

The lexicons of the Papuan languages of the Onin peninsula and their influences.

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Mbaham and Iha are two closely related Papuan languages spoken on the Onin Peninsula in Northwest Bomberai, New Guinea. The prominent position of Onin in the seascape of the region means that groups in Onin were almost certainly involved in the formation of the Wallacean Linguistic Area. Applying the comparative method, we present a reconstruction of the lexicon of their common ancestor, proto-Mbaham-Iha, and identify Austronesian lexical influences on them. This work represents a small but important first step towards understanding the position of these languages of Onin within Linguistic Wallacea.

1. Introduction¹

Onin Peninsula on mainland New Guinea is home to several Austronesian languages and two Papuan languages. Constituting the north-west part of the larger Bomberai peninsula, the Onin Peninsula juts westward into the Sea of Seram. It is only narrowly separated by sea from the well-known Bird's Head of New Guinea and Seram itself. The historical record makes clear that Onin was heavily involved in local trade networks at the time of the arrival of Europeans in the region in the 16th and 17th centuries. However, the prehistorical position of Onin is in need of investigation. The prominent position of Onin in the seascape of the region means that groups in Onin were almost certainly involved in the ancient maritime interactions that led to the formation of the Wallacean Linguistic Area (Schapper 2015). Yet, so little is known about the languages of Onin that the extent to which they have participated in and contributed to Linguistic Wallacea is yet to be established.

This paper represents a small but important first step towards understanding the position of the languages of Onin peninsula in Linguistic Wallacea. We focus on elucidating the history of the closely related Papuan languages of Onin peninsula, Mbaham and Iha. In contrast to some other parts of the circum-New Guinea region, there are many more materials on the Papuan languages than on the Austronesian languages. Reliable grammatical materials are, however, still widely lacking such that we restrict ourselves here to an analysis of the lexicon. We take a bottom-up approach, applying the comparative method to reconstruct 141 lexical items to proto-Mbaham-Iha and identify influences from the Austronesian languages of Onin and surrounds. With a reconstruction of proto-Mbaham-Iha in hand, we will then be in a position to assess longer distance connections that have been proposed between Papuan languages in

¹ We would like to thank Mark Donohue for sharing unpublished word lists on the Austronesian languages of Onin with us as well as a range of terms from the Papuan languages of the region. There is a large corpus of Iha located at the CELD in Manokwari but we were not able access to it to advance this reconstruction. Schapper's research was supported by a Netherlands Organisation for Scientific Research VENI project "The evolution of the lexicon. Explorations in lexical stability, semantic shift and borrowing in a Papuan language family" and by the Volkswagen Stiftung DoBeS project "Aru languages documentation".

Wallacea and thereby better understand the prehistorical situation in which Linguistic Wallacea formed.

This paper is structured as follows. Section 2 overviews the historical significance of Onin as a trading entrepôt and what is known about the interactions between groups within Onin and surrounding islands. Section 3 provides an overview of what is known about the languages of Onin, both Papuan and Austronesian. Section 4 presents the reconstruction of the proto-Mbaham-Iha lexicon, while section 5 identifies Austronesian borrowings in Mbaham-Iha. Section 6 concludes the paper with a discussion of the wider questions of Wallacean prehistory which can be pursued on the basis of the reconstruction of proto-Mbaham-Iha. An appendix is included with proto-Mbaham-Iha reconstructions made in the present paper.

2. Historical significance of Onin

The earliest mention of Onin we have comes from the 14th century lontar-palm manuscript of the *Nagarakretagama*, also known as *Desawarnana*. This Old Javanese document contains detailed descriptions of lands over which the Majapahit Kingdom of East Java claimed suzerainty. In the 13th and 14th cantos, placenames from the eastern part of the Malay archipelago are listed (Robson 1995):

- (1) *Bali, Badahulu, Lwa-Gajah, Gurun, Sukun, Taliwang, Dampo, Sapi, Sanghyang Api, Bhima, Seran, Hutan Kadali, Gurun, Lombok-Mirah, Saksak, Bantayan, Luwuk, Uda, Makasar, Butun, Banggawi, Kunir, Galiyao, Salaya, Sumba, Suraba, Solot Solor, Muar, Wandan, Ambwan, Maloko, Wwanin, Seran, Timur.*

Rouffaer (1908) identified Wwanin in this list with the Onin peninsula, observing that Rumphius records Woni to be the Ternate name for Onin. The rendering of /o/ with {wa} is also consistent with Old Javanese orthography. Van Fraassen (1976) further points out that the position of Wwanin on the list between the Moluccas (*Maloko*, an indigenous collective name for the islands of Ternate, Tidore, Moti, Makian, Bacan and Halmahera) and Seram (*Seran*) also supports identifying Wwanin with Onin.

Why a sliver of land at the far eastern margin of the Malay Archipelago would be worthy of mention in such a significant document of a Javanese Kingdom is a question answered by later historical sources.² The earliest European source on Onin is the Portuguese adventurer Miguel Roxo de Brito who in 1581 stayed with the *raja* of Wage in the Raja Ampat islands (Sollewijn Gelpke 1994). Here he heard stories of great wealth in a land called One (Onin) which lay to the south through a narrow passage between Salawati and the Bird's Head. De Brito then set out in an expedition to Onin and into the McCluer Gulf. On the island of Ugar just to the north of the Onin peninsula in 1582, he noted large amounts of gold gathered by people from the nearby rivers and mountains and populous communities with intensively travelled shipping passages.

Throughout the seventeenth and eighteenth centuries, Dutch sources report Onin as the centre of a slave market where slaves were collected and sold to the East Seramese in exchange for cloths and axes. For example, in 1678 the Dutchman Johannes Keyts visited Onin and described it as a trading hub blessed with plentiful supplies of Papuan laborers and close connections to Seram (Sollewijn Gelpke 1997). Even in the 19th

² This is a topic that has been treated from various perspectives in O'Hare (1986), Goodman (2006), Widjojo (2007), Ellen (2003) and Warnk (2010). The reader is referred to these works for full coverage of the issues and sources at play.

century, Alfred Russel Wallace remarked on the reputation of the Onin people as slavers:

“[S]ome of the more warlike coast tribes, especially those of Onin in McCluer's inlet, have been accustomed to attack the villages of other tribes, and to capture their inhabitants, in order to sell the women and children to the Malays.” (Wallace 1869:445)

Whilst slaves appear to have most regularly been taken from the highlands of Onin and the New Guinea hinterland, fleets of boats known locally as *rak* would also raid neighboring islands and coastlines in the MacCluer Gulf for slaves to sell on the Onin markets (Goodman 1996:59).

Apart from slaves, Onin exported birds of bright plumage, nutmeg, and massoi during the same period. Whilst the bird of paradise plumes of Aru were better known (Valentijn 1726:306–308) and the longer nutmeg of New Guinea named *pala onin* was considered inferior to the Bandanese type (Goodman 1996:121), Onin was renowned as a supplier of massoi. The outer bark of massoi (*Cryptocarya massoy*) was prized in Java where it was used in warm poultices (Soepardi 1967:58), in *jamu* medicines (Heyne 1927:673–674), as a spice in curries, and as a fixative for batik dyeing (Swadling 1996:133). Rumphius (1750:63–64) reported in 1684 that massoi trees flourished in the well-drained, alkaline limestone soil of the mountainous foothills of Onin and Bomberai. He describes how the Seramese trade arranged with middlemen on the coasts of Onin to have highlanders to gather the bark of the massoi for extraordinarily low prices. In a month, these highlanders could gather enough bark to fill one or two cargo vessels to be sent to Java.

