

ROJA HAMA-HAMA? A LINGUISTIC REVIEW OF THE ENDE AND PALU'E WEAVING TRADITIONS

Stefan Danerek, Drottningg. 230, 254 33 Helsingborg, Sweden. Email: Cawalunda@yahoo.se

ROJA HAMA-HAMA? TINJAUAN LINGUISTIK TRADISI TENUN ENDE DAN PALU'E

Abstrak

Studi tentang teknologi tenun dan struktur desain tekstil dapat mengungkapkan hubungan antara tradisi menenun, seperti linguistik komparatif mengungkapkan hubungan antara kelompok linguistik. Tulisan ini membandingkan tradisi menenun serta kosa kata dua kelompok budaya-linguistik Flores, yaitu Ende dan Palu'e, yang terkait dalam tradisi lisan masing-masing, setelah membandingkan teknik dasar dan struktur desain. Pertanyaannya, apakah ada keterkaitan antara kedua budaya tenun tersebut, khususnya kalau tenun Palu'e bersumber dari tenun Ende? Perbandingan kosa kata tenun menunjukkan konvergensi yang lebih rendah daripada leksikon yang tersedia, dan itu tidak mendukung tautan atau asal tersebut, desain dan teknik dasarnya juga tidak. Namun, struktur desain Palu'e mungkin memiliki sumber dalam bentuk Flores yang lebih kuno, yang tertukar oleh atau ditransformasi perkembangan selanjutnya, seperti desain patola Ende.

Kata kunci: Ende, Palu'e, tenun ikat, Austronesia, Flores, linguistik komparatif

Abstract

The study of loom technology and textile design structure can reveal connections between weaving traditions similarly to how comparative linguistics reveal connections between linguistic groups. This paper compares the weaving traditions and related vocabularies of the Ende and the Palu'e, two Flores cultural-linguistic groups who are linked in their respective oral traditions, after comparing basic technique and design structure. The question is if there is a link between the two weaving cultures, particularly if the Palu'e weaving has a source in the Ende weaving? The comparison of the weaving vocabularies shows a lower convergence than that of the existing lexicons, which does not support such a link or origin, neither do the designs and basic techniques. However, the Palu'e design structure may have a source in older Flores forms, which became exchanged or transformed with later developments, such as the Ende *patola* inspired designs.

Keywords: Ende, Palu'e, weaving, ikat, Austronesian, Flores, comparative linguistics

Introduction

Weaving in Insular Southeast Asia is firmly associated with Austronesian speakers, and the so-called Austronesian expansion(s), which began over 4000 years ago with migrants from Taiwan settling in the northern Philippines and continued over three millennia until the settling of New Zealand by the Maori (Bellwood 2017). The study of loom technology, and to a lesser extent, textile structure and pattern, can reveal connections and lineages between weaving traditions (see Buckley 2012, Boudot and Buckley 2015), in the way that comparative linguistics reveal connections between linguistic groups, because the core weaving technology is as stable as the core grammar of languages (Buckley 2017). This paper compares the two related cultural-linguistic groups, the Ende and the Palu'e, examining if there is a clear link between the weaving of the two groups, such as if the Palu'e weaving has branched away from the Ende weaving.

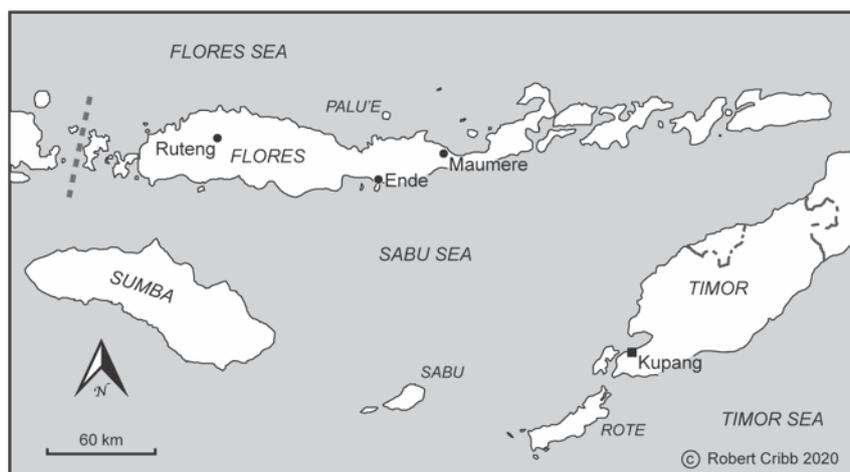


Fig. 1. Map of the eastern Indonesian province Nusa Tenggara Timur.

