Some Aspects of Marshallese Determiner Phrases

by Heather Willson

1. Introduction

The word order in Marshallese determiner phrases is unusual when considered against the word order in Marshallese sentences. While most sentences have an SVO word order, suggesting that Marshallese is a head initial language, DPs seem to have a complement-head order, suggesting that the language is head final:[1]

(1) pinjel   eo
     pencil   the
     the pencil

(2) leddik   ro
     girl   the PL
     the girls

Since both of these claims cannot be true, either the head-complement order of sentences or the complement-head word order of determiner phrases must be derived. Given that Marshallese complementizer, prepositional and noun phrases are all head initial, the most likely explanation is that the word order of the Marshallese DP is derived.

I argue that the syntactic structure of Marshallese DPs can be accounted for by movement of the NP from a complement position to the specifier of DP. This movement is motivated by feature checking of certain semantic features that will be defined later in the paper. Further, by adopting the adjective and possessive structures argued for by Kayne (1994), a uniform analysis can be proposed for adjectives, relative clauses and possessives. This structure can also account for the

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[1] Marshallese transitive sentences have an SVO order, while intransitive sentences can have either a VS or an SV word order.

fact that Marshallese possessives can only have a possessor reading and not an agent of theme reading.

In section 2 of the paper, I provide an overview of the Marshallese pronoun, demonstrative and determiner, adjective and possessive systems. Section 3 begins my analysis of the determiner phrase. The structure of the simple DP containing a NP and a determiner will be discussed first, followed by a discussion of adjectives and finally possessives. The paper concludes in section 5 with some of my major findings as well as topics for future study.

2. Overview of Marshallese

2.1 Pronouns

Marshallese has a rich system of pronouns, as shown in table 1:

Table 1. Marshallese Pronouns

	Subjective	Objective	Absolutive
1st singular	i	io	n̄a
2nd singular	kwo	yuk	kwe
3rd singular	e	e	e
1st plural exclusive	kim	kim	kim
1st plural inclusive	je	kij	kij
2nd plural	kim	kom	kom
3rd singular	re	ir	ir

The subject pronouns have been classified by some researchers as full pronouns and others as agreement markers. Zewen (1977) claims that these forms are subject personal pronouns that have cliticized with the verb, much like the English "I'm." Bender (1969), Song (1994) and Hale (1998) categorize them as agreement markers.   Hale explains that they are generated in AgrS^o and only show agreement when the subject has moved to spec AgrSP.

(3) E   buromuij   iroj   ro.   (Erland 1914)
     3SG   sad   chief   the PL
     The chiefs are sad.

(4) Iroj   ro   re   buromuij
    chief   the PL 3PL   sad
    The chiefs are sad.

In (3), the subject *iroij ro* has remained in spec VP. So there is no agreement between the

"agreement marker" and the subject. Hale claims that the 3rd person singular form in this

sentence a "dummy subject." However, in (4), the subject has moved to spec AgrSP, so the 3rd

plural agreement marker is used. This analysis can also account for sentences with no overt

subject if the fact that Marshallese is a pro-drop language is taken into account:

(5) R-ar   etal   ñan   imon wia.
    3PL-past   go   to   store
    They went to the store.

2.2 Determiners and Demonstratives

`In Marshallese, there are three types of determiners and demonstratives: singular, plural

human, and plural non-human. These three categories are closely linked in morphological form.

For example, all plural human and plural non-human forms are nearly identical except that plural

human forms begin with *r-* and plural non-human forms begin with *k-*:

Table 2. Marshallese Determiner and Demonstratives

	location	Singular	PL human	PL non-human
determiner	unknown, not visible	eo	ro	ko
demonstratives	near the speaker	e	ra	ka
	near the speaker & listener	in	rein	kein
	near the listener	ne	rane	kane
	away from both speaker & listener	en	ran	kan
	distant but visible	uweo	roro	koko

In comparison to the complex demonstrative system, the determiner system is rather simple. It

consists of only three forms, listed in Table 2. All of these three forms are definite; there is no

overt indefinite determiner:

(6)   I-j   je   peba.   (Lomae PC)
        1SG-present   write   paper
        I'm writing a paper.

