

MARSHALLESE YES/NO QUESTIONS AND REMNANT MOVEMENT

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This paper concerns the structure of Marshallese yes/no questions, which are formed through the use of the question particle *ke*. *Ke* does not occur sentence initially but may occur in a number of positions following the tense/aspect/modality marker. In negative questions, *ke* must occur sentence finally. I argue that *ke* is the head of the interrogative phrase and that its position in a sentence results from movement of phrasal elements into the left periphery to the specifier of a focus phrase, followed by movement of the remnant subject agreement phrase to the specifier position of a topic phrase above the interrogative phrase. This analysis is supported by the fact that it can explain the constituency of Marshallese interrogatives and *ke*'s sentence final position in negative questions yes/no questions.

1. INTRODUCTION¹

In this paper, I discuss Marshallese yes/no question structure.² Marshallese forms yes/no questions through the use of the question particle *ke*. However the position of the question particle differs from other Austronesian languages in that it has a relatively free distribution and may occur in any sentential position following the tense, aspect and modality marker (TAM):³

- (1) Herman e-n **(ke)** bajjik **(ke)** kōmmon **(ke)** pade eo **(ke)** ñan ir **(ke)**?⁴
Herman 3S-should Q just Q make Q party DET.S Q for 3PL Q
'Should Herman just throw the party for them?'

It is my argument that the position of the question particle *ke* can be explained through an analysis involving remnant phrasal movement. Assuming the expanded structure of the left periphery proposed by Rizzi (2001), the sentence internal position of *ke* results from movement of phrasal elements to the specifier position of the focus phrase (FocP) below the interrogative

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²Marshallese (Malayo-Polynesian, Oceanic, Micronesian) is an Austronesian language spoken in the Republic of the Marshall Islands (RMI). The RMI consists of 34 atolls comprising two island chains: the Ratak Chain in the east and the Ralik Chain in the west. Each chain has a distinct dialect, although the two dialects are mutually intelligible. There are about 58,000 native speakers of Marshallese. This work will examine the Ratak dialect.

³In Marshallese orthography, *n* represents [n] and ñ represents [ŋ], while *o* represents a mid back rounded vowel and *ō* represents a mid back unrounded vowel.

⁴The multiple occurrences of *ke* in (1) are not meant to indicate that the question particle may occur more than once in a sentence. Rather (1) is meant to indicate that one instance of *ke* may occur in a sentence in one of the positions shown.

phrase (IntP), creating a remnant subject agreement phrase (AgrSP). Following movement to FocP, the remnant AgrSP moves to the specifier of the topic phrase (TopP) above IntP. This analysis is supported by constituency of declaratives and interrogatives and by the fact that it can provide an explanation of why the question particle is sentence final in negative questions.

The outline of this paper is as follows. The syntax of Marshallese declaratives is briefly described in section 2, followed by a discussion of the position of the question particle in negative and non-negative yes/no questions in section 3. Section 4 addresses the constituency of Marshallese declaratives and interrogatives, while Section 5 introduces the remnant movement based analysis of yes/no questions and shows how this analysis can explain the constituency of Marshallese interrogatives and the position of the question particle in negative yes/no questions.

2. DECLARATIVE SENTENCES

Marshallese is head initial language with the following basic word order of declarative sentences:⁵

(2) Subject Cl_S-TAM Neg (Adv) V Object (PP)⁶

There are a number of other elements that may occur in a sentence. However these elements do not affect the analysis of yes/no questions and will therefore not be included in the examples in this paper.

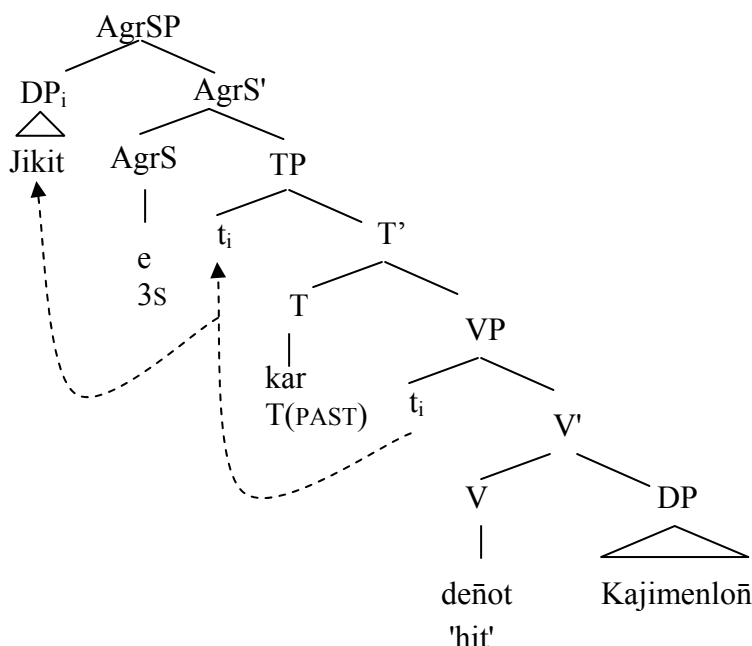
Following Hale (1998), I assume that the structure for Marshallese sentences such as (3) shown in (4). However unlike Hale I do not assume that the verb moves to AgrS^o. This is because the verb forms a constituent with the object and not the agreement marker or tense, as will be illustrated in section 3.