The Ende and the Palu'e are linguistically and culturally 'Flores groups', although the latter inhabit the small island with the same (exogenous) name near the north-central Flores coast, while the first inhabit an area in south-central Flores, including the coast, the regency capital Ende, and the small island Endeh south off the capital. Both the Ende and Palu'e languages are classified as Austronesian, Malayo-Polynesian, Central-Eastern Malayo-Polynesian, Bima-Lembata (Eberhard et al 2020). Inyo Fernandez (1989 and 1996) divides the Flores languages into East, Central and West Flores languages, and labels the Central group 'Ngadha-Lio-[Palu'e]', including Nage, Kéo and Ende, while Manggarai and Lamaholot languages, respectively, dominate the West and East Flores groups. Ende and Lio both have over 100 000 speakers, whereas the Palu'e have approximately 15 000 speakers, of which less than 10 000 reside on the island. The Ende and Lio languages have a closer affinity to each other than to Palu'e (cf. Elias 2018). It is still unsure which of them is closest to Palu'e, due to each's internal variations and the lack of comprehensive dictionaries.

The Flores languages never represented homogeneous or organised entities. The village, the clan, and alliances, were, and still are to a certain extent, the basis of social and political organisation before outsiders' gradually imposed political and administrative organisation in the modern age (cf. Hamilton 1994:21). On Flores the Palu'e are also called *ata Ku'a* (Palu'e: *ata Lu'a*) and are associated with Roja, or Wolo Roja (place), in Soge, Ende. According to Orinbao's (1969) account

of oral history, the *ata Ku'a* were evicted from their lands in Ende-Roja several centuries ago, and subsequently a surviving *Ku'a* community migrated to Palu'e Island, *Nua Ku'a* (Palu'e: *Nua Lu'a*).¹ Palu'e and a Palu'e settlement in Lio on the Flores north coast straight across from the island, where there are recently built Palu'e settlements today, was recorded as early as 1512 by the cartographer Francisco Rodriguez (Cortêsão 1978: Map No. 1.2. In Vischer 1992:22). Joseph Glinka estimated that the rites of the textile producing domains had been going on for at least six to eight centuries (1972:903-904). The Palu'e and the Ende regard each other as a brother people (Ende/Palu'e: *Roja hama-hama* 'same Roja') and maintain a truce, or a blood pact (Palu'e: *tura caji*), which prohibits fighting between the two groups. Whether the Palu'e share this ancestry with today's Ende people, or Ende-Roja specifically, or, rather, if the present Ende-Roja are descendants of the people who evicted the *Ku'a*/Palu'e people, can of course not be determined from oral history only. Both groups have several origin groups and origin myths, and both have myths of people arriving with boats on Flores from a place in the 'west'. Both groups reserve traces of the Majapahit empire's eastern expansion, recorded in *Nagarakertagama* (1365), in their myths, and on Palu'e the names Majo and Bhai are mentioned in ceremonial chants (Vischer 1992:21-22) and exist as personal names (male and female), which compares well with Sawu-Raijua, where a Maja Pai is an ancestral figure (Duggan and Hägerdal 2018:126-127). One common Palu'e myth tells of a migration from Flores, and in one version the ancestors, who are associated with Roja, fled a volcanic eruption, not ethnic cleansing or tribal warfare, whereas in an Ende version a marriage between two clans led to a quarrel and the eviction of the clan that became the *ata Ku'a/Lu'a*.² Anyhow, among several possibilities, it is possible that a non-weaving group from Ende-Roja migrated to the island, or that another migrating weaving community brought weaving to Palu'e. Also, we cannot know with absolute certainty that the people of south Flores were weaving before the historical period, due to the lack of archaeological evidence and preserved textiles. Hamilton (1994:30) speculates that if the body-tension loom was present before the contact with more technologically advanced societies, 'it was probably used to make plain or warp-striped cloth from bast fibers', and that cotton cultivation, ikat, and mordant-dyeing may have been introduced from the 1300s or later when such contact became more frequent.

