Head, CP], which means these question particles would occur in the initial position in a question. This is case for Kosraean, a Micronesian language closely related to Marshallese. In Kosraean, the question particle *kuh* occurs initially in equational sentence (16) and predicational sentence (17).

(16) Kuh kom masrinsracl?
Q 2nd S hungry?
Are you hungry?

(17) Kuh kom wi kuht?
Q 2nd S join 3rd S-OBJ?
Are you joining us?

Since the Marshallese question particle does not occur initially in a sentence, the construction of Marshallese questions becomes somewhat problematic. A description of question structure must account

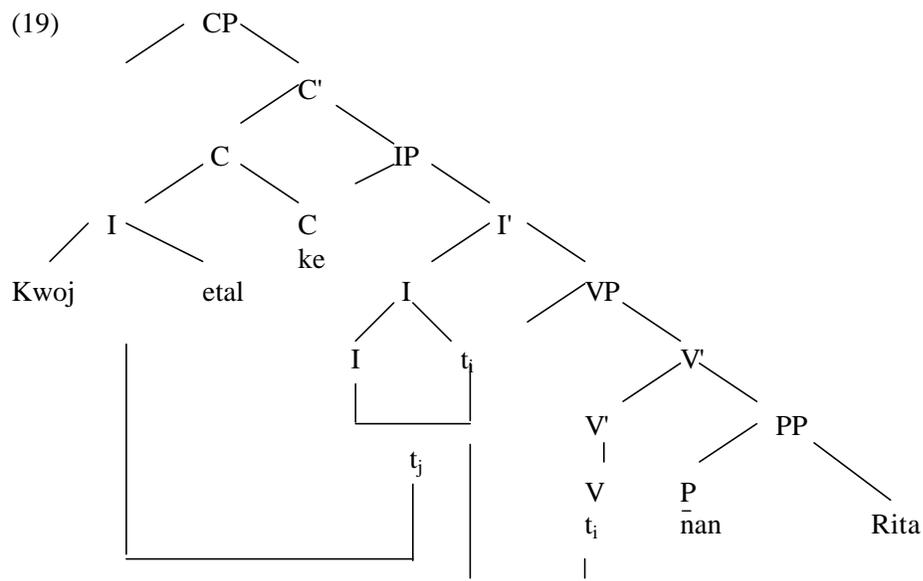
for the placement of *ke* and also fit into X' theory. Therefore I argue that, like the Kosraean *kuh*, the Marshallese question particle *ke* is also found in [Head, CP]. Since subject and verb occur before *ke*, it follows that they move when *ke* occurs in [Head, CP]. A first impulse might be to assume that the subject and verb move to [Spec, CP], as in (18):



(Please note that in (18) I have classified *kwo-* as an agreement marker on the auxiliary and have therefore included it in [Head, IP], leaving [Spec, IP] empty. I will continue to classify subject markers this way.)

However, the analysis in (18) is not possible for a number of reasons. First, (18) purports that only part of the IP is moved, leaving the PP stranded alone in V'. This interpretation assumes that the head of a phrase can be split from its comp. Second, (18) violates movement theories. According to Chomsky (1995), a head must move to another head position and an XP to another XP. Therefore, the movement of head V or I to [Spec, CP] is not possible. Based on these reasons, (18) is discarded.

The only possible landing site for V and I is therefore [Head, CP]. This interpretation would mean that adjunction is occurring rather than substitution, as V and I adjoin to [Head, CP]:



In (19), V moves first to [Head, IP] where it adjoins with I. The resulting I moves to adjoin to [Head, CP]. In sentences where [Spec, IP] is occupied by a subject, [Spec, IP] would then move to occupy [Spec, CP]. Otherwise, [Spec, CP] is empty. Thus, (19) calls for a revision of my earlier supposition that both spec and head CP are strong in all Marshallese questions. It appears that [Spec, CP] can remain empty in some questions. However, in relation to *ke*, it is not possible for the subject and verb to remain in place when *ke* occupies [Head, CP]. Since movement is not optional, features must exist in [Head, CP] that can only be satisfied by the movement of I and V.

The interpretation of (19) is not unusual considering Marshallese equational sentences. Consider sentence (3) from chapter 1, repeated here:

- (20) Nuknuk eo e-aibujuij.
 Dress DET 3RD S-beautiful.
 The dress is beautiful.

In equational sentences such as (20), [Head, IP] often adjoins to [Head, CP] yielding (21) in which the subject appears last in the sentence.

- (21) E-aibujuij nuknuk eo.
 3RD S-beautiful dress DET.
 The dress is beautiful.

Sentences (20) and (21) are synonymous. Therefore, there appears to be no reason for movement.

However the economy principle should guard against the superfluous movement of (21), eliminating it as a possible construction. Yet both constructions regularly occur in Marshallese. This dilemma will not be discussed at this time but will remain an area for future research. However, in returning to sentence (19), (21) does support the movement of the Marshallese [Head, IP] to [Head, CP]. A similar structure is also found in Niuean, a related Oceanic language, which exhibits a V-S-O-IO-Obl word order. However, Massam (2000) argues that fronting in Niuean is to the IP, rather than the CP. Regardless of the landing site for movement, the principle of movement is the same.

The issue of *ke* placement is further complicated by placement of *ke* in sentence (22):

- (22) Kwomaron̄ ke kajan̄jan̄ kita?
2nd S-can Q play guitar?
Can you play the guitar?

In this instance, *ke* occurs before the verb and after the auxiliary or modal. Thus, only [Head, IP] is moved to [Spec, CP], and [Head, VP] remains in place. This construction could be accounted for if *maron̄* is, in fact, the main verb, making *ekkal* embedded. It is also possible that this is an example of optional movement of [Head, IP] only. More research is needed in order to verify both possibilities.

According to Bender (1969), the question particle more frequently follows the verb, as in question (19). However economy should dictate that only the least expensive, and, therefore, the least amount of movement should occur. This would then cause *ke* to occur immediately after the modal and auxiliary rather than indiscriminately before or after the verb. Additionally, questions such as (23) should also not occur.

- (23) Kwo meloklok iō ke?
You forget me Q?
Did you forget me?

(from Bender 1969)

Although an analysis of (23) as a confirmation question would account for the position of the question particle, it would not account for the flexibility of *ke* placement in general. At this time, I am unable to

explain this construction without further and more in depth research. I will therefore leave this puzzle for future research.