(3) Jikit e-kar deñot Kajimenloñ.
 Jikit 3S-T(PAST) hit Kajimenloñ
 'Jikit hit Kajimenloñ.'

(4)

⁵ For the purposes of this paper I will ignore two issues in the syntax of declaratives. The first issue is the ordering of preverbal TAM markers. While the ordering of these elements is puzzling considering the universal ordering of adverbs and functional heads proposed by Cinque (1999), it does not affect the analysis of yes/no questions. The second is the fact that the subject may be postverbal in intransitive sentences. When this occurs, the order of elements is as follows: Cl_S-TAM Neg (Adv) V (Adv) Subject (PP). While these two issues are important to the syntax of Marshallese declaratives, they are beyond the scope of this work and will be explored at a future date.

⁶ In (2), the subject agreement marker is shown cliticizing to TAM. If the sentence lacks TAM, this marker may cliticize to the next element immediately following it, which is often neg or the verb. In the sections that follow, when I refer to the Cl_S-TAM combination, I do so with the understanding that any generalizations I state may also apply to a Cl_S-neg or Cl_S-V combination.



3. THE POSITION OF *KE* IN YES/NO QUESTIONS

The Marshallese question particle occurs in yes/no question but not in *wh*- questions, though it may occur in embedded questions, as in (5):⁷

- (5) I jaje e-j ke likjikin.
 1S don't.know 3S-T(PRES) Q make.up.stories
 'I don't know if she's making up stories.'

In both yes/no and embedded questions, *ke* may occur in any position following the Cl_TS-TAM, including after TAM or preverbal adverbs:

- (6) John e-j ke lukkuun konono ibbe-n Mary?
 John 3S- T(PRES) Q really talk with-3S Mary
 'Is John really talking with Mary?'
- (7) John e-j lukkuun ke konono ibbe-n Mary?
 John 3S- T(PRES) really Q talk with-3S Mary
 'Is John really talking with Mary?'

immediately following the verb:

⁷ Embedded questions may also be formed with *nē* 'if', but, unlike *ke*, *nē* must occur clause initially. See Oda (1976) for a discussion of Marshallese embedded questions.

- (8) Herman e-ar lukkuun kōnan **ke** men in mour?
 Herman 3S-T(PAST) really love Q thing of life
 'Did Herman really love animals?'

immediately following the object:

- (9) Re-n kommon pade eo **ke** n̄an ir?
 3PL-should make party DET.S Q for 3PL
 'Should they throw the party for them?'

and sentence finally:

- (10) Herman e-ar lukkuun kōnan men in mour **ke**?
 Herman 3S-T(PAST) really love thing of life Q
 'Did Herman really love animals?'

I have not been able to pinpoint any meaning difference between sentences with different *ke* positions, such as sentences (6) and (7) or (8) and (10). So it does not appear that a change in the position of *ke* results in a change in meaning.

The question particle may not occur in any position before TAM, including sentence initially, as in (11); between the subject and the subject agreement marker, as in (12); and between the agreement marker and TAM, as in (13):

- (11) ***Ke** Herman e-ar lukkuun kōnan men in mour?
 Q Herman 3S-T(PAST) really love thing of life
 'Did Herman really love animals?'
- (12) *Herman **ke** e-ar lukkuun kōnan men in mour?
 Herman Q 3S-T(PAST) really love thing of life
 'Did Herman really love animals?'
- (13) *Herman e **ke** ar lukkuun kōnan men in mour?
 Herman 3S Q T(PAST) really love thing of life
 'Did Herman really love animals?'

If the question contains a negative, such as *jab* 'not', then the question particle may only occur sentence finally:

- (14) Kwo-j jab etal n̄an Rita **ke**?
 2S-T(PRES) NEG go to Rita Q
 'Aren't you going to Rita?'

The structure of negative questions will be discussed in more detail in section 5.

