THE MAKUVA ENIGMA: LOCATING A HIDDEN LANGUAGE IN EAST TIMOR¹

AONE VAN ENGELENHOVEN

Abstract. The Makuva language is spoken in the tip of the Lautem District in the Republic of East Timor and is known in the literature under several names. Whereas initially classified as a Papuan language, the Austronesian character of its lexicon and grammar was convincingly proven later on. Ever since Ferreira's (1951) contribution, Makuva has been considered to be moribund and to have been replaced by Fataluku, the majority language in the region. This paper intends to 'reconstruct' a grammar sketch and proposes an alternative to Hajek's et al. (2003) finding to reconsider Makuva to be a 'language in coma' rather than being moribund. Instead of being 'pushed aside' by Fataluku, Makuva has rather been 'pushed up' in to the ritual register of Fataluku speakers in the Tutuala subdistrict.

1. INTRODUCTION: HYPOTHESES ABOUT MAKUVA

The new republic of East Timor lies on the eastern half of the island of Timor, which lies at the end of the Minor Sunda Islands Chain on the border of the Indonesian provinces of Nusa Tenggara Timur and Maluku. It contains thirteen districts where sixteen indigenous languages are spoken that belong to two different language families. Twelve of them are Austronesian and the remaining four are so-called 'Non-Autronesian' or 'Papuan'. For an overview of the genetics of these languages, we refer to Hull (1998, 2005). In this paper we want to focus on the 'sixteenth language' of East Timor, which is known in the literature under the names of Loikera (Riedel 1886), Lóvaia or Lóvaia Epulu (as in Ferreira 1951b and Hajek et al. 2003), Maku'a (Sudana et al. 1996) and Makuva (Hull and Branco 2003). The term Loikera or Lokiera is a name in Southwest Malukan mythology that refers to an important port in Timor and from which the ancestors from some clans on Kisar Island originated (cf. footnote 1 in Christensen and Christensen 1992:33). In this paper we will follow the latter authors and use the name Makuva to refer to this language, which is spoken in the Tutuala sub-district in the extreme of East Timor's

¹ This paper and the underlying research has been made possible through a pilot grant from the Endangered Languages Documentation Programme (ELDP ppg 002, 2003) and the Fataluku Language Project 2005-2008 (Grant 256-70-560 in the Endangered Languages Programme, Netherlands Organisation for Scientific Resarch. This paper has been read at the Second Conference on Austronesian Languages and Linguistics, Oxford, June 2-3, 2006. I want to mention special thanks to Justino Valentim for his input for this paper.

RRL, LV, 2, p. 161-181, București, 2010

easternmost district, Lautém. Beside Makuva, three other languages are spoken in this district that are all acknowledged as 'non-Austronesian'. The majority language is Fataluku with five dialects: East (Tutuala and Mehara), Central (Kom, Fuiloru, Home, Souru, Lospalos, Mu'apitine, Lopoloho), Lore dialect, Lautém dialect and Northwest (Maina-Satu, Maina-Dua, Serelau, Baduru). Makalero is mainly spoken in and around Iliomar bordering on Vikeke District. Along the border with Baukau District Makasai dialects are spoken (e.g. Laivai and Luro).

Ferreira (1951a and b) was the first to mention Makuva in an ethnographic note on Tutuala. Capell (1972) was the first to analyze Ferreira's wordlist. Because of the occurrence of nominal endings like -va, -ki and -kia, Capell suggested that Makuva be 'non-Austronesian' like the languages in North Halmahera (Capell 1972:103). Although this feature is not shared by the neighboring "non-Austronesian" language, Fataluku, Capell points out that both languages seem to lack voiced phonemes.

Hull (1998) concludes that Makuva is rather an Austronesian language that is closely related to the Meher language spoken on the island of Kisar off the north coast of East Timor in Southwest Maluku. Hull explains Capell's classification to be caused by complicated sound changes that blurred the Austronesian character of the Makuva lexicon. According to Himmelmann and Hajek (2001:96) Makuva's affiliation to the Austronesian Meher language is confirmed by the fact that both languages have pronominal subject prefixes on their verbs unlike the neighboring Non-Austronesian languages like Fataluku and Makasai.

Sudana *et al.* (1996) are the first to provide a sketch of Makuva grammar based on the model developed by the *Pusat Pembinaan dan Pengembangan Bahasa*², the national language authority of Indonesia. Hull and Branco (2003: 125, note 16) rightly caution against its many erroneous interpretations and consequently incorrect analyses. The latter publication is the first that contains an extensive list containing 969 items in which all previously published and known unpublished material is combined. The authors elaborate Hull's (1998) thesis that Makuva is an Austronesian immigrant language from Kisar Island in Southwest Maluku. By linking the nominal ending -va in Makuva to the generic noun marker -f in the Austronesian Dawan language in West Timor (e.g. Lake 2002:34), Hull and Branco dismiss Capell's "non-Austronesian" hypothesis. Hajek *et al.* (2003) follow Hull's and Branco's that Makuva is closely related to Southwest Malukan Meher by confirming that "[a]part from the lexical similarities, all three languages³ share the same set of unusual set of sound correspondences" (p. 157)⁴.

² "Language Development and Cultivation Centre", nowadays called *Pusat Bahasa* "Language Centre".

That is: Makuva, Meher and Roma, which is spoken on the island with the same name directly north of Kisar Island.

⁴ Their conclusion is based on an unpublished paper by John Hajek (1995) that we have not been able to consult.

Later on, Hull (2004a) acknowledges that Makuva is equally genetically close to Waima'a in the Baukau District as to Meher in Southwest Maluku, because of which he dismisses the previous immigrant hypothesis. Engelenhoven (2009), finally, analyses Makuva as an early offshoot of Proto East Group from which also descended the Kairui-Waima'a-Midiki-Naueti dialect chain on Timor and the Luangic-Kiaric isolects in Southwest Maluku.

In the remainder of this paper we will sketch of Makuva grammar based on our fieldwork notes. By comparing its typology with the surrounding languages on Timor and in Southwest Maluku, we intend to assess the hypotheses above and localize the place of Makuva among its neighbors.

2. PHONOTACTICS AND PHONOLOGY

Makuva has 15 consonants that can be divided in a labial, dental, alveolar, palatal, velar and glottal set: /p, b, m, f, β , t, n, s, z, d, c, $\frac{1}{2}$, 3, j, k, h/.