The historical sources dealing with Onin note that there was contact between peoples of Onin peninsula and traders from the East Seram, the Seram Laut group, Gorom and Geser. According to these sources, trading relationships across the narrow corridor was reinforced through intermarriage and acculturation from an early time. Nicolaas Burgomaster Witsen (1705), for instance, writes that the Seramese had intermarried with coastal peoples of Onin and transferred cultural practices to them:

“The Ceramers are subjects, and likewise allies, of the Dutch Company, and for the most part expert sailors; and it is by them, and none else, that the coast of New Guinea is visited. The inhabitants of New Guinea have for many years suffered from the treachery and murders of these people, who, not by force of arms but by cunning, have subdued the Papoos. Under the cloak of friendship they take their women (in which they are not very choice) for wives, and the children thus born, being very carefully instructed in the Mahomedan faith, are easily able to control these simple inhabitants of the woods.” (Burgomaster Witsen 1705:163)

On his visit to southern coastline of the Onin Peninsula in 1876, the Italian adventurer and ornithologist Luigi D'Albertis similarly observed that this calculated strategy of intermarriage and cultural influence on the peoples of Onin had resulted in a highly fusional population:

“I observed great variety of type, which may be accounted for by there being slaves of several different tribes among these people, and also because the Malay element prevails here. Their chiefs are Malays or of mixed race; and the mixture of Malay which began a long time ago is on the increase, as

many of the natives have been converted to Islamism, and on the coast they have Mussulman priests and mosques.” (D’Albertis 1880:409)

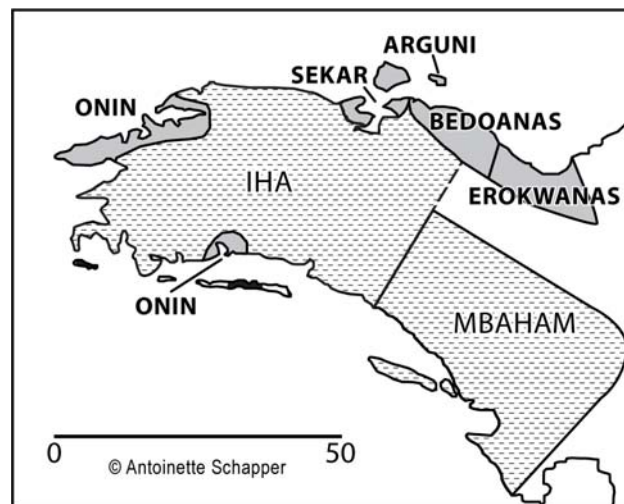
Van Hille visited Onin in 1905 and observed similar mixtures in the coastal peoples that distinguished them from the highlanders of Onin:

“The coastal population of the Onin peninsula with its strong influence from Seramese blood refers to itself as Papua and is Muslim. In accordance with this they wear more clothes than the people of the interior and wear head cloths; they also do not have the stiff curly hair of the people of the interior and they are lighter in colour. The latter are known to the immigrants by the name *Halifuru*. They do not call themselves that (their language does not possess *l* and *f*), but *mih-ma-ni*, that is, mountain people. However, not all of them live in the mountains; in Kapaur, for example, they are also found on the coast.” (van Hille 1905:254)

These sources elucidate the position of the Onin Peninsula as a significant entrepôt connecting the vast trade networks of the Malay archipelago with New Guinea’s wealthy hinterland. In the following sections we use evidence from language to further connect and provide clues to the multiple and overlapping connections between Onin and the wider maritime world of Wallacea.

3. Languages of Onin

In the previous section, we saw that Onin was home to coastal peoples acting as trade intermediaries and the highlanders collecting forest products to be sold to the Seramese. The partition of Onin also reflects a linguistic divide. Traditionally, speakers of the two Papuan languages of Onin were forest-oriented and resided in villages inland at higher altitudes. Speakers of the Austronesian languages lived in villages scattered, chiefly, along the northern coast of Onin and nearby islands. The seven languages spoken on the Onin Peninsula are presented cartographically in Map 1.



Map 1. Languages of Onin peninsula

Little is known about the Austronesian languages of Onin. Numerous short word lists have been recorded by early travelers to Onin and later linguists (e.g., Marsden 1834,

Earl 1853, Müller 1857, Strauch 1876, Robidé van der Aa 1879, Grube 1882, de Clercq 1893, 1889, Bastian 1885, Kühn 1888, Ribbe 1903, Cowan 1953, Galis 1955, de Vries 2004), but nothing more. It is nonetheless clear from the data in these word lists that the languages divide into two groups (as observed in Blust 1993): Onin [iso 639-3 code: oni] and Sekar [iso 639-3 code: skz], on the one hand, and Arguni [iso 639-3 code: agf], Bedoanas [iso 639-3 code: bed] and Erokwanas [iso 639-3 code: erw], on the other.³ Their wider affiliations within the Austronesian family is unresolved. A definitive answer on their subgrouping within Austronesian awaits the languages' fuller documentation and the bottom-up reconstruction of their ancestral states as well as those of surrounding Austronesian groups.

Observations of visitors to the region at the beginning of the 20th century indicate that the Onin language was affected by the prominent role of its speakers in trade:

“The Onin language is a bastardisation of the Seram language and is spoken in the actual village of Onin [as opposed to the Onin peninsula] and with some differences in Kowiai; along the coast it serves as a lingua franca [...] The mountain language is spoken throughout the peninsula up to, but not including, Patimuni...” (van Hille 1905:254)

“The residents of the old colonies have their own language, which they themselves call the Onin language (*basa onin*) or the coastal language (*basa pantei*), and which the Papuan people call *heboe(h)-maak* after the district of the same name. The largest portion of the Onin language is Seramese with a somewhat bastardized pronunciation; it has also adopted Papuan and Malay words.” (van Dissel 1904:642–643)

These accounts suggest that historically the Onin language was heavily influenced by Eastern Seram languages.⁴ These accounts from historical descriptions remain to be verified through comparative linguistic study.

The Papuan languages of Onin are Iha [iso 639-3 code: ihp] (also known as Kapaur) and Mbaham [iso 639-3 code: bdw] (also known as Patimuni). The main descriptive materials are: for Iha, Flassy & Animung (1992), Narfafan (2009), Donohue (2015), and; for Mbaham, Flassy, Ruhukael & Rumbrawer (1984, 1987), Flassy (2002), Husin (2009), and Cottet (2015). Comprehensive modern descriptions and extended lexical materials underpinned by complete phonological analysis are badly needed.

As for many other Papuan languages, the possible genealogical relationships of Mbaham and Iha have been the source of significant speculation. A close relationship between Mbaham and Iha was suspected early on. Cowan (1953: 33) already surmises that the two group together while Karas (iso 639-3 code: kgv), spoken to the south of Bomberai, is more distant:

³ Uruangnirin [ISO 639-3 code: urn] appears to belong in a subgroup with Onin and Sekar. Because it is not spoken on the Onin Peninsula but off the coast of Bomberai Peninsula, it is not dealt with in this paper. For the same reason, we do not deal with the Papuan language, Karas.

⁴ Ethnologue lists an Iha-based pidgin (iso 639-3: ihb), but gives no further information about it. Aside from this listing of its existence, we have not been able to locate any information on this language. It seems possible that there may have been misidentification of Onin in the sources mentioned here (or others) with Iha. We find no mention in print of Iha being used as a trade language such that would warrant it being called a pidgin, though there does appear to be a morphologically reduced Iha spoken by younger people (Mark Donohue pers. comm.).

“To the southwest and south of Sekar, there are three languages spoken in the district of Fak-Fak for which wordlists are available. These are the Kapaur, Patimuni and Karas languages. Of these, the first two are without doubt related to one another; there is probably a more distant relationship between these first two and the Karas language. These three languages are without doubt Papuan languages; some Austronesian elements are present, but these are few in number and probably loanwords.”