Theoretical considerations: The technology of weaving, together with the weaver's technique, are matrilineally inherited and therefore very conservative. The externally braced back-tensioned loom with a circular warp is a central example with its wide distribution among various distinct cultural groups across Insular Southeast Asia. It is warp-faced, concealing the weft, and decorated with warp ikat. The peoples of eastern Indonesia primarily weave warp ikat with this type of loom, which has remained virtually unchanged through the ages. Buckley and Boudot (2017, appendix) found that 'there is no clear evolutionary hierarchy' between the looms of this type, which is found all the way from northern India to Micronesia. To the west of Bima and Borneo, where the influence of the Indianized kingdoms was significant, this loom type became replaced by later coming looms with flat warp and a

¹ Orinbao (1969:50) suggests that Nusa Raja, an alternative name for Palu'e island, derives from previous cartographers' misspelling of 'Nusa Rodja' to 'Nusa Radja'. Nusa Raja is mentioned in Palu'e ceremonial chants.

² SD1-114, Author Palu'e audio collection, Kaipuleohone digital language archive. The Ende myth was told in Indonesian by Om Ali, a local weaving expert, on a visit to the Wo Roja weaving village, 2 April 2021.

reed, suitable for weft ikat decoration. Patterns and the lexicon of weaving are less stable than the technology, yet it has been possible to reconstruct basic weaving terminology for proto-Austronesian and proto-Malayo-Polynesian (Blust and Trussel 2020). Old *adat* (customary) cloths, which often means about a century or more, are evidence that designs and patterns change very slowly. In Indonesian this faithfulness to tradition is, next to *adat*, called *pakem*, and weavers often use an existing cloth as a model for a new one. For these reasons, not only technology (tools) and technique (method), but also pattern and the lexicon of weaving have a potential to reveal linkages between weaving cultures.

Methodology: The technology, technique, and patterns of the two groups are first compared to serve as an introduction to the latter and main concern, the comparison of the weaving vocabularies. The convergence is compared with the convergence of the two languages' lexicons, as in the available Ende dictionary, an online Ende wordlist (Aoki and Nakagawa 1993. 648 items) and the Palu'e-Indonesian dictionary (Author 2019), which is about 32% (near convergence).³ Can the comparisons confirm or throw light on a connection between Ende weaving and Palu'e weaving?

Ende and Palu'e weaving: technology, technique, pattern

Both the Ende and the Palu'e weave circular warp-faced ikat with the same type of back-tensioned externally braced loom. The art of weaving is much larger than the process of mounting warp yarns between the warp and cloth beams and inserting weft yarn at straight angle over and under the warp. Prior to the widely available commercial yarn various plants were grown, most often cotton, whose fibres are made into yarn through a labour-intensive process. To make (warp) ikat, bundles of warp yarns are mounted on a frame and tied for resist-dyeing (ikat). Traditional dyeing with materials from plants, including mordanting, requires the picking of wild or domesticated plants (roots, bark, leaves) for the preparation of dye vats. The yarns and ikat bundles are dyed repeatedly. When the dyeing is done, the ikat bundles are opened and carefully re-mounted on the weaving frame. The weaving results in a long circular textile, which often is cut in two pieces and sewn together alongside both warp and weft to a sarong, with identical panels up and down; the Palu'e do it this way. Shawls and blankets with similar patterns are made the same way, without the cutting and sewing.