(7)   I-j   je   peba   eo.
        1SG-present   write   paper   the
        I'm writing the paper. (a specific one, already know to the speaker and listener)

By contrast, demonstratives have a three way system rather than an English-like, two way system. Whereas, in English, items or people are referred to as close to or away from the speaker, Marshallese identifies the location of items and people as near the speaker, near the listener, or away from both speaker and listener. There is also a distinction between items that are away from the speaker and listener but close and those that are distant yet visible. Additionally, there is a demonstrative used for items and people close to both the speaker and listener.

Plural forms of both determiners and demonstratives show agreement with the noun. This agreement is not in number but in the semantic feature [±human]. Thus, nouns involving people must have the feature [+human], while animals and things have the feature [-human], as shown in (8)–(11):

(8)   pinjel   ko
      pencil   the PL
      the pencils

(9)   *pinjel   ro
      pencil   the PL
      the pencils

(10)   leddik   ro
       girl   the PL
       the girls

(11)   *leddik   ko
       girl   the PL
       the girls

In the sections that follow, I will primarily use examples involving determiners rather than demonstratives with the understanding that anything said for determiners also applies to demonstratives.

2.3 Adjectives

In Marshallese, adjectives follow the nouns they modify but precede determiners:

(12)   wa   kilep   eo   (Lomae PC)
       car   big   the
       the big car

There are two possible structures for the use of more than one adjective. The first possibility is adjective stacking:

(13)   wa   buroro   kileplep   eo   (Lomae PC)
       car   red   big   the
       the big, red car

(14)   cup   jidikdik   buroro   eo   (Gaiun PC)
       cup   small   red   the
       the small, red cup

(15)   cup   roulul   jidikdik   eo   (Gaiun PC)
       cup   round   small   the
       the small, round cup

 The second method is to turn the second adjective into a reduced relative clause:

(16)   wa   emmonmon   eo   e   buroro   (Lomae PC)
       car   good   the   3SG   red
       the good, red car (lit. the good car it (is) red)

(17)   juon   cup   emmonmon   e   roulul   (Gaiun PC)
       one   cup   good   3SG   round
       one good, round cup (lit. one good cup it (is) round)

It is also possible to have a relative when there is only one adjective:

(18)   wa   eo   e   buroro
       car   the   3SG   red
       the red car (lit. the car it (is) red)

Determining if there is a necessary semantic ordering of adjectives is difficult because Marshallese speakers tend to use reduced relative clause when there is more than one adjective. However, according to Lomae and Gaiun (PC), there are some semantic orderings. First, both color>quality and quality>color are acceptable:

(19)   wa   buroro   emmonmon   eo   (Gaiun PC)
       car   red   good   the
       the good, red car

(20)   wa   emmonmon   buroro   eo   (Gaiun PC)
       car   good   red   the
       the good, red car

Second, both color>size and size>color are acceptable, as shown in (13) and (14) above. Third color>shape is better than shape>color:

(21)   cup   buroro   roulul   eo   (Gaiun PC)
       cup   red   round   the
       the round, red cup

Finally, shape>size, as in (15). Nationality is not treated like a regular adjective in Marshallese; it cannot immediately follow a noun. Instead, the preposition *in* must be interposed between in noun and the adjective.

(22)   bolak   in   Majol   (Bender 1969)
       flag   of   Marshal
       Marshallese flag

(23)   *bolak   Majol
       flag   Marshal
       Marshallese flag

In is a sort of adjectival possessive in that can be translated as "X has the quality of Y." I will not be able to discuss *in* in this paper but hope to do so at a later date.

