**INTERROGATIVE STRUCTURES IN MARSHALLESE**[*]

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# 1. Introduction

Marshallese, an Oceanic language spoken on the atolls of the Marshall Islands, has a question particle, *ke*, which may appear in one of a number of positions in yes/no interrogatives. Interestingly, the availability of certain positions depends upon whether the sentential context is affirmative or negative.

In (1), we demonstrate the various grammatical and ungrammatical positions of *ke* in affirmative yes/no interrogatives.

(1) ***(*ke)*** *Herman* ***(*ke)*** *e-n* ***(ke)*** *kōmmon* ***(ke)*** *pade* *eo*
(Q) Herman (Q) IIIsg-T[SUBJ] (Q) make (Q) party the(sg)
***(ke)*** *n̄an* *ir* ***(ke)****?*
(Q) for IIIpl (Q)
'Should Herman throw the party for them?' (Willson, 2005, 1)

However, this variety of positions is not permitted in negative contexts. Here, the only licit position for *ke* is sentence-final.

(2) ***(*ke)*** *Kwo-j* ***(*ke)*** *jab* ***(*ke)*** *etal* ***(*ke)*** *n̄an* *Rita* ***(ke)****?*
(*Q) IIsg-T[PRES] (*Q) NEG (*Q) go (*Q) to Rita (Q)
'Aren't you going to Rita?' (ibid., 5)

In what follows, we evaluate Willson (2005)'s remnant movement analysis of the distribution of *ke*. We then formulate a novel approach to the problem where yes/no interrogatives in Marshallese are built on a core cleft construction, and *ke* is generated in the middlefield of the matrix clause.

# 2. Extant Analysis

Willson (2005) proposes a remnant phrasal movement account of Marshallese yes/no interrogatives, positing a hierarchy of projections as in (3). She proposes that *ke* projects Int(errogation)P, a proposal we will also adopt later.

[*]We would most like to thank our professors Mark Hale, for imparting to us his more than 20 year interest in the Marshallese language, and Dana Isac, for her invaluable insight and guidance navigating the syntactic literature. We thank them both for providing constant feedback and criticism during the development of this project. We are also indebted to the audience at CLA, as well as that of the fifteenth meeting of the Austronesian Formal Linguistics Association, for raising valuable points. A most sincere thanks goes also to Heather Willson for making available her work on Marshallese. Any and all errors remain ours alone.

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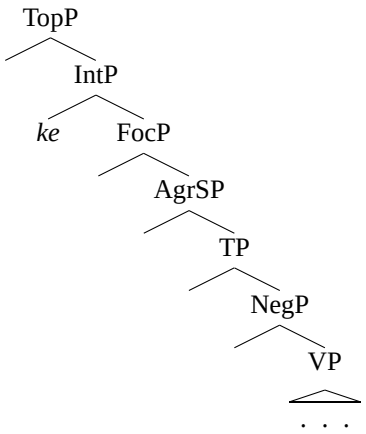



Her proposal consists mainly of two movements, the first corresponding to focalisation and the second to topicalisation. In this way, she is able to successfully generate the grammatical surface positions of *ke* seen above in (1) and (2). We will first demonstrate how this is accomplished, then follow up with an evaluation of the proposal.

## 2.1. How it works

### 2.1.1 Affirmative contexts

Consider a possible surface position for *ke*, that between the tense marker and the VP:

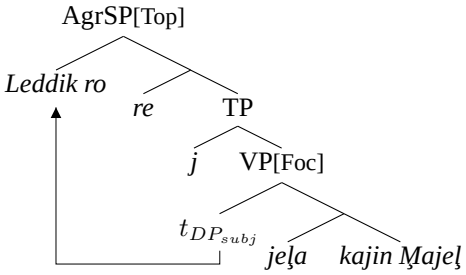
(4)

| *Leddik* | *ro* | *re-j* | ***ke*** | *jeļ̄a* | *kajin* | *Ṃajẹļ?* |
|---|---|---|---|---|---|---|
| girls | the.pl.human | IIIpl-T[PRES] | **Q** | know | language.of | Marshalls |

'Do the girls know Marshallese?'

