Comparative Morphology of the Huon Peninsula Languages (Papua New Guinea)

Inaugural-Dissertation
zur Erlangung des Doktorgrades
der Philosophischen Fakultät
der Universität zu Köln
im Fach Allgemeine Sprachwissenschaft

vorgelegt von

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geboren am 21. April 1965
in Baden AG, Schweiz

13. Dezember 2018

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Datum der mündlichen Prüfung: 5. Dezember 2018

Preface

This dissertation has been long in the making. I presented a paper on "the history of object verbs in Huon Peninsula languages" at the annual meeting of the Australian Linguistic Society in 1995 while being a research scholar at the ANU. Twelve years elapsed before I returned to that paper and found that it needed more research. I started collecting data, contacting a number of people studying a Huon Peninsula language. The idea grew of writing a book on the history of the Huon Peninsula languages. Eventually, I got enrolled as a PhD student at the University of Cologne with the intention of writing that book. As it turns out, the project will require more time than initially thought. When I got in touch with Ken McElhanon, a flood of new data forced me to go back to square one. Two years ago, when my supervisor asked how far work had progressed, I realized that completion of the whole book was not imminent and that I needed to scale the project down. We agreed that I would submit the comparative morphology part as a dissertation. The other parts of the book, the lexical etymologies and the comparative phonology, still await completion. What I present here, I am afraid, is a torso.

The Huon Peninsula family is one of the best documented Papuan language families. We owe this to the efforts of Kenneth McElhanon, who conducted surveys on the Huon Peninsula and collected comparable data for all 21 languages. When he had learned of my book project, he decided to make another trip to Papua New Guinea in order to check his data and fill gaps. What an extraordinary show of support! Ken shared not only his unpublished data with me but also his unrivaled knowledge of the Huon Peninsula languages. Thanks to his advice I avoided a number of errors. I had the good fortune to meet Ken and his wife Noreen on the occasion of their trips to Europe. I fondly remember these visits and our exchange of thoughts. Thank you so much for all you did for me!

Some of the SIL teams active on the Huon Peninsula not only shared their data with me but went out of their way to collect additional data. Thus, Sune Ceder elicited a Dedua word list for me and Steve McEvoy collected texts in Momare. I profited from the email conversations with all of them. I gratefully acknowledge the unpublished manuscripts I received from Thomas and Penny Phinnemore (Ono), Alan and Ritva Brown (Kovai), Steve and Debbie McEvoy (Migabac), Sune and Britt Ceder (Dedua), Yongseop and Hyunsook Lee (Mongi), Soini and Kaija Olkkonen (Somba-Siawari, Borong), Neil and Kathy Vanaria (Mesem), Neville and Gwyneth Southwell (Komba), and Michael and Margaret Foster (Timbe). Equal thanks go out to Chad and Janeene Mankins and their team from Ethnos 360 (Tobo).

In the academic world, I was fortunate to have a mentor in Andy Pawley, who kept in touch through the years when I was unable to do linguistics and then encouraged me to come back. Nikolaus Himmelmann accepted me as a PhD student and steadfastly steered me toward the goal, past more than one obstacle. He made it possible that I did the course without moving to Cologne, which required the creative interpretation of some rules. Thanks for your patience and your trust, Nikolaus. My thanks also go to Eugen Hill, who reviewed the chapters of my dissertation, the last one on short notice.

My deepest gratitude goes to my wife, whose gainful employment kept the family afloat and made it possible for me to devote so much time to linguistics. Merci, Helen.

Contents

Abbreviations

ABL	ablative	IRR.I	irrealis I
ASP	aspect	IRR.II	irrealis II
BEN	benefactive	ITER	iterative
CAUS	causative	LOC	locative
COM	comitative	NEG	negation
COMPL	completive	N.FUT	near future
CON	contrast	NMLZ	nominalizer
CONS	consecutive	NON.PST	non-past
CONT	continuative	N.PST	near past
DESID	desiderative	OBJ	object
DIR	directional	OBJ.I	object class I
DS	different subject	OBJ.II	object class II
DU	dual	OBJ.III	object class III
DUR	durative	PL	plural
EMPH	emphatic	POSS	possessive
ERG	ergative	PRS	present
F.FUT	far future	PRS.IMP	present imperative
FOC	focus	PST	past
F.PST	far past	PST.CONT	past continuative
FUT	future	PST.IRR	past irrealis
FUT.IMP	future imperative	PURP	purposive
FUT.IRR	future irrealis	RECP	reciprocal
GEN	genitive	REFL	reflexive
HAB	habitual	RH.ERG	rhematic ergative
HAB.PRS	habitual present	SCON	salient continuative
IMP	imperative	SEQ	sequential
INF	infinitive	SER	serializing
INS	instrumental	SG	singular
INTENS	intensive	SIM	simultaneous
INT.PST	intermediate past	SPEC	specifier
IO	indirect object	SS	same subject
IRR	irrealis	VZR	verbalizer

Symbols

*A	A is a reconstructed form
†A	A is the expected form following the sound laws but is not in fact attested
A > B	A becomes B following the sound laws
A < B	A comes from B following the sound laws
A ⇒ B	A was replaced by B in some other way than sound change, e.g. by analogy
A ⇐ B	A replaces B in some other way than sound change, e.g. by analogy

“De cet exemple ressort clairement une difficulté fondamentale de la grammaire comparée : les ressemblances que présentent les langues indo-européennes entre elles et sur lesquelles seules peut reposer une théorie de l’indo-européen admettent souvent deux interprétations : identité initiale ou développement dialectal identique : dans les deux cas les formes observées dans les diverses langues font au premier abord l’effet de reposer sur un état premier un. La question qui se pose est alors de déterminer laquelle des deux interprétations est la vraie.”

ANTOINE MEILLET (1900:15f)
Note sur une difficulté générale de la grammaire comparée.
Chartres: Imprimerie Durand.

0 Introduction

0.1 Previous research

The documentation of the Huon Peninsula languages began at the close of the 19th century after the German Empire had claimed the northeastern part of New Guinea as a protectorate. Missionaries and travelers published the first word lists, and soon linguists tried to assess the information. McElhanon (1970g) gives a comprehensive account of the arrival of the Germans in the area and of their linguistic explorations. This early research was limited to the collection of vocabulary and did not extend to morphology. The Lutheran missionaries soon realized that a multitude of languages was spoken on the Huon Peninsula and decided to turn two of them into church languages: Jabêm, to be used among Austronesian language groups, and Kâte, to be used among groups speaking a Papuan language. They focused on the study and the development of these two languages and did little further descriptive work on other languages. A notable exception is Wacke's (1931) article on Ono morphology and Pilhofer's survey of the dialects and languages spoken in the vicinity of the Wemo dialect of Kâte. Pilhofer published not only word lists (1929) but also a description of the morphology (1928). In the morphology paper, he states that Dedua, Mongi, and Somba form a separate group as against Mape, Naga, Mâgobineng, Wamorâ, Sene, Momare, and Migabac (Pilhofer 1928:197), thereby correctly distinguishing between what I call the Pindiu family and the Huon Tip family. But this was only a fleeting remark as Pilhofer did not attempt a comparative analysis of the data he had collected.

The next milestone was Kenneth McElhanon's (1970a) doctoral dissertation dealing with the Selepet language as well as the superordinate Finisterre-Huon stock, which he established. It was published in the form of several articles and a monograph. While working on the dissertation, McElhanon (1967a) had already published a preliminary report on the Huon Peninsula languages, describing the phonology and giving word lists of 14 of them, among them many western languages not covered by Pilhofer. After additional fieldwork he presented a classification of all 21 Huon Peninsula languages in a joint paper with Hooley (Hooley and McElhanon 1970). This article definitively separated Papuan and Austronesian languages, correcting occasional confusions that had lingered in the literature up to that time.

Table 0-1: Classification in Hooley and McElhanon (1970)

Huon micro-phylum
- South-West Huon stock
  - Southern Huon family—*Nabak, Mesem*
  - Western Huon family—*Komba, Selepet, Timbe*
- North-Central Huon stock
  - Northern Huon family—*Ono, Sialum, Nomu, Kinalaknga, Kumukio*
  - Central Huon family—*Mongi, Tobo, Borong, Siawari, Somba*
- East Huon stock
  - Eastern Huon family—*Kâte, Mape, Sene, Momare, Migabac, Dedua*
- *Kovai* isolate

McElhanon recognized five subfamilies in three stocks plus one isolated language, Kovai (Table 0-1). The five subfamilies correspond fairly well to the low-level families in my own classification (cf. Table 0-3), with two exceptions. In his Northern Huon family McElhanon united Ono and Sialum with Nomu, Kinalaknga, and Kumukio. I separate these languages at a high level, assigning Ono and Sialum to the Eastern Huon family and Nomu, Kinalaknga, and Kumukio to the Western Huon family. Second, McElhanon placed Dedua in his Eastern Huon family while it rather belongs to his Central Huon family.

In a theory paper, McElhanon (1970f) reflected on the limits of the lexicostatistical method of language classification, noting the occurrence of chains rather than discrete groups of languages separated by different percentages of cognates in the data. Of the different ways of classifying the Huon Peninsula languages he discussed, it can now be seen that a purely lexicostatistical classification yields the best result whereas the inclusion of typological criteria confuses the picture. This was not, however, McElhanon's conclusion. At the end of the paper he settled on a binary classification.

Table 0-2: Classification in McElhanon (1975a)

Finisterre-Huon stock

Kovai language

Eastern Huon family—*Kâte, Mape, Sene, Momare, Migabac, Dedua, Mongi*

Western Huon family—*Ono, Sialum, Nomu, Kinalaknga, Kumukio, Komba, Selepet, Timbe, Tobo, Borong, Siawari, Somba, Nabak, Mesem*

The languages of his Western Huon family differentiate between the voiceless stops *p*, *t*, and *k* as well as the nasals *m*, *n*, and *ŋ* syllable-finally whereas the languages of his Eastern Huon family only allow the glottal stop *ʔ* and the velar nasal *ŋ* in this position (Table 0-2). This typological classification is in conflict with the lexicostatistical classification. It assigns Dedua and Mongi to the Eastern family although they are lexicostatistically closer to Tobo, Borong, and Somba-Siawari of the Western family, forcing McElhanon to speak of Dedua and Mongi as "mixed languages". Unfortunately, this classification made it into Wurm's (1975) big survey volume on the Papuan languages and was subsequently repeated in all reference works. But the neutralization of the opposition between syllable-final stops and nasals is not a suitable criterion for a genealogical classification because such a phonological change easily spreads from one language to the next. In fact, Dedua and Mongi acquired it from the neighboring Huon Tip languages. The lexicostatistical classification in Table 0-1 is more informative than the typological classification in Table 0-2 and would have deserved the place in the reference works.

The genealogical tree used in this study is shown in Table 0-3. It is based on shared morphological innovations and needs to be confirmed when the analysis of the lexical cognates has been completed. An explication of the innovations, and of subgrouping in general, is beyond the scope of this study. Readers should note that the terms "Eastern Huon family" and "Western Huon family" have a different extension in McElhanon's classification in Table 0-2 and in my classification in Table 0-3.

Aside from the classificatory studies just mentioned, McElhanon (1973) also produced a typological study of the Finisterre-Huon languages. He compared ten languages, among them six from the Huon Peninsula family, pointing out commonalities in phonology and grammar. Finally, he published a linguistic field guide to the Morobe Province (McElhanon 1984) which contains a village directory with linguistic affiliations. McElhanon's publications are informed by an extensive survey of all Huon Peninsula languages that he carried out in the late 1960s. The survey data has not been published but will soon be made publicly available through the digital archive PARADISEC. The comprehensive morphological data he collected is at the heart of this study and is cited in Appendices A, B, and C.

0.2 The Huon Peninsula languages

The Huon Peninsula languages are spoken on the eponymous landmass in the northeast of Papua New Guinea. Umboi Island, on which Kovai is spoken, lies in the Vitiaz Strait between mainland New Guinea and New Britain. The Map preceding Table 0-3 shows the location of the languages and the boundaries of the family. The languages of the adjacent Saruwaged and Finisterre Ranges to the west of the Huon Peninsula are the nearest relatives of the Huon Peninsula languages and form with them the Finisterre-Huon stock. The Finisterre-Huon languages have been included in all versions of the Trans-New Guinea hypothesis.

In this section, I review the languages making up the Huon Peninsula family and the data at my disposal for each of them. I follow the order given in Table 0-3, proceeding from one low-level family to the next starting in the northeast. Bibliographical references are given for all publications and for semi-publications that can be found on the world wide web. Unpublished manuscripts are only mentioned, but not referenced. Thus, a manuscript by an SIL team that is available on the language resources page of the website of SIL Papua New Guinea is cited with its year of creation whereas a manuscript I obtained from its author but which is not (yet) available on the SIL PNG website is mentioned without a date.

The **Kalasa** languages are spoken in the coastal area of the north of the Huon Peninsula around Kalasa station. Two languages make up this family, Sialum and Ono. At the beginning of the 20th century the missionary Michael Stolz studied Sialum, but the only publication that survives is an ethnographic report containing a glossed mythological text (Stolz 1911). My main source for Sialum is McElhanon's survey fieldnotes. For Ono, there is an early paper on the morphology by Wacke (1931). Later in the 20th century, Thomas and Penny Phinnemore did extensive linguistic work on Ono. They published papers on the phonology (T. Phinnemore 1985), on coordination (P. Phinnemore 1988), and on questions (T. Phinnemore 1989). Among their unpublished papers is a grammar sketch and a paper on the verb by P. Phinnemore that covers the whole verb morphology. They further wrote some shorter papers on various grammar topics. I did not get access to their dictionary, but fortunately there is a draft dictionary by Kenneth McElhanon and Zadok Gambungtine.