This view is echoed in Anceaux (1958) and in Voorhoeve (1975:432–434).

Beyond the widely credited relationship with Karas, the wider affiliations of Mbaham and Iha are contested. In a series of articles, Cowan (1957, 1958, 1960, 1963, 1965) included them in the now abandoned West Papuan family of the Bird’s Head. Voorhoeve (1975:434–437) includes Mbaham and Iha in his vast Trans-New Guinea Phylum as a “family-level stock” along with Karas. In recent times, three works (Hull 2004, Holton & Robinson 2014, Cottet 2015) have focussed on possible connections of Mbaham and Iha with the Papuan languages of Timor, Alor and Pantar located in southeast Indonesia. The inadequate understanding of sound correspondences within both Timor-Alor-Pantar and Mbaham-Iha has meant that these works, despite the authors’ best efforts, go little beyond pointing out pronominal and lexical resemblances, as is typical of much of the higher level work on Trans-New Guinea.

In this work, we take the thorough application of the comparative method to establish regular sound correspondences across cognate vocabulary between even obviously related languages as the first step in any historical linguistic work, including the study of loan words.

4. Reconstruction of Proto-Mbaham-Iha

The reconstruction of Proto-Mbaham-Iha, the common ancestor of Mbaham and Iha, is based on Iha materials drawn from Flassy and Animung (1992) and Mbaham drawn from Flassy, Ruhukael and Rumbrawer (1984, 1987).⁵ In this section, we present an overview of the reconstructed phonemes of Proto-Mbaham-Iha and the sound correspondences that underpin the reconstructions. The appendix contains the reconstructed vocabulary of proto-Mbaham-Iha to the exclusion of loans (discussed in section 5). The reader is referred to Usher’s Newguineaworld website for more detailed discussion of the reconstruction of proto-Mbaham-Iha, including topics such as syllable structure and stress which are beyond the scope of the present paper.

Based on the current reconstruction, Proto-Mbaham-Iha had 14 consonants (Table 1) and 5 vowels plus three diphthongs (Table 2). There is marginal evidence for two palatalised consonants; these are bracketed in Table 1 and represented as *tj and *ndj.

⁵ Cottet (2015) contains only a fraction of the number of lexical items compared to the various sources penned by Flassy. As such it was of limited use for this reconstruction. We have, however, often relied on her work to understand details of Mbaham phonology and phonetics.

Table 1. Proto-Mbaham-Iha consonants

*p	*t	(*tj)	*k	*k ^w
*mb	*nd	(*ndj)	*ŋg	*ŋg ^w
*m	*n			
	*s			
	*r			
*w		*j		

Table 2. Proto-Mbaham-Iha vowels, diphthongs†

*i	*ie		*u
*e			*o
	*ei	*a	*ou

† It is an open question whether *ie and *ei should be treated as diphthongs or vowel sequences. We assume diphthong status here.

This analysis constitutes a near complete reconstruction given the data currently available to us. The remaining problems will be outlined below in the discussion of the sound correspondences we identify.

4.1 Consonant correspondences

Table 3 provides the consonant correspondences across the different positions in the word. Details of these correspondences are discussed, where necessary, below. Much of the discussion here centres on Mbaham, because of the availability of Cottet’s (2015) phonology clarifying some of the issues presented by Flassy’s word lists.

While Iha has only /h/, Mbaham has a phonemic contrast medially between /s/ and /h/, though the functional load of the contrast appears to be low. Cottet (2015) distinguishes, for instance, instances of medial /h/, such as /sehere/ [se.he.re] ‘sick’, from instances of medial /s/, such as /asuran/ [a.su.ran] ‘pincer, tongs’ (< Onin *asuran* ‘tongs’). We find no reconstructable items with a medial s in Mbaham at this stage, only h is found medially. Most likely medial /s/ in Mbaham indicates a loan word.

It is notable that *p and *t have voiceless reflexes non-medially and voiced reflexes medially. Cottet (2015) notes for Mbaham that /p/ is realized intervocalically as [β], represented in the transcription of Flassy that we adopt here as b. The /t/, however, surfaces intervocalically as a geminate, as in /atap/ [attap] ‘string bag’ corresponds to the phonological form. In our reconstruction of Proto-Mbaham-Iha (Pmb-Ih) instances of Mbaham medial /t/ have irregular correspondences with Iha and can in many cases be shown to be borrowings (e.g., ‘corpse’: Mbaham *ni.ti*, Iha *nidi* < Proto-Malayo-Polynesian (PMP) *qanitu).

Reflexes of *k are variable in both Mbaham and Iha. This is almost certainly the result of allophonic variation captured by inconsistent transcription in the data used for this reconstruction. While Flassy considers /k/ and /q/ as phonemes whose contrast is neutralized in codas, Cottet (2015) found no such contrast, but only /k/ with an intervocalic [ɣ] allophone. Instances of medial /k/ realized as [k] in Mbaham and Iha are rare and can be identified as borrowings.

Table 3. Mbaham-Iha consonant correspondences†

	Initial		Medial		Final	
	Mbaham	Iha	Mbaham	Iha	Mbaham	Iha
*m	m	m	m	m	m	m
*n	n	n	n	n	n	n
*p	p	p	b	b	p	p
*t	t	t	d	d	t	t
*s	s	h	h	h	s	h
*k	k ~ q	k ~ q	k ~ q	k ~ q ~ g	k	k
*k ^w	k ^w ~ ku	p	q	p	q	p
*mb	mb	mb	mb	mb	--	--
*nd	nd	nd	nd	nd	--	--
*ŋg	ŋg	ŋg	ŋg	ŋg	ŋ	ŋ
*ŋg ^w	ŋg	mb	ŋg ^w ~ ŋgu	mb ~ ŋ(m)b	--	--
*w	w	w	w	w	--	--
*r	(r)	(r)	r	r	r ~ ø	r
*j	j	j	(j)	(j ~ ø)	--	--

† Brackets around segments marks that they are the correspondents are only marginally represented in the data and reconstructed tentatively in these positions.

Flassy transcribes a consonant cluster {pkw} for Mbaham, which we represent in the transcription we use as *k^w*. This is an unusual consonant and more recent work on Mbaham by Cottet (2015) did not find this consonant, but only *k^w*. Flassy's transcription {ku} appears to also represent *k^w*. Similarly, Flassy's {ŋgu} appears to be an alternative transcription for *ŋg^w*. Iha reflexes of *ŋg^w show some variation medially, with *ymb* in one case and *ŋb* in another:

- (2) *mong^wo 'banana' > Mbaham *muyguɔ*, Iha *nɔŋbɔ*
 *tong^won 'elbow' > Mbaham *tuyg^wɔn ~ tuyguɔɔn*, Iha *tɔŋmbɔn*

The phoneme *r is only tentatively reconstructed in initial position. There is only one example of an (apparently) native lexeme with initial *r, PMb-Ih *r[ɔ/u]s 'drink': Mbaham *ru:s*, Iha *rɔh*. Comparison of Flassy's wordlists superficially suggests an irregular correspondence between final *r* in Mbaham and Iha. This reflects the ongoing loss of final *r* in Mbaham. Cottet (2015) explains that, in her data, the final rhotic is unstable and often not produced by speakers. Instead there may be compensatory lengthening of the preceding vowel, such that /war/ 'stone' can be produced as [wa: ~ war].

Medial glides are only tentatively reconstructed; it may be that these vowels are not phonemic. In the case of *w, it is clear that at least some of the segments transcribed by Flassy with {w} medially are epenthetic (as in, e.g., Mbaham 'elbow' which is rendered both as *tuyg^wɔn* and *tuyguɔɔn* < *tong^won). As can be seen in (3), only three instances

of *w actually are stably reflected in the reconstruction; other instances only appear in one of the two languages. Epenthesis may be at play here.