Capell's (1972) observation that Makuva seems to lack voiced occlusives like Fataluku is contradicted by the presence of a voiced bilabial [b] and alveolar [d]. However, the voiced bilabial occlusive was attested only in a few words like [/ajblçlE], which Capell lists as *aiboleva* 'wood' and Hull and Branco (2003) as *ai* bloheva meaning either 'wood' or 'pillow'. Whereas it is true that the most Fataluku dialects lack an alveolar occlusive, it must be said here that the palatal occlusive [c] in the East, Central and Lorehe dialects corresponds with a retroflex occlusive [f] in the Northwest dialect and the closely related Oirata language on Kisar Island, and with an alveolar [d] in the surrounding isolects. This is exemplified in (1)⁵ by the loan *kuda* 'horse' from local Malay, which itself is an Austronesian language. Its alveolar occlusive survived in all Austronesian languages, except Meher where it shifted to a voiced retroflex as in the Fataluku Northwest dialect.

(1)	Waima'a	Makasai	Fataluku	Oirata	Meher	Makuva	Leti
'horse'	kudo	kuda	kuca	kuÕa	kuÕa	kuÍa	kuÍa

Makuva and Fataluku are the only languages in the region to have a voiceless palatal occlusive [c]. The absence of a palatal and of a velar nasal in Makuva agrees with the inventories in the surrounding Austronesian and non-Austronesian languages (Hull 2004b). Hull (1998) explains this feature of all so-called Austronesian 'A Group' (labeled 'Extra-Ramelaic' by Engelenhoven 2009) languages as a merger into a dental nasal of the PMP velar nasal and the Proto Timoric dental nasal, which itself already derived from an earlier merger of the PMP

⁵ The box contains the non-Austronesian languages.

dental and palatal nasals. Engelenhoven (1995) describes a similar merger for the Southwest Malukan languages.

Makuva shares with all Fataluku dialects the allophonic variation between the palatal glide, the voiced palatal fricative and the voiced dental sibilant: $[j\sim3\sim z]$. Whereas in Fataluku mainly attested between vowels, e.g. [taja, taʒa, taza] 'to sleep', in Makuva this allophony is also attested in initial position with the voiced palatal occlusive that is the palatal glide's allophone in this position, e.g. [jene β a, β

Although the glottal stop occurs in both phyla and both regions, no clear examples have been found in Makuva. The only examples attested were [lo?o]or [lo?u] 'leg'⁷, the demonstrative marker [nɛ?ɛ]⁸ and on the morpheme boundary between vowel-initial verbs that are inflected with a pronominal prefix, e.g. [na?alraj]'he reads' where na- is '3sg'. In the East dialect of Fataluku, the glottal stop is effaced, e.g. [mau] versus Central Dialect [ma?u] 'come'.

Makuva has 6 vowels: /i, u, e, o, a/. Whereas the high and low vowels are straightforward, the articulation of the mid vowels vary between [e, ϵ] and [o, η], respectively. In Luangic-Kisaric these vowels are mainly confined to the penultimate syllable. Their height depends on the height of the vowel in the ultimate syllable (e.g. Meher: /leli/ [leli] 'ivory' versus /lela/ [lela] 'spirit'. In Leti, the open allophones are developing into different phonemes (Engelenhoven 2004). Although higher and lower variants of the mid vowels are also attested in the Central and Lorehe dialects of Fataluku (e.g. Campagnolo 1972), further research is required to determine whether these are allophones of a single front-mid or back-mid vowel phoneme or not. Elicitation sessions with informants suggest that in the Mehara variant final high back vowels are lowered to mid position, e.g. /haku/ [hako] 'stone', whereas final low vowels may be raised to mid front position, e.g. /vera/ [β era, β ere, β ere] 'water.

Elicitation from informants suggests that Makuva does not have a special set of long vowels, which does occur in the neighboring languages. Campagnolo (1972) points at long vowels in monosyllabic morphemes in Fataluku, of which ongoing

⁶ The languages of Wetar on the border of Southwest Maluku and Nusa Tenggara Timur do have [f] but belong to a different subgroup within the A Group of Timoric languages (Hull 1998).

⁷ [lo?u] may very well be analysed as lo 'leg' + a possessive suffix -?u '1sg'.

⁸ This may very well be a Tetum loan: *ne'e*. It has attested only once in Sabil José Branco's recording of the late Sr. Almeida, whose speech also contained phrases in Portuguese and Fataluku.

⁹ Hull (2002, 2005) points at an asymmetry in the articulation of mid vowels in Waima'a and Makasai: [e] and [ç] instead of [o].

research suggests that their length is imposed by bimoraic feet (Stoel 2006). Christensen and Christensen (1992) also report a few monosyllabic morphemes having long in Meher, e.g. nE 'snake' (< PMP *nipay). Leti, on the other hand, has a special set of long vowels that evolved from a *V?V or VpV sequence where the glottal stop and the voiceless bilabial occlusive were effaced (Engelenhoven 2004).

Hull and Branco (2003) analyzed Makuva as an Austronesian language that originated from Southwest Maluku. Their main indication was the apparent shift of PMP *t to k, which is typical for Meher on Kisar Island. This is exemplified in the boxed word 'stone' in (2). Left of Makuva is Waima'a, which is its closest Austronesian relative on Timor (Baukau District); to its right are its Luangic-Kisaric neighbors in Southwest Maluku.

(2)	GLOSS	PMP	Waima'a	Makuva	Meher	Leti
	'fish'	*ikan	ikε	jεnεβa	i?an	i~na
	'afraid'	*takut	t ^h aku	nkaku	mka?uku	mta tu
	'skin'	*kulit	k ^h uli	ulke (brain)	ulkin	ulti
	'stone'	*batu	watu	hako	waku	vatu
	'rain'	*uZan	udo	jçnE	çkçnç	utna
	'road'	*Zalan	dala	j an~E	kal~a	tal~a
	'dog'	*(z)asu	dasu	ato	ahu	asu
	'sea'	*tasik	tasi	kate	kahi	taski

Later, Hull (2004a) re-categorized Makuva rather as a typical Timor language. This is exemplified by the words 'rain' and 'road' directly under the box where it can be seen that Makuva, like for example its fellow-Austronesian neighbor Waima'a, has separate reflexes for *Z (e.g. 'road' *Zalan > + jalan > jalna > jan ° ϵ) and *t (e.g. 'sea' *tasik > kat ϵ), whereas both proto-phonemes merged Luangic-Kisaric. The last two words, 'dog' and 'sea' display a sound shift that is exclusive for Makuva on Timor: *s > t. In Southwest Maluku it has only been attested in Southeast Babar in the Babar archipelago (Steinhauer and Engelenhoven 2006).

Another feature in Makuva, which may point at intensive linguistic contact between the tip of East Timor and Southwest Maluku, is the phenomenon of metathesis. Hull and Branco (2003) point out that this is a common feature in Austronesian languages of Timor. However, metathesis in Makuva occurs between originally final consonants and preceding vowels. This is displayed in (3).