Given these facts regarding *ke*, the question may be raised as to where the question particle is generated. Rizzi (1997, 2001, 2002) provides the following expanded structure of the left periphery, which may provide insight into the possible positions in which *ke* might be generated:

(15) [ForceP [TopicP* [InterrogativeP [TopicP* [FocusP [TopicP* [ModifierP* [FiniteP

In introducing this structure, I am not claiming that all of these positions are filled in Marshallese questions. Rather I am attempting to provide a theoretical framework with which to analyze question structure. (15) provides two positions in which the question particle could be generated: ForceP and InterrogativeP (IntP). If *ke* were generated in ForceP, we would expect that the question particle would always be sentence initial, given the doubly filled comp filter (Chomsky and Lasnik (1977), Koopman, (1993)). However, if the question particle is generated in IntP, then it would be possible for elements to precede *ke*, since there are available specifier positions above IntP to which elements could move.

This conclusion about the position of *ke* also relies on the crucial assumption that *ke* does not move out of the position in which it is generated. The question particles in other Austronesian languages, such as Malagasy, have been analyzed as clitics. Paul (2001) claims that the Malagasy question particle *ve* is generated in ForceP and is a second position clitic which intervenes between the predicate and the subject or topic. However this type of analysis will not work for Marshallese given the fact that the question particle has a relatively free distribution and does not occur in second position or any other identifiably consistent position. In addition the constituency of declaratives and interrogatives provides evidence against this type of analysis, and it is to this topic that I now turn my attention.

4. SENTENCE CONSTITUENCY

The constituency of declaratives and interrogatives reveals much about the structure of Marshallese sentences. In declaratives, the verb and those elements following the verb form a constituent, as shown in the fact that these elements can be coordinated, as in (16), and elided, as in (17).

(16) R-ar rabij kuj eo im jibwe kidu eo.
 3PL-T(PAST) hold cat DET.S and catch dog DET.S
 'They held the cat and caught the dog.'

(17) a. R-ar **ke** rabij kuj eo?
 3PL-T(PAST) Q hold cat DET.S
 'Did they hold the cat?'

- b.Aet r-ar.
 yes 3PL-T(PAST)
 'Yes, they did.'

However neither Subject Cl_S-TAM V nor Subject Cl_S-TAM may be coordinated, which seems to indicate that these elements do not form a constituent.

- (18) *Ricky e-kar lolok ak Mary e-kar kir leroij eo.
 Ricky 3S-T(PAST) visit but Mary 3S-T(PAST) call queen DET.S
 Ricky visited but Mary called the queen.
- (19) *Ricky e-kar im Mary e-kar kauteij leroij eo.
 Ricky 3S-T(PAST) and Mary 3S-T(PAST) honor queen DET.S
 Ricky and Mary honored the queen.

It can also be concluded that Subject Cl_S-TAM V is not a constituent because the verb clearly forms a constituent with the elements which follow it.

The constituency of questions is similar to that of declaratives. For example, the verb and the elements which follow it can be coordinated, as in (16), in which the question particle precedes the verb.

- (20) Ricky e-kar ke komat-e pik eo ak koñ-e baō eo?
 Ricky 3S-T(PAST) Q cook-S pig DET.S but eat-S chicken DET.S
 'Did Ricky cook the pig but eat the chicken?'

However in questions the subject, agreement marker and tense may be coordinated, as shown in (21).

- (21) Ricky e-kar im Mary e-kar ke kauteij leroij eo?
 Ricky 3S-T(PAST) and Mary 3S-T(PAST) Q honor queen DET.S
 'Did Ricky and did Mary honor the queen?'

Likewise, Subject Cl_S-TAM V may be coordinated:

- (22) Ricky e-ar komat-e im kw-ar koñ-e ke bao eo?
 Ricky 3S-T(PAST) cook-S and 2S-T(PAST) eat-S Q chicken DET.S
 'Did Ricky cook and did you eat the chicken?'

There are two facts about Marshallese questions which can be clarified by the constituency. First is the fact that the question particle cannot move out of the left periphery. If the position of the question particle resulted from the movement of *ke*, perhaps because it was cliticizing to an element in AgrSP, then the constituency of Marshallese interrogatives should be practically

identical to that of Marshallese declaratives. This is because AgrSP would have the same structure in both declaratives and interrogatives. Since the constituency of declaratives and yes/no questions is so different, we can conclude that this is not what is occurring.

The second fact clarified by constituency relates to the structures of declaratives and interrogatives. Given the above examples, we might ask how it is possible that the verb forms a constituent with the elements following it when it is preceded by *ke* (see (20)) but with the elements preceding it when it is followed by *ke*, as in (22). The answer is that these two types of sentences have different derived structures. In Marshallese questions, the elements following the question particle form a constituent, which in (20) is the verb and the object. However (21) and (22) show that the elements preceding the question particle also form a constituent. If we adopt these two conclusions— what follows *ke* is a constituent and what precedes it is also a constituent— we must conclude that the structure of Marshallese yes/no questions is derived through movement. So how do elements which do not form a constituent in declaratives become a constituent in interrogatives? The answer is explained by the remnant movement based analysis of Marshallese questions.