2.4 Possessives

There are two parts of a Marshallese possessive: the "possessive classifier" and the "possessive suffix."[2] Harrison (1988) claims that possessive classifiers are themselves suffixed possessed nouns. However, his analysis misses the important fact that possessive classifiers agree in semantic features with the nouns they modify. Further these "possessed nouns" cannot occur independent of the "possessive suffix." It therefore seems more logical to view them as semantic agreement markers on the possessive.

The semantic features for classifiers are different from those of determiners and demonstratives, as shown in Table 3:

Table 3. Possessive Classifiers

Form	Semantic category
a-	general
kija-	food
lime-	drink
neja-	child, pet, musical instrument, appliance, toy
wa-	vehicle, boat

These classifiers show semantic agreement with the noun but not in number:

(24) cola   eo   nime-m
      cola   the   drink possessive- 2SG
      your cola

(25) balun   eo   wa-n
      airplane   the   vehicle- 3SG
      his/her airplane

However, some nouns belong to more than one semantic category. For example, *bao* "chicken" can be either food or a pet. Therefore it can be used with either the food or pet possessive.

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[2] I make use of these two terms found in the literature for convenience, although I do not necessarily agree with everything that is implied by the terms "classifier" and "suffix."

(26) bao   ko   nej-a
chicken   the PL   pet possessive- 1SG
my pet chickens

(27) bao   ko   kij-a
chicken   the PL   food possessive- 1SG
my chickens (for eating)

The possessive classifier combines with a possessive suffix. Table 4 lists the possible

possessive suffixes in Marshallese:

Table 4. Possessive Suffixes (from Bender (1969))[3]

Singular	Plural
1st- i, o, a, u	1st exclusive- m
2nd - m	1st inclusive- d
3rd - n	2nd- mi
construct- n	3rd- er, ir

These possessive suffixes can also combine with certain nouns and prepositions. Nouns that

combine with these suffixes are inalienable nouns, such as body parts and kinship terms.

Likewise *ibb*- "with"- is the only preposition that can combine with a possessive suffix.

(28)   bora-m
head- 2SG
your head

(29)   jine-n
mother-3SG
his/her mother

(30)   ibbe-mi
with-2PL
with you (PL)

While more research into the possessive suffixation of nouns and the preposition needs to be

undertaken, it is possible that the [+inalienable] semantic category of the nouns could account for

their ability to combine with the possessive.

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[3] The forms of the 1st singular and 3rd plural are phonologically determined.

The possessive follows the determiner and may not precede either the determiner or the

noun.

(31) nuknuk   ko   a-n   Lucy
      dress   the PL   general poss- 3SG   Lucy
      Lucy's dress

(32) *an   Lucy   nuknuk   ko[4]
   3SG poss   Lucy   dress   the-PL
      Lucy's dress

3. The Determiner Phrase

Having provided a description of some relevant aspects of the Marshallese language, I

now turn to an analysis of these structures.

3.1 Simple DPs

A simple determiner phrase, as shown in (33), can be accounted for through movement of

the NP from the complement to the specifier of DP:

(33a)   pinjel   ko
        pencil   the PL
        the pencils

(33b)
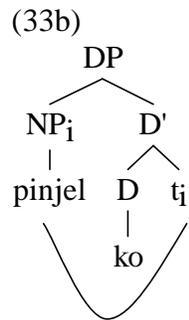
Movement of the NP is not optional:

(34)   *ko   pinjel
        the PL   pencil
        the pencils

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[4] This phrase is grammatical as a whole sentence. However, I argue that this is because the possessive is moving to a higher position than directly in front of the noun. In this paper, I will restrict my discussion to possessive phrases rather than possessive sentences.

There are a number of possible features that could drive movement from comp to spec DP. Number agreement can immediately be ruled out due to the fact that Marshallese nouns do not have singular or plural features. Another possibility is the semantic feature [±human]. While this would account for movement in the plural forms, it would not account from singular determiners because they do not have a [±human] feature. Finally, it is possible that movement is driven by an EPP feature. While an EPP feature is the only analysis that can account for movement of both singular and plural DPs, [±human] cannot be ruled out as a possible motivation in the plural form. Further, if it could be shown that historically, the singular determiner had both a human and a non-human form, then this hypothesis would be confirmed.