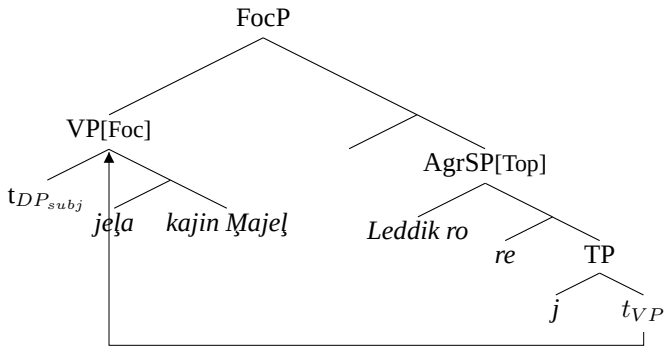
Following construction of the VP, and once the subject agreement marker has been merged, the structure is as in (5).

(5)



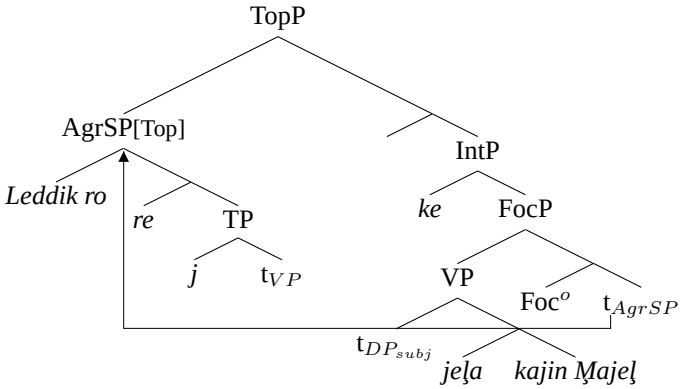

Next, Foc$^o$ is merged, and attracts the [Foc]-bearing VP to its specifier. Willson notes that such a move is legitimate as this phrase is interpreted by native speakers as in focus.

(6)




Finally, Int$^o$ and then Top$^o$ are merged, and the [Top]-bearing AgrSP is attracted to spec-TopP.

(7)




The result is the grammatical string in (4), namely, *Leddik ro rej* ***ke*** *jeļā kajin Ṃajeļ*. Clearly this structure is predicated on native speakers' judgments that the subject is given as old information and the material contained in the VP is introduced as new information; this is consistent with judgments given Willson by Marshallese informants.

### 2.1.2 Negative contexts

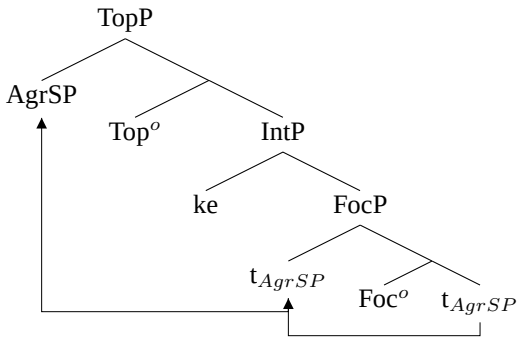
Turning to negative yes/no interrogatives, Willson's proposal is not nearly as clear as that briefly outlined in the preceding section. As mentioned, the relevant fact to be accounted for is that *ke* may only appear sentence-finally in negative contexts. Willson writes on page 20:

> Since FocP and NegP bear the same type of features, RM [Relativized Minimality] predicts that the movement of a phrase to FocP across NegP will be ungrammatical. So as long as NegP is present in a yes/no question, no phrase may be moved to spec FocP. The only option that remains is to move the entire AgrSP to the specifier of TopP, which results in a sentence final question particle.

In her presentation, it is not clear which of the following is the appropriate representation:

1. **Both FocP and TopP are present.** If (1) is the case, then the movement corresponding to focalisation is intended to relocate AgrSP first to spec-FocP, and then to topicalise that same phrase, as in (8).