The dye process, like the materials for the loom parts, naturally shows variation depending on the locally available materials. Speaking in the ethnographic present, both the Ende and the Palu'e prefer to tie the yarn bundles (ikat) with the leaves of the *gebang* (Ind.) palm; coconut palm leaves is the second choice. The tying of thread bundles is done in the same way, except the position of the rack tend to be different. The *gebang* palm is only endemic to Flores, and the Palu'e get it from Lio. Both groups traditionally dye blue-black with *Indigo tinctoria*, and the Palu'e often overdye the indigo until it is near-black, using mangrove bark, leaves of a certain tree species (Palu'e: *langalidhi*), and ash water. The Ende dye reds, or orange and brown, with *Morinda citrifolia*, using the common regional methods for oiling/pre-mordanting with candlenut, and *Symplocos* leaves for mordanting. This method is known on Palu'e, but because neither *Morinda* nor *Symplocos* are indigenous to the island, alternative methods for the red colour developed, among else using the

³ The number is an estimate sufficient for the purpose but does not reveal the close similarity between the two languages. The author documented the Palu'e language and oral traditions 2014-2016, then continued researching the weaving tradition.

mentioned overdye. *Morinda* and *Symplocos* were also brought from mainland Flores, but to what extent they were used is unknown. The Palu'e do oiling with both candlenut and kenari nut (Java almond). It is not surprising if the methods for dyeing do not compare well, colours might be conservative, but the methods of obtaining them are different in different environments. The starch for strengthening the yarns before weaving is, by the Ende, taken from the seeds of the Tamarind tree, a method known by the Palu'e, who traditionally use the tubers of the elephant foot yam, which is also squeezed into the yarn together with the mentioned overdyeing.⁴



Fig. 2. Palu'e sarong *Wua wela*, c. 1900 (PC 305, Pusaka Collection). Fig. 3. Ende sarong *Zawo kabhi* (*Zawo zombo zo*), c. 1940 (PC 233). Both made with handspun cotton and natural dyes.

Overall, Ende and Palu'e cloth designs are very different from each other. Figures 2-3 above show a common design type from each culture. The three panels of an Ende sarong encourages the use of three weavings of different panels/patterns to make two sarongs ($3 \times 2 = 2 \times 3$). This procedure would seem a development from the earlier procedure, but Hamilton (1994:77) suggests the opposite, and the Palu'e use their procedure when they copy Ende cloths. One common feature is the broad plain

⁴ View the method at <https://cawalunda.org/palue-black/>.

black (synthetic dye), or dark blue, bands near the edges or mid-panel (Ende: *mite meré*, Palu'e: *hopa mite. mite* 'black'). The Ende have more design types than the Palu'e, who have remained within a basic design structure, which they have consistently developed. Both groups primarily weave women's sarongs. The Palu'e still weave the men's sarong, of which there is only one type, the *Nae romo*, but the Ende seem to have ceased weaving men's sarongs (*zuka*). The colours of Ende cloths tend to be dominated by brown-red or red against a distinct dark blue or black background, but in the design category of *Zawo mangga* the dominant colour is black, or blue-black, and motifs are often in white (undyed yarn). The colours of the Palu'e cloths are blue-black or black, red, and white, where the first is the background, the red is the red bands, and the white is the undyed yarn of the motifs, sometimes exchanged with yellow, traditionally made by both groups with a turmeric-based dye.

The Ende patterns are varied, often intricate with geometrical motifs, yet more curvy-linear than rectilinear. They leave very little space without ikat. The designs and patterns are mostly *patola*-derived and contain only a few figurative elements (stylized horses/elephants), features it shares to a great extent with the Lio. Bands and panels feature one or two motifs which are repeated. Most types have a large, defined central field (panel), which covers a third or more of the cloth (sarong), which also has a lower and upper panel. This category is called *Zawo kabhi* (*z* may also be spelled *rh*, near to *l*, the Lio pronunciation [*lawo*]), of which there are many distinct and named types, but primarily four, with red (or reddish) and white on a black background (see Hamilton 1994:123-147). The *Zawo mangga* is the second common category. It has no defined central field, instead the central panel is like the entire cloth divided into ikat bands of various sizes, divided by thin black lines. It is this design format, which still can be described as three-panelled, that most resembles the Palu'e format. The colours are white on black, with little red. The third category, *Zawo ngéra* or *Zawo gezo* also has banded centre panels, but the colours are red and white on black, like the *Zawo kabhi*.

