

Island violations in Mende*

Jason D. Smith

Michigan State University
smit2922@msu.edu

Island extraction in Mende, an SOV Mande language spoken in Sierra Leone, does not neatly align with well-known analyses, such as McCloskey's (2006) work on Irish or Koopman's (1982) work on Vata. Quantifier float and reconstruction effects, such as ideophones and Principle A binding, suggest that a movement analysis best accounts for the presence of left-peripheral wh-words and focus constructions in Mende. Movement out of wh- and left branch weak islands is permitted, while movement out of adjunct clauses and coordinate structures is prohibited. Intriguingly, relative clause and CNPC islands permit extraction only when they modify the subject.

1. Introduction

Mende, an SOV Mande language spoken in Sierra Leone, uses both in-situ and left-periphery strategies in marking focus and question formation (1). In this paper I argue that movement, not base-generation, best accounts for the surfacing of wh-words and focused constituents in the left periphery. I further show that movement out of island constructions in Mende muddies the waters of previous analyses (c.f. Koopman (1982), McCloskey (2006)). This is the first work to consider wh-movement and island constraints in Mende.

- (1) a. Peter keyεpε-i-sia gole-nga
Peter rumor-DEF-PL spread-PRF
'Peter has spread the rumors.'¹
- b. Peter **keyεpε-i-sia** **lo** gole-nga
Peter rumor-DEF-PL FOC spread-PRF
'Peter has spread THE RUMORS.'

* I would like to thank my language consultants Dr. Saidu Challaly (Njala University) and Mr. Lawrence Nyango in Bo, Sierra Leone. Thank you as well to my advisors Dr. Deo Ngonyani (Michigan State University) and Dr. Harold Torrence (UCLA). Thank you as well to the MSU Linguistics Program, College of Arts and Letters, and Graduate School for funding this research.

¹ Abbreviations

C	complementizer	PL	plural	STAT	stative
DEF	definite	PRF	perfect		
FOC	focus	SG	singular		

- c. **kεyεpε-i-sia mia** Peter *ti* gøle-nga
 rumor-DEF-PL FOC Peter 3PL spread-PRF
 ‘It is the rumors that Peter has spread.’

(1a) is a canonical Mende sentence with SOV word order, while in (1b), the direct object *keyepeisia* ‘the rumors’ is marked by Mende’s in-situ focus marker *lɔ*. In (1c) the direct object surfaces in the left periphery, where it is focused by the focus-marker *mia*, with the resumptive 3rd person plural pronoun *ti* surfacing in the canonical direct object position. In both cases the focus-marker immediately follows the entity that it focuses.

Wh-questions appear in the same position as the focused constituent. (2a) is an in-situ focus question in which the wh-word *gbe* ‘what’ is marked by the plural marker *nga* and is focused by *-a*, an allomorph of the focus marker *lɔ*. In (2b) the wh-word *gbe* ‘what’ surfaces in the left periphery where it is pluralized by *nga* and focused by *mia*. A resumptive pronoun again appears in the canonical direct object position.

- (2) a. Peter **gbe-nga-a** gøle-nga
 Peter what-PL-FOC spread-PRF
 ‘What has Peter spread?’
- b. **gbe-nga mia** Peter *ti* gøle-nga
 what-PL FOC Peter 3PL spread-PRF
 ‘What is it that Peter has spread.’

In this paper I consider left-peripheral focus constructions with resumptives, such as (1c) and (2b). According to the previous approaches, these constructions could be derived either via base-generation of the focused constituent (McCloskey 1979, 2002 for Irish) or via wh-movement (Koopman 1982, Koopman and Sportiche 1982, 1986 for Vata). These approaches make different predictions, as evidenced, for example, in reconstruction effects, which occur when a constituent (e.g. a wh-word) behaves as if it were in a lower position, indicating that it has raised from that position. I argue that the movement analysis better accounts for the Mende facts, based on quantifier float, resumptive pronouns which amnesty movement out of some islands, and reconstruction effects.