3.2 *Wh*- questions

Like the question particle *ke*, the structure of *wh*- questions raises many issues. First, *wh*- question words may either move or remain *in situ* in many Marshallese questions. In others, it appears that *wh*-movement must occur. Second, in *wh*- questions C is filled by a determiner and not by the question particle *ke*. Third, V never moves from I to C, as in English inversion. In this section, I will examine these issues and other issues in *wh*- question construction.

3.2.1 Optional *wh*- movement

According to Bender (1969), movement of many *wh*- question words is optional, as shown in (24) and (25).

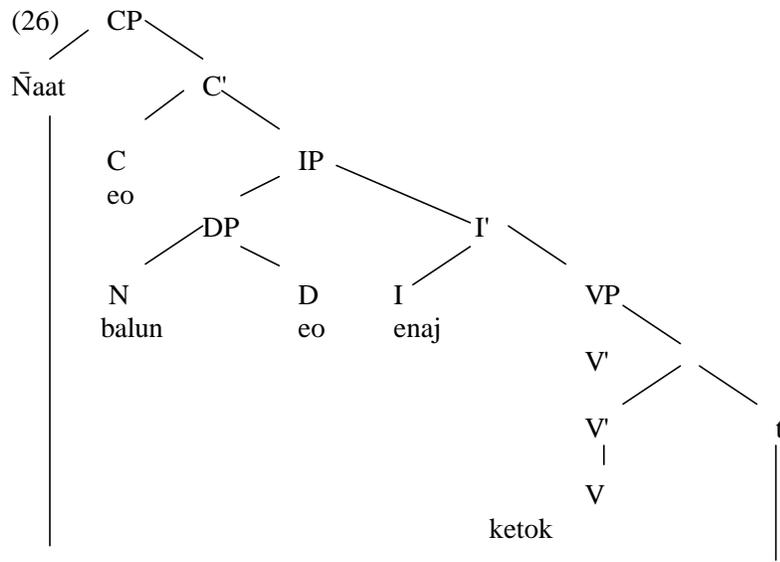
(24) Balun eo e-naj ke-tok ṅaat?
Airplane DET 3rd S-FUT fly-toward speaker when?
When will the airplane fly in?

(25) ṅaat eo balun eo e-naj ke-tok?
When DET airplane DET 3rd S-FUT fly-toward speaker?
When will the airplane fly in?

These constructions follow the movement of [Head, IP] to [Head, CP] in sentences (20) and (21) in that there is no meaning difference between the two sentences. This optional movement is possible for *won*- "who"-, *ṅaat*- "when"-, *ta*- "what"-, *ia*- "where"-, *rot*- "what kind"- and *jete*- "how many". If Marshallese has strong [Spec, CP] and [Head, CP] features as has been argued earlier in the chapter, it would be expected that *wh*- movement would always occur. However (24) and (25) clearly show that *wh*- movement is not mandatory. If this is the case, then the motivation for *wh*- movement is unclear. Cole and Hermon (1998) clarify that, according to Minimalism, there cannot be optionality in syntactic principles. They further conclude that optionality in a language is motivated by lexical items/morphemes. If these suppositions are true, then there would be a morphological reason behind the optionality of Marshallese *wh*- movement rather than a syntactic one. However, this supposition cannot be examined at

this time but may serve as a guiding principle in future research. In spite of this dilemma, I continue to argue that [Head, CP] has strong features in *wh*- questions and hope to explain *wh*- *in situ*, as in (24), at a future time.

Returning to question (25), *wh*- movement in Marshallese requires the inclusion of a determiner in the [Head, CP] position:



Although (26) uses *eo*, any one of the Marshallese determiners listed in chapter 1 may occupy [Head, CP]. The purpose behind the use of a determiner other than *eo* would be to indicate the specific location of an object or person.

(27) Ta ne kwo-j kommone?
 What 2nd S 2nd S-PRES make?
 What are you making (by you)?

(28) Won ran rar itok?
 Who 3Rd PL-PER 3Rd PL-PAST come?
 Who came?

In (27) the determiner *ne* is used to inquire about an object that the listener is making which is close to the listener. It is used in place of *eo* because the position of the object is known at the time of the utterance. Had *eo* been used, it would indicate that the location of the object was unknown. In (28), *ran* is used to indicate that the "who" referred to is a group of people who are away from the speaker and listener. Note the agreement between the determiner and the subject marker. The determiner in [Head, CP] expresses

the knowledge a speaker possesses about the location and number of a person or thing. However, the full range of determiners may only be used with *wh*- words representing noun phrases. Adverbial *wh*- words such as *n̄aat* “when” and *ia* “where” can only be used with *eo*, since it gives no information about location. This makes sense given that adverbials cannot express number or, in the case of *n̄aat*, location. Since *ia* is used when the location of an object or thing is unknown, it cannot be used with a determiner that expresses location.

I therefore conclude that *eo* and all other determiners occupy [Head, CP], rather than supposing that these determiners are part of a DP located in [Spec, CP]. This DP is headed by the *wh*- word and moves out of V'. The existence of strong [Head, CP] features in *wh*- questions is similar to English *wh*- questions. But in English, these features are satisfied through the movement of I to [Head, CP] instead of through the inclusion of a determiner. Besides its similarity to English, the mandatory inclusion of a Marshallese determiner is supported by data from the Marshallese language. First, *eo* never appears when a *wh*- question word remains *in situ*. Thus, (29) is ungrammatical:

- (29) *Balun eo enaj ketok n̄aat eo?
 Airplane DET 3rd S-FUT fly-toward speaker when DET?
 When will the airplane fly in?

The ungrammaticality of (29) shows that the determiner is closely tied to the CP, since it can only occur there. The second support for the inclusion of *eo* in [Head, CP] relates to stranding, which will be discussed further in the next section. However at this point, I introduce one example from Bender (1969):

- (30) Loon ta eo kwoj lomnak emokaj?
 Boat what DET 2nd S-PRES think 3rd S-fast?
 What boat do you think is the fastest?

The DP *loon ta* moves from its original position as the subject of *emokaj* to [Spec, CP] of the matrix phrase. The head of the DP is *ta*. If *eo* were interpreted as part of this DP, it would then become the head of the phrase. This would create problems with the interpretation of Marshallese as a spec final language because the head of the phrase, *eo*, would occupy the final position in the phrase. The spec, *ta*, would then occur between the comp and head of the phrase. Since it has already been shown in chapter 1 that

this is not the correct order of a Marshallese determiner phrase, the determiner cannot be part of the DP phrase but must be the head of CP.