- (3) *n[o/a]wa ‘eat’ > Mbaham *nɔwa*, Iha *nɔwa* ~ *nawa*
 *ŋgawarambuk ‘snail’ > Mbaham (*ŋ*)*g^wa:rambuk*, Iha *ŋgawarambuk*
 *ŋguwas ‘raft, vessel’ > Mbaham *ŋgu:was*, Iha *ŋguwah*
 *ka[jiw]or ‘torch’ > Mbaham *kajɔ:r*, Iha *kɛ(i)wɔr*
 *mbi[w]orj ‘white’ > Mbaham *mbwɔŋ-mbwɔŋ*, Iha *mbiɔŋ*
 *ko[w]ar[a/o]p ‘kin term’ > Mbaham *kɔwarap* ~ *kɔwara:p*, Iha *kɔrɔp*

Similar issues exist for *j. Consider the examples of *j in (4). There is only one clear example of a staple corespondence of *j* in Mbaham with *j* in Iha with *mbajer ‘bat’. In the remainder of the reconstruction, Mbaham *j* corresponds with Ø in Iha. Most instances of medial *j are neighbouring a front vowel, indicating that we may be dealing with an epenthetic glide rather than a properly reconstructable phoneme here.

- (4) *mbajer ‘bat’ > Mbaham *mbajɛ:r*, Iha *mbajer*
 *sejir ‘fish’ > Mbaham *sejir*, Iha *heir*
 *kajam ‘slave’ > Mbaham *kaja:m* ~ *kija:m*, Iha *kiam*
 *sirijet ‘earth, world’ > Mbaham *sirjɛ:t*, Iha *hidiet* ~ *hiriet*
 *seji[m/n] ‘navel’ > Mbaham *se:jn*, Iha *hein* ~ *heim*
 *sap[ij]ok ‘remainder’ > Mbaham *sa:bjɔ:q*, Iha *hap-habɔk*
 *ka[ji]i[r] ‘cook(ed)’ > Mbaham *qaj* ~ *kaj*, Iha *keir*
 *[i]k^wi[j]aren ‘nut’ > Mbaham *pk^wja:ren*, Iha *ipiarɛn* ~ *piar*
 *ka[jiw]or ‘torch’ > Mbaham *kajɔ:r*, Iha *kɛ(i)wɔr*

The status of orthographic {j} in consonant clusters such as those given in (5) is also unclear. It may be that these represent palatalised consonant, or in the case of {dj} and {tj}, affricates. Work is needed to clarify the phonological form of these items.⁶

- (5) Iha *djon* ‘field, wide’
 Iha *tjɔn*, Mbaham *tjuɔn* ‘thigh’
 Mbaham *tjet* (*pres-pres*) ‘diarrhea’
 Mbaham *tjɔ:n* (*pra:m*) ‘sole of foot’
 Mbaham *sjɔ:r* ‘earth’

Possible reconstructed phonemes that are bracketed in Table 1 and that do not appear in Table 3 are *tj and *ndj. We see in the examples in (6) that Mbaham medial /j/ in three cases corresponds to Iha /nd/ and /d/. We tentatively suggest reconstructions for this correspondence with *ndj and *tj, but recognise that the evidence for them is very slim at this stage.

- (6) *kendjep ‘eye’ < Iha *kendɛp*, Mbaham *kijɛp*⁷
 *mandja ‘child’ < Iha *manda*, Mbaham *maja*⁸
 *watjar ‘bay’ < Iha *wadar*, Mbaham *wɛja:r*

⁶ In the case of Flassy et al.’s (1984, 1987) *njie* ‘name’ for Mbaham, we assume that the {j} represents phonetic palatalization before the high front vowel /i/. This interpretation is confirmed by Cottet’s (2015) phonological representation of the lexeme as /níe/ ‘name’ (where the accent marks a stressed syllable).

⁷ Cottet (2015) gives this as /kijép/ [kijép].

⁸ Cottet (2015) gives this as /majá/ [ma.já].

4.2 Vowel correspondences

Table 4 provides the correspondences for the PMb-Ih vowel system. The reconstruction of the vowel system is less developed than that for the consonants. This is mainly because clarity about many descriptive details is lacking at this stage. For instance, while Flassy & Animung (1992) give only 5 vowel phonemes for Iha, Donohue (2015) states that it has a 7 vowel system with two heights of mid-vowels. Cottet (2015) states that Mbaham has a system of phonemic stress, Donohue & Gregory (2014) claim a pitch accent system for Iha. A proper understanding the synchronic vowel systems and their suprasegmentals will contribute significantly to clarifying PMb-Ih vowels. Flassy, Ruhukael & Rumbrawer (1987) transcribe long vowels for Mbaham, but Cottet (2015) finds no phonemic length. Flassy, Ruhukael & Rumbrawer's (1987) long vowels correlate with Cottet's (2015) stressed syllables in Mbaham.

Table 4. Mbaham-Iha vowel, diphthong correspondences

pMb-Ih		Mbaham	Iha
*i		i	i
*u		u	u
*e		ɛ	ɛ
*a	/_Ci	a	ɛ
	/_C ^w w	a ~ ɔ	a ~ ɔ
	elsewhere	a	a
*o	/C ^w w_	uɔ	ɔ
	elsewhere	ɔ	ɔ
*ie		iɛ	ɛ
*ei		i	ɛi
*ou		ɔu	ɔu

The vowels *i, *u and *e in simple environments are retained as such in both Mbaham and Iha. Reflexes of *a are mostly *a* in Mbaham and *a* or *ɛ* in Iha. When *a is followed by *i, *ie (perhaps also *ei) in the next syllable, it is fronted and raised to merge with *ɛ* in Iha:

- (7) *nami-sar ‘man’ > Mbaham *nami-ha* ~ *nami-he*, Iha *nɛmɛ-har*
 *warik ‘bite’ > Mbaham *wari:k*, Iha *wɛrik*
 *tangier ‘heavy’ > Mbaham *tangi:jer*, Iha *tɛnger*
 *sarei[k] ‘trade’ > Mbaham *sri:*, Iha *herɛik*

We observe that in Iha *ɛ* is subject to some harmony effects in the presence of a back vowel in an adjacent syllable. For instance:

- (8) *tumbur-sar ‘woman’ > Mbaham *tamb-hara* ~ *tɔmbɔ-har*, Iha *tumbu-her* ~ *tumbu-hɔr*
 *kɔmɛn ‘hear’ > Mbaham *kɔmɛnɔ:*, Iha *k(ɔ)mɔn*

The proto-phoneme *ɔ is retained as such in both languages in most environments. The exception is when *ɔ is preceded by *k^w, *ŋg^w or *w, it is often realized as uɔ in Mbahaam, as in (9).

- (9) *mɔŋg^wɔ ‘banana’ > Mbaham *muyguɔ*, Iha *nɔŋbɔ*
- *tɔŋg^wɔn ‘elbow’ > Mbaham *tuyg^wɔn ~ tuyguwɔn*, Iha *tɔŋmbɔn*
- *wɔŋg ‘sky’ > Mbaham *wuɔŋ*, Iha *wɔŋ*
- *wɔr ‘tail’ > Mbaham *wuɔr*, Iha *wɔr*

Of the diphthongs, *iɛ is merged with *ɛ* in Iha (10), while *ɛi is merged with *i* in Mbahaam (11).