In the structure for the simple DP, it is not possible for the NP to raise higher than spec DP. This is confirmed by sentence (35), in which the existence of a prepositional phrase shows that the NP must be in a position lower than P^o but higher than D^o.

(35a)   I-j   konono   kin   buk   eo.   (Lomae and Gaiun PC)
         1SG-Present   talk   about   book   the
         I'm talking about the book.

Thus the only possible landing site for the NP in this sentence is spec DP.

(35b)

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        PP
        |
        P'
      /    \
    P        DP
    |       /   \
  kin    NPᵢ      D'
        pinjel   /  \
                D    tᵢ
                |
                eo
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All of the examples in this section involve the definite determiner. While Marshallese does not have an overt determiner, it is possible that there is phonetically unrealized indefinite D^o

(Szabolocsi (1981), (1983)). Since this indefinite determiner would be covert in this case, it would be difficult to tell if the NP is moving to spec DP. It seems logical that this would be the case however.

3.2 Adjectives

Both Cinque (1994) and Kayne (1994) provide structures for adnominal adjectives. Under Cinque's analysis, adjectives are merged as specifiers of functional heads. As part of this analysis, there is an unmarked serialization of adjectives, as in (36):

(36) $[_{DP}$ D $[_{XP}$ poss X $[_{YP}$ card Y $[_{WP}$ ord W $[_{ZP}$ quality Z $[_{HP}$ size H $[_{JP}$ shape J $[_{KP}$ color K $[_{NP}$ nationality N

For languages in which the noun precedes the adjectives, the noun raises to a functional head between D and the highest functional phrase containing an adjective. In addition to explaining this unmarked serialization of adjectives, Cinque's analysis explains why there is limit on the number of non-coordinated attributive adjectives as well why adjectives are found to the left of the noun in many languages.

By contrast, Kayne offers a structure for adjectives which is similar to the structure of reduced relative clauses. In Kayne's structure, the adjective is generated in a predicate position within IP and then moves to spec CP:

(37) $[_{DP}$ the $[_{CP}$ $[_{XP}$ yellow$]_i$ $[C^o$ $[_{IP}$ [book] $[I^o$ [e]$_i$

In adnominal adjective languages, the NP then moves to the specifier of a functional phrase (FP) between DP and CP:

(38) $[_{DP}$ the $[_{FP}$ [book]$_j$ F^o $[_{CP}$ $[_{XP}$ yellow$]_i$ $[C^o$ $[_{TP}$ [e]$_j$ $[T^o$ [e]$_i$

When these two analyses are used to account for Marshallese, Kayne's provides a better framework for two reasons. First, while one of the advantages of Cinque's system is that it can account for multiple adjectives, this fact is not important in Marshallese, which seems to avoid

multiple adjectives. Thus this advantage is actually a disadvantage in analyzing Marshallese.

Further Kayne's structure can provide an explanation as to why Marshallese avoids multiple

adjectives. Second, this structure provides a unified structure for possessives and adjectives.

While Kayne's analysis provides a proper framework, I argue that rather than raising to a

functional head, the NP is moving to spec AP and that the AP is then moving to spec DP, a claim

which will become much more clear shortly.[5] However, my analysis raises a problem for feature

checking. In order for this structure to be correct, it must be assumed that the [human] features

of the noun can be checked in spec AP. In spite of this drawback, it is not an argument for a

different structure, as Cinque's analysis would have this same problem.[6]

In regards to multiple adjective, Kayne does not provide an analysis for these structures.