The Palu'e patterns are exclusively geometric and rectilinear, and done with stippling. All ikat motifs are made up of small dots, except the characteristic triangles, whereas the Ende use different sizes of stipples only for the small ikat bands. Sandra Niessen (2009:52) suggests that stippled patterns represent 'the earliest and the most basic form of Batak ikat'. Whether this is true of the Flores traditions, or generally of ikat cultures, is an open question. Palu'e cloths show no obvious Indian influence, but there are *jilamprang*-like motifs on the mother band. For the mentioned reasons the Palu'e design format appears to be of a more ancient type, which on Flores and elsewhere became supplanted with foreign influences.⁵ An indication in that direction is a black and white cloth from Ende the author discovered, sewn into a bag (obviously not a masterpiece). The motifs are stippled and geometric. The large motifs (Fig. 4) in particular likely have the same source of inspiration, *patolu jilamprang*, as the Palu'e motif in Fig. 5. The cloth was identified as an older type of *Zawo mangga* by a local expert,⁶ who associated this, less intricate, design with coastal Ende, and was unsure of whether it is still made today.

⁵ Rare textiles with similar designs, ikat technique, and colours, are found in the Philippines and on east Flores (see Maxwell (2003:164) and Graham (1994:237. Fig. 11D).

⁶ Personal communication. Om Ali, Aug -19.



Fig. 4. Rare type of *Zawo mangga* cloth sewn into a bag.



Fig. 5. Palu'e motif.

Focusing on women's sarongs, the Ende name cloth types of the *Zawo kabhi* category 'according to either the predominant motif or the internal structure of the central design field' (Hamilton 1994:126). The wider ikat bands are named *foko* and *gha'i* (*gami* and *mboko* are units for band widths), and the five narrower bands are named after the specific motifs they contain. In Palu'e, there is no meta-category other than 'sarong', and the largely static designs are not named after any of the motifs, because no particular motif is predominant in the design (see Author 2020). Neither do the motif names name a band. Both groups measure the warp band width with the number of individual ikat-bundles required to make a motif for a certain band (Palu'e: *lati*). This is prescribed for each design, and the numbers are uneven. Palu'e bands are called *hopa*, *enda* or *dui*. *Hopa* is typically used for the large black bands. The largest ikat bands are called *hina* 'mother', like in the Sikka tradition, and the women's cloths have one or two 'mother bands'. The sarong types are largely fixed designs, decorated with more or less the same, named, motifs, usually eight to ten. The smaller bands, down to 'three *lati*', are called *hanane* 'children'. The motifs on the child bands tend to follow the motifs of the larger bands, as halves, thirds, or smaller versions. The Ende do not use the mother-child terminology.

Lexical comparisons

Weaving related words found to exist in both the Ende and the Palu'e traditions are included in the tables below. The first table compares Ende and Palu'e with the reconstructed Proto-Austronesian (pAN) and proto-Malayo-Polynesian (pMP) words. Notes on the orthography: The adjoined letters *bh*, *dh* in Palu'e represent the imploded b, d, and can be exchanged with *p*, *t*. Final e is [e]. /v/ is in Palu'e represented with *w*. The glottal stop is represented with apostrophe, *é* represents /e:/ in final position or /e/ in penultimate position, which as a rule is /ə/. The same rules are applied for Ende. Some weaving terms have more than one gloss, as there are local variations, not least among the Ende, a larger language group spread over a significantly larger area than the Palu'e. The comparison is neither complete nor perfect, but sufficient for the purpose. Word variants are separated with a comma and alternative words with a slash. Ende-Palu'e cognates are marked *.