- (10) *nie ‘name’ > Mbaham *niɛ*, Iha *nɛ*
- *wiek ‘blood’ > Mbaham *wijɛk*, Iha *wɛk*
- (11) *mein ‘louse’ > Mbaham *mi:n*, Iha *mein*
- *kemeir ‘face’ > Mbaham (*kɔm~*)*kmi:r*, Iha *kemɛir*

5. Austronesian borrowings in Mbaham and Iha

Nothing has been written on borrowing in these languages with the exception of Anceaux’s (1958:112) statement that Iha “shows a number of loanwords from Austronesian languages, mainly from Malay.” In this section, we make a first attempt at identifying loans and analyzing their significance for understanding the external influences on Mbaham and Iha from surrounding Austronesian languages. The number of loan words we deal with is small and many more are present in the word lists used for the reconstruction. We deal with what we consider to be a set that is likely indicative of overall borrowing patterns. We use the following materials on the Austronesian languages on Onin: Donohue (2010a, 2010b, 2010c), Narfafa (2011a, 2011b) and Smits & Voorhoeve (1992).

In the previous section, we outlined the proto-phonemes of the ancestral language of Mbaham and Iha, pointing out some ways in which loan words were identifiable on the basis of irregular correspondences. Loans in Mbaham and Iha can be divided into several layers. Differences in the sound changes displayed by the languages indicate different sources and different timings for the borrowing. An example of how these can be distinguished is given for the appearance of the fricatives *h* and *s* in Mbaham-Iha in Table 5.

Table 5. Example of layers in borrowing as represented by fricative adaptation

Phoneme in borrowing	Phoneme in AN	Source	Timing
initial h	s	Local	Distant
initial s	s	Regional	Recent
medial h	s	Local	Distant
medial s	s	Regional	Recent

Where Austronesian languages have *s*, Mbaham and Iha variably show *s* or *h*. Borrowings in which *s* is adapted to the phonology of Mbaham and Iha with *h* can

typically be traced to local Austronesian languages, such as Onin and Sekar. By contrast, borrowings in which *s* is not adapted to Mbaham-Iha phonology but remain as *s* tend to be words from Indonesian/Malay or regional terms that are widely diffused. For example, Iha *selat* ‘sea’ maintains initial *s* borrowed from Malay *səlat* ‘passage, strait’ (< PMP *səlat), but has adapted Iha *hira* ‘salt’ with *h* when borrowing it from a local source, presumably Onin/Sekar *sira* (< PMP *qasiRa). Similarly, Mbaham tends to have medial *h* for borrowings adapted from local Austronesian languages, such as *rohūm* ‘mortar’ probably from Arguni-Kambran (< PMP *ləsuŋ; see below on the sound changes here), while medial *s* is found in loan words widely found in Maluku, such as Mbaham *maresa* ‘pepper’ (Cottet 2015) from Sanskrit via Malay/Javanese *mārica* (Stevens & Schmidgall-Tellings 2010). Because Malay has only been used widely in Onin peninsula in the last few hundred years, it is relatively safe to assume that borrowings from them are more recent than those from local Austronesian languages such as Onin.

The most significant layer of identifiable borrowing comes from Onin and Sekar. Several are in Iha, but not in Mbaham, as in (12).

- (12) Mbaham *mbetu:n*, Iha *mbetun* ‘spear’ < Sekar *betun* < PMP *bətun⁹
 Mbaham *mbu:a*, Iha *mbua* ‘goanna’ < Sekar *bua* (cf. Uruangnirin *gbuka*)
 Mbaham *si:ra*, Iha *hira* ~ *tira* ‘salt’ < Onin *sira*, Sekar *sira* < PMP *qasiRa
 Mbaham *nuwɛ:*, Iha *nɔha* ‘island’ < Onin *nusa*, Sekar *nusa* < PMP *nusa
 Iha *mahi* ‘smoke’ < Onin *masi*, Sekar *masi* < PMP *ma-qasu
 Iha *pati* ‘stone’ < Onin *pati*, Sekar *bati* < PMP *batu
 Iha *piawa* ‘crocodile’ < Onin *p^waja*, Sekar *biawa* < PMP *buqaja¹⁰

On the basis of certain indicative sound changes we can assume an Onin-Sekar source for several borrowings, even though we do not have the lexeme in the currently available materials. For example, Onin, Sekar and the closely-related Uruangnirin of Karas island are the only ones in the immediate region that show the sound change PMP *l > /n/ (e.g. PMP *lima ‘five’ > *nima*). In the two cases where Mbaham-Iha have *n* for PMP *l, we infer an origin from these Austronesian languages:

- (13) Mbaham *u:ni*, Iha *uni* ‘rudder’ < PMP *qulin
 Mbaham *nununa*, Iha *nununa* ‘headrest’ < PMP *qalunan

Similarly, the change PMP final *u > i characterises Onin and Sekar, as seen in ‘smoke’ and ‘stone’ above. Using this sound change, we can infer an intermediate Onin-Sekar source.

- (14) Mbaham *ni:ti*, Iha *nidi* ‘corpse’ < PMP *qanitu
 Mbaham *tamba:ki* ‘tobacco’ < Onin *tabaki*, Sekar *tabaki* (Smits and Voorhoeve 1992:197–198) < Malay *tembakau*

Some borrowings can be attributed immediately to Onin because *b, as in ‘stone’ above, regularly becomes *p* in Onin but not in Sekar, while other loans with original *b appear as *mb* or *mp* in Mbaham-Iha (e.g. Iha *mpuher* ‘bow’ < PMP *busuR.) The last of these terms is itself a latter-day borrowing into Onin, probably from Malay:

⁹ The meaning ‘spear’ as opposed to ‘bamboo sp.’ appears to be a local change. All the known CMP reflexes suggest initial *mb rather than Blust’s *b.

¹⁰ It is difficult to say which language the Iha word is from, since the metathesis is found in Sekar where the change of *b to *p* does not occur.

- (15) Mbaham *pɛjɛ:r*, Iha *pɛjɛr* ‘pay’ < PMP *bayaD
 Mbaham *pangala*, Iha *pangalah* ‘cassava’ < Onin *pangala* < Malay *bengala*¹¹

Several roots have no established PMP etymologies, but Onin and Sekar or a language ancestral or related thereto are thought their immediate source because cognate forms are found in Austronesian languages of southern Maluku and Timor. For example:

- (16) Mbaham *tək(-tək)*, Iha *tək-təkəm* ‘blocked, deaf’ < Onin *to:k*, cf. Yamdena *toke*,
 Fordata *tok.a*, Tetun *tuka*, Waima’a *tuko*.

Mbaham *ki-ki:bən*, Iha *ki-kibən* ‘mosquito’ < Onin *ifiər*, Sekar *kifin*, cf.
 Yamdena *kifin*.

Mbaham *titi.r*, Iha *titir* ‘drum’ < Sekar *titir*, cf. Kambran *titir*, Yamdena *titir*,
 Fordata *titir*.