Kovai is spoken on Umboi Island to the northeast of the Huon Peninsula and is surrounded by Austronesian languages. The language has been studied by Alan and Ritva Brown, but only text materials are available on the SIL PNG website so far. I had access to a grammar sketch and a dictionary by the Browns and a phonology paper written by Michael Johnstone.

Map: The Huon Peninsula languages (key in Table 0-3)

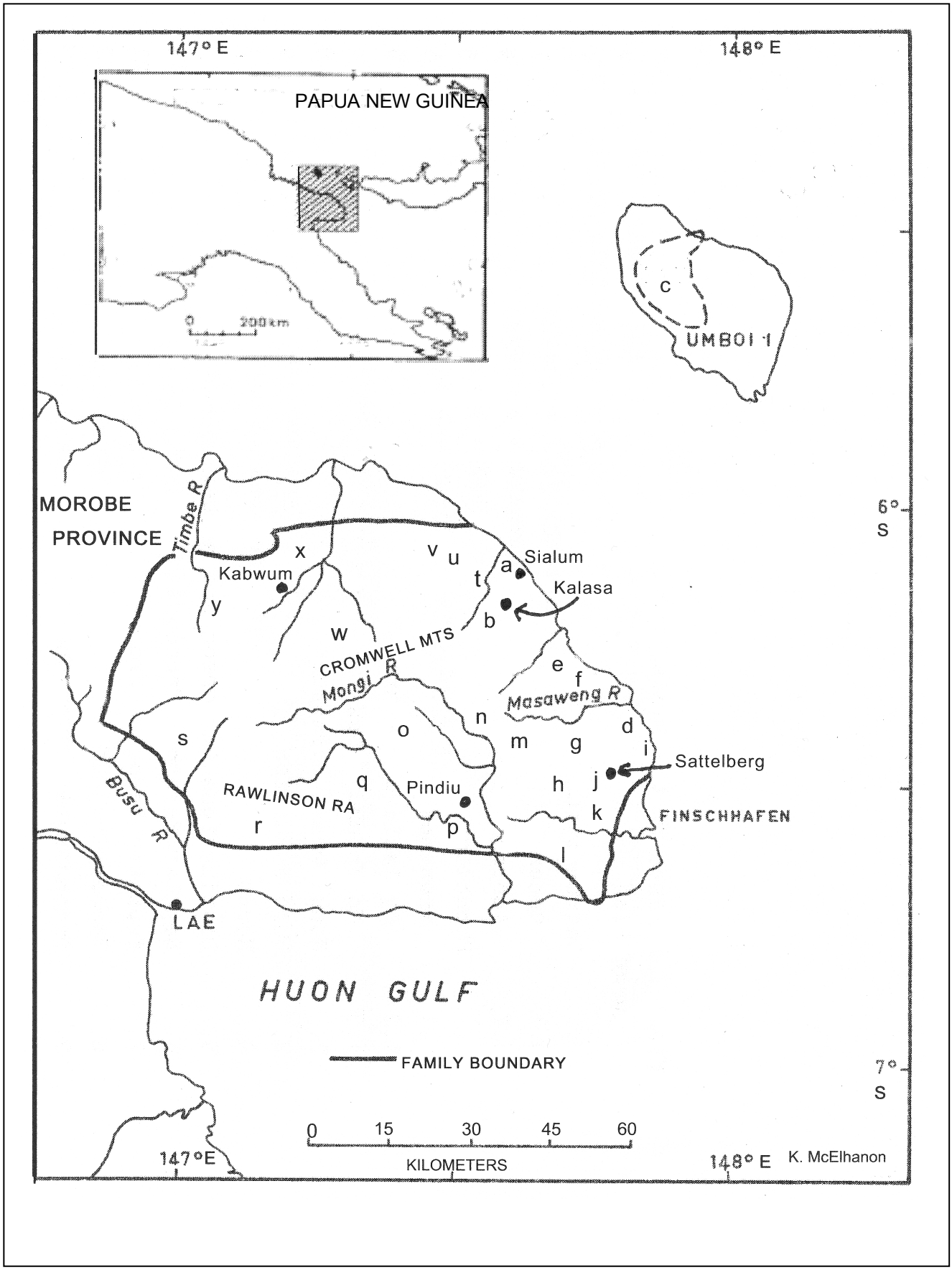

Table 0-3: Genealogy of the Huon Peninsula languages

- Finisterre-Huon stock
  - Huon Peninsula family
    - Eastern Huon family
      - Kalasa family
        - a *Sialum*
        - b *Ono*
      - Trans-Vitiaz family
        - c *Kovai*
        - Huon Tip family
          - d *Sene*
          - Sopâc family
            - e *Migabac*
            - f *Momare*
          - Kâte-Mape family
            - g *Wamorâ*
            - h *Parec*
            - i *Mâgobineng*
            - j *Wemo*
            - k *Naga*
            - l *Mape*
    - Western Huon family
      - Rawlinson family
        - Pindiu family
          - m *Dedua*
          - n *Mongi*
          - o *Tobo*
          - p *Borong*
          - q *Somba-Siawari*
        - Sankwep family
          - r *Mesem*
          - s *Nabak*
      - Cromwell family
        - Dallman family
          - t *Nomu*
          - u *Kinalaknga*
          - v *Kumukio*
        - Kabwum family
          - w *Komba*
          - x *Selepet*
          - y *Timbe*

The **Huon Tip** languages cover the tip of the Huon Peninsula with the exception of a coastal strip of land in the south where the Austronesian language Jabêm is spoken. The Kâte people distinguish four different habitats: Hâwec ('sea', the coast where Jabêm is spoken), Mape (name of a river along which the Mape dialects are spoken), Kâte ('forest', the hinterland, with the exception of the Mape area, where Kâte dialects are spoken), and Sopâc ('grass', the grassland north of the Masaweng River where Momare and Migabac are spoken). The Kâte and Mape speech varieties form a continuum and it is debatable whether they are dialects or languages. Wemo speakers told me that neither Mape nor Wamorâ is readily intelligible to them. Thanks to Pilhofer (1928) we have a good picture of the morphology of Sene, Migabac, Momare, Wamorâ, Mâgobineng (aka Bamotâ), Naga, and Mape. In a separate paper Pilhofer (1927a) had described the morphology of Wemo. McElhanon in addition collected some morphological data on Parec. Pilhofer (1929) also published comparative lexical data. Two Huon Tip languages have been the object of in-depth descriptive studies, Migabac and the Wemo dialect of Kâte. Steven McEvoy (2008) wrote a master's thesis on narrative discourse in Migabac, which contains a grammar sketch. He also published papers on phonology (McEvoy 2005) and on dialect variation (McEvoy 2012). Unpublished papers include a dictionary, an account of kinship terminology, and a study of serial verbs. Texts in Migabac are available on the SIL PNG website. The Wemo dialect of Kâte is the best documented Huon Tip language. There is a comprehensive grammar (Pilhofer 1933), two dictionaries (Keysser 1925, Flierl and Strauss 1977), a handbook for language learners (Schneuker 1962), and several papers on various topics (Pilhofer 1927b, Gleason 1968, McElhanon 1974, Suter 2010, 2014). Furthermore, two sociolinguistic studies deal with Kâte as church language (Renck 1977, Paris 2012). Finally, a bachelor’s thesis on the morphosyntax of Mape was written at the University of Papua New Guinea (Sifuma 1997).

The **Pindiu** family is located in the interior of the Huon Peninsula around the eponymous town. The data situation for these languages is favorable as Bible translators have been active in all five of them. Sune and Britt Ceder produced papers on Dedua phonology and grammar, a dictionary, as well as a dialect survey. On the SIL PNG website, however, only text materials and a paper on participant reference (Blake 2000) are accessible. Yongseop and Hyunsook Lee studied the Mongi (aka Kube) language, producing a grammar (Lee 1993) and a dictionary. Tobo is being studied by an NTM team around Chad Mankins, who wrote a phonology and a grammar sketch as well as a dictionary. Soini and Kaija Olkkonen's primary assignment was Somba-Siawari (aka Burum-Mindik), but they also studied the neighboring Borong language, producing a phonology (Olkkonen 2000) and a grammar sketch (Olkkonen and Olkkonen 2000). For Somba-Siawari they wrote a grammar, a phonology paper (Olkkonen 1985), and a paper on clitics (Olkkonen 1990), and Eileen Gasaway (1997) contributed a paper on morphophonemics. Their Somba-Siawari dictionary (Olkkonen and Olkkonen 2007, Olkkonen and Olkkonen 2004) is wide in scope and includes translation equivalents for Kâte.

The two languages that make up the **Sankwep** family are spoken on both sides of the Sankwep River to the south of the Saruwaged and the Rawlinson Ranges. Mesem was studied by Neil and Kathy Vanaria, who produced a grammar sketch and a draft dictionary. For Nabak, there is a monograph that includes a grammar, a dictionary, and a text collection (Fabian, Fabian and Waters 1998). The Fabians also wrote papers on the phonology (Fabian

and Fabian 1971) and on morphophonemics (Fabian, Fabian and Peck 1971) to which McElhanon (1979) responded.

The **Dallman** family is situated in the north of the Huon Peninsula, in the hinterland of Sialum traversing the Dallman River. None of the three languages of this family has been the object of an in-depth study. For Kinalaknga and Kumukio, the only data available comes from McElhanon's surveys. McElhanon as well as myself collected morphological and lexical data on Nomu.

The **Kabwum** languages are spoken north of the Saruwaged and the Cromwell Mountains around the eponymous town. The data situation for them is the opposite of that for the Dallman family. Bible translation teams have provided a wealth of data for all three languages. Neville and Gwyneth Southwell studied Komba and produced papers on phonology and orthography (1972a), sentences and paragraphs (1972b), the dialects (1976), and a draft dictionary (1969). Neville Southwell (1979) further wrote a complete grammar, and McElhanon (1969) contributed a paper on kinship terms. For Selepet we have the wide-ranging publications of Kenneth McElhanon. He wrote papers on phonology (1967b, 1970b, 1970e), lexicology (1968, 1975b, 1977), and grammar (1970c, 1970d, 1972). Furthermore, together with his wife Noreen McElhanon he produced a lexicographically sophisticated dictionary (McElhanon and McElhanon 1970). Michael and Margaret Foster studied Timbe and wrote papers on the phonology (1972) and on topicalization (n.d.), as well as a dictionary. Michael Foster further produced papers on cohesion (1981), ergativity (1986), prominence (n.d.), and the essentials of grammar for translation.

0.3 Scope and aims of this study

This study is an exercise in comparative morphology. Apart from pursuing the goal of producing scientific results, its purpose was to hone my skills in comparative reconstruction. Pioneering work in comparative-historical linguistics profits greatly from practice and experience. Yet one has to start somewhere. I feel prepared now to tackle other tasks in Papuan historical linguistics. I will also return to this study, which has not yet reached its final form. I present it here as a journeyman's piece.

Comparative morphology builds on comparative phonology. However, I only present the comparative morphology of the Huon Peninsula languages in this study. Work on the comparative phonology proceeded alongside work on the comparative morphology, but because new lexical data kept coming in until very recently whereas I have been in possession of the complete set of morphological data for some time, I decided to write up the comparative morphology first. The comparative phonology remains to be completed and made accessible. This unusual order of presentation brings with it the inconvenience that readers of this study cannot look up sound correspondences. Considering this, I keep the discussion of phonological issues to an absolute minimum. Readers can take it for granted that the morphemes I treat as cognate follow the regular sound correspondences unless I advert them to the contrary. In general, I use IPA symbols in the reconstructions, but the comparative phonology of the vowels has not progressed to the stage yet that this would be possible. For this reason, I use diacritics for some vowels.

In my treatment of the morphology of the Huon Peninsula languages I follow the example of classical Indo-European comparative linguistics. I apply the theoretical approach that has come to be known as the comparative method. The principles of this approach were developed in the 19th century and most clearly laid down by Karl Brugmann (1906-16) and Antoine Meillet (1937). These authors wrote at a time when a wealth of discoveries were being made, much like in present-day Papuan comparative linguistics. Their constant reflection on what they were doing and their awareness of the potential as well as the limits of the comparative method are exemplary. I tried to explore the history of the Huon Peninsula languages with a similarly open mind. In the following chapters I proceed step by step, explain my reasoning in clear prose and let the readers know how confident I am in the results I proffer. I am all too aware that, in a first attempt at reconstruction such as this, it would be a miracle if all of the results were correct.

The Huon Peninsula languages are synthetic, with most of the morphology found on the verb. Verbs are inflected for tense, aspect, and mood and index their subject as well as their object. Two of the four chapters of this study are devoted to verb inflections. Chapter 1 deals with object inflection, giving a comparative account of object indexation through suffixation and prefixation and reconstructing the ancient verbs with object prefixes. In Chapter 3, the morphology and syntax of medial and final verbs is surveyed and subject-indexing paradigms for various TAM categories are reconstructed. The person-number inflections for the subject and for the object have a different origin. The object-indexing prefixes are related to the free personal pronouns, which are reconstructed in Chapter 2 along with other kinds of pronouns. Finally, in the area of nominal morphology the Huon Peninsula languages have phrasal enclitics that indicate case relations. The case enclitics are reconstructed in Chapter 4.

This study does not cover all aspects of the morphology of the languages treated. I focus on the morphological elements that are old and lend themselves to comparative reconstruction. Arriving at solid reconstructions up to the level of Proto-Huon Peninsula is the major aim of this study. It is not possible to give an account of all morphological forms compared. This could be expected of a historical grammar of Kâte or Selepet, but not of a comparative morphology of the Huon Peninsula languages. Intermediate reconstructions are separately presented and discussed in Chapters 1 and 3 dealing with verb morphology. This gives readers an idea of the range of cognates to be found at lower levels of the family and adds clarity to the Proto-Huon Peninsula reconstructions I propose. Apart from reconstructing aspects of the proto-languages from which today's Huon Peninsula languages descend, this study also sheds light on processes of language contact that have shaped them. Contact-induced language change is summarized in the Conclusions at the end of each chapter.