Mende manifests three types of islands: *weak islands* from which movement is permitted, *strong islands* from which movement is prohibited, and, intriguingly, *mixed islands*, in which the possibility of movement is conditioned by the position of the island. I argue that when movement is permitted, resumptive pronouns act like traces, which I show via reconstruction effects. In this regard, Mende’s mixed island data do not line up neatly with McCloskey’s (2006) analysis of Irish, which shows that resumptive pronouns can amnesty violations. Nor does it align with Koopman’s (1982) work on Vata showing resumptive pronouns that act like

traces. Instead, Mende joins the list of languages which do not follow this neat paradigm (c.f. Krachi: Torrence and Kandybowicz (2014), Asante Twi: Korash and Murphy (2019), and Igbo: Georgi and Amechi (2020)).

The remainder of this paper is structured as follows. In Section 2, I present quantifier float and reconstruction [data](#) to argue for a movement analysis to account for left peripheral focus and wh-constructions in Mende. In Section 3, I look at island data considering contexts from which movement is permitted, prohibited, and positionally dependent. Section 4 is a conclusion.

2. Movement in Mende

2.1. Previous Analyses on wh-words

Looking again at (2b), we are faced with two alternatives. Either the wh-word *gbe-nga* ‘what (PL)’ is base-generated or it has moved into that position. The argument for base-generation is set out in Chomsky (1977) and is demonstrated with the English data in (3).

- (3) It’s **Bill**_{*i*} [_{CP} *Op*_{*i*} that I think *t*_{*i*} [(that) he saw *t*_{*i*}]]

This analysis suggests that the Operator moves from its base position through [Spec, CP] of the most embedded clause into [Spec, CP] of the next embedded clause. It further argues that *Bill* has merged into its position in the clause. As a result, there can be no reconstruction effects of the clefted constituent (*Bill*) into the embedded clauses, as it was never there.

This contrasts with the movement analysis set out in Rizzi (1997, 2001).

- (4) It’s **Bill**_{*i*} [_{CP} that I think *t*_{*i*} [(that) you saw *t*_{*i*}]]

This analysis also proposes movement, but, crucially, it is the clefted item *Bill* that has moved from its base-position through [Spec, CP] of both embedded clauses into its surface position. Since *Bill* began in a lower position, it is able to reconstruct back into that lower position.

2.2. Evidence for Movement in Mende

Turning next to the Mende data, I will show data from quantifier float and reconstruction effects to argue for a movement analysis of wh-words to the left periphery in the language.

Evidence of movement in Mende can be seen in quantifier float (QF), which I first illustrate in English. In (5a) the DP ‘all the children’, consisting of the

DP ‘the children’ and the quantifier ‘all’, merges underlingly as the subject of the verb (5b). In deriving the surface structure of the sentence, either the whole DP can raise, as in (5c), or the quantifier can be floated (stranded / left behind) in its initial position, while the rest of the DP has raised, as in (5d).

- (5) a. surface structure
 all the children will sing
- b. underlying structure
 will [VP [DP all [DP the children]] sing]
- c. “Big” DP moves
 [DP all [DP the children]] will [VP [DP all [DP the children]] sing]
- d. “Small” DP moves / Quantifier Float (QF)
 [DP the children] will [VP [DP all [DP the children]] sing]

Given that only leftward movement is permitted, quantifier float is significant in showing positions through which the DP has transited (Sportiche 1998, Fitzpatrick 2006). That is, if a quantifier can be floated in position X , then the associated DP must have been in position X at some point in the derivation.

A similar behavior is observed in Mende (6).

- (6) a. Peter **sele-i-sia** me-nga
 Peter banana-DEF-PL eat-PRF
 ‘Peter has eaten the bananas.’
- b. Peter **sele-i-sia** *kpele* me-nga
 Peter banana-DEF-PL all eat-PRF
 ‘Peter has eaten all the bananas.’
- c. **sele-i-sia** {*kpele*} mia Peter {*kpele*} me-nga
 banana-DEF-PL all FOC Peter all eat-PRF
 ‘Peter has eaten ALL THE BANANAS.’