The Austronesian languages in the east of Onin peninsula have had much less discernable influence on Mbaham-Iha. There is only one known loan from Arguni in Mbaham and Iha at this stage:

- (17) Mbaham *nɔur*, Iha *nɔwr ~ nɔur* ‘coconut’ < Arguni *nawur* < PMP *niuR

However, several more are suspected. Arguni-Kambran is characterized by PMP *l > r (e.g., Arguni-Kambran *rim* ‘five’ < PMP *lima; Arguni *ragit*, Kambran *raʔit* ‘sky’ < PMP *laŋit). This sound change is not found in Onin or Sekar.¹²

- (18) Mbaham *rɔhum ~ rɔhu*, Iha *rɔhum* ‘mortar’ < PMP *ləsuj
 Mbaham *tare ~ tare:*, Iha *tare* ‘rope’ < PMP *talih
 Mbaham *ma:r*, Iha *mar* ‘cloth’ < PMP *malaw
 Mbaham *(pa)re:r*, Iha *rar* ‘sail’ < PMP *(pa-)layaR¹³

It may be that some words have been introduced into Mbaham and Iha from the north, where families of the South Halmahera-West New Guinea subgroup are spoken (Kamholz 2014). An example is Mbaham *ma:jm ~ mɛ:jm*, Iha *main* ‘fat, grease, oil’ < PMP *məñak (Kamholz 2014:183–184). It is more obvious that the Mbaham and Iha words reflect a northern form than it is that these regularly continue Blust’s PMP reconstruction. Similar northern influence is likely for Mbaham *wamɔ:r*, Iha *wamar* ‘hornbill’ and Mbaham *kəkək*, Iha *kəkar* ‘chicken’. These two animal terms are found throughout the Papuan languages of Onin, the Bird’s Head and Cenderawasih Bay and in the Austronesian languages of Raja Ampat and Cenderawasih Bay (Smits and Voorhoeve 1992:239–240, 1998:120–121, Kamholz 2014:241, 224).¹⁴

¹¹ *Ubi benggala* is still found in some dialects of Malay in Malaysia, but is lost in Molluccan Malay where *kasbi* now dominates (David Gil pers. comm.). According to Blust & Trussel (ongoing), *benggala* ultimately comes from Bengal.

¹² Note that this sound change is found in Iraputu, but because that language is outside Onin and at a much greater distance than Arguni-Kambran, we assume the latter is the source for borrowings with the *l > r sound change.

¹³ Alongside *layaR, Blust also reconstructs *pa-layaR with causative *pa-, as seen in Drabbe’s (1932a:53, 1932b:48) Tanimbar forms; this is the origin of Mbaham’s initial segment.

¹⁴ Clark (2011:283–285) states the “Red Jungle Fowl, *Gallus gallus*, spread as a domesticate along with Oceanic speakers throughout almost all the Pacific islands”, and reconstructs Proto-Oceanic *kokorako ‘fowl, *Gallus gallus*, especially male’.

There are also numerous instances of Austronesian etyma in Mbaham-Iha where no precise source language can be as yet identified. For instance:

- (19) Mbaham *dulan*, Iha *dulan* ‘durian’ cf. PMP *duRi-an
 Mbaham *kabʷɔr*, Iha *kɔbuk ~ kɔbɔuŋ* ‘lime’ cf. PMP *qapuR
 Mbaham *pa:ri*, Iha *pari* ‘stingray’ cf. PMP *paRih
 Mbaham *suwe:r*, Iha *huwer* ‘long-tooth comb’ cf. PMP *suat
 Mbaham *tɔwɔ:*, Iha *tɔwɔ* ‘old’ cf. PMP *tuqah
 Iha *puhar* ‘navel’ cf. PMP *pusəj
 Iha *hihir* ‘comb’ cf. PMP *sisir
 Iha *wena* ‘honey’ cf. PMP *wani

Loan words may also be identifiable on the basis of morphology. The common CMP 3rd person verbal prefix *na- is often the sign of a loan in the languages of West Bomberai.¹⁵ There are two Mbaham-Iha lexemes in the available data which have this morpheme:

- (20) Mbaham *na-sula*, Iha *na-hula* ‘dance’
 Mbaham *na-ki:ra*, Iha *na-kira* ‘deceive’¹⁶

The extensive wordlists provided in Flassy and Animung (1992:79–110) and Flassy, Ruhukael and Rumbrawer (1987:108–148) contain many more Austronesian borrowings than have been presented here. This treatment has only provided an initial look at borrowings in Mbaham-Iha. Descriptive work on the Austronesian languages of the region will greatly assist in further understanding of the Austronesian element in the Mbaham-Iha lexicon.

6. Discussion

This paper has presented an historical analysis of the lexicons of Mbaham and Iha, the two Papuan languages of the Onin peninsula. Our treatment consists of a reconstruction of the lexicon of proto-Mbaham-Iha and the identification of borrowings from Austronesian languages spoken in Onin Peninsula. On the basis of the available materials, we could not yet perceive much influence from the languages of Eastern Seram/Seram Laut, a connection which has been set out by historical eyewitness accounts of the Onin Peninsula. Documentation of both the Austronesian languages of Onin Peninsula and those of East Seram/Seram Laut is needed to verify whether Seram had a significant linguistic impact on Onin.

This study has shown that, despite a not insignificant number of Austronesian borrowings from different sources, Mbaham and Iha have an inherited core of non-Austronesian vocabulary. With this reconstructed lexicon of Mbaham-Iha in hand, we are now in a position to take further steps to understand their position in the Wallacean Linguistic Area, in particular, a systematic appraisal of the proposal that Mbaham-Iha are related to the Papuan languages of Timor region (Usher & Schapper in preparation). Future work on the grammars of Mbaham and Iha will also be useful in facilitating understanding that a possible expansion from New Guinea into Timor may have had on the linguistic landscape of Wallacea.

¹⁵ Visser (2016:73, 107–108, 139–140) identifies the morpheme as a loan verb marker and includes a number of verbs with *na-* for Karas, such as *na-sula* ‘dance’ among many others.

¹⁶ cf. Drabbe’s (1932a:47, 1932b:44) Jamdena *n-kir* and Fordata *n-kira*, the glosses of which suggest the meaning ‘trick’ or ‘tempt’. The majority of Drabbe’s verbal entries include a version with this prefix.

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Appendix: Proto-Mbaham-Iha reconstructions

	Proto-Mbahaam-Iha		Iha (Flassy & Animung 1992: 79-110)		Mbaham (Flassy, Ruhukael & Rumbrawer 1984, Flassy, Ruhukael & Rumbrawer 1987:108–148)	
1	*[a]k ^w orou	enemy/evil	pərouw	musuh	a:qrəw ~ a:qrəu ʔaqəru-aqəru nat aqəru-aqəru kə:r	marah musuh bermusuh musuh
2	*atok ^w	wood/tree	adəp	obat	adə:q ~ adəq	obat; kayu
3	*[i]k ^w ijaren	nut	ipiaren ~ piar	kacang-kacangan	pk ^w ja:ren	kacang-kacangan, buncis
4	*ind[o/u]p	needle	indəp	jarum	indu:p	jarum
5	*[i]piek	cook	bək	memasak; masak, matang, tua	ibijek ~ ibjek	masak (makanan); masak, matang
6	*is	fruit/seed	is paha ih nəur is kε-ih	buah bulir padi buah kelapa bibit tanaman; biji	ka-js ~ ka-is	biji
7	*jambar	dog	mbiar	anjing	jamba:r	anjing
8	*jembar	wave(s)	jember	ombak	je:mba	ombak
9	*jerong	light (weight)	je-je:roŋ	ringan	je:roŋ	ringan
10	*joun	flat land/dry land/wide	djəŋ ~ jəŋ	padang rumput; lebar/lapang	jəwn ~ jəun	daratan
11	*kajam	slave	kiam	budak	jəwn wi:nda kaja:m ~ kija:m	luas, lebar budak; tawanan perang, budak
12	*kajir	cook/cooked	keir	memasak	qaj	memasak; masak (makanan)
13	*kajiwor	torch	keiwə:ɾ	suluh	kajə:ɾ	suluh
14	*kamar	yawn	kam-kamar	menguap	kam-kamar	menguap
15	*kaminV	sun	kimina	matahari	kami:ni	matahari
16	*kambir	war	kambir winin	mengadakan perang	kambi:r	perang
17	*kanda	head	kanda kuwuh kanda	kepala mudik	knda: krija knda:	kepala berlayar ke hulu
18	*kangap	sharp	kangap	tajam	kangga:p	tajam
19	*kang ^w am	grass	kambam	rumput	kəŋg ^w a:m	rumput
20	*kapas	moon	kabah	pematang, bedeng; bulan	kaba:s	bulan