(8)

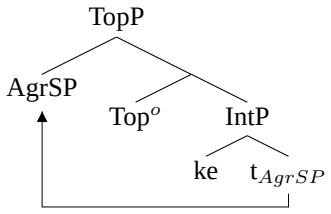



However, another interpretation is available, namely,

2. **TopP is present, FocP is not.**

   If (2.1.2) is the case, then there is no FocP in the structure, and AgrSP moves straight to spec-TopP, as in (9).

(9)




Given the ambiguity in her presentation[1], it is difficult to see how Willson's analysis provides for *ke*'s limited distribution in negative contexts. She stipulates that "[t]he only option" is to move AgrSP to TopP, which will inevitably derive a sentence-final *ke* (14). We will show in the next section why this stipulation is insufficient.

## 2.2. Evaluation

While there are problems with the analysis just sketched, the one we consider most important is that it overgenerates. In the next few subsections, we illustrate how Willson's analysis predicts certain ungrammatical structures to be grammatical, and then propose our account of *ke*'s distribution.

[1] Note that while Willson appears to opt for Option 2 (FocP is *not* present; 14), she does not explain how then an appeal to relativized minimality is relevant. That is, RM demands a competition between two [Foc]-bearing phrases over which moves to a higher spec-FocP. If there is no FocP, there is no competition.

### 2.2.1 Affirmative contexts with *ke*

Since in principle nearly every phrase in a given structure may be topicalised and/or focalised[2], by considering structures in which phrases other than those Willson details bear [Foc] and [Top] we can easily derive ungrammatical word orders, e.g. that in (10).

(10) ***E-n** *k$\bar{o}$mmon* *pade* *eo* *$\bar{n}$an* *ir* ***ke*** *Herman?*
IIIsg-SUBJ make party the.sg for IIIpl **Q** Herman
'Should Herman throw the party for them?'

We illustrate that to generate this string requires no more machinery than that described in the preceding sections. First, the subject DP (bearing [Foc]) moves to spec-FocP, as in (11).

(11) $[_{FocP}$ DP [ Foc$^o$ $[_{AgrSP}$ t$_{DP}$ [ AgrS$^o$ . . . ] ] ] ]

Following that, the [Top]-bearing AgrSP moves to spec-TopP.

(12) $[_{TopP}$ AgrSP [ Top$^o$ $[_{IntP}$ *ke* $[_{FocP}$ t$_{AgrSP}$ [ Foc$^o$ . . . ] ] ] ] ]

The result is a derivation where AgrSP is followed by *ke*, and the sentence finishes with the subject NP. By applying this same procedure to different phrases (e.g. topicalizing VP, and leaving the remnant AgrSP in Spec-FocP) one is able to derive similarly ungrammatical structures.

### 2.2.2 Negative contexts with *ke*

As mentioned previously, there are at least two ways of interpreting Willson's proposal for negative questions.

Option 1: **Both FocP and TopP are present.**

If this is the case, there is nothing in Willson's proposal that prevents, e.g., NegP (rather than AgrSP) raising to the specifier of FocP, to be followed by movement of AgrSP to the specifier of TopP. We show the (ungrammatical) result of this derivation in (13).

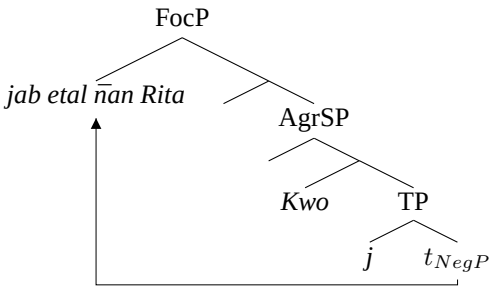
(13) **Kwo-j* ***ke*** *jab* *etal* *$\bar{n}$an* *Rita?*
IIsg-T[PRES] **Q** NEG go to Rita
'Aren't you going to Rita?'

Following Willson's proposal that Neg$^o$ inherently bears [Foc], movement of any [Foc]-bearing phrase across NegP would result in a relativized minimality violation[3]. So, when Foc$^o$ is merged, it must be NegP that raises to spec-FocP.

[2]The main exceptions we assume, and we believe Willson would agree, are phrases headed by phonologically null material, as well as TP: the assumption is that the derivation will crash for independent reasons if it TP is topicalised or focalised. That is, the clitic AgrS$^o$ may presumably only be hosted by certain categories, which do not include Int$^o$.