(6a) is a canonical Mende sentence with the direct object *seleisia* ‘the bananas’ marked in bold. In (6b) the direct object is quantified by *kpele* ‘all’. The crucial example is (6c), which shows that when the direct object surfaces in the left periphery, the quantifier can either surface with it, or it can remain in its canonical position. If the direct object can be fronted and the quantifier can remain in its canonical position, we need a story for how the two were separated, and movement is the most natural explanation: the direct object begins in its canonical position (6a-b), but it moves into the left periphery in (6c), stranding its quantifier.

I look next at two cases of reconstruction effects, that is contexts in which a constituent surfaces in one position in the clause, but behaves as if it were in another position. The first case uses ideophones. Ideophones, which have been described as vivid sensory words, are fairly common in African languages (Dingemanse 2018, Downing 2019), and they are very similar to adverbs. Crucial to this analysis, there is a very strong selectional relationship between the ideophone and the verb. We find that ideophones typically only appear with just one verb, as seen for the ideophone *kpe* ‘clean through’ in (7) which can appear with the verb *lewe* ‘cut’ in (7b), but not with *bɔ* ‘shoot’ in (7d).

- (7) a. Peter nesi-i lewe-nga
 Peter pineapple-DEF.SG cut-PRF
 ‘Peter has cut the pineapple.’
- b. Peter nesi-i lewe-nga **kpe**
 Peter pineapple-DEF.SG cut-PRF clean.through
 ‘Peter has cut the pineapple clean through.’
- c. Peter ndambe-i bɔ-nga
 Peter crocodile-DEF.SG shoot-PRF
 ‘Peter has shot the crocodile.’
- d. *Peter ndambe-i bɔ-ngs **kpe**
 Peter crocodile-DEF.SG shoot-PRF clean.through
 ‘Peter has shot the crocodile clean through.’

That *kpe* ‘clean through’ can appear with *lewe* ‘cut’ but not *bɔ* ‘shoot’ points to the strong connection between an ideophone and its verb. Canonically the ideophone directly follows the verb, as in (7b). The data in (8) with the ideophone *fikifiki* ‘with a sawing motion’ shows a reconstruction effect as it surfaces in the left periphery but is interpreted as if it were in its base position.

- (8) a. Peter hueŋ lewe-nga
 Peter meat cut-PRF
 ‘Peter has cut the meat.’
- b. Peter hueŋ lewe-nga **fikifiki**
 Peter meat cut-PRF sawing.motion
 ‘Peter has cut the meat with a sawing motion.’
- c. **fikifiki** mia Peter hueŋ lewe-nga
 sawing.motion FOC Peter meat cut-PRF
 ‘It is with a sawing motion that Peter has cut the meat.’

The ideophone *fikifiki* typically appears in a position immediately following the verb, as in (8b). Interestingly, however, it can also surface in the left-periphery where it is focus-marked by *mia* (8c). In this position, it is separated from the verb, yet it reconstructs, acting as if it were still in a post-verbal position. The most natural analysis is that it has moved from its base position to the left periphery.

A second context in which we can see reconstruction effects is in Principle A binding. Principle A states that an anaphor must be bound in its local domain (Chomsky 1986). Consider the data in (9).

- (9) a. *ndupu-i-sia ti ngi-nga ke [ta kpe kɔli-i gaa-nga]
 child-DEF-PL 3PL think-STAT C 3SG self book-DEF.SG read-PRF
 ‘The children think that him/her self has read the book.’
 Intended: ‘The children think that s/he has read the book.’
- b. Mary ta kpe lɔ-nga meme hun
 Mary 3SG self see-PRF mirror in
 ‘Mary has seen herself in the mirror.’
- c. ndupu-i-sia ti hunge-nga ke [Mary_i [ta kpe]]_i
 child-DEF-PL 3PL explain-PRF C Mary 3SG self
 lɔ-nga meme hun
 see-PRF mirror in
 ‘The children have explained that Mary has seen herself in the mirror.’
- d. [ta kpe]_i mia ndupu-i-sia ti hunge-nga ke Mary_i
 3SG self FOC child-DEF-PL 3PL explain-PRF C Mary
 ngi_i lɔ-nga meme hun
 3SG see-PRF mirror in
 ‘It is herself that the children have explained that Mary has seen in the mirror.’