5. A REMNANT MOVEMENT BASED ANALYSIS OF YES/NO QUESTIONS

In the previous section, I spelled out how constituency facts of Marshallese are an essential clue to the structure of yes/no questions. The analysis of Marshallese questions I propose is one involving remnant phrasal movement, as discussed by Müller (1998), Mahajan (2003) and Koopman and Szabolcsi (2000). This type of movement is often proposed as an alternative to head movement and involves the movement of a phrase XP out of a larger phrase YP. The movement of XP leaves behind a remnant YP, which then moves at a later stage in the derivation, as illustrated in (23).

- (23) Step 1: Movement of XP $[_{ZP} Z [_{YP} WP Y XP]] \rightarrow$
 Step 2: Movement of the remnant YP $[_{ZP} XP_i Z [_{YP} WP Y t_i]] \rightarrow$
 $[_{YP} WP Y t_i]_j [_{ZP} XP_i Z t_j]$

Following the movement of the XP, the remnant YP is a constituent, which is then free to move to a position above ZP. Note that before step one occurs, WP and Y do not form a constituent because YP also includes XP. However, once XP moves to the specifier of ZP, WP and Y form a constituent: a remnant YP.

This seems to be a good description of what occurs in Marshallese questions: elements which do not form a constituent in declaratives form a constituent in questions after movement occurs. So if Z in (23) is the question particle *ke*, the derivation of Marshallese yes/no questions is as follows: step 1— movement of the elements following *ke* to a position in the left periphery below IntP, creating a remnant AgrSP; step 2— movement of the remnant AgrSP to a position above *ke*. Each of these steps will be discussed in section 5.1 and 5.2 respectively.

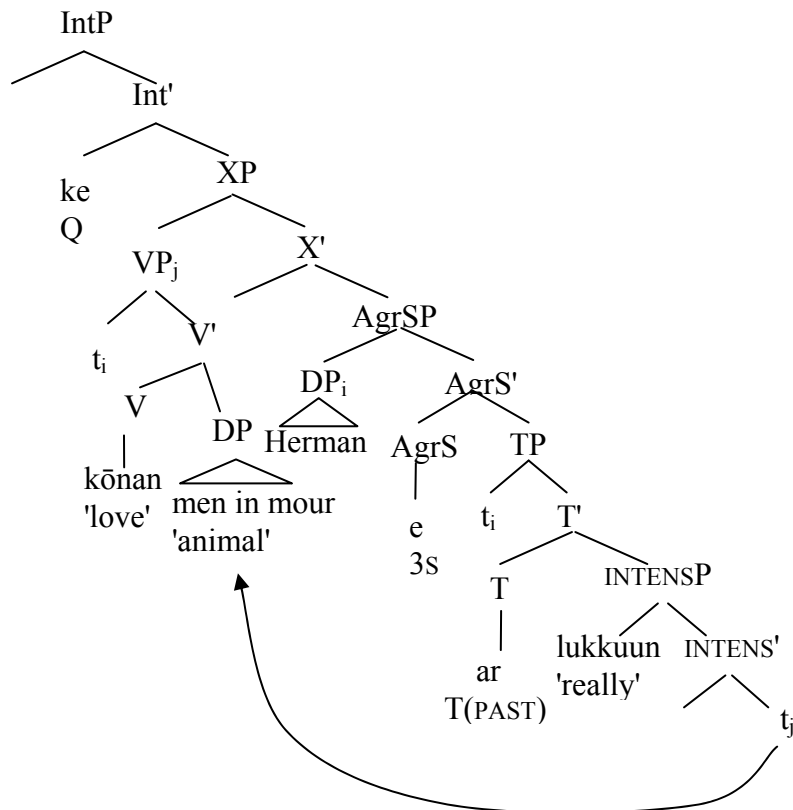
5.1. Movement of Elements Following the Question Particle

Take a sentence such as (24), in which the question particle precedes the verb.

- (24) Herman e-ar lukkuun **ke** kōnan men in mour?
 Herman 3S-T(PAST) really Q love thing of life
 'Did Herman really love animals?'