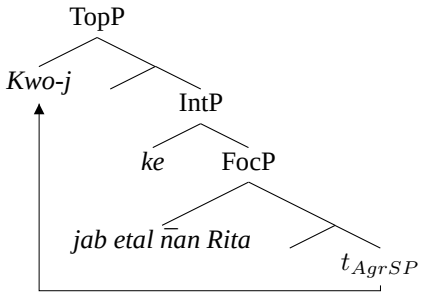
[3]While this is true, there is nothing in her system to prevent AgrSP from bearing [Foc], and thus raising first. The result of such a derivation will (also) result in ungrammaticality.

(14)




For the purposes of this evaluation, suppose that AgrS bears [Top]. Thus, the second movement is of the remnant AgrSP to spec-TopP, as in (15).

(15)




However, the result of this derivation is the ungrammatical string in (13). In fact, any derivation which moves NegP to spec-FocP, and then topicalises any XP other than NegP, similarly results in ungrammaticality.

Option 2 : **TopP is present, FocP is not.**

If this is the case, i.e. if there is no Focus projection, then there may be no competition between [Foc]-bearing elements, and thus no recourse to a relativized minimality violation. Furthermore, in the absence of movement to spec-FocP, if any phrase other than AgrSP moves to TopP, the result is ungrammatical. Thus, Option 2 must be buttressed by the stipulation that, in these contexts, only AgrSP may be topicalised; given the flexibility of topicalisation required to accomplish the grammatical strings in other contexts, this is surely an undesirable result.

In sum, the analysis does not in fact predict that the only possible position for *ke* in negative contexts is sentence final, and the distribution of *ke* remains to be explained.

# 3. Our Proposal

Building on previous work[4], we here propose an addition to a hierarchy proposed by Adger and Ramchand (2005). First, we propose that yes/no questions

[4]See Gagnon and Wellwood (2008) for discussion of Marshallese *wh*-questions as cleft constructions in Marshallese. Note, however, that that discussion is not required to grasp the points laid out in this section. What consideration of *wh*-interrogatives provides is a core cleft construction which we propose generalizes to yes/no interrogatives.

in Marshallese are structurally more complex than clefts (and by extension *wh*-constructions), as outlined in (16).

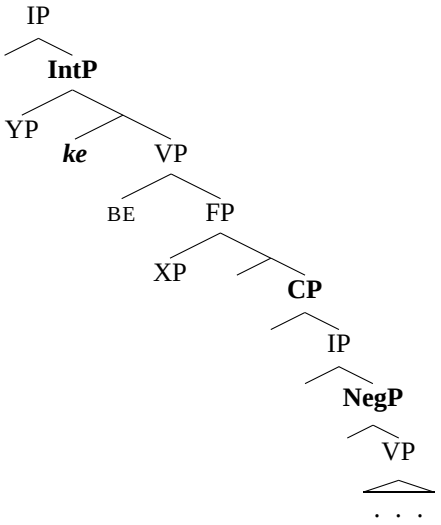
(16) **yes/no Qs** ⟩ clefts ⟩ relative clauses

Secondly, we retain the idea from Willson's analysis that *ke* heads an IntP, yet propose that this projection is in the middlefield of the matrix clause, above VP but below TP[5].

Finally, we posit a polarity feature, [Pol], borne by Int$^{o}$. In this way, *ke* attracts constituents bearing a matching [Pol] feature. We restrict the constituents which may bear such a feature to NegP and CP[6].

Taken together, we thus posit the representation for yes/no interrogatives in Marshallese as in (17). Crucially for our purposes, NegP is generated in the embedded clause, as well as the semantically 'informative' verb and its objects, while the overt subject, subject agreement and tense markers are generated in the matrix clause higher than *ke*.

(17)




The interpretation of a yes/no question will thus always be one in which the subject is out of the cleft and is thus interpreted as topicalised, for example when the object is clefted: 'As for Mary, is it A POSSUM that *(she/pro)* found?' [7]

[5] For discussion of IP-internal Topic and Focus, see e.g.Cardinaletti (2002), Butler (2004, Chap. 2), Jayaseelan (2001), and Drubig (2003).