In (9a) we have a plural subject *ndupuisia* ‘the children’ with the obligatory 3rd person plural subject marker *ti*, followed by the verb *ngi* ‘think’ with its CP complement. The subject of the embedded phrase is the 3rd person singular reflexive *ta kpe* ‘him/her self’. The embedded subject is not bound, violating Principle A, and the sentence is ungrammatical. This contrasts with (9b) where the singular subject *Mary* binds the reflexive object *ta kpe* ‘him/her self’, according to Principle A, and the sentence is grammatical. In (9c) the clause from (9b) is embedded in a matrix clause, and the sentence remains grammatical as the anaphor is bound in its domain. The crucial example is (9d) in which the reflexive *ta kpe* ‘him/her self’ surfaces in the left periphery, where it is not bound, yet the sentence is grammatical. This can only result if the reflexive surfacing in the left periphery is interpreted as if it were in the embedded clause where it is co-indexed with and bound

by *Mary*. In effect, the reflexive surfaces in a high position, but it behaves as if it were in a lower position, showing that it has moved from its base position in the embedded clause to its surface position in the left periphery.

3. Weak, Strong, and Mixed Islands

Having demonstrated that the most reasonable analysis for left-peripheral wh- and focus constructions is movement, I next consider [island phenomena in Mende](#). As noted above, there are three categories of islands in Mende. Extraction is possible out of weak islands, prohibited out of strong islands, while for mixed islands, extraction is permitted only when the island is found in a pre-verbal position.

3.1. Weak Islands

I turn first to weak islands. The data in (10) shows that extraction is possible out of left-branch islands. (10a) has canonical SOV word order with a possessive construction *ndupuisia ti nikeisia* ‘the children’s cows’ as the direct object. [In Mende](#), genitive phrases with a plural possessor obligatorily require a possessive marker, that is the 3rd person plural marker *ti* in this construction. (10b) shows an in-situ construction, [while](#) (10c) shows that the wh-word *ye-ni* ‘who (PL)’ can move out of the left-branch into the left peripheral focus-position. The plural marker *ti* remains in the pre-movement position, and it is unclear whether it functions as a resumptive pronoun in this context.

- (10) a. Peter [ndupu-i-sia ti nike-i-sia] yeya-nga
 Peter child-DEF-PL 3PL cow-DEF-PL buy-PRF
 ‘Peter has bought the children’s cows.’
- b. Peter [ye-ni ti nike-i-sia] yeya-nga
 Peter who-PL 3PL cow-DEF-PL buy-PRF
 ‘Peter has bought whose cows?’
- c. **ye-ni** {**ti*} mia Peter [*ti* nike-i-sia] yeya-nga
 who 3PL FOC Peter 3PL cow-DEF-PL buy-PRF
 ‘Whose cows has Peter bought?’

Wh-islands are another instance of weak islands. In (11), the matrix verb *ngi* ‘think’ takes a CP clausal complement that is introduced by *ina* ‘if/whether’. In (11a) the embedded question has canonical SOVX word order, while in (11b) the direct object of the embedded question *nikeisia* ‘the cows’ is transformed into the wh-word *gbe-nga* ‘what (PL)’ in an in-situ focus construction. The sentence in (11c) shows the wh-word has moved to the left periphery where it is focused by *mia*, with the third person

plural resumptive pronoun *ti* remaining in its pre-movement position. As such, we see that the wh-word is able to escape the wh-island, moving to the left periphery.