English	pAN	pMP	Ende	Palu'e
to weave	tenun		senda	noru
loom	ta-tenun-an tenun-an		ozo	dhodho wa'i no'o pabha 'foot rest and plank' / dhadha (same but the wood or bamboo is hammered into the ground)
beater (sword)	baRija	balija	fi'a	luja
spindle	qaNi		zuzo, ozo woe	bhudhe / bhudhe kabha
breast beam	qatip(-an)	qatip	konggo	hati
tie, bind (gen.)	siket	hiket	rike (gen.)	tike (gen.)
clothing	qules	qules	lambu	lambu*
tubular skirt		tapis	zawo	dhama

Fig. 6. Table. Weaving related words of pAN, pMP, Ende, Palu'e.

Robert Blust's reconstruction of pAN includes four weaving related words, of which the main *tenun 'to weave' is still retained in modern Indonesian with an added prefix, *ber-tenun*, *tenun* being a noun. The question is if the pAN *tenun-an actually refers to the loom or to the produce, like in Indonesian (*tenunan*), or both. Warp ikat is not attested for Taiwan, so we cannot infer that pAN 'to tie' refers to resist dyeing, neither is there a word for the tubular skirt, which was invented subsequently, and more probably, like ikat itself, on the Asian mainland (see Buckley 2017). Many weaving groups lack a word for the whole of the loom, only having words for its parts. The Palu'e have two terms that refer to the heavy parts of the loom opposite the weaver, which in combination pass for 'loom'. The pAN and pMP first syllables *qa and *ba of three-syllabic words have disappeared in the Central Flores languages, which rarely exceed CVCV word structure. Therefore the Palu'e *hati* is a clear cognate of pAN and pMP *qatip, the q tending to shift toward glottal stop or disappear (Palu'e vocals being 'breathy'), and words in Central Flores languages do not have end

consonants. The Palu'e word for tying ikat patterns is *nuju*, but there is also *tike* 'to tie' (a rope), a distant and slightly more probable pAN cognate than the Ende *rike*. Of the six clearly weaving related terms in pAN/pMP, Ende has only one recognizable pAN/pMP cognate, the distant *fi'a*, whereas Palu'e has two rather clear cognates (*luja*, *hati*). Only one of the eight words, *lambu*, is a full cognate between Palu'e and Ende (only), because the relation of *fi'a* and *luja* is not identifiable without the pMP source.



Fig. 7. Palu'e women weaving a Palu'e cloth (nearest) and an Ende-type cloth on back-tensioned circular warp looms. The nearest loom uses bamboo posts, hammered into the ground (*dhadha*), for support of the warp beam, the farthest uses a wooden frame. Both weavers use the spathe (*pa'o*) of the Areca palm as back support.

The appendix to Hamilton (1994) shows illustrations of three loom types used in the region, with the terminologies for the loom parts of the surveyed weaving groups, except Palu'e. The Ende terms, including the above, are taken from Hamilton, the Ende wordlist, input from a recent short field visit to Ende, backed up by consulting by phone, and various online sources. The backstrap looms of Flores are portable and usually frameless. On Palu'e the warp beam is often a plank set into openings of two bamboo posts, which are hammered into the ground and supported by rocks. Some weavers use a frame for a removable warp beam, which includes the footrest but not a seat. The footrest (Palu'e: *dhodho wa'i*) is hardly a tool, but a piece of wood placed next to the rocks supporting the warp beam. It, and other rests, are therefore not included in the appendix to Hamilton. The heavy parts of the loom are simple, carpenter skills are only needed for the beater and the breast beam. The table further below include basic Ende and Palu'e terminology for cotton spinning, resist-dyeing, and the generic cloth terms. Verbs referring to details in the process or names of locally specific dye plants are not included. It occurs that the Ende use the reed (*keke* in both languages) but it is not used by the Palu'e, so it is not included.

English	Ende	Palu'e
back support	kabhe	kedhu (gen.) / pa'o, pa'o lae wuane (spathe of the Areca tree).
warp beam	ozozi	pabha ('plank') / dhadha (incl. the supports)
temple (optional)	(tubho)	(dubho)*
tube shuttle	bhoku	dhibo / béko
stick for weft yarn, bobbin	niku	kaju pola kabhane / niku*
string heddle	guru	kugu (same as the supplementary heddle but with nylon threads)
heddle rod	kuku guru	kaju hana
shed roll	mbeza	halo
shed stick	kuku reté	kaju hana
supplementary heddles	kuku guru	kaju hana
lease sticks	sipe	kaju sipene* / pa'a
long wooden stick for straightening of the yarns	ozo denga	dhiko

Fig. 8. Table. Ende and Palu'e names for loom parts or tools.