[6] Such a proposal is roughly congruent with discussion of SigmaP in Laka 1990, and the $\text{Pol}_1$P/$\text{Pol}_2$P of Drubig 2003.

[7] We predict that the subject *pro* in the relative clause will never be overt, as Marshallese (which *does* have resumptive pronouns) never has an overt *pro* in an argument position. See Gagnon and Wellwood (2008) for more details.

Note that we follow independently motivated assumptions that the copular verb (here represented as BE) in the matrix clause is phonologically null[8], as well as C$^o$ and the functional material of the embedded clause[9].

Similar to Willson (2005)'s analysis, we posit two main movements: First, the attraction of a [Foc]-bearing XP to spec-FP; second, attraction of a [Pol]-bearing YP to spec-IntP. The next two sections detail how this analysis generates the grammatical surface positions for *ke*, and how it blocks the ungrammatical positions.

## 3.1. Affirmative yes/no interrogatives

As noted in the Introduction, *ke* may surface in a number of positions following the Tense marker. These grammatical surface positions are reproduced in (18) for convenience.

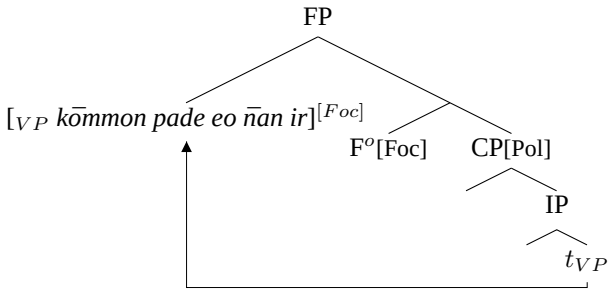
(18) ***(*ke)*** *Herman* ***(*ke)*** *e-n* ***(ke)*** *kōmmon* ***(ke)*** *pade eo*
(Q) Herman (Q) IIIsg-T[SUBJ] (Q) make (Q) party the(sg)
***(ke)*** *n̄an ir* ***(ke)****?*
(Q) for IIIpl (Q)
'Should Herman throw the party for them?'

To illustrate how our proposal generates the grammatical surface positions for *ke*, we derive the word order where *ke* occurs between Tense and VP, that shown in (19).

(19) *Herman e-n* ***ke*** *kōmmon pade eo n̄an ir?*

In this example, the VP *kōmmon pade eo n̄an ir* bears [Foc], and so moves to spec-FP once F$^o$ is merged.

(20)

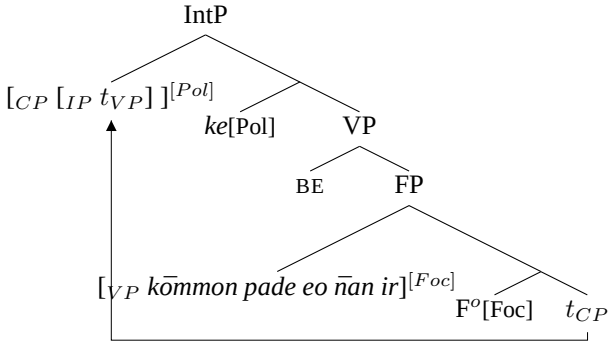



Next, the copula and *ke* (Int$^o$) are merged, followed by movement of the remnant CP to spec-IntP.

[8]Consider the lack of overt BE in Marshallese copular constructions in general, e.g. *Kabua iroj* [Kabua chief], 'Kabua is a chief' (Zewen, 1977, 82).