¹⁰ The Leti word for 'sea' in (2) is an adapted Malay loan tasik.

(3)	GLOSS 'swollen' 'order'	Makuva pekna tupna	Meher pekene hçpçnç	Leti petna sçpna	
	'kitchen'	dapru	Íapuru	dapru	
	'heavy'	herka	werke	ppɛrta	
	'vein'	urke	çrkçn	urta	

This type of metathesis occurs exclusively in Southwest Maluku. The boxed word 'kitchen', which is loaned from Malay *dapur*, shows that in Leti and Makuva the final consonant /r/ metathesizes with the preceding vowel /u/. Interestingly, Meher is the only Luangic-Kisaric language where metathesis does not permeate the entire lexicon. Albeit that some words, like 'brain' in (2) above do feature metathesis, specifically in the Northern dialect (Samloy et al. 1998:10) - an echo vowel is added to the final consonant, as in 'kitchen' in (3). However, whereas in Southwest Maluku metathesis is a grammatical device (Engelenhoven 2004, 2003), in Makuva it is petrified in the lexicon.

An exclusive feature in Makuva is the geminating of intervocalic consonants. Also initial occlusives may occur geminated when followed by a liquid. Further research is required to identify the exact rules of this phenomenon¹¹. In a few instances, previous researchers report clusters of different consonants where we found a geminate, as for example the word for 'hear' in the box below.

(4)	'moon'	hune	huņe	
	'pig'	hake	haķe	
	'hear'	tete	tεţε	depta (Sudana et. al 1996)
	'mat'	tetre	teţre	
	'maize'	βεkraj	βεķraj	

3. NOUN PHRASES

3.1. Nominal enclitics and suffixes

Whereas all surrounding languages mark plurality, we have found no indications of it in Makuva. Would Makuva align with the Southwest Malukan typological frame, then the presence of a cardinal numeral or its function as a subject

¹¹ We have attested that stress may shift from the penultimate syllable to the ultimate when encliticised with the NP marker -va, e.g. [hákε \Rightarrow hakέβa \Rightarrow hákεβa].

would block plural marking (Engelenhoven 2004). Hull (2005b), on the other hand, specifically mentions that in the Central Fataluku dialect human NPs may mark plurality on the cardinal numeral:

(5) pala-ocava utu'-atere garden-lord three-PL 'three farmers' (Fataluku)

The =va enclitic was Capell's (1972) main indication to categorize Makuva as a 'non-Austronesian' language, because he analyzed it as a nominal category marker reminiscent of what is found in Papuan languages in North Halmahera (North Maluku). Hull and Branco (2003) link the =va enclitic to the generic nominal suffix —f in Dawan (e.g. Lake 2002), suggesting that /va/ has an allomorph /ve/. Although we acknowledge a segment –ve that occurs usually on nouns, it's co-occurrence with =va indicates that –ve is a morphological marker rather than a syntactic marker. Another morpheme, which Capell (1972) mentions but remains undiscussed in Hull and Branco (2003) is –ke. Again, its co-occurrence with =va suggests that the first mentioned is functionally different from the latter. For the time being the function of these suffixes remains unclear.

(6)	mahek-ve=va	maheke+ve	'woman'
	ler-ve=va	lere+ve	'sun'
	ar-ke=va	ari+ke	'man'
	pip-ke=va	pipi+ke	'goat'

Our fieldwork yielded a blurred picture with respect to possessive constructions. Like all other languages in the region, Makuva conforms to the so-called 'Brandes-line' region where possessor nouns precede possession nouns. Although our informants we very hesitant, two patterns emerged from the elicitations that suggest Makuva had an alienable-inalienable distinction as has been found in Meher. Inalienable nouns are marked for possession by means of a pronominal suffix on the possession noun, whereas alienable possession nouns prepose the possessor noun or precliticize a possessor pronoun. In (7) below Makuva is compared with Meher and Southeast Babar in the Babar archipelago, where it can be seen that the latter does not mark (in)alienability. In Meher alienable nouns have a particular preposed particle on which the possessive suffix is docked.

(7)	Inalienable	Makuva	Meher	SE Babar	Fataluku
	noun: hand	lipe=va	lima-n ¹²	lim	tana
	my hand	lipo- '=oni	Limu-u	lim '-ol	a tana
	your (sg) hand	lipo-m=oni	Limu-m	lim m-ol	e tana

¹² In Meher inalienable nouns are always suffixed.

lipo-n=oni ik' lipo-n=oni am' lipo-n=oni	lima-n lima-d lima-m	lim l-ol lim k-ol lim m-ol	i tana afi tana ini tana
em' lipo-n=oni	lima-m	lim m-ol	i tana
tir' lipo-n=oni	lima-r	lim t-ol	tavar i tana
: lakke=va	nakara	em	le
au lakke=va o lakke=va ar' lakke=va ik' lakke=va am' lakke=va em' lakke=va	ai nu-'u nakara o nu-m nakara ai ni-n nakara ik ni-k nakara ai ni-m nakara mi ni-m nakara	em '-ol em m-ol em l-ol em k-ol em m-ol	a le e le i le afì le ini le i le
	ik' lipo-n=oni am' lipo-n=oni em' lipo-n=oni tir' lipo-n=oni : lakke=va au lakke=va o lakke=va ar' lakke=va ik' lakke=va am' lakke=va	ik' lipo-n=oni am' lipo-n=oni em' lipo-n=oni tir' lipo-n=oni lima-m lima-m lima-r lakke=va nakara au lakke=va o lakke=va ar' lakke=va ik' lakke=va am' lakke=va am' lakke=va ai ni-n nakara ai ni-n nakara ai ni-n nakara ai ni-m nakara ai ni-m nakara ai ni-m nakara	ik' lipo-n=oni lima-d lim k-ol am' lipo-n=oni lima-m lim m-ol em' lipo-n=oni lima-m lim m-ol lima-m lim m-ol lima-m lim t-ol lima-m em lima-m lim t-ol lima-m em '-ol

An interesting phenomenon in Makuva is the - seemingly obligatory addition of the demonstrative pronoun *oni* when the noun has a pronominal suffix. Observe that in this specific case the final vowel /e/13 changes to /o/, suggesting some kind of vowel harmony between final vowels of noun with pronominal suffixes and demonstratives. This feature equals the Southeast Babar possessive construction where the pronominal suffix docks as an onset on a subsequent possessive particle (Steinhauer and Engelenhoven 2006). ¹⁴ In the box in (11) above it can be seen that our Makuva informants use the same suffix from 3sg through 3pl. Also in Leti, the 3sg suffix is used for all plural possessors, except 2pl. However, like the other Luangic languages Leti does not distinguish alienable from inalienable possession. In another Austronesian language of Southwest Maluku, Serua, the inalienable possession construction featuring pronominal on the noun is being replaced by the alienable possession construction. In this construction that equals the Meher one having preposed particles to which pronominal suffixes are added, the 3sg suffix occurs with all plural possessors except 1plex. Engelenhoven (2003) suggests this grammatical simplification to be induced by the recent imposed migration history of the Seruans. This is also a plausible scenario for the Makuvans who were replaced from villages on the North coast to the road connecting Tutuala to Fuiloru (Engelenhoven ms.)