The first step of the derivation of yes/no questions is one in which the elements following the question particle move into the left periphery. In (24), these elements consist of the verb *kōnan* and the object DP *men in mour*. These elements constitute the VP, which moves to the specifier of XP, as shown in (25):

(25)

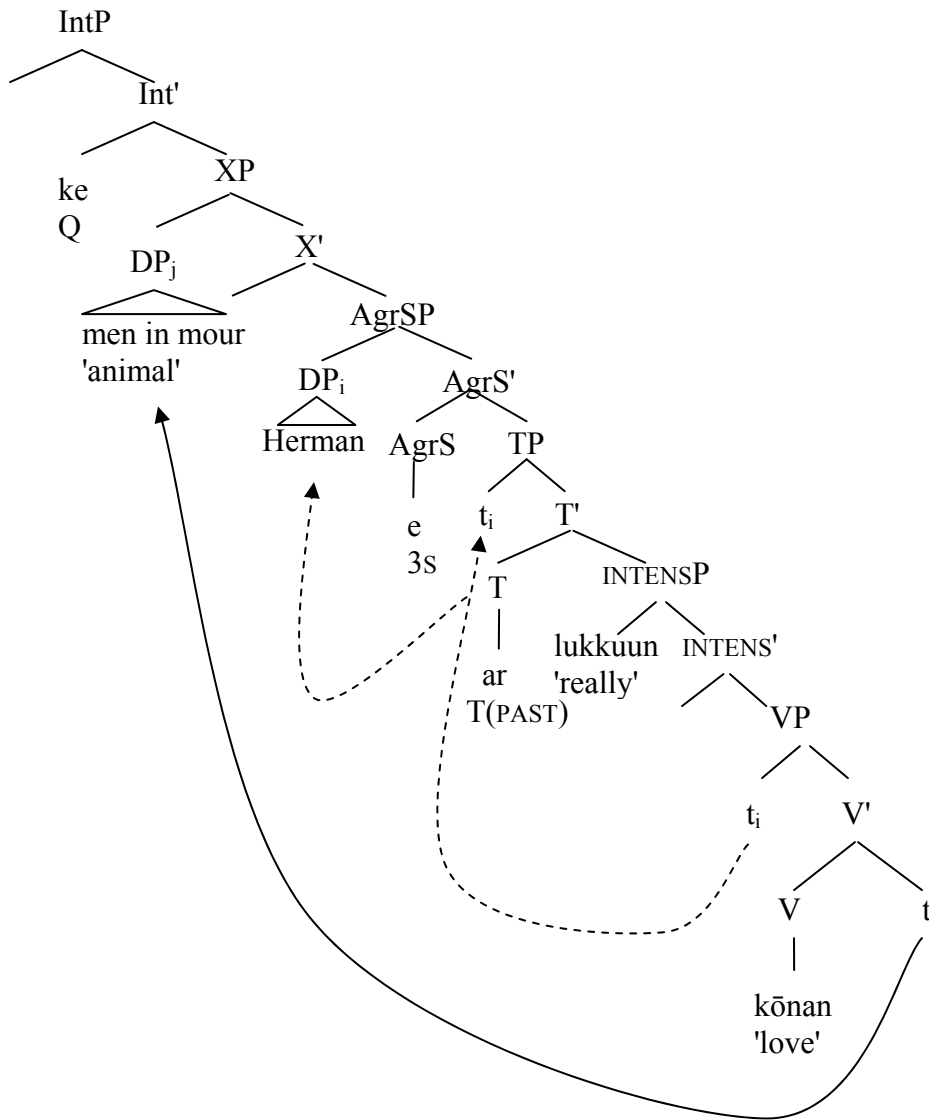


However, it is also possible for the question particle to follow the verb but precede the object DP, as in (26):

- (26) Herman e-ar lukkuun kōnan **ke** men in mour?
 Herman 3S-T(PAST) really love Q thing of life
 'Did Herman really love animals?'

When the question particle follows the verb, it cannot be the case that the VP moves into the left periphery. Rather the object DP is the phrase which moves to spec XP:

(27)