1 Object verbs

1.1 Introduction

All Huon Peninsula languages have affixes that index the person and number of the object on the verb. Three persons and three numbers, singular, dual, and plural, are distinguished. There is considerable variation across the family concerning the morphology, the syntax and the etymology of these markers. In 1.1.1 through 1.1.4 I give a synchronic description of object indexation in a number of well-described Huon Peninsula languages from different subfamilies. In 1.1.5 I present a survey of object verbs and the grammatical uses to which they are put. In section 1.2 I analyze variation and recent changes and in 1.3 I reconstruct the object verbs of all subfamilies up to the top-level family. The chapter ends with conclusions in 1.4.

1.1.1 Object indexation in Ono and Kâte

Object indexation in the two Eastern Huon languages Ono and Kâte follows similar principles. In both languages human object referents are obligatorily indexed on the verb. The regular object inflections can be seen in (1) and (2).

(a) Ono (Wacke 1931:178) and (b) Kâte (author's fieldnotes)

1a	*ware-gan-maike* watch.over-2S:OBJ-PRS:3s 'He watches over you.'	1b	*soŋaŋ-gu-kaʔ* watch.over-2S:OBJ-PRS:3s 'He watches over you.'
2a	*ne-gan-girap* eat-2S:OBJ-PST.IRR:3s 'He would have eaten you.'	2b	*nəʔ-gu-tsaʔ* eat-2S:OBJ-PST.IRR:3s 'He would have eaten you.'
3a	*gan-maike* 2s:OBJ.see-PRS:3s 'He sees you.'	3b	*gu-kaʔ* 2s:OBJ.hit-PRS:3s 'He beats you.'

In (1) we see a transitive verb that always occurs with an object person-number suffix. If the object referent were inanimate, the form of the third person singular would be used on the verb (Ono *ware-ka* 'watch over it' and Kâte *soŋaŋ-ke* 'watch over it'). The transitive verb in (2), on the other hand, usually occurs without an object person-number suffix. The object referent of the verb meaning 'eat' is normally not a human being and triggers no object indexation on the verb. In the context of a fairy tale peopled with man-eating monsters, however, we find statements like the one in (2). As the object referent is human, it must be indexed on the verb. This example shows that suffixation is the productive process of object inflection in Ono and Kâte.

There is a small number of transitive verbs that do not take the regular object suffixes but display prefixal variation for the person and number of the object. One of these verbs is homonymous with the object person-number suffixes. In Ono, the syllable *gan* serves the function of a second person singular object marker if used as a suffix (1a and 2a), but used as a verb stem it has the meaning 'see you' (3a). Similarly, the Kâte syllable *gu* can be used as an object suffix, but means 'hit you' in the position of a verb stem (3b). Pilhofer (1933:42f) addressed the question of whether anything of the meaning of 'hit' remains if *gu* is used as an object-indexing suffix and came to the conclusion that this is not the case. He asked a native teacher for his opinion and was surprised to hear that the man had not been aware of the formal identity of *gu* 'hit you' and *-gu* '2s:OBJ'. This is an indication that we are dealing with two different morphemes that are homonyms. We note that the object-inflected verb that is homonymous with the object person-number suffixes has the meaning 'see' in Ono but 'hit' in Kâte.

Table 1-1: Object inflections and homonymous verb forms in Ono and Kâte

	Ono			Kâte		
	'see'	OBJ	pronoun	'hit'	OBJ	pronoun
1SG	nan	-nan	na	nu	-nu	no
2SG	gan	-gan	ge	gu	-gu	go
3SG	ka	Ø, -ka, -ke	eŋe	kpa	Ø, -ke, -ne	e
1DU	ŋot	-ŋot	ŋere	nɔfo	-nɔfo	nɔhe
2DU	ŋut	-ŋut	ŋire	ŋofa	-ŋofa	ŋohe
3DU	ot	-ot	ere	jofa	-jofa	jahe
1PL	ŋon	-ŋon	ŋene	nɔpo	-nɔpo	nɔŋe
2PL	ŋun	-ŋun	ŋine	ŋopa	-ŋopa	ŋoŋe
3PL	on	-on	eŋe	jopa	-jopa	jaŋe

Table 1-1 illustrates the forms of the verb 'see' in Ono, varying according to the person and number of the object, as well as the related object suffixes. The right-hand side of the table shows the forms of the Kâte verb 'hit' and the related object suffixes. A comparison with the forms of the personal pronoun, given to the right for both languages, suggests that the verbs 'see' in Ono and 'hit' in Kâte contain fused person-number prefixes. Both the personal pronouns and the verb forms for the first and the second person singular start with *n-* and *g-*, respectively, in both languages. In the dual and plural, too, the initial consonant of the free personal pronoun matches that of the corresponding verb forms. Only the third person singular steps out of line. Here, the personal pronoun does not resemble the verb form. Furthermore, the third person singular form of the verb 'hit' in Kâte is different from all three allomorphs of the corresponding object suffix, and only one of the three allomorphs of the object suffix is homonymous with the verb form meaning 'see him/her/it' in Ono.

Table 1-2: Some Ono and Kâte object verb forms

Ono				Kâte			
	1SG	2DU	2PL		1SG	2DU	2PL
hit	neku	ŋitku	ŋingu	hit	nu	ŋofa	ŋopa
give	nin	ŋipon	ŋibon	give	nale	ŋaʔte	ŋale
see	nan	ŋut	ŋun	tell	natsa	ŋasa	ŋatsa
bite	nirot	ŋitot	ŋidot	follow	nape	ŋafe	ŋape
shoot	nato	ŋikotat	ŋigotat	show	nowatu	ŋofatu	ŋowatu

There are more verbs like 'see' in Ono and 'hit' in Kâte which take prefixal object inflections. Following Pilhofer (1933:38) I call these irregularly inflecting verbs "object verbs". Ono has fourteen object verbs, for Kâte seven have been recorded. Table 1-2 gives a selection of them, the full set is listed in Appendix A. The presence of prefixes can best be seen by comparing the same person-number forms across several different verbs. In Table 1-2 we see that in all object verbs the form of the first person singular starts with the consonant *n-*, whereas the forms of the second person dual and plural start with *ŋ-* in both Ono and Kâte. These consonants are obviously part of person-number prefixes. The prefixes themselves cannot easily be separated from the verb roots. Sometimes it is questionable whether the vowel following the initial consonant should be considered a part of the prefix or the root, particularly in the singular. And in most verbs, the consonant following this vowel alternates between dual and plural forms. Thus, in Ono *ŋipon* 'give you two' and *ŋibon* 'give you all' there is an alternation between *-p-* and *-b-*, and in Kâte *ŋasa* 'tell you two' and *ŋatsa* 'tell you all' there is an alternation between *-s-* and *-ts-*. The alternating consonants belong to the prefix just as well as to the root. Separating the prefixes in these fused verb forms with a hyphen would involve an element of arbitrariness.

Object verbs are usually frequently used transitive verbs that typically or often have a human object referent. The same concepts reappear all over the Huon Peninsula, although some languages also have one or two verbs with a unique meaning. Ono and Kâte both have object verbs meaning 'hit' and 'give' (Table 1-2), but only Ono has object verbs meaning 'see', 'bite' and 'shoot' while these concepts are expressed by regular verbs taking object suffixes in Kâte. We have seen that homonyms of the forms of the object verb 'hit' serve as object person-number suffixes in Kâte. The Ono object verb 'hit' has no such double use and is only a lexical item. There is a second object verb in both languages which does double duty as a lexical and grammatical item. This is the verb 'give', which serves as a benefactive marker.

Ono (Phinnemore and Phinnemore 1985:70f)

4	*ŋet-ze*	*wareware*	*ŋet-ŋone*	*ma-uluk-e*
	teeth-1p:POSS	boss	teeth-2s:POSS	do-INTENS-SS

gin-iake.
2s:OBJ.give-FUT:3s
'The dentist will fix your teeth for you.'

5	*Naŋane*	*takot*	*gbetur-e*	*nin-om.*
	my	shirt	sew-SS	1s:OBJ.give-IMP:2s
	'Sew my dress for me.'			

In the Ono sentence in (4) the two verb forms at the end form a benefactive construction. The object verb form *gin* 'give you' indicates the person and number of the beneficiary, the preceding verb expresses the predication that has a beneficiary. The first of these verb forms is connected to the second as a same subject medial verb, hence both verbs are clearly separate grammatical words. The conceptual relation between a verb meaning 'give' and benefaction is much closer than that between verbs meaning 'hit' or 'see' and the object relation. In example (5) both concepts seem to be present at the same time. After sewing the dress, the addressee will have to give it to the speaker, who is at the same time the recipient and the beneficiary. In (4), on the other hand, *gin* cannot be construed to mean 'give' but has a purely benefactive function. Example (5) shows that there is a transition between the lexical meaning 'give' and the grammatical function of benefaction. It seems therefore best to consider the benefactive use of the object verb 'give' in Ono a case of polysemy.

Kâte (Pilhofer 1933:41f)

6	*Sa?*	*hafe-jale-po.*
	fence	bind-3p:BEN-F.PST:1s
	'I made them a fence.'	

7a	*wio-nale-je?*	7b	*wila-nale-ka?*
	ask-1s:IO-N.PST:3s		call-1s:IO-PRS:3s
	'He asked me.'		'He calls me.'

In Kâte, too, the object verb 'give' can be used as a benefactive marker. The preceding lexical verb carries no ending and forms one grammatical word together with the benefactive marking form of 'give'. In the verb form *hafe-jale-po* 'I bound for them' in (6) the benefactive person-number marker *jale* ('give them') can be considered a suffix parallel to the object suffixes, which occur in the same position. The range of functions that the benefactive suffixes cover is greater in Kâte than in Ono. In particular, they can be used to index indirect objects as in (7). The verbs *wio* 'ask' and *wila* 'call' can be monovalent or bivalent. In (7) they are bivalent, taking a first person singular object which is indicated by the benefactive suffix *-nale*. In Kâte, therefore, some verbs take objects indexed by the object suffixes introduced above in (1) and (2) and some verbs take objects indexed by the benefactive suffixes. Since the latter are also objects rather than beneficiaries, it seems appropriate to use the traditional term indirect object for them. The object suffixes must then more precisely be called direct object suffixes.

In clauses in which the suffixed forms of the verb 'give' have a true benefactive function, as in (6), they introduce an additional participant that is not part of the valency of the verb. For Ono, only such examples of the benefactive construction have been found in the data. Only in Kâte has the verb 'give' been grammaticalized into an indirect object marker.

The semantic distance between the indirect object function and the lexical meaning 'give' is greater than that between 'give' and benefaction.

1.1.2 Benefactive objects in Somba-Siawari

Somba-Siawari and its closely related neighbor Borong have the largest number of object verbs in the Huon Peninsula family. For Somba-Siawari twenty object verbs have been recorded (see Appendix A). The following are a few examples in the context of a sentence.

Somba (Olkkonen and Olkkonen 1983:86, 142, 134)

8	*M-ewə*	*zi-ba*	*neŋgo-mosot-a*	*an-ək.*
	that-like	say-SS	1p:OBJ-leave-SS	go-PST:3s
	'He said like that, left us and went.'			

9	*Weɣen-nəŋ*	*kʷe-i-ga*	*nup*	*kʷe-in-ga*	*sile-ŋi*
	sun-ERG	shine-3s-DS	garden	till-1p-DS	skin-3s:POSS

n-oɣo-jək.
1s:OBJ-burn-PST:3s
'The sun shone as we tilled the garden and my skin was burnt.'

10	*Miaŋgəreŋ*	*an-al-ga*	*ka-ba*	*nə-me-man!*
	there	go-1s-DS	come-SS	1s:OBJ-take-FUT:2s
	'After I have gone there, please come and pick me up!'			

The object verbs of Somba cover the bulk of high frequency transitive predications with human object referents. In comparison with Kâte, which has only a smallish number of object verbs, object verbs figure much more prominently in Somba discourse. Kâte would express all of the transitive concepts in (8) to (10) with regular verbs taking object suffixes. In Somba, the construction with a postposed object person-number marker is comparatively rare in discourse. In the whole grammar by Olkkonen and Olkkonen (1983) I have found less than a dozen examples. There are more examples of object verb forms.

Somba (Olkkonen and Olkkonen 1983:152, 101, 37)

11	...	*aka*	*bərə-ni*	*kude*	*baukkə-m*	*ni-ŋgi-get-ka ...*
		and	work-1s:POSS	not	help-INF	1s:OBJ-give-3p-DS
	'... and they don't help me in my work ...'					

12	*Gi*	*ambatsip*	*pakpak*	*printsop*	*uru-ŋ-e*
	2s	people	all	printshop	inside-3s:POSS-LOC

mət *e-ŋgi-tsan?*
know 3p:OBJ-give-PRS:2s
'Do you know all the people of the printshop?'

13 *Kambu-ŋi* *kambu-ŋi* *mindiri-m* *a-ŋgu-ba*
group-3s:POSS group-3s:POSS join-INF RECP-give-SS

mal-get.
be-PST:3p
'The groups were joining each other.'