¹³ Or /a/

¹⁴ In fact, the particle is a syllabe on which the onset consonant is functionally a possessive suffix of the noun, whereas the coda consonant is a pronominal suffix encoding singularity/plurality, e.g. *em l-o-l* (house 3sg-PART-3sg) 'his house' versus *em l-o-t* (house 3sg-PART-3pl) 'his houses'.

3.2. Word order

Like all languages in the region, Makuva has head-initial phrases. Attributes are directly placed right from the head, which can be followed by numerals and/or determiners like demonstratives:

(8) HEAD \pm ATTRIBUTE / NUMERAL \pm DETERMINER

Makuva NP

Ongoing research suggests Makuva has a large class of adjectives that prototypically fill the attribute slot. In this aspect Makuva differs from both 'non-Austronesian' and Austronesian languages that surround it. Whereas the Luangic-Kisaric languages have a small closed class of adjectives – e.g. in Leti the set of adjectives contains only seven items – the 'non-Austronesian', e.g. Fataluku, ones does not distinguish formally between adjectives and verbs. Example (9a) and (b) show that the demonstrative *eni* or *oni*¹⁵ deletes final vowels from attributes. Ongoing research is required to determine its phonological rules.

(9a) nurkelapeni (9b) sapateni nurkelapa=eni sapatu=eni book big=DEM shoe= DEM 'this big book' 'this shoe'

Minve 'delicious' in (10a) shows that adjectives can function predicatively. In Luangic-Kisaric, however, predicatively used adjectives require a subject-agreement marker. This is displayed in the Leti example in (10b).

(10a) Jene pateva minve mia jene pate=va minve mia fish small=va delicious PERF 'Small fish are delicious.'

(10b) *Ianmikmikri* nmuti. iina=miki-mikri n-muti fish=RED-delicious 3sg-white. 'A delicious fish is white.' (Leti)

In the surrounding languages numerals directly follow the attribute slot. However, we have not been able to elicit such combinations from our informants. Also no examples were found in the material of previous researchers. Example (7a) above

¹⁵ According to Hull and Branco (2003) *oni* is the Tutuala counterpart of Mehara *eni*. We have indeed not been able to distinguish a semantic difference between both forms.

shows that the NP marker =va attaches directly to adjectives. There was, however, no consensus among informants whether it also combines with numerals. Our Loikera informant provided example (11a) where =va is added to the noun 'pig', whereas our Porlamano informant provided examples like (11b) where =va was consistently removed in combination with numerals. Nobody added =va to the numeral.

(11a) hakkeva hokelu. (11b) arpou horua. hakke=va three bufallo two 'three pigs' 'two buffaloes'

The structure as displayed in (11b) is consistent with the ones in the surrounding languages. However, Steinhauer (1996) points out that cardinal numerals in his three sample languages¹⁶, unlike other phrase constituents, do not metathesize on to the preceding phrase constituent, suggesting an exclusive syntactic status for these numerals in NPs. (8a) could be a Makuva confirmation of this hypothesis.

4. CLAUSE STRUCTURE

4.1 Verbal affixes

Himmelmann and Hajek's (2001) and Hajek *et al.*'s (2003) conclusion that Makuva be closely related to the Austronesian languages of Southwest Maluku was mainly based on the fact that verbs are inflected with a pronominal subject agreement prefix. This is a feature that is lacking in all surrounding languages on Timor, whether they are Austronesian or not. Whereas the Luangic-Kisaric languages distinguish at least two verb classes with formally different inflections¹⁷, Makuva only has one type of inflection. Fataluku loans, however, are usually not inflected.¹⁸ This is exemplified in (12) where the pronominal subjects are simply preposed to the Fataluku loan. No instances have been found of free pronominal subjects with pronominal subject markers, suggesting that Makuva has a rule similar to Leti and Meher where only lexical subjects may co-occur with pronominal prefixes on verbs.

```
(12) 'to bathe' 'to disappear' (< Fataluku)

IMP ruto mula

1sg vo-ruto a' mula (au + mula)
```

¹⁶ Helong and Dawan in West Timor and Leti in Southwest Maluku.

¹⁷ No inflection or consonant prefixation in Meher, full, 'metathesised' and irregular inflection in Leti.

in Leti.

18 A noticeable exception is 'to read' *elre* or *alra* (< Fataluku *eler-e* 'read-VRB' < Portuguese *ler*), which has been attested with a 3sg prefix: *na-alr-ai* '3sg-read-TR'.

```
2sg
                       o mula (o + mula)
        mo-ruto
3sg
                       ar' mula (ari + mula)
        na-ruto
                      ik' mula (ika + mula)
1plinc
        ka-ruto
1plex
                       ami mula
         ma-ruto
2pl
                       emi mula
         me-ruto
3pl
                       tira mula
         ra-ruto
```

Makuva diverts from Southwest Malukan languages like Leti and Serua in that it does not inflect verbs for second person in imperatives (e.g. examples (16a) and (b) in the next paragraph). Subject agreement is no longer productive in Makuva, albeit that two of our informants, the late Sr. Duarte Almeida and Sr.a Lubiana Almeida could elicit complete paradigms. In elicited sentences, however, the conjugated verb did hardly ever agree with the subject, which is explicitly salient in the material of Sudana et al. (1996). This same phenomenon was attested also in the Serua language (Engelenhoven 2003) and the 'Sung Language' (Engelenhoven 2004), albeit that the latter rather is a register within the Leti language. This is exemplified in (13) where the verb has a 1plinc marker while the subject is a third person singular.

```
(13) Pak Guru ka-kakra.

Mr. school teacher (Ind) 1plinc-talk

'The school teacher talks.' (Sudana et al. 1996:83)
```

An exclusive element in Makuva that has not been attested anywhere in the surrounding languages is a vocalic suffix ending in /i#/ that we will preliminarily label 'transitive suffix', having at least two allomorphs {ai} and {oi}. Ongoing research suggests {oi} to be the allomorph used on verbs with /u/. However, they may also be dialectal variants. This is exemplified in (14).