The third reason relates to the fact that the inclusion of a determiner is mandatory. However, sentences examined earlier seem to show that the determiner is optional in *wh*- questions. In most of Bender's (1969) examples, the determiner is included when *wh*- movement occurs. However he does cite examples such as (31):

- (31) Won e-konaan iakiu?
Who 3rd S-want baseball?
Who wants to play baseball?

(31) seems to show that the determiner is optional, which would then interfere with the analysis of Marshallese as having strong [Head, CP] features in questions.

In relation to this issue, Rizzi (1990) shows the difference between subject and object *wh*- movement in the following English examples:

- (32) Who ₀ [t left]
(33) *Who did [t INFL leave]

In these examples, *who* occupies [Spec, CP] and has moved out of the [Spec, IP] position. (32) shows that [Head, CP] is empty. In fact, the sentence becomes ungrammatical when [Head, CP] is filled, as in (33). This leads Rizzi to conclude that [Head, CP] is in fact filled with an agreement feature (Agr). If this is the case, (31) would be accounted for by supposing that *won* occupies [Spec, CP], and Agr, [Head, CP], thus filling the strong features of [Head, CP]. However, I reject this interpretation for two reasons. First, unlike the English examples, (31) is also grammatical with a determiner:

- (34) Won eo e-konaan iakiu?
Who DET 3rd S-want baseball?
Who wants to play baseball?

The second reason relates to the optionality of *wh*- movement. Since, other *wh*- question words can either move or remain *in situ*, it follows that *won* should also demonstrate optional *wh*- movement. Thus, an *in situ* construction must be accounted for. (31) easily accounts for an *in situ* construction in which *won*

remains in [Spec, IP]. Since *won* does not move to [Spec, CP], there is no need for a determiner in [Head, CP]. This interpretation also accounts for sentence (13) from chapter 1, repeated here:

- (35) Won ar lewoj waj ne am?
Who PAST gave-toward listener watch near listener 2nd P POSS?
Who gave you your watch (by you)?

Thus, *won*'s initial position in sentences (31) and (35) is due not to its position in the CP but rather to its position in [Spec, IP].

Lakjohn and Gaiun (PC) have indicated that sentences with *wh*- movement are acceptable either with or without a determiner when pairs of sentences were presented for acceptability judgements. However in conversations and translation exercises with both informants and in examples from Bender (1969), the majority of sentences involving *wh*- movement included a determiner. Further, when asked to translate sentences from English to Marshallese, Lakjohn and Gaiun always included a determiner when *wh*- movement occurred. There are two possibilities as to why *wh*- movement constructions were judged grammatical without a determiner. First, these sentences may only be slightly deviant. Second, Lakjohn and Gaiun's acceptance of these constructions may be an acknowledgement of their understanding of the semantic meaning of a sentence rather than their endorsement of what is "native speaker" like. Regardless of the explanation, it seems that, since all questions produced by the native speakers included a determiner, the determiner is in fact mandatory. More research in this area would clarify this issue. However, based on the current data, I continue to argue that the determiner is mandatory.

Since the inclusion of a determiner appears to be mandatory, it follows that the determiner occupies [Head, CP] in order to satisfy the strong features of CP in Marshallese questions.

I now leave optional *wh*- movement and the inclusion of a determiner and move on to other issues in *wh*- questions.

3.2.2 *Ia*

Like most other *wh*- question words, *ia*- "where"- can either move or remain *in situ*. When it moves, *ie*- "there"- is often inserted at the end of the question. *Ie* never appears in a sentence when *ia* remains *in situ*:

(36) Kwoj itok jen ia?
2nd S-PRESENT come from where?
Where do you come from?

(37) Ia eo kwoj itok jen ie?
Where DET 2nd S-PRESENT come from there?
Where do you come from?

Although (36) and (37) involves the preposition *jen* "from", *ia* can also occur in sentences without a prepositional phrase in [Comp, VP]. A possible explanation for the inclusion of *ie* is that, when *ia* moves to [Spec, CP], it leaves a copy of itself behind in the form of *ie*. This copy does not always occur, although Lakjohn (PC) included *ie* in the majority of sentences involving *wh*- movement of *ia*.

In addition to the inclusion of *ie*, there are also other unusual constructions related to *ia*, as in

(38):

(38) Kwar bok ia kuj eo nejim?
2nd S-PAST take where cat DET 2nd S- POSS?
Where did you get your cat?

This question is unusual in that the adverbial *ia* precedes the object *kiru eo nejim*. Lakjohn and Gaiun (PC) indicated that the sentence is also grammatical with the object *kiru eo nejim* preceding the adverbial *ia*, and both informants tended to place the object before the adverbial *ia*. But, returning to economy, both sentences should not co-exist unless there is a reason for movement. (38), in which *ia* moves, should not occur if it is possible for *ia* to remain *in situ*.

Other constructions in Marshallese help explain the reason for (38). I propose that (38) is similar to sentence (21), repeated here as (39):

(39) E-aibujuij nuknuk eo.
3rd S-beautiful dress DET.
The dress is beautiful.

I am not assuming that the phrase *kwar bok ia* in sentence (38) moves in an identical fashion to (39) (although this is possible). I am, however, suggesting that the constructions (38) and (39) occur for similar reasons. In both sentences, I propose that the object or subject occur at the end of the sentence or question for focus reasons. Thus in Marshallese, the end of the sentence appears to be a place of focus. It

would then follow that movement occurs in (38) and (39) so that the subject or object will be the focus of a sentence. This then accounts for the construction in (38).

3.2.3 *Wh*- complementizers

In sections 3.2.3, I will examine *wh*- question words that cannot remain *in situ*. The first of these is *etke*- "why":

- (40) Etke kw-ar jab i-tok?
 Why 2nd S-PAST not come-toward speaker?
 Why didn't you come?

Unlike other *wh*- question words, *etke* cannot include a determiner in [Head, CP]. In trying to explain this construction, it is necessary to look at the possible historical development of *etke*. *Etke* might have been derived from the words *et*- meaning "do what" and *ke*- the question particle. (*Et* is discussed later in the chapter.) If these two words were compounded to form *etke*, the lack of a determiner could be explained. Since *ke* is a complementizer, the resulting compound of *et* and *ke*, *etke*, might also be a complementizer. Therefore, like the question particle *ke*, *etke* could occupy [Head, CP]. This being the case, a determiner could not fill [Head, CP]. Thus, I argue that *etke* originates in [Head, CP] as a complementizer and not as an adverbial sister to V'. Additionally, if *etke* were occupying [Spec, CP], then [Head, CP] would be empty. However it has already been shown that [Head, CP] must be filled in questions. Therefore I discard the possibility that *etke* fills [Spec, CP].