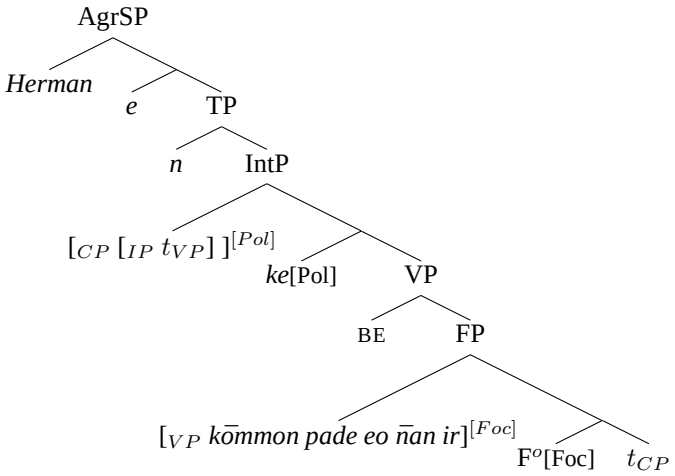
[9]C$^o$ may be null in relative clause constructions, or (optionally) be filled by *me* (Willson, pers. comm.).

(21)




Finally, the remaining lexical items are merged.

(22)




The result is a grammatical surface position for *ke* shown in (19). We derive all other grammatical positions for *ke* by the same process, depending on which phrase in the embedded clause bears [Foc].

### 3.1.1 Impossible structures with *ke*

In Section 2.2.1 we saw how Willson's analysis generates a string in which AgrSP precedes *ke*, and the subject-DP (*Herman*) follows *ke*. Our proposal does not face this problem as the semantically and phonologically 'contentful' subject is base-generated in the matrix clause, and so *always* precedes *ke*.

The other ungrammatical positions for *ke* are also ruled out, since only phrases bearing [Pol] may move to spec-IntP, and [Pol]-bearing phrases are limited to CP and NegP. Clearly, this will always be CP in affirmative contexts. This proposal thus contrasts with Willson's Focus/Topic-driven analysis, since any phrase (more or less unrestrictedly) may bear [Foc]/[Top]. Hence, the restrictions on *ke*'s distribution follow straightforwardly from our analysis.

## 3.2. Negative yes/no interrogatives

As discussed, the only grammatical surface position for *ke* in negative contexts is sentence-final. This distribution is reproduced in (23) below.

(23) ***(*ke)*** *Kwo-j* ***(*ke)*** *jab* ***(*ke)*** *etal* ***(*ke)*** *n̄an Rita* ***(ke)****?*
(*Q) IIsg-T[PRES] (*Q) NEG (*Q) go (*Q) to Rita (Q)
'Aren't you going to Rita?'

In the following, we show how the sole grammatical surface position for *ke* is generated, and how the other (ungrammatical) positions are ruled out.

### 3.2.1 Possible structures - *ke* and negation

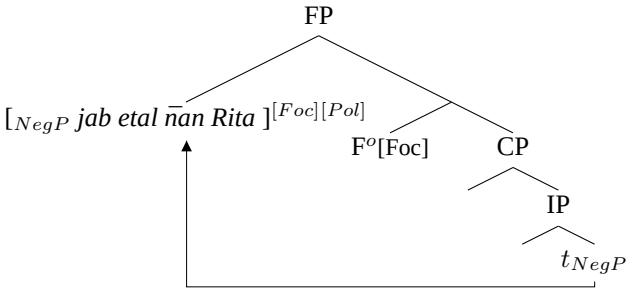
We follow Willson in assuming that *jab* (Neg$^o$) inherently bears [Foc], and so (also assuming a relativized minimality constraint) the first phrase that may raise to spec-FP is NegP[10].

The sentence we derive is as in (24).

(24) *Kwo-j* ***jab*** *etal n̄an Rita* ***ke****?*

Following the construction of the embedded CP, FP (sensitive to [Foc] features) is merged, and the nearest [Foc]-bearing phrase raises to the specifier of FP.

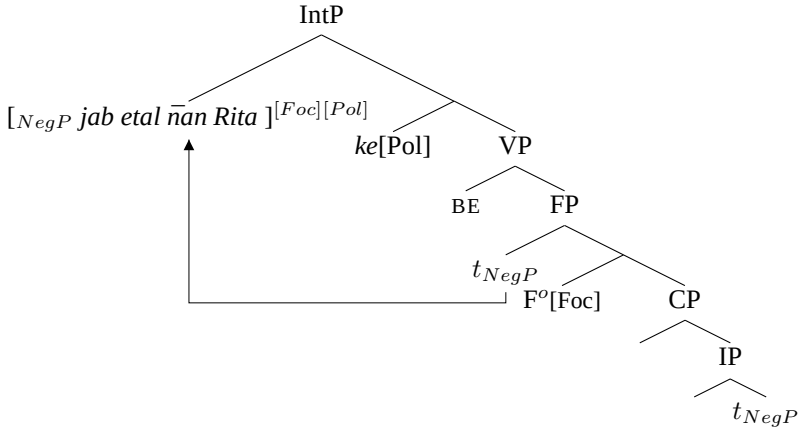
(25)