(14)				
` ´	'to look after'	tomra	\rightarrow	tomrai
	'to cut'	keri	\rightarrow	kerikai
	'to buy'	heli	\rightarrow	helikai
	'to call'	ho	\rightarrow	ho'ai, hovai
	'to kick'	kumu)	kumoi
	'to search'	sapu	\rightarrow	sapoi

4.2. Word order

The Lautém- Southwest Maluku region features two word orders that are usually linked to the genetic origin of the language. All Austronesian languages in the region feature a verb medial or 'SVO' order, whereas the so-called

¹⁹ In fact, {oi} was never attested in our own field work but only in Sudana et al. 1996.

'non-Austronesian' ones have a verb final or 'SOV' order (Klamer 2002). The Austronesian character of the Makuva lexicon (Hull and Branco 2003) suggests therefore that the language be verb medial. This is indeed what is displayed in most sentences of the Makuva version of the *Conversa de um médico e um doente* 'Conversation Between a Doctor and a Patient', a text prepared by the Portuguese anthropologist António de Almeida²⁰.

(15)	Ou	ulomu	apitnona	oco	moruto	vaucomonu	meta.
	O	ulomu	apitnona	oko	morut'	vaukumoni	meta
	0	ulo-mu	apitna=ona	oko	mo-ruta	vauku-mu=oni	meta
	2sg	head-2sgP	ill=IMPER	VET	2sg-bathe	forehead-2sgP=DEM	only
'Just do not wash your forehead when your head aches.' (Conversa 60)							

In (15) above we see in the box that the object 'your forehead' follows the verb 'you wash'. We have found one instance where a verb final construction is used (16a). (16b), which is also a command, shows the expected verb medial word order.

(16a)	Toko moni	momahe.	(16b)	Kon tai	lipo moni.
	Tokumoni	momahe.		Kontai	lipomoni
	toka-mu=oni	mo-mahe		konta-ai	lipa-mu=oni
	mouth-2sgP=DEM	2sg-open		lift-TR	hand-2sgP=DEM
	'Open your mouth	.' (Conversa 28))	'Lift you	hand.' (Conversa 30)

Our field work signals that more and more Makuva word order aligns with the SOV order of Fataluku in sentences that specify direction, which in Fataluku is encoded by means of an adposed clause. This is exemplified in (17a) where the object precedes the verb. (17b) provides the Fataluku counterpart.

				-	
(17a)	Tapoi	muti	<u>mai</u>	vei	lakeni.
	tapoi ²¹	muti	mai	vei	lake=eni.
	broom	take	come	DIR	house=DEM
	'Take a b	room to t	he house	e.'	
(17b)	Lulur	em	la'a	le	<u>та'и</u> .
	broom	take	DIR	house	come
	'Take a b	room to th		.' (Fataluk	cu)

²⁰ A typed and recorded version of this text was found in the Anthropobiological Centre in Lisbon and subsequently lodged at ELAR in London. Example sentences from this text have five lines: the first line is the original transcription; the second line contains what is said on the recording; the third line provides the morphological analysis of the second line, while the fourth and fifth lines contain glosses and the translation of the recording. If necessary, a sixth line is added for original Portuguese translation when it differs from our translation.

²¹ Actually this is a verb *sapu* (< Indonesian *sapu*) +transitive suffix oi.

The sentences above show that Makuva, unlike Fataluku, combines motion verbs with direction verbs (underlined in the examples above) in a series, which is a phenomenon it shares with the other Austronesian languages in the region. Similarly, Makuva also seems to lack a special morpheme to indicate ablative motion. However, whereas the other languages require a locational verb ('to be somewhere', e.g. 18b), Makuva simply encodes the location as an object of a direction verb (18a)²².

(18a)**Thomas** Kikuola nala mai mia Thomas Tutuala na-laha mai mia Thomas Tutuala 3sg-go come **PERF** 'Thomas came from Tutuala.'

13

(18b) Thomas Tutuala na'en hai ma'u
Thomas Tutuala na'-e=nu hai ma'u
Thomas Tutuala LOC-VRB=and PERF come
'Thomas came from Tutuala.' (Fataluku)

In Southwest Malukan languages a comitative notion is usually indicated by means of a verb meaning 'to be with', which clause is juxtaposed to another clause specifying the action of the scene:

(19) Aüòra püatdidi masaammèke.
a^u-òra püata=dí^di ma-saava=mèka=e
S^1sg-with woman=DEM^END 1plex-marry=only=DEX
'I just marry this woman here.' (Leti, Engelenhoven 2004:254)

Makuva encodes comitative relations by means of a morpheme *nora* 'with', which we suppose to have been loaned from either Meher or Leti (< n- ∂ra '3sg-with'). Makuva follows the Lautém-Southwest Maluku pattern in which the comitative segment precedes the segment where the verbal action is specified.

(20a) Norai hakkeu en'pan' ratilu.
nora-ai hak-ke-u eni=pana ra-tilu
with=TR pig-ke-1sgP DEM=SEQ 3pl-fight
'They fight with my pig.'

The transitive suffix in example (20a) above confirms the verbal character of *nora*. However, it is not always used as is exemplified in (20b) where the informant used *nora* in order to translate the Fataluku *nere* 'to accompany, follow' (cf. (20c)).

²² A notable exception is Meher, which is the only Southwest Malukan language having an ablative verb, e.g. *Ya '-anoo Amerika* (1sg 1sg-from America) 'I come from America.' (Christensen *et al.* 1991: 10).

(20b)	Atova	nora	ar'	mamorkeni.
	ato=va	nora	ari	ma-mori-ke=eni
	dog=va	with	man	REL-live-ke=DEM
	'The dog	accomp	anies his b	ooss.'
(20)	7	_		

(20c) *Ipar ocava nere*.

dog boss follow

'The dog accompanies his boss.' (Fataluku)

As already mentioned in 3.1, Makuva shares the "possessor-possession" construction that features all languages in the region. The Austronesian languages in the region use this construction too to encode locational notions.

(21)	Location	Waima'a	Makuva	Leti
	On (= 'top')	wuu	?	vavna
	Under (= 'underside')	wake	vika	naani
	In front (= 'face')	wase	vauku	üòò-ne ('face-POS')
	Behind (= 'back')	tuko	liru? ²³	tukra
	Next to (= 'side')	bali	2^{24}	servïali
	In (=ínside')	lale	larane	rïarma
	Out (= 'outside')	igi	teri	plïòr-ne ('seaside-POS')

Whereas we were able to elicit some of these "locational nouns" (Engelenhoven 2004: 117) from our informants, they never used them in sentences. Ongoing research suggests that in Fataluku and Oirata (on Kisar Island) locational notions are encoded through verbs rather than nouns. The only clear example of a locational noun in Fataluku is *fanu* 'face' that is used to encode the notion "in front of". Elicitation from informants for the notion 'on (top of)' in general yielded a form like *me-n-hitu* (2pl-n-upward)²⁵, which is a verb. Example (17a) above shows that Makuva specifies the direction of the motion (*muti* 'take') by means of a second verb (*mai* 'come'). This is again displayed in (22a) where *hitu* 'upward' is added to the verb *kuru*' to sit'.