The next set of questions involving *wh*- words lack verbs. I have labeled these sentences as equational sentences, even though they may not all have the exact semantic relation "X is Y" as introduced in chapter 1. However they do all lack the verb "to be."

The first word I will examine is *ewi*, meaning "where." The use of this word differs from *ia* in that it can only be used to ask for the location of a stationary object or person, as in the English "where is":

- (41) Ewi binjel eo?
 Where pencil DET?
 Where is the pencil?

Like *etke*, determining whether or not *wh*- movement occurs depends on the historical development and interpretation of *ewi*. If *ewi* developed as a completely independent word, then *wh*- movement occurs in question (41). If *wh*- movement does occur, we might expect to also find the *in situ* construction of (42), since the movement of many other *wh*- question words is optional.

(42) *Binjel eo ewi

However *ewi* cannot remain *in situ*, rendering (42) ungrammatical. Since this is the case, it is likely that *ewi* is a complementizer like *etke*. This can be supported by the lack of determiner following *ewi*. It is also possible that *ewi* is a compound of *e-*, the 3rd person singular subject marker, and *-wi*, a word which could either be a locative or simply mean "where." Although the word *wi* does not exist in Marshallese, it is historically possible that a similar word might have existed. The hypothetical *wi* could also be related to *ia* and have phonologically changed due to its attachment to *e-*. If this possibility is found to be true, then *wh*- movement is taking place. *Ewi* would then represent the [Head, IP] of an equational sentence, which was moving to [Head, CP] in order to satisfy strong features.

Evidence supporting this interpretation is found in the fact that *ewi* can be inflected for plurality. The word *ewi* can only be used for single things, as in (41). A different form is used for plural objects- *erki*- and plural people- *erri*.

(43) Erki nuknuk ko?
 Where-PL- THING dress DET-PL-THING?
 Where are the dresses?

(44) Erri armij ro?
 Where-PL- PER person DET-PL-PER?
 Where are the people?

No other Marshallese question words are inflected for singular/plural and things/people. In this respect, these words are similar to determiners, which distinguish between plural people and things. This inflection supports the conclusion that *ewi* consists of the 3rd S form *e-* combined with a word for "where" which includes information on number. Regardless of what interpretation is adopted, I conclude that *ewi* is located in [Head, CP], as given the evidence, this seems the most likely conclusion

A second *wh*- word that falls into the classification of equational sentences is *ekojkan*- "how." As demonstrated in sentence (45), *ekojkan* must be followed by a possessive.

- (45) Ekojkan aō̄ call e?
How 1st S-POSS call 3rd S-OBJ?
How do I call him?

Abo (1976) lists the root of this word as *ekojka*-. Thus the *-n* ending indicates possession. In Marshallese, possession is shown in one of two possible constructions: first through the use of a possessive word similar to the English possessive system and second through a possessive suffix attached to a root word. These constructions are common in Austronesian languages and are classified by Bender (1971) as alienable and inalienable. One example of the obligatory inalienable possessive construction is the root word *mej*-, meaning *face*. This root is then suffixed to indicate possession, as in *meja*, "my face," *mejam*, "your face," *mejan*, "his/her/its face," etc. The 3rd S form may also have the more general meaning "of," rather than relating to ownership by a particular person. I have included this brief description in order to account for the *-n* ending of *ekojkan* and to account for the meaning of this word.

In order to understand the full meaning of *ekojkan*, the response to (45) should be examined:

- (46) Kwo-marō̄n kajerbal telephone eo.
2nd S-can use telephone DET.
You can use the telephone.

The response to the question does not use a possessive and is not an equational sentence. Rather this sentence contains a subject and a verb. Thus, a more accurate translation of *ekojkan* is not "how" but "what is the process of." Even with this revised translation, it is still unclear whether *ekojkan* originates in [Head, IP] or [Head, CP]. If *ekojkan* developed as a compound word, affixing of *e-* with *-kojkan*, then it originates in [Head, IP] and could possibly be remaining there. But since a determiner cannot be included in this sentence, it can be assumed that *ekojkan* does not occupy [Spec, CP]. Given the conclusions related to *etke* and *ewi* and the similar structure of these two words and *ekojkan*, I conclude that *ekojkan* occupies [Head, CP].

At this point, I will briefly discuss another unusual Marshallese question word, *et*. *Et* is translated as "do what," and is used in certain common greetings:

(47) Kwar et bon̄?
2nd S-PAST do what last night?
What did you do last night?

(48) Ej et am mour?
3S- PRES do what 2nd S- POSS life?
How are you?

Et is unique because it appears to have verbal qualities, which might lead to the conclusion that *et* is found in [Head, VP]. However, returning to the interpretation for *etke*, I conclude that *et* is a C which originates in [Head, CP]. In (47), *kwar* therefore moves to adjoin with *et* in [Head, CP]. This is very similar to the structure of questions using *ke*. I support this interpretation based on the lack of a determiner and on the fact that *et* cannot occur in a declarative statement. Thus it is closely tied to the CP, as this is the domain in which question elements occur.

3.2.4 Preposition and noun stranding

Another issue regarding *wh*- movement involves stranding. Stranding is relevant when a *wh*-question word is part of a prepositional phrase, as in (49), or determiner phrase, as in (50). Below are two English examples of *wh*- movement in which the *wh*-word originates as part of a PP or a DP.

(49) Who are you speaking to?

(50) Which boat do you think is the fastest?

In these two examples, the *wh*- word is part of the phrase *to whom* in (49) and *which boat* in (50).

Languages often differ as to whether the entire phrase is pied piped along with the *wh*- word, as in (50), or whether the phrase is split up, stranding certain material in its original position, as in (49). Like other grammatical rules, improper stranding will cause an ungrammatical derivation.

(51) To whom are you speaking?

(52) *Which do you think boat is the fastest?

(49) and (51) show that, in English, both pied piping and stranding are acceptable, although (51) is "grammatically" correct (prescriptively speaking). (52) shows that stranding is not possible for a DP; the entire phrase must be moved to [Spec, CP].