- (11)a. Peter ngi-ngo [ina Mary **nike-i-sia** majia-nga ha]
 Peter think-STAT if Mary cow-DEF-PL sell-PRF today
 'Peter wonders if Mary has sold the cows today.'
- b. Peter ngi-ngo [ina Mary **gbe-nga-a** majia-nga ha]
 Peter think-STAT if Mary what-PL-FOC sell-PRF today
 'What does Peter wonder if Mary has sold (them) today?'
- c. **gbe-nga** mia Peter ngi-ngo [ina Mary *ti* majia-nga ha]
 what-PL FOC Peter think-STAT if Mary 3PL sell-PRF today
 'What does Peter wonder if Mary has sold (them) today?'

3.2. Strong Islands

While movement is permitted out of left-branch and wh-islands [in Mende](#), there are two strong islands from which movement is always blocked: adjunct clauses (12) and coordinated phrases (13). The following example shows that movement out of an adjunct clause leads to ungrammaticality. In (12a) we have a matrix clause and a clausal adjunct. The targeted constituent for movement is the object of the adjunct clause *nikeisia* 'the cows.' As shown in (12b), it is possible to have an in-situ focus construction in the adjunct clause. Movement out of the adjunct island is prohibited, as seen in (12c) where the wh-word *gbe-nga* 'what (PL)' cannot move to the left periphery, even with the resumptive pronoun *ti* in its canonical position.

- (12)a. Peter kule-i-sia wua-nga [nalegwoma Mary
 Peter cloth-DEF-PL wash-PRF after Mary
nike-i-sia *gbe-nga*]
 cow-DEF-PL chase-PRF
 'Peter washed the clothes after Mary has chased the cows.'
- b. Peter kule-i-sia wua-nga [nalegwoma Mary
 Peter cloth-DEF-PL wash-PRF after Mary
gbe-nga-a *gbe-nga*]
 what-PL-FOC chase-PRF
 'Peter washed the clothes after Mary has chased what?'
 (answer: the cows)

- c. ***gbε-nga** mia Peter kule-i-sia wua-nga [nalegwoma
 what-PL FOC Peter cloth-DEF-PL wash-PRF after
 Maryti **gbε-nga**]
 Mary3PL chase-PRF
 'Peter washed the clothes after Mary chased what?'
 (answer: the cows)

Movement out of coordinated structures is also prohibited. The sentences in (13) include a pre-verbal coordinated direct object *nikeisia ke yiisia* 'the cows and the goats.' The sentences in (13b-c) show that it is possible to replace either of the conjuncts with the wh-word *gbε-nga* 'what (PL)' in an in-situ construction. (13d-e) show, however, that the wh-word cannot move out of the coordinate structure island, even with the resumptive pronoun in its place. The data in (13f) shows that *gbε-nga* 'what (PL)' can replace the entire coordinated structure and move to the left periphery in across the board (ATB) movement, leaving the resumptive pronoun *ti* in its place.

- (13) a. Peter [nike-i-sia ke yi-i-sia] majia-nga
 Peter cow-DEF-PL and goat-DEF-PL sell-PRF
 'Peter has sold the cows and goats.'
- b. Peter [**gbε-nga-a** ke yi-i-sia] majia-nga
 Peter what-PL-FOC and goat-DEF-PL sell-PRF
 'Peter has sold what and the goats.'
- c. Peter [nike-i-sia ke **gbε-nga-a**] majia-nga
 Peter cow-DEF-PL and what-PL-FOC sell-PRF
 'Peter has sold the cows and what.'
- d. ***gbε-nga** mia Peter [*ti* ke yi-i-sia] majia-nga
 what-PL FOC Peter 3PL and goat-DEF-PL sell-PRF
 'Peter has sold what and the goats?'
- e. ***gbε-nga** mia Peter [nike-i-sia ke *ti*] majia-nga
 what-PL FOC Peter cow-DEF-PL and 3PL sell-PRF
 'Peter has sold the cows and what?'
- f. **gbε-nga** mia Peter [*ti*] majia-nga
 what-PL FOC Peter 3PL sell-PRF
 'What has Peter sold?'