(22a)	Nakurhito	aruva.	(22b)	Loiasu	hi'apen	imire.
	na-kuru=hito	aru=va		loiasu	hi'a=pe=nu	i=mire
	3sg-sit=upward	boat=va		boat	upward=move=and	3sg-sit
	'He steps into the boat.' ²⁶		'He steps into the boat.' (Fataluku)			

²³ The informant who gave this form actually translated it with the Fataluku *fanu* 'front, face' for which others came up with *vauku*. Since it is clearly related to PMP *liuR 'back'(e.g.Leti *liiru*)

²⁴ The notion 'aside' was consistently translated as either *vanne* 'right' or *vene* 'left'.

 $^{^{25}}$ We do not know what the segment /n/ means. It may very well be an old prefix, comparable to /n/ in vo-n-kako (1sg-n-afraid) 'I am afraid'.

²⁶ One informant insisted (22a) meant api me (Fataluku: 'fish take') 'to fish'.

In Fataluku this scene is encoded by means of a clause combination in which the first clause profiles the movement and the second clause the resulting state. Luangic-Kisaric uses both strategies. Unlike Makuva, however, none of the latter can encode 'upward motion' as an adverb on to the verb. The notion of 'aside', which turned out to be very difficult for the informants, was equally readily encoded by means of a second verb:

(23) Mamrik' lutrai eni.
ma-mrike lutra-ai eni
1plex-stand follow-TR DEM
'We stand next to him.'

5. FINAL REMARKS AND CONCLUSION

5.1. Grammar

Hull and Branco (2003) have convincingly proven that Makuva lexicon is basically Austronesian, albeit that its Austronesian character is blurred by awkward sound changes like PMP *t > k and PMP *s > t. Hull (2004a) is right to hint at a closer genetic relation between Makuva and the Waima'a-Midiki-Naueti dialect chain in the Baukau and Vikeke Districts than between Meher and Makuva. Notwithstanding the grotesque sound changes in this dialect chain (cf. Hull 1998, 2002), Makuva shares the loss of PMP *Z, which in Luangic-Kisaric has merged with *t.²⁷ The occurrence of consonant-vowel metathesis in historically closed final syllables may be explained through a scenario of contact with Southwest Malukan languages where this feature is quite common, but synchronic feature. However, whereas subject-agreement is confined to verbs of Austronesian origin, metathesis has also been attested on Fataluku loans, for example *neklu* 'angry' (< Fataluku *nekul-e* 'angry-VRB') and

However, there are many indications that Makuva in general follows the Timorese Sprachbund. Like all Timorese languages clauses are negated in Makuva by means of a negator preceding the verb. The notion 'not yet' is encoded by means of combining the negator with an imperfective marker²⁸ *ona*, which is placed before the verb. Like Fataluku, Makuva distinguishes 'no' in one-word sentences/replies from a preverbal one. However, whereas the Fataluku form categorizes as a verb ('it is not so'), Makuva adds either =va to the independently used negator or =ta when it is used preverbally. Southwest Malukan languages rather add an imperfect marker

²⁸ Hull (2001) prefers to refer to it as gressive.

²⁷ This merger was reason for Stresemann (1927) to dismiss the Luangic-Kisaric languages from his Proto-Ambonic (*Ur-ambonisch*), while Collins (1982) used the same merger to exclude these languages from his Proto Southeast Maluku.

after the verb or in the end of the clause. Whereas Waima'a on Timor uses a formally different negator with nominal predicates and Leti inverts the order and places the negator in predicate final position, Fataluku does not distinguish between verbal and nominal predicates. We have not been able to elicit negated nominal clauses from our informants. Neither have we been able to attest whether Makuva has a special negating verb meaning 'to exist not', which is found in Waima'a and Fataluku²⁹, but in none of the Luangic-Kisaric languages.

(24)	GLOSS	Waima'a	Fataluku	Makuva	Leti
	No	da	ире	kava	taa
	NEG-V	da	akam	kat(a)	ta
	NEG-N	debo	akam	?	N ta
	Not.yet	da-hati	aka -ono	kav-ona	tamaata
	Not.exist	dihe/mohu	pali	?	(ta lae)
	VET	aisai	tapa	oko	ïena

Another resemblance between Fataluku, Meher and Makuva is the special set of possessive pronouns. Makuva seems to be between the Fataluku system, in which specific possessive pronouns are placed in front of a morpheme *hini*, *heni* or *hani*, and the Meher system, which uses the alienable possession construction of a segment *ni* to which a pronominal suffix is added and is preceded by a personal pronoun.

(25)	GLOSS	Fataluku	Makuva	Meher
	1sgPOS	a hani	ve-'u-va	ai nu- 'u
	2sgPOS	e heni	e-mu-va	o nu-ma
	3sgPOS	i hini	ar' vai-ni	ai ni-na
	1plincPOS	afi hini	?	ik ni-ka
	1plexPOS	ini hini	ami kia	ai ni-ma
	2lpPOS	i hini	emi kia	mi ni-ma
	3plPOS	i hini	tir' vai-ri	hi ri-ra

Makuva clauses display both "Austronesian" SVO and "non-Austronesian" SOV word orders. We hypothesize that SVO is the original word order that is more and more being replaced by the Fataluku pattern. This is especially salient in clauses that contain an adverbial complement referring to a place or a direction.

Although Makuva features subject-agreement on mostly verbs of Austronesian origin, it is not so that it occurs everywhere. Almost all Fataluku loans

²⁹ However, not in any of the Makasai dialects that are spoken in the region between the Waima'a and fataluku territories.

do not inflect an agreement marker, nor do the Austronesian roots inflect 2sg or 2pl in the imperative mood. The fact that most informants were not able to produce verb paradigms with inflections and the fact that often the pronominal prefix no longer agrees with the subject in elicited sentences equals the situation of language endangerment as Engelenhoven (2003) has attested in Serua, one of the northern languages in Southwest Maluku. We hypothesize that the original (S)VO order is closely related to the awareness of subject agreement. This is exemplified in sentence (26a) which has SVO with acknowledged 2sg inflection:

(26a) Moranai halkoni.
mo-rana-ai halke=oni
2sg-wait-TR friend=DEM
Ýou wait for your friend.'