I, therefore, propose that both adjectives are generated in the predicate position of IP[7]. This is a

feasible assumption given the reduced relative clause structure of Marshallese:

(39)   cup   e   roulul   im   buroro   (Gaiun PC)
        cup   3SG   round   and   red
        the round, red cup (lit. cup it round and red)

(39) shows coordinated predicates.   Since, Kayne suggests that adjective structure is

underlyingly one similar to reduced relatives, its possible that predicates with more than one

"adjective" is a coordinated structure underlyingly, but coordination is not seen on the surface

because one of there adjectives move. So a Marshallese adjective structure would initially be:

(40) [$_{DP}$ eo [$_{CP}$ [C^o [$_{IP}$ cup [I^o [$_{AP}$ roulul] [$_{AP}$buroro]

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[5] Kayne claims that, in English the XP containing the adjective can be an AP.
[6] Under Cinque's analysis, it would have to be argued that all the functional phrases move to spec DP and that NP moves to spec AP so as to appear on the left of the phrase. This movement to spec AP is exactly what I am arguing for under Kayne's analysis.
[7] I am using a possibility of only two adjectives, as my consultants only provided sentences with two adjectives.

If only one of the adjectives can raise to spec CP, then both the occurrence of the agreement marker in reduced relatives and the Marshallese preference for only one adjective adnominal adjective can be accounted for. The agreement marker would only occur if there is overt material in the IP. So if both adjectives move there is no need for an agreement marker. But if an adjective remains, then there must be an agreement marker:

(41) cup   buroro   roulul   eo
      cup   red   round   the
      the round, red cup

(42) cup   roulul   eo   e   buroro
      cup   round   the   3SG   red
      the round, red cup

Further, in spite of the fact that it is possible to move both adjectives, Marshallese speakers seem to prefer to move only one. It is unclear as to whether Marshallese speakers spontaneously produce structures with two adnominal adjectives or if they were only produced because of the elicitation by the linguist. Thus what is actually "Marshallese-like" is in question. Therefore it is possible that only one AP can move to spec CP.

In addition to movement of the AP to spec CP, NP must move to spec AP rather than FP as Kayne proposes. Marshallese word order shows that both the noun and adjective precede the determiner, and since the NP must occupy spec DP for agreement reasons, it is not possible that NP is moving to a higher position and AP is occupying spec DP. Further it is clear that the entire CP cannot be moving to spec DP because the reduced relative follows the determiner. Thus it must be the case that NP is moving to spec AP. It is clear that these elements form a constituent in spec DP, as coordination shows.

(43) wa   emmonmon   im   loon   jidikdik   ko   re   buroro
      car   good   and   boat   small   the PL   3PL   red
      the good cars and the small boats they are red

Thus formation of a Marshallese DP containing adjectives is shown in (44):

(44)
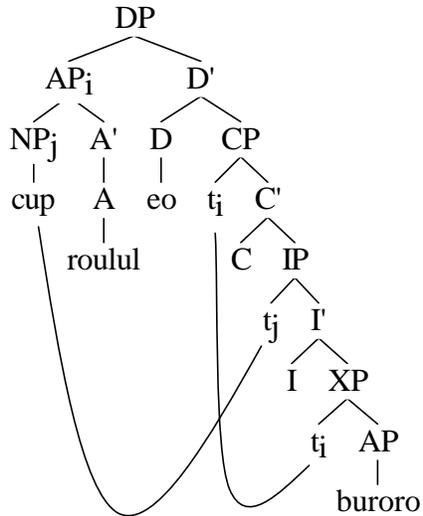
In (44), the two adjectives are shown to be originating as sisters headed by an XP. This structure

is more a product of the constraints on the tree program rather than a statement of structure.

3.3 Possessives

Kayne's structure for possessives is similar to that of adjectives except that, in the place

of CP, there is a prepositional determiner (D/PP):

(45) [$_{DP}$ la [$_{D/PP}$ [$_{NP}$ voiture]$_j$ [de [$_{TP}$ Jean [T^o [e]$_j$
        the   car   of   John

The advantage of this construction is not only that it is uniform with the relative clause and

adjective structures, but it is tied to the structure of possessive sentences involving *have*:

(46)   Jean   a   une   voiture.
   John   has   a   car.