Marshallese favors the movement of an entire determiner phrase over stranding, as in sentence

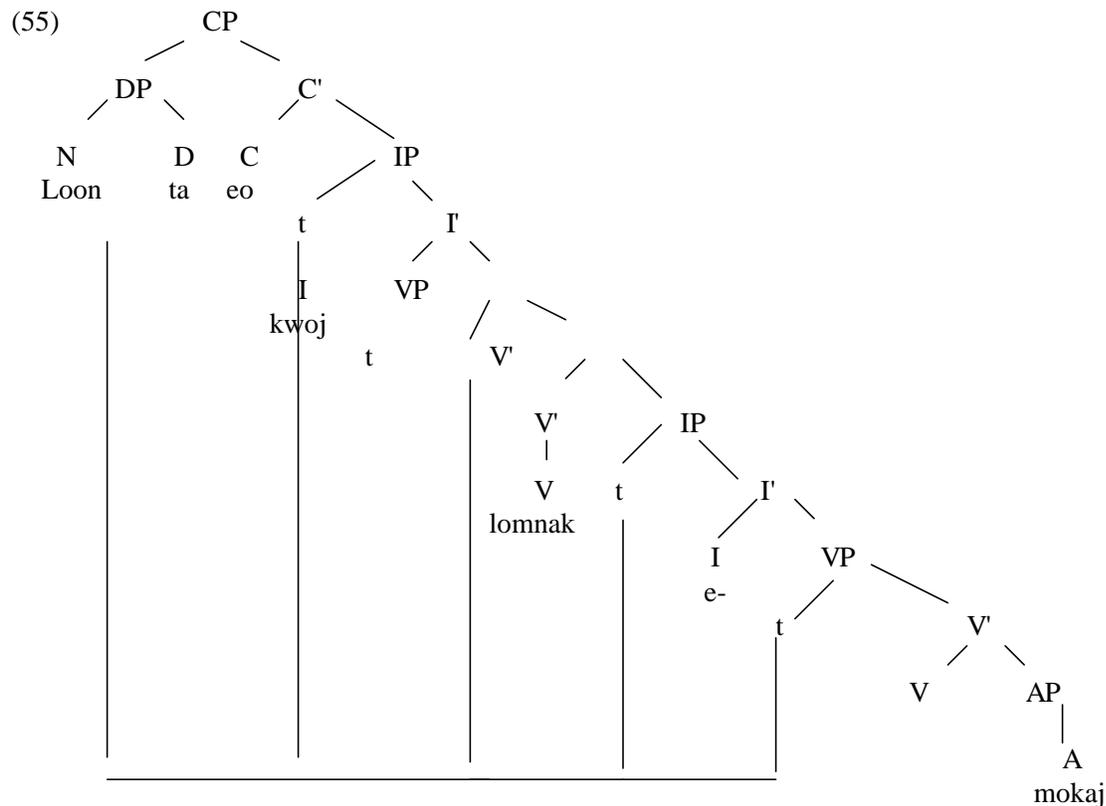
(30) repeated here:

- (53) Loon ta eo kwoj lomnak e-mokaj?
 Boat what DET 2nd S-PRES think 3rd S-fast?
 Which boat do you think is the fastest?

By contrast Marshallese favors preposition stranding:

- (54) Ta ne kwoj kanan kake?
 What by you 2nd S-PRES talk about?
 What are you talking about?

(55) below shows the movement of the DP to the [Spec, CP] as in (53):



Please note that the DP originates in [Spec, VP] and makes several stops before it arrives in its final position in order to fill the strong features of [Spec, CP].

The structural differences in movement of DP and PP can be accounted for by looking at the structure of each phrase. As shown in (53), the DP *loon ta* is composed of head *ta* and comp *loon*. For the PP from (54), *kake* is the head with its complement the DP phrase *ta ne*. Thus in (53), the whole phrase is moved. If stranding were to take place, the head would have to be taken away from its complement, which is not possible in determiner phrases. However in (54), the head is left *in situ* while the complement is moved to [Spec, CP].

3.2.5 *Jete* and *rot*

Jete "how many" and *rot* "what kind" have some unusual properties that need to be further discussed. I mention them following the discussion on stranding, as pied piping of the whole phrase is favored over stranding for both of these words. *Jete* and *rot* modify nouns and must either precede or follow a noun. I will begin my discussion by talking about *jete*.

Jete is often used in equational sentences such as in (56), but it is not limited to them, as in (57), both from Bender (1969).

(56) *Jete beij in buk ne am?*
 How many page of book 2nd S-DET 2nd S- POSS?
 How many pages are there in your book (by you)?

(57) *Jete eo kwo konaan?*
 How many DET 2nd S want?
 How many do you want?

In (56), *jete* modifies *beij*. However in (57), the noun *jete* is modifying is ellipsed. This is only possible when the speaker and listener know what is being discussed. This construction is also possible in English, as shown in the translation of (57). Notice that the modifier precedes the object it is modifying. This is very unusual for Marshallese, as the modifying device, whether it be a relative clause or a determiner, usually follows the noun. Thus in (56), the head of the phrase precedes its complement.

Rot- "what kind"- has a more typical Marshallese structure, as it follows its complement regardless of whether or not *wh*-movement takes place.

(58) *Jen moṅa moṅa rot?*
 1st PL- IN-should eat food what kind?
 What kind of food should we eat?

(59) Mona rot en kwokonaan moṅa?
Food what kind 3rd S- DET 2nd S-want eat?
What kind of food do you want to eat?

(57)- (59) show that *wh*- movement is optional for these two words and that stranding is not possible.

4.0 Conclusion

In this chapter, I have explained the basic structure of Marshallese questions. I have shown that, even though the general form for both yes/no and *wh*- questions seems rather simple, there are in fact many issues to explore relating to structure. I have argued that yes/no questions have *ke* in [Head, CP], while *wh*- questions have a determiner occupying C and that certain *wh*- words, such as *etke*, *ewi*, and *et* are complementizers and originate in [Head, CP]. I have also argued that, in questions involving *ke*, [Head, IP] adjoins [Head, CP]. Some other issues I have addressed are optional *wh*- movement and stranding.

Chapter 4

THE CP IN MARSHALLESE SENTENCES

1.0 Introduction

Having examined the CP in Marshallese questions, I now turn my attention to the CP in embedded sentences. In this chapter, I will introduce four different Marshallese complementizers- *ke*, *bwe*, *ne*, and *me*- and explain the factors relating to complementizer choice. I will also argue that these complementizers occur in [Head, CP] and are in complementary distribution with *wh*- words, which appear in [Spec, CP] of embedded sentences.