17

When the pronominal prefix is no longer recognized as a subject agreement marker, then the informants copy the Fataluku SOV order (examples 26b and c):

(26b)Paiatani kareta (26c)Paiatani moranai. kareta hire. Paiatani kareta mo-rana-ai Paiatani kareta hir-e Paiatani Paiatani bus 2sg-wait-TR bus wait-VRB 'Paiatani waits for the bus.' 'Paiatani waits for the bus.' (Fataluku)

5.2. Makuva: a language in coma

We are hesitant to compare the Makuva case with other types of language endangerment. The Serua case mentioned above concerns a language, which is truly on the brink of extinction through extreme displacement of its society to the Netherlands and later on to Seram Island in Central Maluku. In both locations, however, they managed to maintain their own identity as a separate ethnic group.

Previous researchers focused on the place where Makuva speakers had been found: Lóvaia (Porlamano)³⁰. It is true that after the relocation of this village to Mehara, together with Loikera, speakers were to be found here. However, it is very significant to note that most, if not all (!) researchers had the late Sr. And Sr.a de Almeida as informant. These people were also our main informants. Additionally, we were also helped by the late Sr.a Laulinda da Costa. It needs to be stressed that these three people were members of the *Kaptenu* clan, who seeks its origin on Saparua (Central Maluku). This clan is considered to be the youngest clan in Porlamano that also functions as the bridge between the 'inner' group of Porlamano

³⁰ Hull and Branco (2003) had another one, Sr.a Felicidade Correia, who lives in Tutuala, but came from Porlamano originally.

and the outside world. The fact that the couple mentioned above bore the same as the Portuguese anthropologist António de Almeida may have been a decisive element in their choice to bring the language in the open.

We can confirm Hull's and Branco's (2003) and McWiliam's (2005) statement that Pitileti, and also Tutuala has been Makuva-speaking at least up in to the sixties of the last century. Silva and Valentim (2004) explain that the Makuva language was pushed aside in Tutuala by Fataluku that was much more qualified as a daily language. Nevertheless, Makuva did not disappear from the Tutuala society, but rather was 'brought' to a higher level as a special register for ritual speech. This strategy is well-known in Southwest Maluku and in the Lautém and Baukau Districts, where both Fataluku-speaking and Makasai-speaking clans are known to have a ritual language that 'their ancestors took along from their place of origin'. Sometimes this speech is artificial (e.g. the 'Sung Language' in Leti, Engelenhoven 2004) and only contains a set of numerals to which a secret narration is added (Gomes 1972). In the case of Makuva it is a complete language that, however, no longer functions as a daily language.

During our last fieldwork in January 2006, the generally accepted idea in the literature that Makuva be a language without a 'literary' tradition proved to be wrong. In a ritual by a Tutuala clan, it turned out that prayers were recited in Makuva. However, only the 'chosen', a small group of specialists knew their meaning. This strengthens our hypothesis that Makuva is a ritual register within the Fataluku speech of the clans in the Tutuala sub district.

Makuva is not a moribund language in the sense that it has a few final speakers, after whose death the language will be extinct. Speakers get only introduced to the language after they have been chosen by someone who wants to transfer his knowledge on Makuva. Usually this means a candidate will be in his sixties. In such a scenario one does not learn a grammar and a lexicon, but rather a set of phrases, which are not all readily understood anymore. Of course this does not mean that the ones who are not chosen do not know anything. At a birthday in 2003 in Mehara Van Engelenhoven attested that almost everybody could produce some sentences and phrases in Makuva as long as they were drunk. When sober nobody dared to inform him on anything related to the language.

Makuva is very important for a complete understanding of Fataluku society and history. In a forthcoming paper Van Engelenhoven will propose that many Fataluku-speaking clans, among whom the land-owning Katiratu clan used to be Makuva-speaking. In this scenario, many of the awkward, Austronesian features of the Fataluku language and society could be explained as originally Makuva features that survived. We consider Makuva not to be a dying language, but rather a language 'in coma'. When Ferreira (1951b) pointed at the bad condition of the language, he was talking about an ongoing situation in Porlamano and Loikere. This situation only began in Tutuala (and Pitileti) in the sixties of the last century, but definitely will take a similar route of mystification and subsequent secrecy. It is therefore very

important that the people of the Tutuala Sub district learn that there are better ways to safeguard their linguistic heritage than through 'language concealment'. This is a task linguists can assist with.

ABBREVIATIONS

- 1, 2, 3 first, second, third person
- DEM Demonstrative
- DEX Indexing suffix
- DIR Directional marker
- END Endophora
- N Noun
- NP Noun phrase
- O Object
- **PART Particle**
- PERF Perfect marker
- PL Plural marker
- pl Plural
- plex Plural exclusive
- plinc Plural inclusive
- PMP Proto Malayo-Polynesian
- POS Possessive marker
- REL Relative marker
- S Subject, subject clitic
- sg Singular
- TR Transitive suffix
- V Verb
- VET Vetative marker
- VRB Verbalizer

BIBLIOGRAPHY

- Almeida, A. de, 1967, "A contribution to the Study of Rock Paintings in Portuguese Timor", in: W. G. Solheim II (ed.), Archaeology at the Eleventh Pacific Science Congress, Asian and Pacific Archaeology Series 1, Honolulu, Social Science Research Institute, University of Hawaii at Manoa. 69–76.
- Almeida, A. de, 1976, "Da origem legendária e mitológica dos povos do Timor Português", *Memórias da Academia das Ciências de Lisboa*, XIX, 335–365.
- Campagnolo, H., 1972, "Langue fataluku (extrémité est de Timor Portugais)", Bulletin du Centre de documentation et recherche sur l'Asie sud-Est et le monde insulindien, III, 3, 53–76.
- Capell, A., 1972, "Portuguese Timor: two More Non-Austronesian Languages", A. Capell (ed.), *Portuguese Timor: Two More Non-Austronesian Languages*, in: A Capell (ed.), *Linguistic Papers, II: Indonesia and New Guinea*, Oceania Linguistic Monographs 15, Sydney, University of Sydney, 95–104.
- Collins, J. T., 1982, "Linguistic research in Maluku; a Report of recent fieldwork", *Oceanic Linguistics*, 21, 73–146.