The verbs *baukkə* 'help' (11), *mət* 'know' (12) and *mindiri* 'join' (13) all cannot take object prefixes. To index a human object referent, they must enter into a periphrastic construction with the verb *-ŋgi* 'give'. The person-number prefixes of the verb *-ŋgi* then index the object of the preceding verb. This verb carries the so-called infinitive suffix *-m* which signals a close connection with the following verb in a chaining construction. If a verb root ends in a consonant, as *mət* in (12), the infinitive suffix is absent or has no phonetic exponent (Olkkonen and Olkkonen 1983:19). It is hard to say whether the combination of a lexical verb and an object person-number indicating form of *-ŋgi* 'give' represents one or two grammatical words. Semantically, they belong together and, particularly when the infinitive suffix is absent, their formal connection is strong, too. That the Olkkonens always write such complex verb forms with a space between the two components seems to indicate that they are two separate phonological words. The forms of the verb *-ŋgi* may therefore not be suffixes in at least one respect, but they have certainly completely lost the lexical meaning 'give' in this construction.

The paradigm of object prefixes contains a form which stands outside the three person and the three number categories. This is the reciprocal prefix. It stands for reciprocal action but not, in Somba, for reflexive action. The reciprocal form of the verb 'give' is also used in the periphrastic construction described above. In (13) it makes the verb *mindiri* 'join' reciprocal.

Somba (Olkkonen and Olkkonen 1983:38)

14 *Opo* *u-m* *me-m* *ni-ŋgi-tsal.*
cloth sew-INF hold-INF 1s:OBJ-give-PRS:1s
'I sew clothes for myself.'

The benefactive construction in Somba is identical with the periphrastic object construction: the verb *-ŋgi* 'give' is used as an auxiliary in both cases. (14) is an example of this construction with a benefactive function. The lexical verb is here itself complex, consisting of the two-verb lexical unit *um me-* 'sew'. In spite of its wealth of object verbs, in Somba only a single one of them has been grammaticalized. The verb *-ŋgi* 'give' serves as a benefactive auxiliary as well as an object auxiliary.

1.1.3 Multiple object inflections in Selepet

The situation in Selepet is the opposite of the one we found in Somba. The language has only five object verbs but puts three of them to grammatical use. The three verbs are *nek* 'see me', *niɣi* 'give me' and *noɣo* 'hit me'. In (15) to (17) homonyms of these verbs can be seen used as object suffixes.

Selepet (McElhanon 1972:39, 40, McElhanon and McElhanon 1970, s.v. *hâtik-*)

15 *gɔi-nek-sap*
cut-1s:OBJ.I-N.PST:3s
'He cut me'

16 *mambot-niɣi-ap*
await-1s:OBJ.II-N.PST:3s
'He awaited me.'

17 *hɔtik-noɣo-ap*
cross-1s:OBJ.III-N.PST:3s
'It crossed over me.'

The three transitive verbs in (15) to (17) each take a different set of object person-number suffixes. McElhanon (1972:38ff) labels these sets with the Roman numerals I, II and III. Set II, which is formally identical with the verb 'give', is not only used for marking objects but also for beneficiaries. There is, however, a point of divergence between the benefactive paradigm and the paradigm of object II suffixes. In the third person singular, the object II paradigm has a zero realization (18) whereas the benefactive form is *-waŋgi* (19).

Selepet (McElhanon 1972:40, 1970c:27)

18a *mewale-niɣi-ap*
cheat-1s:OBJ.II-N.PST:3s
'He cheated me.'

18b *mewale-Ø-ap*
cheat-3s:OBJ.II-N.PST:3s
'He cheated him.'

19 *puluɣu-waŋgi-wi*
buy-3s:BEN-F.PST:3p
'They bought it for him.'

The three object classes are not equally frequent in the lexicon. While there are many verbs that take suffixes of classes I and III, the dictionary by McElhanon and McElhanon (1970) lists only five that take the suffixes of class II. Three of these must be discarded, one (*kərəŋ* 'squeal, reprove') because it really takes benefactive suffixes, one (*po waŋ* 'be hungry') because it is a collocation with the verb 'give', and one (*saɣ-aŋgi* 'discuss') because it only occurs with the reciprocal suffix which cannot be assigned to either the object II or the

benefactive paradigm. Of the remaining two verbs, one (*kəɣəi* 'offend') variously occurs with suffixes of class I or class II. Presumably, variation of the same sort is found with *mambot* 'await' which is described as taking class II suffixes in the grammar (cf. 16) but is said to take class III suffixes in the dictionary. This leaves us with a single straightforward example of a verb that takes class II object suffixes, *mewale* 'cheat' (18). The object class II is thus a marginal phenomenon.

The transitive verbs of Selepet are roughly evenly divided between object classes I and III.[1] Semantically, the verbs of either class do not seem to have anything in common. Although clusters of conceptually related verbs can be found in both classes, these clusters taken together do not seem to have a common denominator. Furthermore, conceptually related verbs can also be found across the two object classes. This can be seen in (20) through (25).

Selepet (McElhanon and McElhanon 1970, s.v.)

	<-*nek*> OBJ.I		<-*noɣo*> OBJ.III
20a	*misimbut* 'hide, conceal'	20b	*kətəp* 'conceal, hide'
21a	*wəi* 'touch'	21b	*walip* 'touch'
22a	*wat* 'follow, chase'	22b	*warat* 'follow, track'
23a	*təwəe* 'trick, deceive'	23b	*halap* 'trick, tease'
24a	*lou* 'carry on one's shoulder'	24b	*haɣan* 'carry on the hip'
25a	*loŋgəi* 'climb over, climb up on'	25b	*hətik* 'cross over'

Of the verbs in (20) through (25), the (a)-examples take the object person-number suffixes of class I, the (b)-examples those of class III. A comparison of the verbs in (a) with those in (b) shows that there are synonyms (20, 21), near-synonyms (22, 23) and conceptually similar verbs (24, 25) across the two object classes. Just as I fail to see any semantic feature that the (a)-verbs or the (b)-verbs have in common, I cannot detect any consistent semantic factor that separates the two members of these pairs. Their assignment to one or the other object class appears to be arbitrary.

A few verbs have been found to have variable object inflection. The dictionary lists four verbs that can take the object suffixes of either class without any concomitant difference in meaning (26 to 29).

Selepet (McElhanon and McElhanon 1970, s.v.)

26	*hələŋ*	*-nek/-noɣo*	'sit next to s.o., alongside s.th.'
27	*liwat*	*-nek/-noɣo*	'push against s.th. or s.o., bend s.th. over'
28	*maŋgan*	*-nek/-noɣo*	'greet, shake hands'
29	*para*	*-nek/-noɣo*	'shake s.o. in greeting, embrace s.o.'

[1] In the following I will only consider verbs that can take human object referents. The dictionary also assigns many verbs that take inanimate object referents to the two classes. The difference resides in the presence or absence of the third person singular marker of object class III, *-ku*. Transitive verbs that have this suffix are assigned to class III, verbs that lack it to class I. However, with inanimate object referents the suffix *-ku* (or zero) stands in no paradigmatic opposition with other person-number suffixes. It is an invariable part of the verb stem and had better be considered a sign of derivation than a person-number marker.

Surprisingly, these verbs have something in common: they all denote reciprocal actions. When I greet somebody (28), this person normally also greets me and when I sit next to somebody (26), this person in turn sits next to me. Such a reciprocal interpretation is possible for all the verbs in (26) through (29) in the meaning they have with a human object referent. I have no explanation for this curious fact.

While the verbs of the two object classes I and III cannot be shown to differ from each other semantically, they diverge with respect to two lexicological properties. In both cases object class III has a property that class I lacks. Firstly, object class III encompasses impersonal verbs like those in (30) to (32).

Selepet (McElhanon and McElhanon 1970, s.v.)

30 *nelǝm-noɣo-ap*
forget-1s:OBJ.III-N.PST:3s
'I forget.'

31 *ŋǝtǝk-noɣo-ap*
hiccup-1s:OBJ.III-N.PST:3s
'I hiccuped.'

32 *to-ǝn* *haran-gu-ap*
water-LOC drown-3s:OBJ.III-N.PST:3s
'He drowned in the water.'

The verbs in (30) to (32) always take third person singular subject inflection whereas the object inflection is variable. There is only a single argument and this is indexed by the object inflections. There are eight impersonal verbs of this sort in the dictionary and they all belong to object class III.

Secondly, object class III contains many verbs that are derived from nouns (McElhanon 1972:40). In (33) through (38) some examples are gathered.

Selepet (McElhanon and McElhanon 1970, s.v.)

	verb <-*noɣo*> OBJ.III	noun
33	*bet* 'turn one's back on, offend'	*bet* 'back'
34	*haɣan* 'carry on the hip, under the arm'	*haɣan* 'axilla, armpit'
35	*kan* 'stab, spear, impale'	*kan-ŋe* 'handle, spike'
36	*kǝlǝp* 'annoy, arouse'	*kǝlǝp* 'fire'
37	*nelǝm* 'forget'	*nelǝm* 'mind'
38	*tǝn* 'help, support'	*tǝn* 'bone, prop, tree trunk'

The verbs on the left-hand side of (33) to (38) are derived from the nouns on the right-hand side. They all take the object inflections of class III. For up to a third of the verbs of class III

such a derivational origin can be recognized. Among the verbs of class I, on the other hand, only very few are derived from nouns. The vast majority of class I verbs are basic verbs.

Selepet uses object verbs with the same meanings as those that are put to a grammatical use in Ono and Kâte, namely 'see' and 'hit', as object person-number markers. There is no syntactic difference between the two classes of object markers and no semantic feature has been found which sets the verbs that take these markers apart from each other. Selepet has two object conjugations and each transitive verb is specified for one of them in the lexicon. As in Ono, Kâte, and Somba, the object verb 'give' is used as a benefactive marker. It is also marginally used as a third class of object marker.

1.1.4 Object prefixes and suffixes in Nabak

Fabian, Fabian and Waters (1998:42) describe object inflection in Nabak in the following terms. The affixation of an object person-number marker on the verb is optional. It is absent when the object participant has low saliency in the discourse, presence of an object index suggests saliency. There are two forms of affixation, prefixation and suffixation. These are in turn differentiated according to the saliency of the object participant: use of a prefix suggests high saliency, use of a suffix, medium saliency. A medium saliency participant is important in only a limited part of a narrative, such as an episode, whereas a high saliency participant plays an important role throughout the whole narrative. The authors summarize their findings in the following words: "There is thus a three-way partition of the saliency gradient: low versus medium versus high: and these categories correlate with no affix versus a suffix versus a prefix, respectively." (Fabian, Fabian and Waters 1998:43).

Nabak (Fabian, Fabian and Waters 1998:60, 97, 110)

39 *Met-sɔt-m-ti-ŋgut* *ga-wap.*
go-DESID-do-SS-COMPL 2s:OBJ.give-F.FUT:2s
'I am going to go and then I will give it to you.'

40 *Kiŋgagat* *n-aik-ge.*
fear 1s:OBJ-find-F.PST:3s
'I was afraid. (lit. 'Fear found me.')'

41 *"Kuleki-jet* *go-n",* *jaŋkwesi-man.*
what-BEN 2s:OBJ.hit-PRS:3s ask-INT.PST:1s
'"Why does she hit you?" I asked.'

Unusually, in Nabak not only the object suffixes but also the object prefixes are related to a lexical verb. The object prefixes are homonymous with the forms of the object verb *sa ~ -a* 'give' (39), except in the third person singular. The verb 'give' has the suppletive form *sa* 'give him/her' whereas the object prefix for the third person singular is zero. Before vowel initial verb stems the prefixes lose their final vowel *a* (40). An object verb form such as *go* 'hit you' (41) can therefore be synchronically analyzed as consisting of the regular object prefix *g(a)-* and the vowel initial stem *o* 'hit'. The third person singular form *ku* 'hit him/her'

must then be considered a suppletive form within the paradigm. This is in fact the analysis of Fabian, Fabian and Waters (1998:48). They list six verbs with such a suppletive third person singular form (see Appendix A). From a diachronic perspective, it is clear that the object forms of these six verbs are not productive or even recent formations but go back in time a long way, the form *go* 'hit you', for instance, all the way back to pHP **gaku* (cf. Table 1-73 in 1.3.11). The six object verbs listed by Fabian et al. plus two further ones recorded by McElhanon contain original person-number prefixes and have never been derived from compounds with the verb 'give'. The other verbs that take object prefixes, on the other hand, seem to go back to compounds or serial verb constructions in which an object-inflected form of the verb 'give' was the initial part.

Nabak (Fabian, Fabian and Waters 1998:78, 47)

42	*Ekŋen*	*sek-in*	*melesiŋ*	*Anutu-aŋ*	*belak*
	3p	body-3p:POSS	whole	God-FOC	nothing

mi-ti *ainzili-inde-je.*
do-SS hide-3p:BEN-F.PST:3s
'God just took hold of the entire body of [each of] them and hid them.'

43 *Za-ne-p.*
tie-1s:BEN-N.PST:3s
'He tied it for me.'

While the object prefixes always refer to an object participant (patient or recipient), the suffixes perform two functions. They can also refer to an object participant, like *ainzili-inde-je* 'he hid them' in (42), or they can introduce an additional benefactive participant into the clause (43). Formally, the object/benefactive suffixes are identical with the forms of the object verb *pe ~ -e* 'leave', including the form of the third person singular. In their function as object markers, the benefactive suffixes compete with the prefixes discussed above. According to Fabian et al. the level of discourse saliency determines whether a prefix or a suffix is used on a particular verb in context. This suggests that one and the same verb can take either object prefixes or object suffixes. In fact, Fabian, Fabian and Waters (1998:47) explicitly say that this happens without, however, giving any examples. In the nearly 100 pages of texts in the appendix to the grammar I have, however, only found two instances of a verb that variously occurs with object prefixes and benefactive suffixes in object function.