21	*kapasi	sneeze	kabahi	bersin	kaba:i	bersin
22	*kar	vagina	kar	puki	ka:r	puki, vagina
23	*karepot	yam (sp.)	kerebət	umbi-umbian	karəwət	kumbeli (besar dan berbulu)
24	*kemeir	face	kemeir	wajah	kmi:r	wajah
25	*kemeŋ	sweet	kemeŋ	manis	kme:ŋ	manis
26	*ken[a/e][t]	see/sense	kenet	melihat	kna:	melihat
27	*kende	know	kende	tahu, kenal; tahu, mengerti	keŋde:-qende	pandai
28	*kendjep	eye	kendep	mata	k(i)jep	mata
			kara kendep	sumber air	krija k(i)jep	mata air, sumber air
			hən kendep ~ sən	puting susu	sə:n kijep	puting susu
			kendep			
29	*kira	water/river	kara	air	krija	air
30	*kis-kis[a]	star/firefly	kihkiha	unag-kunang	kiskis	bintang
31	*komen	hear/listen	kəmən	mendengar	kəmənə:	mendengar
32	*kos[um]	grub	kə-kəhum	ulat	kus	ulat
33	*kowar[a/o]p	father's older sister	kərəp	anak saudara perempuan tua ayah, anak saudara laki-laki	kəwarəp ~ kəwara:p	anak perempuan, sdr. laki ibu, MBD; anak perempuan, sdr. laki ayah, FZD; sanak saudara
34	*kowus	snake	kəuh	ular piton	ku:s	ular; ular sawah
35	*kuturuk	sweat	kuduruk	keringat	kuduru:k	keringat
36	*kundur	pig	ndur mundhuk	rahang babi	kundur:r	babi
37	*k ^w ara	ten	para	sepuluh		
			para pə	sebelas		
38	*k ^w arok	carry	pərək	menjinjing	karə:q	mengepit
39	*k ^w eji[t/s]	foot/leg/claw	pəih	cakar	pk ^w ejt	kaki
40	*k ^w en	raw/unripe/young	pən-pən	mentah, muda	pkən-pk ^w ən ~ pk ^w ən-pk ^w ə	muda, mengkal (buah); mentah, belum matang/masak
41	*k ^w [e]r[e/i]	nest	pəiri	sarang (kasar)	pk ^w rə	sarang
42	*k ^w ies	village	pəh	kampung	pk ^w jəs	kampung
43	*k ^w ier	ear	pər ŋgein	(daun) telinga	pk ^w ujer	telinga
44	*k ^w irembus	boil (n.)	pirembuh	bisul	kutje:m bus	bisul
45	*k ^w osi	good	pəhi	baik	pk ^w ə:hi ~ kuəs	bagus, baik
46	*mak	voice/language	maq	suara	ma:q	bunyi, suara, bahasa
			iha ma:q	Bahasa Iha		
47	*mandja	child	manda	anak; anak saudara laki-laki	mə(j)a ~ məja: ~ majt ~ mejt	anak; istri sdr. laki-laki tertua suami, MZoH

48	*maŋ	ginger	maŋmaŋ	halia/goroka	maŋmaŋ	jahe
49	*mein	louse	mein	kutu	mi:n	kutu
50	*mejer[e]	inside	mere merenən	di dalam di dalam	mi:r mejren	bagian dalam dalam
51	*[me]ŋgaŋgam	spider web	meŋaŋgaŋ-tare	laba-laba	ŋgaŋga:m tare	sarang laba-laba
52	*mesek	neck/throat	mehek	leher	maha-kajs	lelum, jakun
53	*mesen	sit	mehen	duduk	mehɛ:n maqena	duduk (umum) duduk (tunggal)
54	*[mi]sin	mouth	mihin mihin pri-bri mihin tap ~ mhin- tap	moncong tersenyum gigi; paruh	sin sin-mi:r sin-pri: sin ta:p	mulut bagian dalam mulut tersenyum gigi
55	*moŋg ^w o	banana	noŋbo	pisang	muŋgɔ	pisang
56	*mos	sow	keih məh	menyebar benih	mɔ:s	menugal, menyebar benih
57	*munduk ~ *ndumuk	chin	munduk	dagu	nd(u)mu:k	dagu; geraham
58	*mbajer	flying fox	mbajer	keluang, kalong	mbaje:r	keluang, kalong
59	*mbaŋgor	thick	mbaŋ-mbaŋgor	tebal	mbaŋgɔ:r	tebal
60	*mbap	star/firefly	mbap	bia, kerang (kecil); bintang	mbab mbap-mbap	berkelip kunang-kunang
61	*mbes	sugarcane	mbeh	tebu	mbɛ:s	tebu
62	*mbiwong	white	mbiɔŋ	putih	mbwɔŋ-mbwɔŋ	putih
63	*mbuk	yellow	mbuk-mbuk	kuning	mbu:k-mbuk	kuning
64	*naka	younger sibling	naka ~ naga	anak laki-laki saudara muda ayah/ibu	pk ^w a-naqa	adik laki-laki/perempuan; saudara perempuan termuda istri, Wzy
65	*nami	man/male	nɛme-har nɛme-nɛme-har nɛme-har-dia	laki-laki, pria jantan jantan	namije nami-ha ~ nami-he narit-narit nami-he pk ^w a-dwa nami-he	suami orang laki-laki teman, sahabat laki-laki
66	*nan	older sister	nan	kakak perempuan; anak perempuan saudara laki-laki tua ayah/ibu	a:ni	ayah suami, HF kakak laki-laki/perempuan
67	*nander	stand	nander wiri ndo nander	berdiri membuat/membangun rumah	nandɛ:r kambi:r nandɛ:ra	berdiri berperang

68	*nareit	guest/friend	nɛrɛ(i)t	tamu	narit narit-narit	tamu teman, sahabat laki-laki
69	*n[a/o]wa	eat	nɔwa nawa-ŋge	makan makan	nɔwa	makan
70	*nen	older brother	nɛn	kakak laki-laki	a:ni	kakak laki-laki/perempuan; istri sdr. laki-laki termuda suami suami, HByW
71	*nie	name	nɛ	nama	njiɛ qɔm-njiɛ	nama bernama
72	*nieŋ	stairs/ladder	nɛŋ	tangga	njiɛŋ	tangga
73	*niŋgis[i]	hide	ŋgihi	bersembunyi	ni:ŋgis	bersembunyi
74	*ndaram	loft/ceiling	ndaram	loteng	ndra:m	langit-langit rumah
75	*ndoman	sea snail	ndoman	keong, siput (laut)	ndɔ:man	keong, bia ketok
76	*ndum	shoot (n.)	ndum wɛdi ndum	pucuk pucuk bambu/rebung	wame ntum	rebung
77	*ndura	sleepy/nod off	ndura ~ ntura kɛndɛp dira	mengantuk mengantuk	kijɛp ndura	mengantuk
78	*ŋgambur[a]	thatch	ŋgambar	lalang	g(a)mbu:ra ŋgaŋ-g(a)mbu:ra	lalang, alang-alang lalang, alang-alang
79	*ŋgawarambuk	land snail	ŋgawarambuk	keong, siput (tanah)	(ŋ)gʷa:rambuk	siput, keong
80	*ŋgeit	weave	ŋgeit	menenun; menjahit	ŋge:jt ~ ŋgeit	menjahit
81	*ŋgeŋgap	tongue	ŋgeŋgabuh	lidah	(ŋga) ŋgambje:r	lidah
82	*ŋgombor	swollen	ŋgombɔr mɛhek ŋgombɔr	bengkak gondok, gondong	mbɔmbɔra:	bengkak
83	*ŋguwas	raft/vessel	ŋguwah	rakit	ŋgu:was	kapal
84	*ŋgʷor[o/u]s	snore	mbɔrɔh	mendengkur	ŋgru:s wuɔŋ ŋgru:ŋ	menggeram, mendengkur guruh
85	*ŋgʷ[o/u]n[a]	bee	mbɔn	tawon, tabuhan, lebah	ŋgu:na	lebah
86	*[o]kʷo[no]	one	pɔ hɛrɛ-wu para pɔ	satu satu sebelas	ɔqɔnɔ	satu
87	*pak	skin/bark/covering	pak adɔp pak kɛndɛp pak	kulit; kulit buah kulit pohon kelopak mata	pkʷra:ɔqɔnɔ pa:k adɔq pa:k kijɛp pa:k	sebelas kulit kulit pohon kelopak mata
88	*pande[s]	ask	pandɛk	bertanya/menanyakan	pendɛja:	bertanya