2.0 *Ke* and *bwe*

I will begin my discussion by looking at *ke* and *bwe* since they have similar meanings and functions. Bender (1969) describes *ke* as the dependent clause introducer "that," while Abo (1976) defines it as a past tense clause introducer. Perhaps the best definition can be derived by simply combining the two, as *ke* can be used for both the present and past tense. Like *ke*, *bwe* means "that" but can also mean "because," "so that," and "for." This difference in meaning can, in many instances, account for the selection of *bwe* over *ke*. However, since both words mean "that" and since both can function as a complementizer introducing dependent clauses, the distinction between them is more complex than a simple lexical one.

While addressing this issue, Oda (1976) identifies three factors relating to the selection of a Micronesian complementizer: features of the complementizer, features of the matrix verb, and the speaker's presupposition of the truth-value of the embedded sentence. In examining the first factor, *ke* and *bwe* exemplify a common Micronesian division of complementizers into two types. This division is based on the inherent semantic features of the complementizer. Oda describes these types as reportive and presuppositional. A speaker uses a reportive complementizer when indirectly quoting an utterance or a mental process of him/herself or of someone else. The truth of this indirect quotation is not certain. By contrast presuppositionals are used when the information in the embedded clause is considered "old" or

something the speaker already knows to be true. These two types are also present in other Micronesian languages, such as the Kosraean *lah* and *muh*, the Pulo Annanese *na* and *bwa*, and the Ulithian *la* and *bo*. In Marshallese, *bwe* is a reportive complementizer, and *ke*, a presuppositional one. Thus *ke* is a stronger complementizer, since it is used to present information which the speaker already knows to be true. *Ke*'s presuppositional status can also account for its use as a past tense subordinate clause introducer. Since the information in the subordinate clause is "in the past," it is already known to be true.

The semantic content of each word, in addition to the other two factors identified by Oda, determine complementizer selection. However, in some instances one factor may be more important than another in selection of *ke* or *bwe*. For example, the features of the matrix verb may be the deciding factor in some instances. The reportive complementizer *bwe* is used with such verbs as *ba* "say," *lomnak* "think," *toimak* "believe," *meloklok* "forget," etc., as in the following example:

- (1) Ear ba bwe kwoj jab kōnan etal.
 3rd 3-PAST say COMP 2nd S-PRES NEG want go.
 S/he said that you don't want to go.

In (1) *bwe* is selected rather than *ke* because of the semantic features of the matrix verb *ba*, where normal past tense sentences use *ke*:

- (2) Iar ron̄ ke ear itok.
 1st S-PAST hear COMP 3rd S-PAST come.
 I heard s/he came.

Some matrix verbs are not encoded to select a particular complementizer, thus a complementizer is selected based on the speaker's presuppositions of the truthfulness of the statement. Consider the complementizer selections in (3) from Oda (1976).

- (3) I kōnan bwe kwon jela ke i liki yuk.
 1st S want COMP 2nd S-should know COMP 1st S trust you.
 I want you to know that I trust you.

Bwe is selected initially since the speaker is expressing a desire that something should happen (but hasn't yet occurred), i.e. the listener should "know." By contrast, the truth of the final clause is known to the speaker, i.e. the speaker knows s/he trusts the listener, thus *ke* is used

In some instances, the use of one complementizer over another can indicate a speaker's knowledge of the truthfulness of a statement. Verbs such as *kōjatrikrik* "hope" and *kadredrelok* "conclude" can use either complementizer, and the complementizer selection affects the meaning of a sentence.

(4) Ij kōjatrikrik bwe enaj etal
 1st S- PRES hope COMP 3rd S-FUT go.
 I hope that s/he will go.

(5) Ij kōjatrikrik ke enaj etal
 1st S- PRES hope COMP 3rd S-FUT go.
 I hope (and I know for sure) that s/he will go.

(4) and (5) from Oda (1976) show that when the truth of the statement is unknown, verbs like *kōjatrikrik* take a reportive complementizer, while when the clause is known to be true, they take the presuppositional *ke*.

When examining the data, it is important to remember that the three factors are interwoven in speech and cannot always be clearly distinguishable. Additionally, the complementizer can often be omitted as in (6):

(6) Ej ba jenaj rumij.
 3rd S-PRES say 1st PL-IN-FUT late.
 S/he says we will be late.

2.1 *Ke* and *bwe* in noun phrase complements

Bwe and *ke* can also be used in what Oda describes as subject noun phrase complements. These phrases have structures similar to equational sentences, which were analyzed in previous chapters, in that the matrix clause often lacks a verb. This structure occurs in many Micronesian languages, in which the subject complement clause must be extraposed:

(7) Emmon bwe kwon etal.
 Good COMP 2nd S-should go.
 It is good that you should go.

(8) *Bwe kwon etal emmon.
 COMP 2nd S-should go good.
 That you should go is good.

Unlike English, (8) is ungrammatical in Marshallese. Like previous examples from the chapter, the selection of *ke* or *bwe* in subject noun phrase complements is dependent on the three factors. In these phrases, the complementizer is also optional, as is the subject marker, which serves as an expletive in noun phrase complement constructions. However, the Kosraean example (10) shows the regular pattern for Micronesian languages:

- (9) (E) mol (ke) ear etal.
 True 3rd S-PAST go.
 Its is true that s/he went.
- (10) Pwacye lah el som.
 True COMP 3rd S go.
 It is true that s/he went.

While Marshallese is like most Micronesian languages in that the subject is optional, it differs in that a complementizer is optional in Marshallese but obligatory in most Micronesian languages.

3.0 Indirect questions

The complementizer of condition *ñe* "if, whether, when" is used in indirect questions, rather than *ke* or *bwe*. This complementizer is used to introduce an embedded yes/no question.

- (11) I jaje ñe e bed imweo imen.
 1st S don't know COMP 3rd S stay house his.
 I don't know if he's at his house.

By contrast, an embedded *wh*- question does not use *ñe*, but instead uses a determiner as in *wh*- questions.

The *wh*- question word moves to the [Spec, CP].

- (12) I jaje ñaat eo kwar emotlok
 1st S don't know when DET 2nd S-PAST leave.
 I don't know why you left.

The structure of (11) and (12) are similar to Marshallese question structures. The *wh*- question word appears in [Spec, CP], and *ñe* occurs in [Head, CP]. Since one cannot appear when the other occurs, the two are in complementary distribution. This distribution is the same for all Micronesian languages except for Kosraean, which allows a complementizer and a *wh*- question word, the *wh*- word following the complementizer.