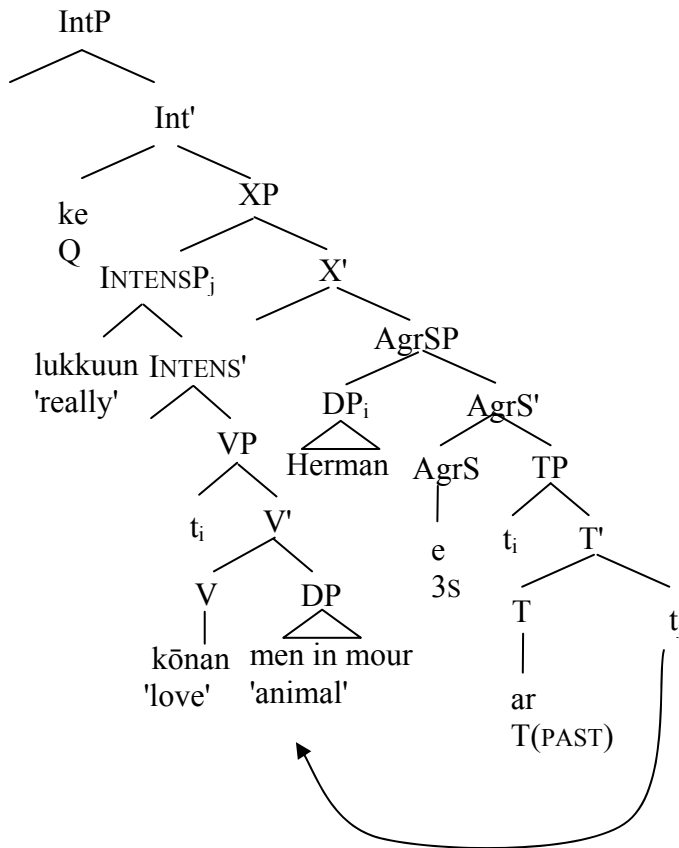


Finally, take a sentence in which the question particle precedes the adverb *lukkuun*, as in (28).

- (28) Herman e-ar ke lukkuun kōnan men in mour?
 Herman 3S-T(PAST) Q really love thing of life
 'Did Herman really love animals?'

When the question particle is precedes the adverb, then it must be the case that INTENSP moves to the left periphery, as in (29):

(29)



As of yet, I have not made any claim as to where the VP, DP or INTENSP are moving. The expanded structure of the left periphery provides three possible specifier positions which might be the target of movement. These include the specifiers of ModP, TopP and FocP. ModP can be immediately ruled out, as it is the landing site for elements which modify the sentence, such as adverbs. Since the moved phrases do not modify the sentence in any way, it cannot be the case that these phrases are moving to the specifier of ModP. The next possibility, TopP, seems more plausible. But if the phrases move to the specifier of TopP, they should have a connection to previous discourse. For example, a question like (30) would be expected to be appropriate in a situation where there had been some discussion of a party. However (30) is most appropriate when there has been no discussion of a party at all.

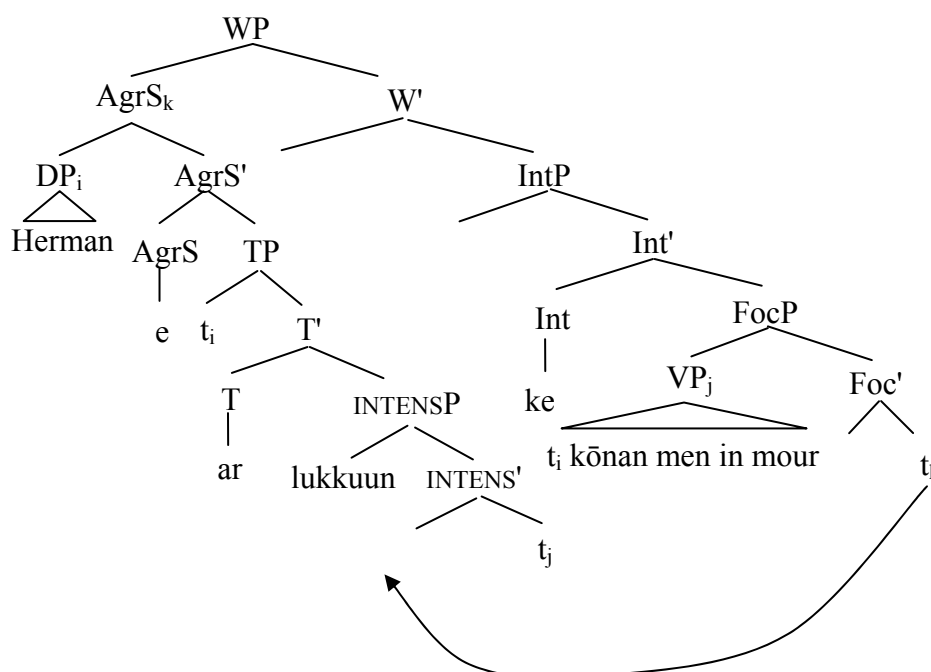
- (30) Re-naaj ke kommon pade eo ñan e?
 3PL.T(FUT) Q make party DET.S to 3S
 'Will they throw a party for him?'

The third and final possibility is that movement occurs to the specifier of FocP. Since focus can be the position of elements representing new information, it seems plausible that this might be the landing site for these moved elements, especially since the purpose of a question is to seek new information. Further, FocP is the position to which *wh*-question words move (Rizzi 2001), so there seems to be some evidence of a connection between the specifier of FocP and questions. Therefore, it seems possible to tentatively conclude that the elements following the question particle have moved to the specifier of FocP.