3.3. Mixed Islands

To this point we have seen that movement is permitted out of weak islands and prohibited out of some strong islands. Intriguingly, there is a third class of islands in Mende, with movement out of them being conditioned by their

position in the clause. The following data show that movement is possible out of subject-modifying relative clauses and complex noun phrases, while it is prohibited out of object-modifying relative clauses and complex DPs. The data in (14) shows a subject modifying relative clause. The matrix subject consists of the relative clause head *ndupui nasia* ‘those children’ and the modifying relative clause *ti manguisia golima* ‘who will pick the mangoes.’ The third person plural subject marker *ti* follows the matrix subject. The subject marker is followed by the matrix direct object *kpakpawulii* ‘the ladder’ and the verb *yeya* ‘buy.’ In this example, the direct object of the relative clause is targeted for movement. (14b) indicates that the direct object can be transformed into a wh-word *gbenga* ‘what (PL)’ and focused in-situ within the relative clause, while (14c) shows that the wh-word, which began as the relative clause direct object can move to the matrix left periphery, leaving a resumptive pronoun in its canonical position.

- (14) a. ndupu-i na-sia [ti **mangu-i-sia** goli-ma] ti
 child-DEF that-PL 3PL mango-DEF-PL pick-FUT 3PL
kpakpawuli-i yeya-nga
 ladder-DEF.SG buy-PRF
 ‘Those children who will pick the mangoes have bought a ladder.’
- b. ndupu-i na-sia [ti **gbε-nga-a** goli-ma] ti
 child-DEF that-PL 3PL what-PL-FOC pick-FUT 3PL
kpakpawuli-i yeya-nga
 ladder-DEF.SG buy-PRF
 ‘Those children who will pick what have bought a ladder.’
 (answer: the mangoes)
- c. **gbε-nga** mia ndupu-i na-sia [ti *ti* goli-ma] ti
 what-PL FOC child-DEF that-PL 3PL 3PL pick-FUT 3PL
kpakpawuli-i yeya-nga
 ladder-DEF.SG buy-PRF
 ‘What is it those children who will pick (them) have bought a ladder? (answer: the mangoes)

While movement out of subject-modifying relative clauses is permitted, it is blocked for object-modifying relative clauses. In (15) we see that the relative clause head *kolii* ‘the leopard’ has raised from its position as the subject of the relative clause, moving into Mende’s canonical direct object position above the verb. The CP component of the relative clause, however, remains stranded in a post-verbal position. In (15b) the direct object of the relative clause *yiiisia* ‘the goats’ is transformed into the wh-word *gbenga* ‘what (PL)’ and focused in-situ. In (15c) the sentence is ungrammatical when the relative clause wh-word direct object moves into the matrix left-

periphery, even if a resumptive pronoun surfaces in its pre-movement position.

- (15) a. Mary koli-i lo-nga [i yii-i-sia wa-nga]
 Mary leopard-DEF.SG see-PRF 3SG goat-DEF-PL kill-PRF
 ‘Mary saw the leopard that has killed the goats.’
- b. Mary koli-i lo-nga [i gbε-nga-a wa-nga]
 Mary leopard-DEF.SG see-PRF 3SG what-PL-FOC kill-PRF
 ‘Mary saw the leopard that has killed what?’
- c. *gbεnγa mia Mary koli-i lo-nga [i ti wa-nga]
 what-PL FOC Mary leopard-DEF.SG see-PRF 3SG 3PL kill-PRF
 ‘What is it that the leopard that Mary has seen has disturbed?’
 ≈ Which x, Mary saw the leopard that disturbed x

Complex noun phrases pattern similarly [to relative clauses](#). In (16a), the subject of the sentence is the DP *keyepei* ‘the rumor’ and the CP that modifies it *ke Mary nikeisia majinga* ‘that Mary has sold the cow’. The object inside of the modifying CP *nikeisia* ‘the cows’ is targeted for movement. In (16b) the object is transformed into a wh-word *gbεnγa* ‘what (PL)’ and is focused in-situ, while in (16c) the wh-word moves out of the island to the clausal left periphery with the resumptive 3rd person plural subject marker *ti* surfacing in its pre-movement position.