English	Ende	Palu'e
(cotton) yarn cotton / locally grown cotton	zézu	kabha / kabha pi'i
simple bamboo tool used to clean cotton from seeds, using the tool	oza ngéu (zézu)	bhia (kabha), ngéu, kéu (kabha)*
bow-like tool used to clean cotton, using the tool	wo'o (zézu)	mana (kabha), wu (kabha)
spin (cotton)	woe (zézu)	pudhe / poe ([kabha], archaic: woe)*
spin (thread)	woe (zézu)	ta kabha / pole / lele
tool used to further process the spun cotton, or the purchased yarn, straighten it before rolling it to a ball or onto a stick	méka	ra'a kaju, ra'a
tool used to make balls of yarn (ready to use)	ozo woe	pole
warp	ura peru	romo
weft	poke	haka
male sarong	zuka	nae
shawl (gen.)	semba (<i>luka ria</i> for men's shawl)	sépa*
indigo (<i>Indigo tinctoria</i>)	taru	daju (distant cognate)

leaves used for tying motifs (<i>Coryphautan</i> palm)	mboro	poro*
measure of warp band width, which also describes the type of band	(sa) gami	(ha) lati
dyeing the ikated warp yarn	nggizi zézu	toja romo, cemo romo
wooden rack for setting up the warp and tying motifs before dyeing	dao, dao pete, dao denga / dao meka / ndoa go'a / ozo go'a	ra'a ko'a*, ra'a pite, ra'a (also after dyeing)
1. setting up the warp on a wooden rack, measuring yarn and size of cloth 2. setting up the ikated warp on the loom (last step before weaving)	1. go'a, dao go'a 2. go'a, go'a bué	1. ko'a* (romo) 2. ko'a* (dhama)
tying motifs to bundles of warp yarn (ikat)	pete, pete peru	nuju
tool to dry and stretch the newly dyed yarn (usually bamboo beams and rocks)	mindó (zézu)	léa, léa tai kabhane
one (ikat) dot (usually two or more knots)	(sa) mata ([one] eye)	(ha) weja (one seed, classifier in counting)
one ikat dot as motif (in a line)	bué (green gram)	hua wua (flowering fruit of the vine tuber species <i>hua</i>)
motif (unit, not design)	(sa) mata	léko
large empty black band	mite mere	hopa mitene (only 'black' is a cognate)

the unwoven part of the finished circular cloth	upu	uwe / dhama rembune
num. quantifier for cloths	pata	bata*
sew	sati	te'i

Fig. 9. Ende and Palu'e weaving-related terminology.

Conclusions

The reply to the paper's question is in the negative. The above tables have 24% (11/45) clear Palu'e-Ende cognates, a lower convergence than that of the Ende wordlist-Palu'e dictionary (32%). Whether the assumption that the lexicon of weaving could be preserved by the conservatism of weaving is true or not, the low linguistic convergence does not support an Ende link to Palu'e weaving, neither do the design structure nor the patterns. Older, less intricate Ende designs, like the alleged *Zawo mangga* type, are hard to come by, if not extinct. The Ende, with the multicultural port city Ende, have, like the Palu'e, a conservative weaving tradition. Weavers make the cloths their mothers used to do, but at a certain point in time, during the first half of the 1800s or earlier, there occurred a shift or a development toward *patola* inspired designs with three panels. The only clear links between the two weaving cultures are more on the proto-level; language group, culture, weaving tools. There is little reason to doubt a migration of (proto-) Ende or Lio clans to Palu'e in the far past, but if they brought with them weaving it was of a different type than the one Ende is known for, and the traces lay at a deeper level than this preliminary investigation can reveal. Even so, the first place to search for a source of the more archaic Palu'e design format is still Flores, such as east Flores where a rare textile similar to the Palu'e designs is reported.