- (13) Nga etuh lah ngac elwac tuhkuh uh.
 1st S know COMP when 3rd S-FUT come DET.
 I know when he is coming.

This unusual structure will not be examined here, as Marshallese does not share this structure.

4.0 Relative clauses

Because Marshallese lacks adjectives, it frequently uses relative clause constructions. Unlike English, Marshallese has a separate complementizer for relatives- *me*, which means "which, who, that."

Sentence (14) shows the use of this complementizer in a line from a popular Marshallese children's song.

- (14) Cinderella e juon leddik eo me ejerata ilo mour eo an.
 Cinderella 3rd S one girl DET COMP 3rd S-unlucky in life DET her.
 Cinderella is a girl who is unlucky in her life.

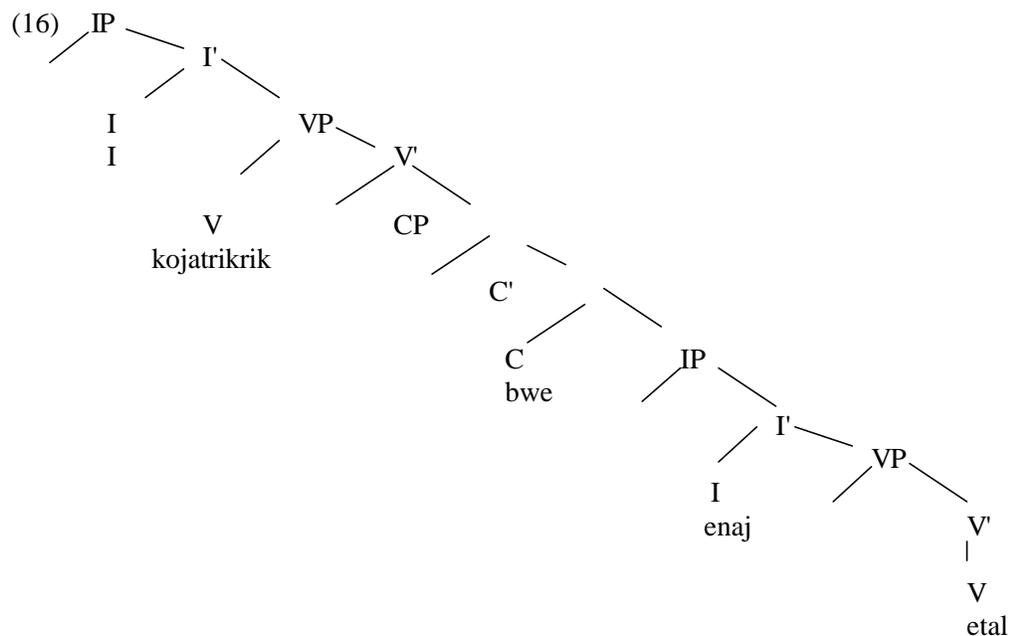
(14) is unusual in that the noun *leddik* appears to have two determiners, *juon* and *eo*. This construction will not be discussed at this time, as relative clause construction is the focus of the chapter.

As with other constructions discussed in the chapter, the complementizer is optional:

- (15) Eluñ nuknuk ko (me) remouj.
 3rd S-exist dress DET 3rd PL-white.
 There are dresses which are white.

5.0 Position of complementizers

Based on the analysis provided in sections 2.0-4.0, I argue that each clause using a complementizer has a similar structure. For each example, I propose that the complementizers originate in [Head,CP], as in the structure of (16):



This structure sufficiently explains constructions involving *ke*, *bwe*, and $\bar{n}e$.

However, the relative clause structure is somewhat more complicated.

In examining relative clause construction, Kayne (1994) proposes the following base structure:

(17) $[_{DP} D^{\circ} CP]$

In order to arrive at the structure of an English relative clause, Kayne further argues for a raising analysis in which the NP is moved to [Spec, CP]. (18) shows the structure of the phrase before movement, and

(19), the relative clause after movement:

(18) $[_{DP} \text{the}[_{C^{\circ}} \text{[he saw man]}]$

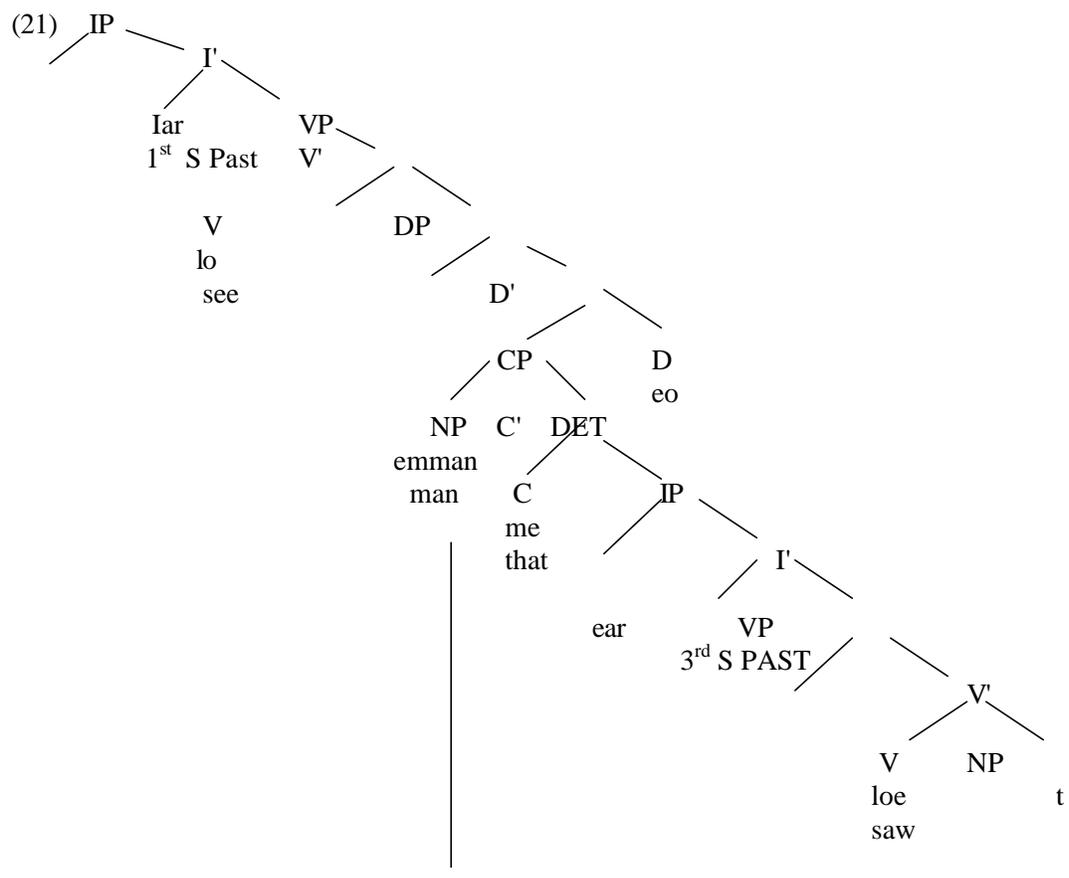
(19) $[_{DP} \text{the} [_{CP} \text{man}_i [_{C^{\circ}} \text{that}] \text{[he saw } t_i]]]$