- Christensen, J., S. Christensen, 1992, "Kisar Phonology", in: D. A. Burquest, W. D. Laidig (eds.), Phonological Studies in Four Languages of Maluku, Arlington, TX, Summer Institute of Linguistics and The University of Texas at Arlington Publications, 33–66.
- Christensen, J. et al. (eds.), 1991, Wanakunu Yotowawa akilere. Percakapan Bahasa Kisar. Kisar Daily Conversation, Ambon: Pusat Kajian dan Pengembangan Bahasa Maluku/Universitas Pattimura.
- Engelenhoven, A. van, 1995, "Van Proto Malayo-Polynesisch naar Proto Luangisch-Kisarisch", in: C. Baak, M. Bakker, D. van der Meij (eds.), *Tales from a Concave World, Liber Amicorum Bert Voorhoeve*, Leiden: Leiden University, Dep. Languages & Cultures of Southeast Asia and Oceania, Projects Division, 246–264.
- Engelenhoven, A. van, 2003, "Language endangerment in Indonesia: the incipient obsolescence and acute death of Teun, Nila and Serua (Central and Southwest Maluku)", in: M. Janse, S. Tol (eds.), Language Death and Language Maintenance: Theoretical, Historical and Descriptive Approaches, Current Issues in Linguistic Theory 240, Amsterdam, Benjamins, 49–80.
- Engelenhoven, A. van, 2004, A Grammar of Leti, A language Spoken in Southwest Maluku, Verhandelingen, 211, Leiden, KITLV Press.
- Engelenhoven, A. van, 2005, *Tekeni na-kakre makuvo?* Leiden University, Dep. Languages & Cultures of SE Asia & Oceania.
- Engelenhoven, A. van, 2009, "The position of Makuva among the Austronesian languages of East Timor and Southwest Maluku", in: A. Adelaar, A. Pawley (eds.), *Austronesian Historical Linguistics and Culture History: A Festschrift for Bob Blust*, Pacific Linguistics, 601, Canberra, Pacific Linguistics/Research School of Pacific and Asian Studies/The Australian National University, 425–442.
- Ferreira, M., 1951a, "Tutuala I (Apontamentos Etnográficos)", Seara, 3, 6, 204-217.
- Ferreira, M., 1951b, "Tutuala II (O Lovaia-Epulo)", Seara, 3, 6, 256-259.
- Grimes, B. (ed.), 1992, Ethnologue (12th Ed), Dallas, TX, Summer Institute of Linguistics.
- Hajek, J., 1995, When is a non-Austronesian language really Austronesian? When it's Lóvaia. Unpublished paper, Melbourne: Melbourne University.
- Hajek, J., N. Himmelmann, J. Bowden, 2003, "Lóvaia: an East Timorese on the verge of extinction", International Journal of the Sociology of Language, 160, 155–167.
- Himmelmann, N., J. Hajek, 2001, "A Report on the Current Sociolinguistic Situation in Lautém (East Timor)", *Studies in Languages and Cultures of East Timor*, 4, 88–97.
- Hull, G., 1998, "The Basic Lexical Affinities of Timor's Austronesian Languages: A Preliminary Investigation", Studies in Languages and Cultures of East Timor, 1, 97–202.
- Hull, G., 2001a, "O Mapa Linguístico de Timor Leste: Uma Orientação Dialectológica", Studies in Languages and Cultures of East Timor, 4, 1–19.
- Hull, G., 2001b, "A Morphological Overview of the Timoric Sprachbund", *Studies in Languages and Cultures of East Timor*, 4, 98–205.
- Hull, G., 2002, Waimaha (Waima'a), East Timor Language Profiles 2, Dili: Instituto Nacional de Linguística/Universidade Nacional de Timor Lorosa'e.
- Hull, G., 2004a, *The Languages of East Timor, Some Basic Facts (revised 24.8.2004)*, retrievable at http://web.archive.org/web/20080119191225/www.asianlang.mq.edu.au/INL/ langs.html.
- Hull, G., 2004b, "The Papuan Languages of Timor", Studies in Languages and Cultures of East Timor, 6, 23–99.
- Hull, G., 2005a, Makasai, East Timor Language Profiles 6, Dili: Instituto Nacional de Linguística/ Universidade Nacional de Timor Lorosa'e.
- Hull, G., 2005b, Fataluku, East Timor Langauge Profiles 7, Dili: Instituto Nacional de Linguística/ Universidade Nacional de Timor Lorosa'e.
- Hull, G., S. J. Branco, 2003, "O Enigma da Língua Macuva", Studies in Languages and Cultures of East Timor, 5, 107–134.
- Klamer, M., 2002, "Typical Features of Austronesian Languages in Central/Eastern Indonesia", Oceanic Linguistics, 41, 2, 363–383.

- Lake, F., 2002, Deskripsi bahasa Dawan, Leiden, MA Thesis at Leiden University.
- O' Connor, S., 2003, "Nine New Painted Rock Art Sites from East Timor in the Context of the Western Pacific Region", *Asian Perspectives*, 42, 1, 96–126.
- Riedel, J. F. G., 1886, De sluik- en kroesharige rassen tusschen Selebes en Papua, The Hague, Martinus Nijhoff.
- Samloy, S., L. Laurika, H. Jacob, M. Manaha, D. Frans, 1998, *Struktur bahasa Kisar*, Jakarta, Pusat Pembinaan dan Pengembangan Bahasa, Departemen Pendidikan dan Kebudayaan.
- Silva, A. da, J. V. Cailoro, 2004, "Historia Badak Kona Ba Lia *Makua*", *Hakerek Kona-Ba Timor-Lorosa'e*, 10.
- Steinhauer, H., 1996, "Synchronic metathesis and apocope in three Austronesian languages of the Timor area", in: S. Premsrirat (ed.), *Pan-Asiatic Linguistics, Proceedings of the Fourth International Symposium on Language and Linguistics January 8-10, 1996*, Volume II. Salaya: Institute of Language and Culture for Rural Development Mahidol University, 471–492.
- Steinhauer, H., A. van Engelenhoven, 2006, *Babar, Enigmatic language contacts in East Nusantara*, paper presented at the 10th International Conference on Austronesian Linguistics, January 17–20, Palawan, Philippines.
- Stresemann, E., 1927, Die Lauterscheinungen in den Ambonischen Sprachen, Berlin, Reimer.
- Sudana, I W., I. B. K. M. Indra, P. Aridawati, I. Ayu, Y. Taum, 1996, *Struktur bahasa Makuʻa*, Jakarta, Pusat Pembinaan dan Pengembangan Bahasa, Departemen Pendidikan dan Kebudayaan.
- Sudhiarta, I W., I W. T. M. Denes, R. B. Suprihanto, 1994, *Survei bahasa dan sastra di Timor Timur*, Pusat Pembinaan dan Pengembangan Bahasa, Departemen Pendidikan dan Kebudayaan.
- Takahashi, M., 2003, "Makua Language which will be dying out", Hakerek Kona-Ba Timor-Lorosa'e, 8.
- Valentim Cailoro, J., E. Goveia, M. Aoyama, 2003, "A lingua Maku'a Que Vai Desaparacer/Dialecto Nebe Atu Lakon/The Disappearing Language, Maku'a", *Hakerek Kona-Ba Timor-Lorosa'e*, 7.