Nabak (Fabian, Fabian and Waters 1998:432, 455)

44	*Mka-en*	*nemba*	*isik-isik*	*notnaŋ*	*ma*	*am*	*penaŋ*
	house-LOC	child	little	some	or	people	very.old

notnaŋ-aŋ	*nda-ek-me*	*sakambuk*	*mi-senup.*
some-FOC	1p:OBJ-see-DS:3p	embarrassed	do-N.FUT:1p

'In the village some little children or some old people will see us and we will be embarrassed.'

45 *Ek-pe-mti* *mi-mbien-nalak.*
see-3s:BEN-SS do-F.PST:2p-CONS
'You [i.e. the guilty clan] saw it [i.e. the actual event] and have done nothing about it.'

In (44) we see the verb *ek* 'see' with the first person plural object prefix *nda-*.[2] (45) shows the same verb with the object suffix of the third person singular *-pe*. The only other verb for which the same variation can be observed in the published material is the object verb *o ~ -eo* 'spear, sew, comb, plant'. Both *ek ~ -ik* 'see' and *o ~ -eo* 'spear' are object verbs and occur with prefixes for all person-number combinations. All attested instances of an object suffix with either of these verbs, on the other hand, involve the third person singular form *-pe*. Variation between prefixation and suffixation can therefore only be observed for the third person singular in the case of these two verbs and not at all for any other verb. This very limited finding is at odds with the account of Fabian et al. Variation between prefixation and suffixation of object indexes is such a rare and apparently marginal phenomenon that it is hardly possible to classify the few attested instances according to their saliency in discourse. Furthermore, the number of verbs that take object prefixes is small. In the published material, apart from the six object verbs with a suppletive third person singular form recognized by Fabian et al., only four verbs and two verbal adjuncts can be found to take object prefixes: the verbs *aik* 'find', *be* 'put', *ele* 'shoot' and *ti* 'take' and the verbal adjuncts *mukulem (mi)* 'help' and *damung (mi)* 'care for'. A considerably larger number of verbs take object suffixes. Even the most frequent of them consistently occur only with suffixes, just like the prefixal verbs exclusively occur with prefixes, with the exception of the two verbs mentioned above.

While a co-variation between prefixation and suffixation of object indexes and high and medium saliency in discourse is not supported by the texts published in Fabian et al. (1998), the case looks somewhat more promising for presence versus absence of object indexes. In the published texts, a few examples can be found of the same verb occurring with and without object suffix in close succession in discourse.

Nabak (Fabian, Fabian and Waters 1998:445 (clauses 530 and 536), 96)

46a *selik* *maŋgu-ŋaŋ* *seŋ-ti*
bamboo stopper-3s:POSS remove-SS
'... then he removed its leaf wad stopper ...'

46b *selik* *maŋgu-ŋaŋ* *seŋ-pe-mti*
bamboo stopper-3s:POSS remove-3s:BEN-SS
'He removed the stopper of the bamboo ...'

[2] *Ek* is here treated like an invariable verb root rather than the third person singular form of an object verb. *Ndaek* 'see us' is a new formation competing with the older object verb form *ndik* 'see us'.

47a *Gəgət* *pu-jap.*
2s:BEN carry-PRS:1s
'I am carrying [it] for you.'

47b *Gəgət* *pu-ŋge-jap.*
2s:BEN carry-2s:BEN-PRS:1s
'I am carrying [it] for you.'

The clauses in (46a) and (46b) differ only in the presence versus absence of the third person singular object suffix *-pe*. In this pair of examples, as in similar ones, it is hard to tell whether the object referent is really more salient in the clause whose verb carries an object suffix. The stopper is a prop in both clauses in (46). The fact that it is first mentioned in (46a) and then referred to again in (46b) could alternatively be taken as evidence for a distinction in activation. However that may be, example (47) confirms that the object/benefactive suffixes are not obligatory inflections and may be left away even though the clause contains an object or benefactive NP. I have found no similar examples showing that the object prefixes are optional, too. The difference between synonymous clauses with and without object suffix, such as (46) and (47), is subtle and it would require extensive discourse analysis to pin it down more precisely than saying that it is of a pragmatic nature.

As in the other Huon Peninsula languages, in Nabak most transitive verbs take suffixes to index the person and number of the object. There are eight ancient inherited object verbs with fused prefixes. In addition, a small number of other verbs can take object prefixes which are homonymous with the forms of the object verb 'give'. Variation between prefixation and suffixation on the same verb is a marginal phenomenon. The account of Fabian et al. according to which prefixation indicates high saliency in discourse and suffixation lower saliency is not supported by the published texts.

1.1.5 Survey of the object verbs in Huon Peninsula languages

In all Huon Peninsula languages, the majority of verbs take suffixes to index human objects. There is, however, a minority of verbs which take prefixes. The number of such object verbs varies between languages and subgroups. The largest number of object verbs is found in the Pindiu family: Borong has 22 and Somba-Siawari 20. The Huon Tip languages had a smaller number ranging from five to seven when Pilhofer (1928) documented them, but contemporary Migabac has lost all object verbs except 'give'. There is one language that has lost all object verbs: Kovai. The object indexing suffixes of Kovai seem to go back to the free pronouns rather than an object verb. The object verbs are a closed class in all Huon Peninsula languages. Prefixation of object indexes is not a productive process, except in Mesem and Nabak, where this is an innovation (cf. 1.1.4).

Table 1-3: The meanings of the most widespread object verbs

	'give'	**'hit'**	**'see'**	**'tell'**	**'bite'**	**'call'**	**'burn'**	**'pass by'**
Sialum	na	nuku	no	nadan	nadet	–	nize	–
Ono	nin	neku	nan	nolat	nirot	nora	nae	–
Sene	nɔte	nu	nɔŋɔnu	nɔze	–	–	–	–
Migabac	nele	–	–	nedo	–	–	–	–
Momare	nale	–	naŋane	–	–	–	–	nawali
Wamorâ	nala	nu	naŋona	nazɯ	–	–	–	nandolo
Parec	nala	nu	–	natsi	–	–	–	–
Mâgobineng	nala	nu	–	naze	–	–	–	naulu
Wemo	nale	nu	–	natsa	–	–	–	nowalu
Naga	nale	nu	naŋone	nazɔ	–	–	–	nalule
Mape	nale	nu	naŋone	nazɯ	–	–	–	nadule
Dedua	neŋ	nu	neŋ	nede	ni	nuru	noho	–
Mongi	nəŋ	nu	nəŋ	nətsə	ni	nuru	no	nogiʔ
Tobo	nəm	nu	nən	nətsə	ni	nuru	noɣo	nuɣit
Borong	noŋ	nu	nii	nize	ni	nooŋ	noo	nuugu
Somba	niŋgi	nuŋgu	nek	–	nəɣə	noɣol	noɣo	noŋgit
Mesem	nəga	no	ne	–	nɘ	–	–	–
Nabak	na	no	nik	–	ni	–	nembu	–
Nomu	nogi	noku	–	nozo	niko	nokun	nozi	–
Kinalaknga	noŋgo	nuku		–	niko	nukun	nozi	–
Kumukio	noŋgo	nuku	nik	–	niko	nukun	nuŋgi	–
Komba	niɣ	noɣ	nek	–	niɣ	nonsʌ	nise	–
Selepet	niɣi	noɣo	nek	–	niɣi	noɣon	–	–
Timbe	niŋ	nuɣu	nek	–	niɣi	noɣon	–	–

If one compares the meanings of object verbs in different languages, one finds a number of concepts that reappear all over the Huon Peninsula. Table 1-3 presents the first person singular forms of the object verbs with the meanings given at the top. As can be seen from the table, every documented language has an object verb with the meaning 'give' and only Momare and Migabac lack an object verb meaning 'hit'. The concepts 'see' and 'tell' are also well represented in both Eastern and Western Huon languages. Mainly the Western Huon languages have object verbs meaning 'bite', 'call' and 'burn'; in the Eastern Huon family these concepts can only be found in the Kalasa subfamily. Finally, the concept 'pass by' is attested in the Huon Tip family and in the Pindiu family. These eight concepts are the most widespread on the Huon Peninsula. On the other hand, there are some unique object verbs, mostly in the languages with a large number of them. Only Ono has an object verb with the meaning 'put down', only Borong has object verbs meaning 'feed' and 'whip', and Somba-Siawari is the only language with object verbs meaning 'accompany' and 'ignore' (cf. Appendix A).

Table 1-4: Object affixes and homonymous verb forms in Huon Peninsula languages

	indexation		**lexeme**		
	1SG:OBJ	*3SG:OBJ*	*1SG*	*3SG*	*meaning*
Sialum	-no	Ø, -ka	no	ka	'see'
Ono	-nan	Ø, -ka, -ke	nan	ka	'see'
Sene	-nu	Ø, -ge	nu	kpɔ	'hit'
Migabac	-nu	Ø, -ke	–	–	–
Momare	-nu	Ø, -ke	nu	hʷa	'stab'
Wamorâ	-nu	Ø, -ka, -kpa	nu	kpa	'hit'
Mâgobineng	-nu	Ø, -a	nu	kpa	'hit'
Wemo	-nu	Ø, -ke, -ne	nu	kpa	'hit'
Naga	-nu	Ø, -ka	nu	kpa	'hit'
Mape	-nu	Ø, -ga	nu	kpa	'hit'
Dedua	-nu	Ø, -ke	nu	kpe	'hit'
Mongi	-nəŋ	-mi	nəŋ	mi	'give'
Tobo	-nəm	-mi, Ø	nəm	mi	'give'
Borong	noŋ	mu	noŋ	mu	'give'
Somba	niŋgi	waŋgi	niŋgi	waŋgi	'give'
Mesem	n(ə)-	Ø	–	–	–
Mesem	-ne	-pe	ne	pe	'leave'
Nabak	n(a)-	Ø	na	sa	'give'
Nabak	-ne	-(m)pe	ne	pe	'leave'
Nomu	-nogi	-wagi	nogi	wagi	'give'
Kinalaknga	-noŋgo	Ø, -waŋga	noŋgo	waŋga	'give'
Kumukio	-noŋgu	Ø, -waŋga	noŋgo	waŋga	'give'
Komba	-niɣ	Ø	niɣ	pindʌ	'give'
Komba	-noɣ	-ko	noɣ	ko	'hit'
Selepet	-nek	Ø	nek	ek	'see'
Selepet	-niɣi	Ø	niɣi	waŋ	'give'
Selepet	-noɣo	-ku ~ -ɣu	noɣo	ku	'hit'
Timbe	-nek	Ø	nek	ek	'see'
Timbe	-niŋ	Ø	niŋ	waŋ	'give'

The three most widespread object verbs 'give', 'hit', and 'see' are also the verbs that have been put to a grammatical use as object person-number markers. In Table 1-4, the object affixes are given on the left-hand side and the homonymous object verbs on the right-hand side. The first person singular forms stand for all person-number combinations other than third person singular. These forms are always homonymous with the corresponding object verb forms. The third person singular forms, however, often diverge. In many cases, the third

person singular form of the object affix, or one of its allomorphs, is zero whereas the corresponding object verb form has phonetic substance.

Individual Huon Peninsula languages have grammaticalized object verbs with different meanings into object indexes. The only object suffix set of Ono and Sialum and one of the object classes in Selepet and Timbe derive from the verb 'see'. The verb 'hit' yields the object suffixes in most Huon Tip languages, except synchronically in Momare and Migabac, and in the neighboring Western Huon language Dedua. One of the object classes of Komba and Selepet also derives from the object verb 'hit'. The verb 'give' is used as an object index in the Pindiu languages, except Dedua, and in the Dallman languages. One of the object classes of the Kabwum languages and the object prefixes of Nabak also derive from 'give'. Finally, the object suffixes of Mesem and Nabak are homonymous with an object verb meaning 'leave'.

Table 1-5: Benefactive suffixes and related verb forms in Huon Peninsula languages

	indexation		**lexeme**		
	1SG:BEN	*3SG:BEN*	*1SG*	*3SG*	*meaning*
Ono	nin	man	nin	man	'give'
Sene	-nɔte	-tine	nɔte	tene	'give'
Migabac	-nele	-ʔno	nele	laʔno	'give'
Momare	-nale	-ʔno	nale	loʔne	'give'
Wamorâ	-nala	-ʔna	nala	tɯna	'give'
Mâgobineng	-nala	-ʔna	nala	teʔna	'give'
Wemo	-nale	-ʔne	nale	lɔʔne	'give'
Naga	-nale	-te	nale	ɔte	'give'
Mape	-nale	-te	nale	ɔte	'give'
Dedua	-neŋ	-mi	neŋ	mi	'give'
Mongi	-nəŋ	-mi	nəŋ	mi	'give'
Tobo	-nəm	-mi	nəm	mi	'give'
Borong	noŋ	mu	noŋ	mu	'give'
Somba	niŋgi	waŋgi	niŋgi	waŋgi	'give'
Mesem	-ne	-pe	ne	pe	'leave'
Nabak	-ne	-(m)pe	ne	pe	'leave'
Nomu	-nogi	-wagi	nogi	wagi	'give'
Kinalaknga	-noŋgo	-waŋga	noŋgo	waŋga	'give'
Kumukio	-noŋgu	-waŋga	noŋgo	waŋga	'give'
Komba	-niɣ	?	niɣ	pindʌ	'give'
Selepet	-niɣi	-waŋgi	niɣi	waŋ	'give'
Timbe	-niŋ	-waŋ	niŋ	waŋ	'give'

Migabac shows that there is no necessary synchronic relationship between the object indexes and a homonymous object verb. There is no such object verb in Migabac. The object person-number suffixes are just that, suffixes, and they have no counterpart among the verb forms of the language. There is also no object verb corresponding to the object prefixes of Mesem.