5.2. Movement of the Remnant AgrSP

The movement of elements to spec FocP creates a remnant AgrSP, as shown in (25), (25) and (25) above. Since the elements in the remnant AgrSP precede the question particle, it must be the case that this remnant phrase moves to a specifier position above IntP, as shown in (31).

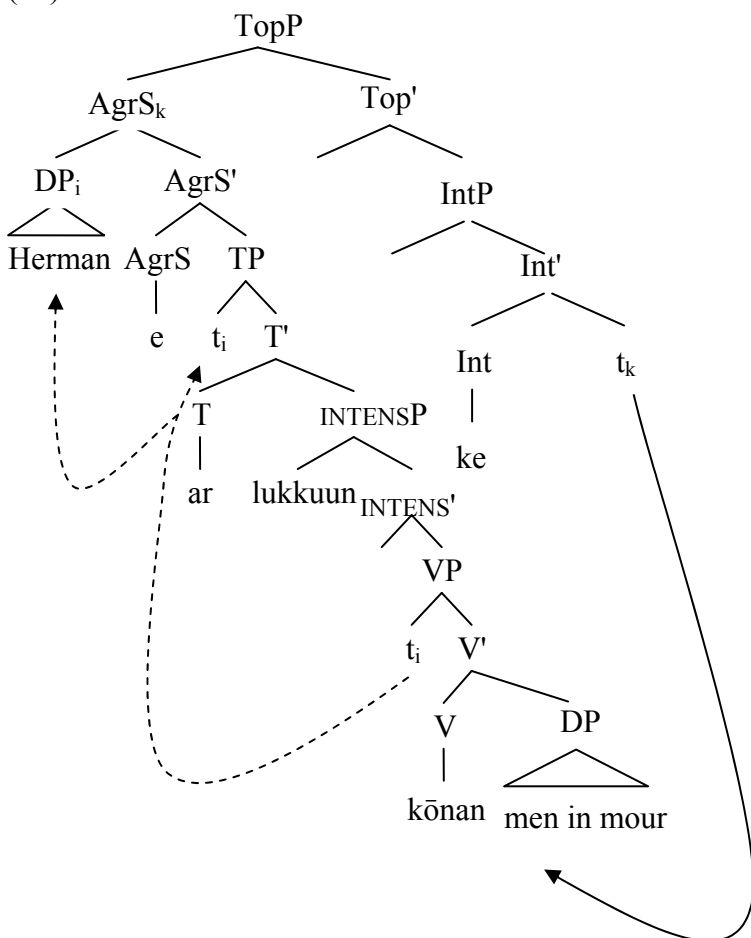
(31)



Current theory of the structure of the left periphery provides three specifier positions above Int^o which might serve as the target for movement. The first is the specifier of the interrogative phrase, which is occupied by a null operator in yes/no questions (Rizzi 2001). Since this position is occupied, it can be ruled out as a possible target for movement. Also available is the specifier of ForceP. This position distinguishes various clause types, including relative, interrogative and declarative (Rizzi 1999). Thus it might be argued that this is the landing site for movement. In this analysis, the null head in ForceP might have EPP features which require movement to its

specifier in questions. However, if movement targets this position, the resulting structure would violate the doubly filled comp filter. Therefore it cannot be the case that the remnant AgrSP is moving to the specifier of ForceP. The third option is the specifier of the topic phrase. Recall that any phrase occupying the specifier of TopP should have a connection to the previous discourse. If we assume that all movement above the question particle targets spec TopP, then the sentence final question particle would occur in sentences in which no phrase moves to the spec FocP because the entire AgrSP moves to spec TopP, as shown in (32).

(32)



If spec TopP is the target for movement, then a sentence final question particle would be predicted to occur in a question that have a connection to previous discourse. This prediction turns out to be true, since a sentence like (33) is most appropriate when there had been discussion of whether the players were to be honored.

(33) Re-kar kauteij dri ukkure ro **ke?**

3PL.T(PAST) honor one.who play DET.PL.humans Q
 'Did they honor the players?'

Given this fact, I conclude that TopP is the target for movement of the remnant AgrSP.

In this analysis, the elements following the question particle form a constituent, which explains why these elements can be coordinated. Likewise, the movement of these phrases leaves behind a remnant AgrSP. This remnant AgrSP is a constituent, which explains why both the elements preceding *ke* and the elements following *ke* are constituents in yes/no questions.

Having presented the remnant movement analysis and shown how it can account for the constituency of Marshallese questions, I now turn my attention to negative yes/no questions, showing that the remnant movement analysis can also explain the sentence final question particle in negative yes/no questions.