89	*pare	say/speak	pre mak pre	berkata berbicara	pare:	berbicara
90	*par[o/u]	fly (v.)	pru	terbang	parə	terbang
91	*pek	earwax	peri-bek	tahi telinga	pk ^w ujer pek-pek	anak telinga
92	*per	fish trap	per	sero	pɛ:r	bubu
93	*peres	diarrhea	p(ɛ)rɛh-p(ɛ)rɛh	menceret	tjet prɛs-prɛs	menceret
94	*pot	stingray	pət-pət	parang; menjala; ikan pari	pət-pət	ikan pari jenis kecil
95	*pouk	wash	pouk mar pan pouk	mencuci mencuci pakaian	pouk	cuci
96	*poun	ashes	poun	abu	pə:un	abu
97	*pur	root	pur	akar	pu:r	akar
98	*pVram	palm/sole	telapak tangan kame:n pra:m	telapak tangan telapak kaki	kame:n pra:m p ^w et pra:m tjə:n pra:m	telapak tangan telapak kaki telapak kaki
99	*pVri	smile	mihin pri-bri	tersenyum	sin-pri:	tersenyum
100	*pVrus	burp/belch	kərat pruh	serdawa	pru:s ~ prə:s	serdawa, menyemburkan makanan
101	*r[o/u]s	drink	rəh	minum	ru:s	minum
102	*sang ^w on	cockroach	hambən	lipas	sang ^w ə:n	lipas
103	*sap[ij]ok	old/worn out	hap-habək	bekas pakai	sa:bjə:q	bekas pakai
104	*seke[t]	thin/flat	hege-heget ~ hege- hege	tipis; pipih/gepeng	seqe: seqe:-heqe	tipis datar
105	*semeng	sand	hemɛŋ	pasir	smɛ:ŋ	pasir
106	*senek	black	henɛk	hitam	sne-h(ɛ)nɛk	hitam
107	*sep	hot/warm	hep	panas	se:p	hangat
108	*serere	be ill/sick	herere tedəbər herere	sakit sakit perut	serere tikembu:n serere	merasa sakit sakit perut
109	*sejiŋ	hoarse	heij	parau	ma:q se:ŋ	parau
110	*sejir	fish	heir	ikan	sej(i)r	ikan
111	*sengiek	open	hengɛk	membuka (hal kecil)	siŋje:k	membuka
112	*sirijet	earth/world	hidiet	sawah, ladang, kebun	sirje:t	bumi
113	*s[iw]or	ground/below	hər-angɛ hər mena hər nen hər nangkak	turun ke bawah di bawah dari bawah	sjə:r kanumbar sjə:r	tanah belanga tanah

114	*sombi[t]	younger youngest child	nə həmbi manda həmbi	saudara perempuan ibu anak bungsu	nə:i su:mbit meja sə:mbit	bibi, MZy anak bungsu
115	*son	breast	hən ~ sən hən kəndəp ~ sən kəndəp	susu puting susu	sə:n sə:n kijəp	susu, paudara puting susu
116	*tangier	heavy	təŋgər	berat	təŋgi:jer	berat
117	*tap	fence/teeth	mi-hin tap ~ mhin- tap	gigi; paruh	ta:p sin ta:p	pagar, deretan tonggak gigi
118	*tep	pointed	təp	runcing	tə:b-teb	runcing
119	*[te]rem	cluster/bunch	rəm	rangkai	tə:rəm nəur tə:rəm	rangkai, tangkai, tandan rangkai kelapa
120	*t[iw]on	thigh	tjən	paha	tjuən	paha
121	*tokar	bone	təqar wətəwət ibuh təgər mbəŋ təgər	sambungan pada tulang tulang punggung tulang belikat	tə:qar təqar-təqar tukuruk tə:qar	tulang tulang-tulang tulang tunggung, tulang ekor, tulang pantat tulang belikat
122	*tong ^w on	elbow/wrist/knee	tan təŋmbən	pergelangan tangan	kərə:m tə:qar tunŋ ^w ən kame:n tunŋ ^w ən pk ^w əjt tunŋ(u) wən	merajut, menjirat siku lutut
123	*top	spit	kət kəmbər təp	meludah	təp	ludah
124	*tos	hit	təh kim	membunuh	tə:s	pukul
125	*totom	sit with legs to the side	tə-tədəm	duduk bertimpuh kaki	tə-tə:dəm	bertimpuh
126	*t[o/u]mb[o/u]r	woman/female	tə-təmbər təmbər nəŋmbər təmb-hara ~ təmbə-har təmbə təmbə-har kəkər tamba-har	betina pemuda (putri) perempuan betina ayam betina	tumbuwə tumbu-her ~ tumbu-hər narit-narit tumbu-her pk ^w a-dwa tumbu-hər	istri orang perempuan teman, sahabat perempuan ibu suami, HF
127	*tumbis	ridgepole/ roof	tum-tumbuh	atap	imja:k tum-tu:mbis	bubungan
128	*tumbu	five	tumbu herə tumbu tumbu pə herə tumbu pə	lima lima enam enam	tumbu:-əqənə	lima enam

129	*watjar	bay	wadar	teluk	weja:r	teluk
130	*war	stone	war tatar	kerikil	wa:r	batu
131	*warik	bite	warik	menggigit	wari:k	gigit
132	*[wa]rik	two	rik	dua	wri:k	dua
			herɛ rik	dua		
			tumbu rik	tujuh	tmbu:-wri:k	tujuh
133	*weng-weng	earthquake	wɛŋ-wɛŋ	gempa bumi	sjɔ:r wɔŋ-wɛ:ŋ ~ sjwɔ wɔŋ-wɛ:ŋ	gempa bumi
134	*wes	go	wɛh	pergi, berlayar	wɛs ~ wɛ:s	berjalan, pergi masih dalam tujuan; pergi
					wɛ:het	pergilah
135	*wiek	blood	wɛk	darah	wijek	
136	*w[i]r[a]	tree	wɛrɛ	pohon/kayu	wurja:	pohon
137	*wɔŋg	sky	wɔŋ	langit; udara	wuɔŋ	langit
138	*wor	tail	wɔr	ekor	wuɔr tarɛ	ekor
			kuwu wɔr	hilir	krija wuɔ(ŋ)	berlayar ke hilir
139	*wosou	breath/breathe	wɔhɔ	bernapas, istirahat	a:t wɔhɔw	bernapas
			mbe wɔhɔ-ndia	terengah-engah		
140	*wotour	clan/relatives	wɔdɔur	suku bangsa	wɔdɔ:w	sanak saudara
			wɔdɔur pɔnet	sanak saudara		
141	*wun	egg	kɔkar wun	telur	u:n	telur