(46) is derived from (47), in which there is an abstract copula.

(47) BE [$_{D/PP}$ [D/P^o [$_{TP}$ Jean [T^o [$_{NP}$ voiture]

In this sentence, *Jean* moves to spec D/PP to get case, then to spec BE. D/P^o is then incorporated with BE, and D/P^o + BE is spelled out as have. Since D/PP in (47) is parallel to D/PP in (45), then the semantics of the possessive can be explained. This structure can also explain why Marshallese possessives can only have a possessor meaning (X has Y) and not an agentive or thematic reading.

As with other Marshallese DP constructions, NP moves to spec DP, unlike (45) in which NP remains in spec D/PP. Since NP must first move to spec D/PP and then to spec DP, semantic agreement in Marshallese is explained. Thus the structure for the Marshallese possessive is:

(48)
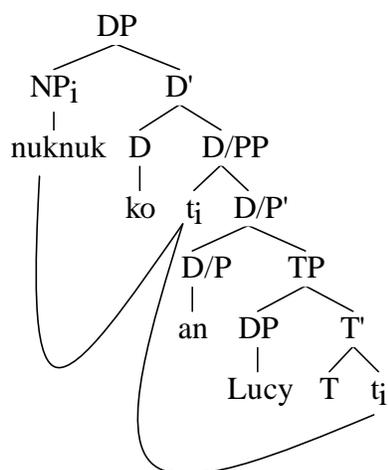
This structure also accounts for why the possessor cannot precede noun. If NP is moving to spec DP, then there is no landing site for D/PP and, since NP must move to spec D/PP for feature checking, it cannot be the case that D/PP is simply moving to spec DP.

(49)　*I-j　　　　konnaan　kin　　an　　　　Lucy　pikja　　eo
　　　1SG-present　talk　　about　poss 3SG　Lucy　picture　the
　　　I'm talking about Lucy's picture.

This raises an interesting question as to why AP can move to spec DP when NP occupies its specifier position, but D/PP can't. At first glance, this may appear to be asymmetrical. However

recall that the CP and the D/PP occupy the same position in the parallel structures of possessives and adjectives. Neither of these structures can move to spec DP. Thus what appears to be asymmetrical is in fact symmetrical, as AP is moving from spec CP to spec DP.

4. Conclusion

In this paper, I have touched only briefly on some Marshallese DP structures. I have argued that Kayne's analysis provides a framework which can account for the properties of Marshallese possessives and adjectives. However, I have claimed that Marshallese NPs and APs raise not only to spec CP or D/PP, as Kayne argues, but that they move higher to spec DP. Finally, I have argued that movement is motivated by checking of semantic features between N and D^o or D/P^o

There are a number of issues that have been addresses in this paper. Perhaps most important is the nature of the possessive itself. It is possible that the possessive "suffix" is in fact a pronoun which combines with a general possessive of some sort. This is based on the fact that there is no number agreement between the possessive and proper nouns and that a pronoun could not co-occur with a proper noun:

(50) *nuknuk   ko   aer   Lucy   im   Helentina
       dress   the-PL   3PL poss   Lucy   and   Helentina
       Lucy and Helentina's dresses

(51) nuknuk   ko   an   Lucy   im   Helentina
       dress   the-PL   3PL poss   Lucy   and   Helentina
       Lucy and Helentina's dresses

For this to be the case, then *an* would be the general possessor which can occur with proper nouns, and the final *–n* would be dropped when the possessor combines with a possessive pronoun. It is also possible that there is only agreement with the first conjunct in these sentences. More research needs to be done in order to account for this structure.

Finally, I was not able to examine how numerals fit into the DP structure, the adjectival preposition *in*, or give a proper account of the ordering of adjectives. I hope to explore these topics at a later date.

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