Next, the copula and *ke* are merged. This is followed by movement of the closest [Pol]-bearing phrase. Given NegP's position higher than the other [Pol]-bearer, CP, it is NegP which raises to spec-IntP.

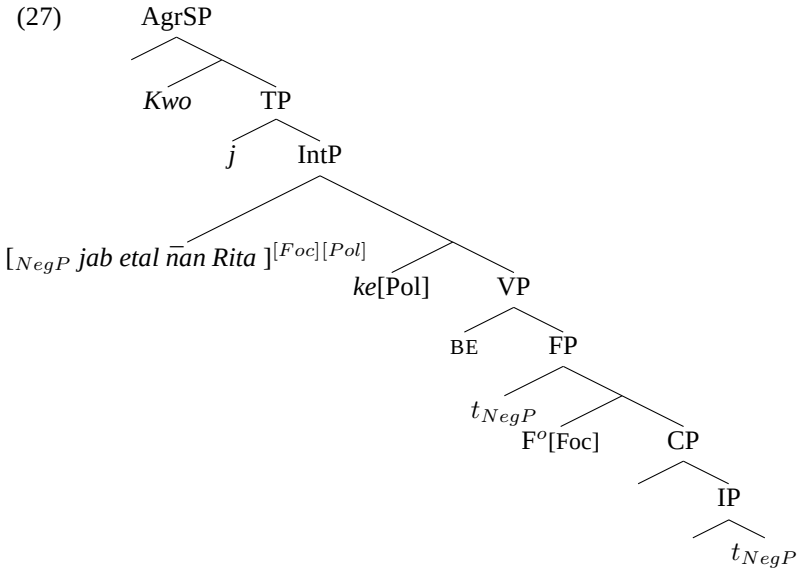
[10]Note that any lower phrase may also bear an interpretable [Foc] feature, but it will have no syntactic consequences. Those phrases which we assume may not bear [Foc] are those headed by phonologically null material, as well as TP. In this last case, the assumption is that the derivation will crash for independent reasons if TP is topicalised or focalised. That is, the clitic AgrS$^o$ may presumably only be hosted by certain categories, which do not include Int$^o$.

(26)




As we saw above in Section 3.1, the remaining lexical items are merged.

(27)




The result is the grammatical string in (24).

### 3.2.2 Impossible structures - *ke* and negation

In Section 2.2.2, we derived the order AgrSP ⟩ *ke* ⟩ NegP using Willson's system[11].

Our proposal rules out such a derivation, as raising NegP to spec-FP ensures that NegP is 'closer' to *ke* than the other polarity phrase, CP. Raising CP to satisfy [Pol] results in a relativized minimality violation. As indicated, restrictions on the question particle's distribution follow from the fact that only a limited number of phrases may bear [Pol].

[11]We also derived *NegP ⟩ *ke* ⟩ Subject, but clearly this is underivable under our analysis, for reasons noted in section 3.1.1.

# 4. Conclusion

We have shown how the distribution of the question particle *ke* in Marshallese can be accounted for by positing a middlefield interrogation projection, which is sensitive to a feature which we label [Polarity]. The analysis posits a cleft-like construction for yes/no interrogatives, and allows us to generate all and only the grammatical sentences with *ke* in Marshallese. The previous analysis of such structures, that proposed in Willson (2005), is able to generate the grammatical positions but not to block the ungrammatical positions. However, we hope to have shown that our analysis agrees in spirit with that of Willson, in that we adopt a remnant movement analysis and make use of a relativized minimality constraint. These two powerful grammatical principles facilitate an accounting of *ke*'s distribution which, otherwise, appears quite opaque.

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