- (16) a. keyepe-i [ke Mary nike-i-sia majia-nga] nya
 rumor-DEF.SG C Mary cow-DEF-PL sell-PRF 1SG
 lii nyani-nga
 heart spoil-PRF
 ‘The rumor that Mary sold the cows has saddened me.’
- b. keyepe-i [ke Mary gbε-nga-a majia-nga] nya
 rumor-DEF.SG C Mary what-PL-FOC sell-PRF 1SG
 lii nyani-nga
 heart spoil-PST-LC
 ‘The rumor that Mary sold what has saddened me.’
- c. gbε-nga mia keyepe-i [ke Mary ti majia-nga] nya
 what-PL FOC rumor-DEF.SG C Mary 3PL sell-PRF 1SG
 lii nyani-nga
 heart spoil-PRF
 ‘What is it that there is a rumor that Mary sold (them) that
 saddened me?’

Similar to relative clauses, movement is prohibited out of an object-modifying CP, as seen in (17). As is the case in relative clause constructions, the DP raises into the canonical direct object position, stranding its CP

modifier in a post-verbal position. (17b) shows the in-situ construction, while in (17c), we see that it is ungrammatical for the wh-word to move out of the CNP island into the left periphery.

- (17) a. Peter keyεpe-i gole-nga [kε Mary **nike-i-sia** majia-nga]
 Peter rumor-DEF.SG spread-PRF C Mary cow-DEF-PL sell-PRF
 'Peter spread the rumor that Mary has sold the cows.'
- b. Peter keyεpe-i gole-nga [kε Mary **gbε-nga-a**
 Peter rumor-DEF.SG spread-PRF C Mary what-PL-FOC
 majia-nga]
 sell-PRF
 'Peter has spread the rumor that Mary has sold what.'
- c. ***gbε-nga** mia Peter keyεpe-i gole-nga [kε Mary
 what-PL FOC Peter rumor-DEF.SG spread-PRF C Mary
 ti majia-nga]
 3PL sell-PRF
 'What is it that Peter has spread the rumor that Mary has sold
 (them)?'

In this section, I have shown three types of islands in Mende. Movement is possible out of weak islands, including left-branch and wh-islands and is prohibited from some strong islands, including adjunct clauses and coordinate structures. Movement out of mixed islands depends on their position in the clause. Subject modifying relative clauses and CP complements of DPs permit extraction while their object modifying counterparts do not.

These results are surprising, in light of the analyses proposed by McCloskey and Koopman. It would be expected that resumptive pronouns would either be sensitive or insensitive to islands, or at least distinguish between strong and weak islands. This is the case in Wolof which permits movement out of wh-islands and left-branch constructions, while blocking movement out of adjunct clauses, coordinate structures, complex DPs, and relative clauses (Torrence 2005, 2012). In Mende, however, movement out of relative clauses and CP modifiers of DPs is permitted only when they modify the subject and in no other context. In this regard the strong / weak island distinction seems to play a secondary role to the position of the CP within the broader matrix clause. Alternatively, it may be the fact that A-movement has already occurred out of the CP or that the CP itself is stranded that lead to the prohibition on wh-movement in these constructions.

4. Conclusion

Mende allows both in-situ and left peripheral focus and question constructions. In this paper, I argue that movement best accounts for the presence of wh-words in the left periphery in Mende. Stranded quantifiers and reconstruction effects both indicate that constituents that surface in the left periphery arrived there via movement.

Island data from Mende does not fit neatly into the paradigms that have been proposed. McCloskey (2006:99) claims, “The single most celebrated property of the binding relations that resumptive pronouns enter into is that they show no sensitivity to general constraints on movement”. He argues that resumptive pronouns are not island sensitive and are syntactically active. In contrast, Koopman (1982) shows that resumptive pronouns behave like traces. In Mende resumptives are sometimes island-sensitive (strong islands) and sometimes island-insensitive (weak islands), but it is the third group, that is mixed islands, whose behavior is most surprising. Resumptive pronouns enable wh-extraction when the relative clause or complex DP modify the subject, while not permitting movement when the relative clause or complex DP modify the object. What exactly causes this distinction is a topic for further research.