The picture of the benefactive suffixes is much more uniform (Table 1-5). In all languages except Mesem and Nabak these grammatical markers are related to the verb 'give'. The object verb corresponding to the benefactive suffixes of Mesem and Nabak means 'leave'. The third person singular form of the benefactive suffixes always has phonetic substance. In the Huon Tip family and in Selepet, the third person singular form of the benefactive suffix and that of the object verb 'give' diverge from each other, otherwise they are identical.

Typologically, the Huon Peninsula languages can be divided in four groups, which were exemplified in sections 1.1.1 to 1.1.4. The Eastern Huon languages have grammaticalized two object verbs, one becoming an object person-number marker, the other a benefactive marker. Dedua also belongs to this group. The Pindiu languages, with the exception of Dedua, and the Dallman languages have only grammaticalized a single object verb, 'give', which does double duty as an object and benefactive marker. The Kabwum languages have grammaticalized more than one object verb into object person-number markers. Komba and Timbe have two and Selepet has three sets of such object markers. Each transitive verb is lexically specified for one of these object classes. In addition, all three languages use the verb 'give' as a benefactive marker as well as an object marker. In Mesem and Nabak, there are not only object suffixes but also object prefixes which are at least partially productive. The prefixes derive from the object verb 'give'. The suffixes are also used as benefactive markers.

1.2 Variation and change

We are in the fortunate position of knowing the object verbs of all Huon Tip languages and dialects, even those that are now extinct, because Pilhofer (1928) elicited them in his morphological survey of the eastern part of the Huon Peninsula. Since Pilhofer recorded these verb forms, several decades have passed and linguistic change has come about. It is instructive to note the direction of change that can be observed in this time span. The tendency is for languages to reduce the number of object verbs, replacing them with regular formations. This process has gone furthest in the Migabac language, which today has only a single object verb (McEvoy 2008:35). Of the four object verbs that Pilhofer was able to record in the 1920s, three have fallen out of use and only the object verb 'give' remains in common usage. How this change came about can be deduced from the variation between different dialects that Pilhofer (1928:221f) recorded.

Table 1-6: Irregular versus regular object inflection in different dialects of Migabac

	'tell'		**'show'**	
	Mountain d	*Coastal d*	*Mountain d*	*Coastal d*
1SG	nedo	edo-ʔnu	nedali	edali-ʔnu
2SG	gedo	edo-ʔgu	gedali	edali-ʔgu
3SG	edo	edo	edali	edali
1DU	noto	edo-ʔnopa	notali	edali-ʔnopa
2DU	ŋeto	edo-ʔŋepa	ŋetali	edali-ʔŋepa
3DU	jeto	edo-ʔjepa	jetali	edali-ʔjepa
1PL	nodo	edo-ʔnoba	nodali	edali-ʔnoba
2PL	ŋedo	edo-ʔŋeba	ŋedali	edali-ʔŋeba
3PL	jedo	edo-ʔjeba	jedali	edali-ʔjeba

The Mountain dialect and the Coastal dialect of Migabac differed in that the former had object verbs for 'tell' and 'show' whereas the latter had invariable verb stems taking the regular object person-number suffixes (Table 1-6). The invariant verb stem of the progressive Coastal dialect is identical with the third person singular form of the object verb in the conservative Mountain dialect. This pivotal form mediates between the old and the new paradigm. In the Coastal dialect, the former third person singular form has been reinterpreted as a monomorphemic verb stem; the original prefix *e-* is no longer recognizable as such from a synchronic point of view. This new verb stem is then suffixed with the regular object person-number markers. As the third person singular form has a zero suffix, it survives the transformation of the paradigm outwardly unchanged. In the other person-number categories, prefixation of the object indexes is replaced with suffixation.

In this manner, the number of verbs taking object prefixes has gradually diminished. In contemporary Migabac, the object verbs *nedo* 'tell' and *nedali* 'show', which were first replaced with regular formations in the Coastal dialect, have entirely disappeared from the language. In the closely related language Momare the same development is underway. In the late 1990s, some old informants were able to recall the object verbs recorded by Pilhofer, but they said that these forms were no longer in common use, with the exception of 'give'. Likewise, in the Wemo dialect of Kâte the object verb *nape* 'follow' has become obsolete, and so have Dedua *nuru* 'call' and Mongi *nətsi* 'show' (cf. Appendix A). The three object verbs just mentioned must have been vital in Pilhofer's days, but some others showed signs of being moribund.

Table 1-7: Object verbs about to disappear in Migabac, Mâgobineng and Dedua

	Migabac **'take away from'**	*Mâgobineng* **'show'**		*Dedua* **'tell'**	
1SG	newala	naudu-ʔnu			ede-nu
2SG	gewala	gaudu-ʔgu	gede		ede-gu
3SG	ewala	jɔudu	ede	ede	ede
1DU	ewala-ʔnopa	nɔudu-ʔnɔfe			ede-nuʟu
2DU	ewala-ʔŋepa	ŋaudu-ʔŋafe		ŋede-ŋuʟu	ede-ŋuʟu
3DU	ewala-ʔjepa	jaudu-ʔjafe		jede-juʟu	ede-juʟu
1PL	ewala-ʔnoba	nɔudu-ʔnɔbe	nende		ede-nunu
2PL	ewala-ʔŋeba	ŋaudu-ʔŋabe	ŋende		ede-ŋunu
3PL	ewala-ʔjeba	jaudu-ʔjabe	jende		ede-junu

The object verb paradigms from three languages given in Table 1-7 show the shift from prefixation to suffixation in slow motion, as it were. The paradigm for 'take away from sb' in Migabac is a mixture of regular and irregular inflectional forms. In the singular, we find the old prefixed forms; in the dual and plural, regular formations with object suffixes have taken their place. The invariable verb stem used in the dual and plural is identical with the third person singular form. In this paradigm, the dual and plural forms have already undergone the change to suffixation while the singular forms lag behind.

A different avenue of change can be seen in the paradigm for 'show' in the Mâgobineng dialect of Kâte. Here, the regular object suffixes have been appended to what looks like the old prefixed verb forms. On closer inspection we note, however, that the opposition between dual and plural is only expounded by the object suffixes, the stems of the dual and plural forms having given it up. While the Wemo dialect of Kâte opposes *nɔfotu* 'show us two' and *nɔwotu* 'show us all', the Mâgobineng dialect has given up the dual stem and extended the old plural stem *nɔudu* to the dual. This leveling of oppositions is a first step toward the introduction of an invariable verb stem.

The situation is particularly tangled in the case of the forms of the object verb 'tell' in Dedua. Perhaps the informant who gave Pilhofer (1928:221) this mixed bag of forms used the regular formations in the rightmost column in his own speech and merely remembered some older forms. That he did not give the first person singular form of the old object verb (in the leftmost column) would otherwise be surprising. The informant recalled the old prefixed plural forms, but not the dual forms. The two dual forms in the middle column are formed in the same manner as the Mâgobineng paradigm for 'show', i.e. the object suffixes are appended to stems that already have prefixes. These are probably transitional forms that were soon replaced by the regular suffixed forms in the rightmost column. In them,h the former third person singular form *ede* serves as an invariable verb stem. This is the final stage in the transformation of the paradigm. Thus, while there seem to be different avenues of change

leading from prefixation to suffixation, the end result is always the same. The former third person singular form becomes the new invariable verb stem.

Comparing the data in Pilhofer (1928) with contemporary data we found that the number of object verbs in Huon Peninsula languages is diminishing. Object verbs are irregular formations, a residue from an earlier stage in which prefixation of object indexes was a productive process. In modern Huon Peninsula languages, prefixation is no longer productive[3], but suffixation has taken its place as the regular process of object inflection. Suffixation is gaining ground and ousting more and more of the residual prefixed verb forms. This general drift has progressed with variable speed in the different subfamilies. The Huon Tip and the Cromwell languages have only preserved a small number of object verbs, between one and nine. The Pindiu languages, on the other hand, boast up to twenty. In the Huon Peninsula languages as a whole, around sixty etymologically different object verbs can be found. We will see evidence in the next section that occasionally an object verb has come into existence at a later date than proto Huon Peninsula. Therefore, we cannot simply project all sixty extant object verbs back to Proto-Huon Peninsula. But given the general trend of obsolescence, it is safe to say that Proto-Huon Peninsula had more than the twenty object verbs we find in the most conservative modern languages.

1.3 Reconstruction

In this section, the object verbs of the Huon Peninsula languages are stepwise reconstructed, beginning with low-level families and then moving step by step upwards until the top-level is reached. First, the object verbs of the Kalasa family (1.3.1) and the Huon Tip family (1.3.2) are reconstructed, then those of the superordinate Eastern Huon family (1.3.3). In the same manner, the object verbs of the Western Huon family (1.3.10) are built up from the reconstructions of four low-level and two intermediate-level subfamilies (1.3.4 through 1.3.9). Finally, in 1.3.11 the object verbs that can be reconstructed to Proto-Huon Peninsula are discussed.

Object verbs are cited with their first person singular form. If this form cannot be reconstructed, the third person singular serves as citation form. Whole paradigms of object-inflected verb stems are compared to each other. Two tables are needed to present all forms, the first giving the meaning of an object verb and presenting its singular forms as well as the reciprocal form, the second presenting the dual and the plural forms. Reconstructions are given in the top row of a column or at the top of a subsection of a column representing a subfamily. Forms in a column that are put in square brackets do not descend from the superordinate reconstruction, all other forms are deemed to be reflexes of the starred form given above. Parts of a form that are innovative additions to the reflex of a reconstruction are similarly put in square brackets. Parts of a form that can be present or absent are enclosed in parentheses.

[3] An exception is found in Mesem and Nabak which have secondarily introduced partially productive object prefixes (cf. 1.1.4).

1.3.1 Kalasa

For Ono, fourteen object verbs are attested by Wacke (1931) and Phinnemore and Phinnemore (1985). For Sialum, McElhanon elicited nine object verbs of which eight have cognates in Ono (see Appendix A). Sialum and Ono form together the Kalasa subfamily of the Eastern Huon family. There is a general mismatch between the first person dual and plural forms of Sialum and Ono, with the exception of the object verb **näku* 'hit' where these forms match (cf. Table 1-10). As the reconstruction of the personal pronouns shows, Proto-Kalasa had two first person non-singular pronouns, the dual forms **netä* and **itä* and the plural forms **nenä* and **inä* (see Tables 2-3 and 2-4 in Chapter 2). They may have been exclusive and inclusive forms, respectively. In the object verbs, we find the corresponding prefixes **net-* and **it-* in the dual and **nen-* and **in-* in the plural. The former ones are reflected in Ono, the latter ones in Sialum, in parallel with the free pronouns. I refrain from reconstructing Proto-Kalasa first person non-singular forms in this section because this is not possible in a bottom-up approach.

Table 1-8: Proto-Kalasa **ka* 'see him/her/it'

		1SG	2SG	3SG	RECP
pKalasa	see			*ka	
Sialum	see	no	go	ka	jo-nagu
Ono	see	nan	gan	ka	aek

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa		*ŋot	*jot		*ŋo	*jo
Sialum	ut	ŋot	jot	un	ŋo	jo
Ono	ŋot	ŋut	ot	ŋon	ŋun	on

The most ancient form in the paradigm of 'see' in Sialum and Ono is the third person singular form (Table 1-8). An original form **ka* 3SG cannot only be reconstructed for Proto-Kalasa but also for Proto-Finisterre-Huon (cf. Table 1-74 in 1.3.11). The root **ka ~ k* only recurs in the reciprocal form of Ono, but not in the other person-number forms. What the root in the other forms was is hard to tell. The dual and plural forms consist only of the CV(C) template of the prefix. In these forms, the back rounded quality of the vowel is the only reflex of the root. In the first and the second person singular, the Sialum and the Ono forms do not agree. Ono shows a root-final consonant *n* which Sialum lacks. The Sialum forms fit with the non-singular forms of both languages in that the rounded back vowel *o* is the only trace of the root. The original root must have been worn down through frequent use and all that is left of it is a harmonic vowel in the prefix. The original root must therefore have contained a back rounded vowel. It was, at least in the dual and plural, a common innovation of the Kalasa languages and entered into a suppletive relationship with the retained third person singular form **ka*.

48a		DU	PL
	1	t	n
	2	t	
	3	t	

48b		DU	PL
	1	t	n
	2	t	n
	3	t	n

When we focus on the final consonant of the dual and plural forms in Table 1-8, we note the pattern (48a) in Sialum and the pattern (48b) in Ono. The difference lies in the second and third person plural forms: in Ono they end in n whereas in Sialum this consonant is lacking. In the course of reconstructing the object verb forms of the various Huon Peninsula subfamilies we will repeatedly meet the two patterns in (48) in one and the same correspondence set. The diachronic relationship between them is always the same. The pattern in (48a) is the original one and (48b) is an extension of it. In (48a) there is an opposition between *t* in the dual and *n* in the plural in the first person non-singular forms only. In (48b) this opposition has been generalized to encompass all persons. The result is a semantically significant alternation between *t* in all dual forms and *n* in all plural forms. We must therefore subtract the innovative final *n* of the Ono forms *ŋun* 2PL and *on* 3PL and reconstruct **ŋo* 2PL and **jo* 3PL, as in Sialum.