Thus, the NP "man" originating in [Comp, CP] moves to occupy [Spec, CP]. Kayne's analysis of the relative "which" differs slightly, since *wh*- words occupy [Spec, CP], not [Head, CP]. For relatives involving "which," the DP that is moved to [Spec, CP] is "which man." This DP occupies [Spec, CP], with [Head, DP] occupied by "which" and [Comp, DP] occupied by "man." Further movement occurs as "man" moves to [Spec, DP] to yield (20).

(20) [DP the [CP [DP man_i [which [e]_i]_j] [C°] [he saw _j]]

In returning to the analysis of Marshallese, Kayne's theory could provide a possible analysis for the structure of Marshallese relative clauses. However, *me* cannot occur in a regular sentence that matches the structure before movement, i.e. "he saw which man." It can only occur as a relative, thus I argue that *me* is a full complementizer which originates in [Head, CP].

At this time, I have no Marshallese evidence to support that Kayne's theory, but I also have no evidence eliminating it as a possibility. This remains an item for future research. At this time, I present the structure of Kayne's theory. I have translated (19) into Marshallese, provided a matrix clause, and provided translations under the Marshallese words.



Please note the head final position of *eo* in the DP, which follows Marshallese sentence structure.

6.0 Conclusion

In this chapter, I have analyzed the structure of the CP in Marshallese embedded sentences including dependent clauses, indirect questions, and relative clauses. I have explained the factors relating to complementizer selection and argued that all complementizers occur in [Head, CP] and in complementary distribution with *wh*- question words. Additionally, I have provided a possible analysis of relative clauses involving raising of a NP to [Spec, CP], in keeping with Kayne's theory on relative clause formation. However, I have argued that the relative clause introducer *me* always originates in [Head, CP].

Chapter 5

CONCLUSION

In Marshallese, the CP in questions and in embedded sentences demonstrates a complexity of issues relating to structure. I have examined many of these complexities but concluded that [Head, CP] is strong in questions and that many *wh*- question words are in fact complementizers.

In this discussion of the Marshallese CP, I have also raised many questions for future research. Among the questions not directly related to the CP is the classification of "pronouns" as clitics or as subject markers and the optionality of agreement. Many questions still remain regarding *ke* placement and movement to the CP of many sentence elements.

Additionally, more research need to be done on the determiner in *wh*- questions, which would more firmly establish its classification in [Head, CP] rather than as an agreement marker or another element in [Spec, CP]. This topic will also further clarify the issue of the optional inclusion of the determiner. I hope to address many or all of the issues through further research.

References

- Abo, Takaji, Byron B. Bender, Alfred Capelle, and Tony DeBrum. 1976. *Marshallese-English dictionary*. Honolulu: University of Hawaii Press.
- Bailey, Charles-James N. 1967. *Transformational outline of Marshallese syntax*. Unpublished M.A. thesis. University of Chicago.
- Bender, Byron W. 1963. Marshallese phonemics: labialization of palatalization? *Word* 19:335-41.
- _____. 1968. Marshallese phonology. *Oceanic Linguistics* 7:16-35.
- _____. 1969. *Spoken Marshallese*. Honolulu: University of Hawaii Press.
- _____. 1971. Micronesian languages. In *Current Trends in Linguistics*, vol. 8, *Linguistics in Oceania*, ed. by Thomas A. Sebeok, pp. 426-465. The Hague: Mouton.
- Chomsky, Noam. 1977. On wh- movement. In *Formal Syntax*, ed. by Peter W. Culicover, pp. 71-132. New York: Academic Press, Inc.
- _____. 1986. *Barriers*. Cambridge: MIT Press.
- _____. 1995. *The Minimalist Program*. Cambridge: MIT Press.
- Chung, Sandra. 1994. Wh- agreement and 'referentiality' in Chamorro. *Linguistic Inquiry* 25:1-44
- Cole, Peter and Gabriella Hermon. 1998. The typology of wh- movement. Wh- questions in Malay. *Syntax* 1:221-258.
- Good, Elaine Marie. 1985. *Clause-final determiners in Kosraean*. Honolulu: University of Hawaii Press.
- Grimes, Barbara ed. 2001. *Ethnologue: Languages of the world*. Dallas: SIL.

- Hale, Mark. 1998. Diachronic aspects of Micronesian clause structure. *Canadian Journal of Linguistics* 43:341-357.
- Huang, C T James. 1982. Move wh in a Language without wh Movement. *Linguistic-Review* 1:369-416.
- Kayne, R. 1994. *The Antisymmetry of syntax*. Cambridge, MIT Press.
- Lee, Ke-dong. 1975. *Kusaiean reference grammar*. Honolulu: University of Hawaii Press
- Massam, Diane. 2000. VSO and VOS aspects of Niuean word order. In *The Syntax of Verb Initial Languages*, ed. by Andrew Carnie and Eithne Guilfoyle, pp. 97-116. Oxford: Oxford UP.
- Oda, Sachiko. 1976. Complementation in Micronesian languages. *Working Papers in Linguistics, University of Hawaii* 8:2.
- Pollock, J Y. 1989. Verb movement, universal grammar, and structure of IP. *Linguistic Inquiry* 20: 365-424.
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge: MIT Press.
- Song, Jae Jung. 1997. The verb-object bonding principle and the pronominal system: with special reference to nuclear Micronesian languages. *Oceanic Linguistics* 33:515-565.
- Zewen, Francois X. N. 1977. *The Marshallese language: A study of its phonology, morphology and syntax*. Berlin: Dietrick Reimer.