References

- Aoki, Eriko and Satoshi Nakagawa. 1993. *Endenese-English dictionary*. (unpublished manuscript) <<https://lexirumah.model-ling.eu/sources/aokinakagawa93>>. Accessed 7 June 2021.
- Blust, Robert and Stephen Trussel. 2010 (rev. 6 June 2020). *Austronesian Comparative Dictionary*. Web edition: <https://www.trussel2.com/acd/acd-hw_a1.htm> Accessed 10 June 2020.
- Boudot; Eric and Chris Buckley. 2015. *The Roots of Asian Weaving: The He Haiyan collection of textiles and looms from Southwest China*. Oxford: Oxbow Books.
- Buckley, Christopher. 2017. Looms, weaving, and the Austronesian expansion. In: (eds. Acri Andrea, Roger Blench, and Alexandra Landmann) *Spirits and Ships: Cultural Transfers*

- in Early Monsoon Asia*, pp. 273-324. ISEAS - Yusof Ishak Institute. (Ebook)
- Buckley, Christopher D. Investigating Cultural Evolution Using Phylogenetic Analysis: The Origins and Descent of the Southeast Asian Tradition of Warp Ikat Weaving. *PLOS ONE* (7) 12: e52064. Online: <<https://doi.org/10.1371/journal.pone.0052064>> Accessed 10 June 2021.
- Author. 2020. Palu'e Ikat: Nomenclature and Iconography. *Archipel* no. 100, pp. 113-142.
- Author. 2019. *Kamus bahasa Palu'e-Indonesia*. Depok: UI Publishing.
- Duggan, Genèvieve and Hans Hägerdal. 2018. *Savu: History and Oral Tradition on an Island of Indonesia*. Singapore: NUS Press.
- Eberhard, David M., Gary F. Simons, and Charles D. Fennig (eds.). 2020. *Ethnologue: Languages of the World*. Twenty-third edition. Dallas, Texas: SIL International. Online version: <https://www.ethnologue.com>. Accessed 10 June 2021.
- Elias, Alexander. 2018. *Lio and the central Flores languages*. Leiden: Leiden University. (MA thesis)
- Fernandez, Inyo, Y. 1996. *Relasi historis kekerabatan bahasa Flores*. Ende: Nusa Indah.
- Fernandez, Inyo, Y. 1989. Posisi bahasa Komodo, Rembong, dan Paluqe dalam kelompok bahasa Flores. *Lingvistik Indonesia* 8 (1): 25-60.
- Glinka, Josef. 1972. Die Anthropologie der insel Palu'e (Kleine Sunda inseln). *Anthropos* 44: 900-907.
- Graham, Penelope. (1994). Vouchsafing fecundity in eastern Flores. Textiles and Exchange in the rites of life. In: Roy W. Hamilton (ed) *Gift of the cotton maiden: textiles from Flores and the Solor Islands*, pp. 229-246. Los Angeles: UCLA and Fowler Museum of Cultural History.
- Maxwell, Robyn. 2003. *Textiles of Southeast Asia: tradition, trade and transformation*. Singapore: Periplus.
- Niessen, Sandra. *Legacy in Cloth: Batak Textiles of Indonesia*. Leiden: KITLV Press, 2009.
- Orinbao, P. Sareng. 1969. *Nusa Nipa*. Ende: Pertjetakan Arnoldus/Penerbitan Nusa Indah.
- Pusaka collection: Online museum of Indonesian textiles. (Curator Peter ten Hoopen). <https://ikat.us/ikat_literature.php> Accessed 10 June 2021.

Vischer, Michael. P. 1992. *Children of the black patola stone; Origin structures in a domain on Palu'e island (Eastern Indonesia)*. Australian National University. URL: <http://openresearch-repository.anu.edu.au/handle/1885/9986>. Accessed: 7 June 2021.

Archival sources

Author Collection Palu'e Audio. Kaipuleohone Digital Ethnographic Archive, University of Hawaii. <<https://scholarspace.manoa.hawaii.edu/handle/10125/38830>> Accessed 10 June 2021.