Table 1-9: Proto-Kalasa **man* 'give him/her'

		1SG	2SG	3SG	RECP
pKalasa	give			*man	
Sialum	give	na	ga	man	a-nagu
Ono	give	nin	gin	man	

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa		*ŋepën	*epën		*ŋemën	*emën
Sialum	ipen	ŋepen	epen	imen	ŋemen	emen
Ono	ŋepon	ŋipon	epon	ŋebon	ŋibon	ebon

For the object verb 'give', too, the forms of the first and the second person singular are not reconstructible (Table 1-9). There is some uncertainty about what these forms are in Sialum (cf. Appendix A). The verb root we see in **man* 3SG also occurs in the plural forms of Sialum. In the dual, the consonant cluster **-tm-* became *-p-* in both languages (e.g. **et-mën* 3DU > **epën*). The dual forms with medial *-p-* then gave rise to a replacement of the medial consonant **-m-* with *-b-* in the plural forms of Ono, in analogy with such object verbs as *nirot* 'bite' (Table 1-11) and *nolat* 'tell' (Table 1-12), where *-t-* in the dual alternates with *-d-* in the plural. Now Ono has a consonant alternation between an unvoiced stop in the dual and a voiced stop in the plural as in most of its object verbs.

Table 1-10: Proto-Kalasa **näku* 'hit'

		1SG	2SG	3SG	RECP
pKalasa	hit	*näku	*gäku	*kpe	*jaku
Sialum	hit	nuku	guku	kpe	jaku
Ono	hit	neku	geku	gbe	jaku

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa	*netku	*ŋetku	*jetku	*nengu	*ŋeku	*jeku
Sialum	nutku	ŋutku	jutku	nungu	ŋuku	juku
Ono	ŋetku	ŋitku	etku	ŋengu	ŋingu	engu

All forms of the paradigm of 'hit' in Sialum and Ono, including the reciprocal form, are good matches (Table 1-10). In Sialum, we find consonant harmony in all prefixed forms with the exception of the reciprocal form. Ono preserves the original vowel of the prefixes, therefore it is clear that that vowel has been recently umlauted in Sialum. 'Hit' is the only object verb in which Sialum reflects the first person non-singular prefixes **net-* 1DU and **nen-* 1PL, otherwise it shows reflexes of **it-* 1DU and **in-* 1PL. The first person non-singular forms with initial *n-* in Sialum confirm that the initial *ŋ-* in the first person non-singular forms of this and all other Ono object verbs comes from **n-*. The sound change **n- > ŋ-* is often encountered in Ono, but is not strictly regular. We note that it only applies to the non-singular forms of the object verb prefixes and the personal pronouns (cf. 2.2.2), but not to the singular form, cf. *neku* 'hit me' < **näku*, *ŋetku* 'hit us two' < **netku*. Note that there are two different prefix-initial consonants in the second person, too, namely *g-* in the singular and *ŋ-* in the dual and plural. In the second person this duplication is inherited. The sound change **n- > ŋ-* in the first person dual and plural forms would have led to homonymy with the second person forms. However, homonymy was counteracted by raising the vowel of the second person dual and plural prefixes. We now find an opposition between *ŋe-* (< **ne-*) in the first person and *ŋi-* (⇐ **ŋe-*) in the second person non-singular throughout the Ono object verbs. The initial consonants *n-*, *ŋ-*, and *j-* in the Sialum dual and plural forms, characteristic of first, second, and third person respectively, have a match in the corresponding forms of the object verbs in the Huon Tip languages (cf. 1.2.2), hence the exceptional occurrence of initial *j-* in the third person non-singular forms of 'hit' and 'see' (cf. Table 1-8) must be considered a retention.

Table 1-11: Proto-Kalasa **nädët* 'bite'

		1SG	2SG	3SG	RECP
pKalasa	bite	*nädët	*gädët	*ki	
Sialum	bite	nadet	gadet	ke	edet-nagu
Ono	bite	nirot	girot	ki	airot

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa		*ŋetët	*etët		*ŋedët	*edët
Sialum	itet	ŋetet	etet	idet	ŋedet	edet
Ono	ŋetot	ŋitot	etot	ŋedot	ŋidot	edot

The Proto-Kalasa object verb for 'bite' is suppletive; the third person singular root is **ki*, in the other person-number combinations we find the root **-dët* (Table 1-11). In the Western Huon family and in several Finisterre languages the root **ki* occurs throughout the paradigm (Suter 2012:32). It is therefore likely that the introduction of the suppletive root **-dët* is an innovation of the Kalasa family. The vowel *i* in the prefix of the Ono forms *nirot* 1SG and *girot* 2SG is somewhat mysterious. It is not clear whether it may be due to umlaut induced by the root vowel **ë* as the phonetic nature of this reconstructed sound is not clear. Alternatively, the reciprocal form *airot* might be interpreted as indicating that the root was really **-idët* rather than **-dët*, but the Sialum reflexes *nadet* 1SG and *gadet* 2SG could hardly be reconciled with such a reconstruction. The dual and plural forms show the expected consonant alternation between **-t-* (< **-t-d-*) and **-d-*.

Table 1-12: Proto-Kalasa **nulan* 'tell'

		1SG	2SG	3SG	RECP
pKalasa	tell	*nulan	*gulan	*jat	
Sialum	tell	nadan	galan	jat	
Ono	tell	nolat	golat	[ol]at	au

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa		*ŋetan	*etan		*ŋedan	*edan
Sialum	itan	ŋetan	etan	idan	ŋedan	edan
Ono	ŋetan	ŋitan	etan	ŋedan	ŋidan	edan

The object verb **nulan* 'tell' (Table 1-12) is unique to Sialum and Ono, replacing pHP **nazu* 'tell' (cf. Table 1-75 in 1.3.11). Only the Ono reciprocal form *au* 'discuss with each other' (< **a-zu*) retains the Proto-Huon Peninsula root **-zu*. The Sialum forms show a suppletive relationship between the third person singular root *jat* and the root *-(a)lan* in the other person-number combinations. In Ono, the singular forms have been assimilated to each other and the original suppletion is no longer recognizable. Ono *nolat* 1SG (⇐ **nulan*) and *golat* 2SG (⇐ **gulan*) have their final *t* from the third person singular form **jat*, the third person singular form *olat* (⇐ **jat*) has been remodeled after the first and the second person singular forms. In the first and the second person singular forms we find the root **-ulan*, but the dual and plural forms point to **-lan*. The consonant cluster **-tl-* in the dual yielded **-t-* and the consonant cluster **-nl-* in the first person plural yielded **-d-*, which was extended to the second and the third person plural.

Table 1-13: Proto-Kalasa **naze* 'burn'

		1SG	2SG	3SG	RECP
pKalasa	burn	*naze	*gaze	*ze	
Sialum	burn	nize	gize	ze	
Ono	burn	nae	gae	ze	

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa		*ŋetzë	*etzë		*ŋezë	*ezë
Sialum	itse	ŋitse	etse	ize	ŋize	eze
Ono	ŋeso	ŋiso	eso	ŋezo	ŋizo	ezo

The object verb **naze* 'burn' has a single root that appears without prefix in the third person singular **ze* (Table 1-13). It is not clear why the prefix vowel in Sialum *nize* 1SG and *gize* 2SG has been raised. I assume that Ono preserves the original vowel in *nae* 1SG and *gae* 2SG. In the dual and plural, Sialum has the root vowel *e* and Ono has *o*, which mandates the reconstruction of **ë*. The intervocalic *-z-* in the plural forms of Ono should have dropped following the sound laws but was retained because it alternates with *-s-* in the dual forms.

Table 1-14: Proto-Kalasa **nïtë* 'cut'

		1SG	2SG	3SG	RECP
pKalasa	cut	*nïtë	*gïtë	*kïtë	
Sialum	cut	nite	gite	kite	
Ono	cut	nito	gito	kito	aito

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa		*ŋetë	*etë		*ŋedë	*edë
Sialum	ite	ŋite	ete	ide	ŋide	ede
Ono	ŋeto	ŋito	eto	ŋedo	ŋido	edo

Like **nulan* 'tell' (Table 1-12), Proto-Kalasa **nïtë* 'cut' appears to have variant roots, **-ïtë* in the first and the second person singular and **-të* in the dual and plural, i.e. the initial vowel of the singular form is missing in the non-singular (Table 1-14). In addition, the third person singular form **kïtë* is partly suppletive. Its first syllable reminds of the object verb form **ki* 'bite him/her/it' (cf. Table 1-11). In the dual and plural, there is an alternation between **-t-* and **-d-* as in the object verbs **nädët* 'bite' (Table 1-11) and **nulan* 'tell' (Table 1-12). This consonant alternation is hardly a regular outcome of phonological developments but has been driven by analogy.

Table 1-15: Proto Kalasa **nägït* 'copulate'

		1SG	2SG	3SG	RECP
pKalasa	copulate	*nägït	*gägït	*gït	
Sialum	copulate	nigit	gigit	git[-ka]	
Ono	copulate	neit	geit	git	jai

	1DU	2DU	3DU	1PL	2PL	3PL
pKalasa						
Sialum						
Ono	ŋekit	ŋikit	ekit	ŋegit	ŋigit	egit

For the object verb **nägit* 'copulate' only the singular forms have been safely recorded in Sialum (Table 1-15). Ono reflects the original vowel of the prefix in the first and the second person singular forms whereas Sialum has umlauted it. The third person singular form is the bare verb root.

1.3.2 Huon Tip

Between five and seven object verbs are attested in the different Huon Tip languages and dialects (Appendix A). In contemporary Migabac, only one of the five object verbs reported by Pilhofer (1928) survives (cf. 1.2). Signs of obsolescence have also been noted for some object verbs in other Huon Tip languages. All Huon Tip languages use the object verb **nu* 'hit' (Table 1-16) as suffixal object marker and the object verb **natë* 'give' (Table 1-17) as benefactive marker on other verbs.

Table 1-16: Proto-Huon Tip **nu* 'hit'

		1SG	2SG	3SG 'hit'	3SG OBJ
pHuon Tip	hit	*nu	*gu	*kpa	*-ʔgë
Sene	hit	nu	gu	kpɔ	-ge
Migabac	OBJ	-nu	-gu		-ʔke
Momare	stab	nu	gu	hwa	-ʔke
Wamorâ	hit	nu	gu	kpa	-ʔka
Parec	hit	nu	gu	kpa	
Mâgobineng	hit	nu	gu	kpa	-ʔa
Wemo	hit	nu	gu	kpa	-ʔke
Naga	hit	nu	gu	kpa	-ʔka
Mape	hit	nu	gu	kpa	-ʔga

	1DU	2DU	3DU	1PL	2PL	3PL
pHuon Tip	*nüpV	*ŋapV	*japV	*nübV	*ŋabV	*jabV
Sene	nuhɔ	ŋɔhɔ	jɔhɔ	nuba	ŋaba	jaba
Migabac	-nopa	-ŋepa	-jepa	-noba	-ŋeba	-jeba
Momare	nopa	ŋapa	japa	noba	ŋaba	jaba
Wamorâ	nɔfe	ŋafe	jafe	nɔbe	ŋabe	jabe
Parec	nɔfe	ŋafe	jafe	nɔpe	ŋape	jape
Mâgobineng	nɔfe	ŋafe	jafe	nɔbe	ŋabe	jabe
Wemo	nɔfo	ŋofa	jofa	nɔpo	ŋopa	jopa
Naga	nɔpu	ŋapu	japu	nɔbu	ŋabu	jabu
Mape	nɔpe	ŋape	jape	nɔbe	ŋabe	jabe

The third person singular form of the object verb **nu* 'hit' is **kpa* (Table 1-16). This form does not occur as object suffix on other verbs, rather we find the suffix **-ʔgë* in the third person singular of some transitive verbs and zero in others. The voiced velar stop *g* in this suffix is only preserved in Sene and Mape, in the other languages it turned into *k* as a result of contact assimilation to the preceding glottal stop. In the dual and plural, we find the suppletive verb root **-bV* whose vowel cannot be reconstructed with certainty. The consonant alternation between **-p-* (< **-ʔb-*) in the dual and **-b-* in the plural arose through contact assimilation of the root **-bV* with the final glottal stop of the original dual prefixes **nüʔ-* 1DU, **ŋaʔ-* 2DU, and **jaʔ-* 3DU (cf. Table 1-17) and subsequent loss of the glottal stop.

Table 1-17: Proto-Huon Tip **natë* 'give'

		1SG	2SG	3SG 'give'	3SG BEN
pHuon Tip	give	*natë	*gatë	*tü-ʔnë	*-ʔnë
Sene	give	nɔte	gɔte	tene	[-tine]
Migabac	give	nele	gele	[laʔno]	-ʔno
Momare	give	nale	gale	loʔne	-ʔno
Wamorâ	give	nala	gala	tuuna	-ʔna
Parec	give	nala	gala		
Mâgobineng	give	nala	gala	teʔna	-ʔna
Wemo	give	nale	gale	lɔʔne	-ʔne
Naga	give	nale	gale	[ɔte]	[-te]
Mape	give	nale	gale	[ɔte]	[-te]

	1DU	2DU	3DU	1PL	2PL	3PL
pHuon Tip	*nüʔtë	*ŋaʔtë	*jaʔtë	*nütë	*ŋatë	*jatë
Sene	nete	ŋɔte	jɔte	nete	ŋɔte	jɔte
Migabac	note	ŋete	jete	nole	ŋele	jele
Momare	noʔte	ŋaʔte	jaʔte	nole	ŋale	jale
Wamorâ	nɯʔta	ŋaʔta	jaʔta	nɯla	ŋala	jala
Parec	nɯʔta	ŋaʔta	jaʔta	nɯla	ŋala	jala
Mâgobineng	neʔta	ŋaʔta	jaʔta	nela	ŋala	jala
Wemo	nɔʔte	ŋaʔte	jaʔte	nɔle	ŋale	jale
Naga	nɔʔte	ŋaʔte	jaʔte	nɔle	ŋale	jale
Mape	nɔte	ŋate	jate	nɔle	ŋale	jale

The object verb **natë* 'give' has a verb root with alternating vowel, in the third person singular the root is **tü*, in the other forms it is **të* (Table 1-17). The occurrence of **ü* in the prefixless third person singular root **tü* is reminiscent of the occurrence of the vowel **ü* in the prefix of the third person singular **üzü* of the object verb *nazü* 'tell' (cf. Table 1-19).
The third person singular root **tü* was reinforced with the benefactive suffix **-ʔnë* of the same person and number. It is possible that the Kovai object suffix variant *-tin* 3SG:OBJ (Brown 1992:13) is cognate; in that case we could reconstruct the verb form **tuknä* 'give him/her' to Proto-Trans-Vitiaz. Naga and Mape have replaced **tüʔnë* 'give him/her' with *ɔte*, which contains the unlenited root *te* and the prefix *ɔ-* that we also find in the object verbs 'tell', 'show' and 'pass by' (cf. Appendix A). This analogical form must have been created at a time when word initial *t-* had not yet been lenited to *l-*, but after word medial *-t-* had been lenited, and when the etymological connection between *lo* 'take' and *nale* 'give' was still clear. The reconstruction of intervocalic **-t-* in the singular and plural forms rests on the Sene reflexes and on the evidence from the dual forms. In the dual, the glottal stop in the cluster **-ʔt-* prevented the lenition of *t*. In the singular and plural, all languages except Sene have lenited **-t-* to *-l-*.