REFERENCES

- Chomsky, Noam. 1977. On Wh-movement. In P. Culicover, T. Wasow & A. Akmajian (eds.), *Formal Syntax*, 71–132. New York: Academic Press.
- Chomsky, Noam. 1986. *Knowledge of Language: Its Nature, Origin and Use*, New York, NY: Praeger.
- Digemanse, Mark. 2018. Redrawing the margins of language: Lessons from research on ideophones. *Glossa: a journal of general linguistics*, 3(1).
- Downing, Laura. 2019. Tumbuka prosody: Between tone and stress. In Emily Clem, Peter Jenks & Hannah Sande (eds.), *Theory and description in African Linguistics: Selected papers from the 47th Annual Conference on African Linguistics*, 75–94. Berlin: Language Science Press.
- Eberhard, David. M., Gary F. Simons, & Charles D. Fennig. (eds.). 2020. *Ethnologue: Languages of the World*. Twenty-third edition. Dallas, Texas: SIL International.
- Fitzpatrick, Justin. M. 2006. *The syntactic and semantic roots of floating quantification*. Cambridge, MA: MIT Dissertation.
- Georgi, Doreen, and Mary Amaechi. 2020. Resumption and islandhood in Igbo. In *Proceedings of the 50th Annual Meeting of the North East Linguistic Society*. pp. 261–274. GLSA, Amherst, MA.
- Koopman, Hilda. 1982. Control from COMP and comparative syntax. *Linguistic Review* 2(4). 365–391. Reprinted in Koopman (2000): 126–150.
- Koopman, Hilda & Dominique Sportiche. 1982. Variables and the Bijection Principle. *The Linguistic Review* 2(2). 136–160.

- Koopman, Hilda & Dominique Sportiche. 1986. A note on long extraction in Vata and the ECP. *Natural Language and Linguistic Theory* 4(3). 357–374.
- Korash, Sampson and Andrew Murphy. 2019. Islands and Resumption in Asante Twi. In Richard Stockwell, et al (eds.) *Proceedings of the 36th West Coast Conference on Formal Linguistics*. 226-236. Somerville, MA: Cascadilla Proceedings Project.
- McCloskey, James. 1979. *Transformational Syntax and Model Theoretic Semantics: Case-Study in Modern Irish*. Dordrecht: Reidel.
- McCloskey, James. 2002. Resumption, successive cyclicity, and the locality of operations. In Epstein, Samuel. & T. Seely (eds.), *Derivation and Explanation in the Minimalist Program*. 184–226. Oxford: Blackwell
- McCloskey, James. 2006. Resumption. In Everaert, Martin and Henk van Riemsdijk (eds.) *The Blackwell Companion to Syntax*. Volume IV: 94-117. Oxford: Blackwell.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegmen (ed.) *Elements of Grammar*. 281-337. Dordrecht: Kluwer Publications.
- Rizzi, Luigi. 2001. On the position “Int (errogative)” in the left periphery of the clause. *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*, 59. 287-296. Oxford: Elsevier.
- Sportiche, Dominique. 1988. A theory of floating quantifiers and its corollaries for constituent structure. *Linguistic inquiry*, 19(3). 425-449.
- Torrence, Harold. 2005. A promotion analysis of Wolof relative clauses In *Annual Meeting of the Berkeley Linguistics Society*. 31(2), 107-118.
- Torrence, Harold. 2012. The morpho-syntax of silent wh-expressions in Wolof. *Natural Language & Linguistic Theory*, 30(4), 1147-1184.
- Torrence, Harold. and Jason Kandybowicz. 2014. Wh- question formation in Krachi. *Journal of African Languages and Linguistics* 36(2), 253-285.