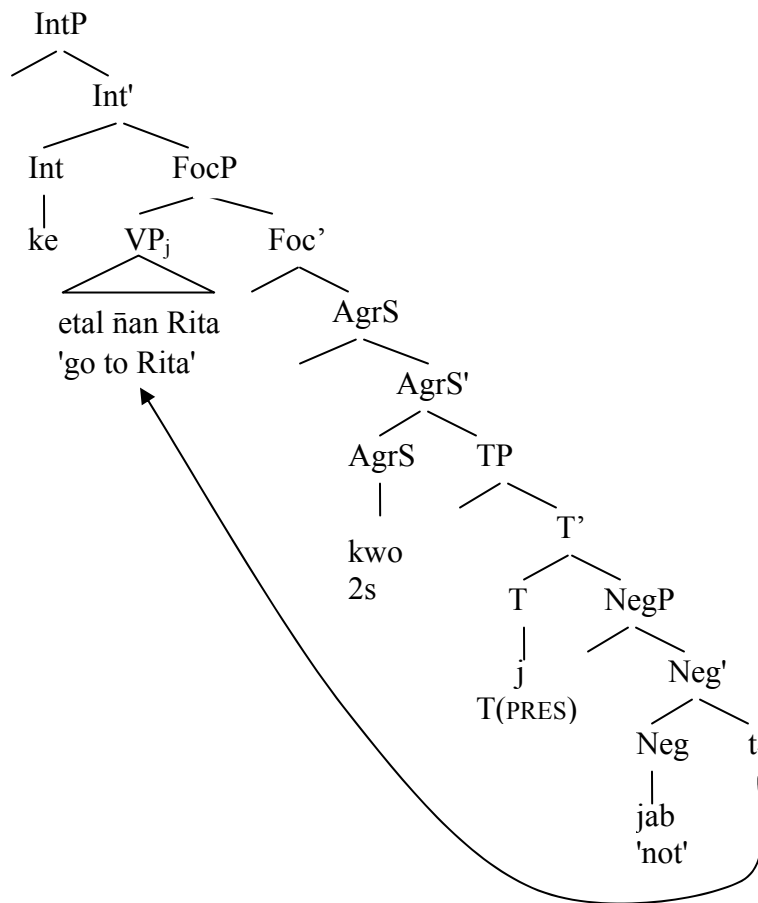
5.3. Negative Yes/No Questions

Recall that negative yes/no questions must have a sentence final question particle, as shown in (34a-d):

- (34) a. Kwo-j jab etal ñan Rita **ke**?
 2S-T(PRES)NEG go to Rita Q
 'Aren't you going to Rita?'
- b. *Kwo-j **ke**jab etal ñan Rita?
 2S-T(PRES) Q NEG go to Rita
 'Aren't you going to Rita?'
- c. *Kwo-j jab **ke** etal ñan Rita?
 2S-T(PRES) NEG Q go to Rita
 'Aren't you going to Rita?'
- d. *Kwo-j jab etal **ke** ñanRita?
 2S-T(PRES) NEG go Q to Rita
 'Aren't you going to Rita?'

So far the analysis of yes/no questions has not explained why negative questions do not allow a sentence internal question particle. According to this analysis of Marshallese questions, the first step in the derivation of a sentence like (30c) is the movement of the VP to spec FocP, as shown in (35):

(35)



Following movement of the VP, the remnant AgrSP, consisting of *kwoj jab*, moves to spec TopP.

An explanation for why this derivation is ungrammatical is found in relativized minimality (RM). According to RM, movement of an element to a position bearing one type of features across another element bearing the same type of features results in a relativized minimality effect, and the sentence is ungrammatical (Rizzi 1990, 2002). Since both Focus and Neg bear quantificational features, RM predicts that movement of a phrase bearing focus features across NegP will be ungrammatical. Therefore the movement of a phrase with focus features to FocP in Marshallese questions will be grammatical as long as the phrase does not move across NegP. As shown in (35), any negative sentence with a sentence internal question particle will require movement of a phrase bearing focus features to spec FocP across NegP. Therefore, it is not possible for the question particle to be sentence internal in negative yes/no questions. The only option is to move the entire AgrSP to the specifier of TopP because there will be no relativized minimality effect. This will result in a sentence final question particle in negative yes/no questions.

6. CONCLUSION

In this work, I have shown that the Marshallese question particle must appear after the TAM markers and that it must appear sentence finally in negative yes/no questions. I have also argued for an analysis of Marshallese yes/no questions involving remnant phrasal movement because this type of analysis can provide an explanation for constituency and the sentence final position of the question particle in negative yes/no questions. In doing so, I am not arguing that all head movement operations should be reduced to phrasal movement. Rather my point is to show that in the case of Marshallese questions, remnant phrasal movement is the only type of movement that can explain the position of the question particle.

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