In the Huon Tip languages, the pronominal prefix of the first person singular and of the first person plural both have the shape *nV-*. The two prefixes are differentiated by the quality of their vowel: **na-* 1SG versus **nü-* 1PL. The first person dual prefix has the same vowel as the plural. This method of forming the non-singular prefixes of the first person by ablaut does not recur in any Huon Peninsula language outside the Huon Tip family. There is no trace within the Huon Tip family of a final *n* in the first person plural prefix. Since such an *-n* is the mark of the plural in the Kalasa subfamily of the Eastern Huon family as well as the Western Huon family, we must reconstruct pHP **nan-* as the prefix of the first person plural and consider Proto-Huon Tip **nü-* an innovation.

Table 1-18: Proto-Huon Tip **naŋâ(në)* 'see'

		1SG	2SG	3SG	3SG
pHuon Tip	see	*naŋâ(në)	*gaŋâ(në)	*(ja-)ŋânë	*kânë
Sene	see	nəŋə[-nu]	gəŋə[-nu]	jəŋəne	
Migabac	see			ŋani	
Momare	see	naŋane	gaŋane	ŋane	
Wamorâ	see	naŋona	gaŋona	ŋona	
Mâgobineng	see				ona
Wemo	see				hone
Naga	see	naŋone	gaŋone	ŋone	
Mape	see	naŋone	gaŋone	ŋone	

	1DU	2DU	3DU	1PL	2PL	3PL
pHuon Tip	*nükâ(në)	*ŋakâ(në)	*jakâ(në)	*nüŋâ(në)	*ŋaŋâ(në)	*jaŋâ(në)
Sene	nekə [-nuhə]	ŋəkə [-nuhə]	jəkə [-nuhə]	neŋə [-nuba]	ŋəŋə [-nuba]	jəŋə [-nuba]
Momare	nokane	ŋakane	jakane	noŋane	ŋaŋane	jaŋane
Wamorâ	nəhona	ŋahona	jahona	nəŋona	ŋaŋona	jaŋona
Naga						
Mape	nəkone	ŋakone	jakone	nəŋone	ŋaŋone	jaŋone

The verb 'see' is an object verb in Sene, Momare, Wamorâ, Naga, and Mape, the other Huon Tip languages have turned the former third person singular form into an invariable verb root (Table 1-18). Two different third person singular forms are in evidence. The forms of the Mâgobineng and the Wemo dialects of Kâte go back to **kânë*, the forms of the other languages can be subsumed under **ŋânë*. The two forms are evidently related, but have different initials. The reflex *an* 'see it' in Kovai, allowing the reconstruction of Proto-Trans Vitiaz **kanä* 'see it', supports the assumption that **kânë* is the older of the two variants. The initial *k* of the original root **kânë* turned into *ŋ* in intervocalic position after a prefix, hence **nakâ(në) > *naŋâ(në)* 'see me'. It is unclear whether there was a third person singular form with a prefix in Proto-Huon Tip, as in Sene, or whether this form was always unprefixed, as in the other languages. In the former case, there may have been a distinction between an animate form **jaŋânë* 'see him/her' and an inanimate form **kânë* 'see it'. In this scenario, Migabac, Momare, Wamorâ, Naga, and Mape lost the prefix **ja-* and the inanimate form disappeared. Alternatively, the unprefixed third person singular form **ŋânë* arose by analogy with the prefixed first and second person singular forms and ousted the original form **kânë*.

Except for the third person singular, the singular, dual, and plural forms of Sene must be analyzed as containing a regular object suffix. Surprisingly, the forms of all persons are suffixed with the first person form, i.e. *-nu* in the singular, *-nuhə* in the dual, and *-nuba* in the plural (cf. Table 1-16). The verb root in these forms is *-ŋə ~ -kə < *-kâ*, which matches Proto-Kalasa **ka* 'see him/her/it'. The second syllable **-në* that we find in the third person singular form **kânë/*ŋânë* is missing in the other person-number forms in Sene. This suggests that **-në*

originally only occurred in the third person singular form and was then extended to the other forms in all languages except Sene. The etymology of this accretion is unknown.

As in all Huon Tip object verbs, the root initial consonant alternates between the dual and the plural forms. The consonant in the plural is the same as in the singular, **-ŋ-* from original **-k-*. The dual consonant **-k-* is a simplification of the cluster **-ʔk-*. After the plural consonant **-k-* had turned into **-ŋ-*, the glottal stop in the dual forms stopped being distinctive and could be dropped.

Table 1-19: Proto-Huon Tip **nazü* 'tell'

		1SG	2SG	3SG
pHuon Tip	tell	*nazü	*gazü	*üzü
Sene	tell	nɔze	gɔze	eze
Migabac	tell	nedo	gedo	[edo]
Wamorâ	tell	nazɯ	gazɯ	ɔzɯ
Parec	tell	natsi	gatsi	ɔtsi[-na]
Mâgobineng	tell	naze	gaze	ɔze[-ʔna]
Wemo	tell	natsa	gatsa	ɔtsɔ[-ʔne]
Naga	tell	nazɔ	gazɔ	ɔzɔ
Mape	tell	nazɯ	gazɯ	ɔzɯ

	1DU	2DU	3DU	1PL	2PL	3PL
pHuon Tip	*nüʔzü	*ŋaʔzü	*jaʔzü	*nüzü	*ŋazü	*jazü
Sene	neze	ŋɔze	jɔze	neze	ŋɔze	jɔze
Migabac	noto	ŋeto	jeto	nodo	ŋedo	jedo
Wamorâ	nɔsɯ	ŋasɯ	jasɯ	nɔzɯ	ŋazɯ	jazɯ
Parec	nɔsi	ŋasi	jasi	nɔtsi	ŋatsi	jatsi
Mâgobineng	nɔse	ŋase	jase	nɔze	ŋaze	jaze
Wemo	nɔsɔ	ŋasa	jasa	nɔtsɔ	ŋatsa	jatsa
Naga	nɔsɔ	ŋasɔ	jasɔ	nɔzɔ	ŋazɔ	jazɔ
Mape	nɔsɯ	ŋasɯ	jasɯ	nɔzɯ	ŋazɯ	jazɯ

For the object verb **nazü* 'tell' we can tentatively reconstruct the third person singular form **üzü* (Table 1-19). This form is reflected by Sene and by the Kâte-Mape dialects. We find the vowel *ü* in third person singular forms not only in object verbs but also in the free pronoun, where it may have arisen in order to differentiate **jüŋë* 'he, she' ⇐ pEH **jaŋa* from **jaŋë* 'they' < pEH **jaŋa* (cf. 2.2.2). In the Kâte object verb *nape* 'follow', too, the rounded vowel in the third person singular is the only feature that differentiates *jɔpe* 'follow him/her' from *jape* 'follow them' (Table 1-21). Momare and Migabac generally show the same vowel in the prefix of the third person singular as in the first and the second person singular, perhaps due to analogy. In Parec, Mâgobineng, and Wemo the benefactive suffix **-ʔnë* has been incorporated into the third person singular form **üzü*.

The consonant cluster **-ʔz-* that originally occurred in the dual forms was simplified in the Kâte-Mape dialects, resulting in a consonant alternation between *-s-* in the dual and *-z-* in

the plural. In Migabac, **-z-* regularly became *-d-* and the dual forms show the voiceless stop *-t-* alternating with *-d-* in the plural. In Sene, the dual and the plural forms became homonymous after the loss of the glottal stop in the dual.

Table 1-20: Proto-Huon Tip **nawâ(ʔ)-tâ* 'take from'

		1SG	2SG	3SG
pHuon Tip	take from	*nawâ(ʔ)-tâ	*gawâ(ʔ)-tâ	
Migabac	take from	newala	gewala	ewala
Momare	take from	nawala[-ba]	gawala[-ba]	awala-ba
pKâte-Mape	take from	*nawoʔ-to	*gawoʔ-to	*jɔwoʔ-to
Wamorâ	take from	nawɯ[tɯ]ʔ-to	gawɯ[tɯ]ʔ-to	jɔwɯ[tɯ]ʔ-to
Parec	take from	nawɯʔ-to	gawɯʔ-to	jɔwɯʔ-to
Mâgobineng	take from	naoʔ-to	gaoʔ-to	jɔoʔ-to
Wemo	take from	nowaʔ-lo	gowaʔ-lo	jɔoʔ-lo
Naga	take from	naoʔ-lo	gaoʔ-lo	jɔoʔ-lo
Mape	take from	naaʔ[-nu]-lo	gaaʔ[-gu]-lo	jɔɔʔ[-gɔ]-lo

	1DU	2DU	3DU	1PL	2PL	3PL
pHuon Tip				*nüwâ(ʔ) -tâ	*ŋawâ(ʔ) -tâ	*jawâ(ʔ) -tâ
Migab.						
Momare	noʔkpala -ba	ŋaʔkpala -ba	jaʔkpala -ba	nowala [-ba]	ŋawala [-ba]	jawala [-ba]
pKâte-Mape	*nɔfoʔ-to	*ŋafoʔ-to	*jafoʔ-to	*nɔwoʔ-to	*ŋawoʔ-to	*jawoʔ-to
Wamorâ	nɔfɯ[tɯ]ʔ -to	ŋafɯ[tɯ]ʔ -to	jafɯ[tɯ]ʔ -to	nɔwɯ[tɯ]ʔ-to	ŋawɯ[tɯ]ʔ -to	jawɯ[tɯ]ʔ -to
Parec	nɔfɯʔ-to	ŋafɯʔ-to	jafɯʔ-to	nɔwɯʔ-to	ŋawɯʔ-to	jawɯʔ-to
Mâgob.	nɔfoʔ-to	ŋafoʔ-to	jafoʔ-to	nɔwoʔ-to	ŋawoʔ-to	jawoʔ-to
Wemo	nɔfoʔ-lo	ŋofaʔ-lo	jofaʔ-lo	nɔwoʔ-lo	ŋowaʔ-lo	jowaʔ-lo
Naga	nɔfoʔ-lo	ŋafoʔ-lo	jafoʔ-lo	nɔoʔ-lo	ŋaoʔ-lo	jaoʔ-lo
Mape	[nɔɔʔ -nɔpe-lo]	[ŋaaʔ -ŋape-lo]	[jaaʔ -jape-lo]	nɔɔʔ [-nɔbe]-lo	ŋaaʔ [-ŋabe]-lo	jaaʔ [-jabe]-lo

The object verb **nawâ(ʔ)-tâ* is made up of two parts, an original object verb **nawâ* and the verb root *tâ* 'take' (Table 1-20). It is not attested in Sene. Migabac and Momare have lost Proto-Huon Tip **tâ* 'take', accordingly Migabac *newala* is synchronically no longer analyzable as being made up of two parts. In Momare, the verb *ba* 'take' has been added to the merged forms, thus reestablishing the original bipartite structure. In Wamorâ, too, the verb *to* 'take' was added to the reflex of **nawâ(ʔ)-tâ*, presumably because the last syllable *-tɯ* was no longer recognizable as the verb 'take' owing to a vowel change. In the Kâte-Mape languages, in which the addition of **tâ* 'take' is transparent, it is preceded by a glottal stop. This is reminiscent of the glottal stop preceding the object suffixes and appears to be a boundary

signal. Its absence from the merged verb forms of Migabac and Momare suggests that it is a secondary development. In Mape, the regular object suffixes have been inserted between the two parts of **nawâ(ʔ)-tâ*.

In the singular, the forms of the first and the second person singular are good matches, but in the third person singular there is a mismatch between the prefix **jɔ-* of the Kâte-Mape languages and the prefix **ä-* of the Sopâc languages. The plural forms can be reconstructed thanks to the match between Momare and the Kâte-Mape languages. Here, the verb root starts with the consonant **w*. In the dual, however, there is a mismatch between Momare, where the root starts with **kp*, and the Kâte-Mape languages, where it starts with **f*.

Table 1-21: Proto-Huon Tip **namb(i)ë* 'follow'

		1SG	2SG	3SG
pHuon Tip		*namb(i)ë	*gamb(i)ë	
Momare	follow	nampie	gampie	ampie
Wemo	follow	nape	gape	jɔpe

	1DU	2DU	3DU	1PL	2PL	3PL
pHuon Tip						
Momare						
Wemo	nɔfe	ŋafe	jafe	nɔpe	ŋape	jape

It is likely that the Wemo object verb *nape* 'follow' is cognate with the fragmentarily attested Momare object verb *nampie* 'follow' though the match is not perfect (Table 1-21). Again, there is a discrepancy between third person singular forms, Momare showing a prefix *a-* whereas Wemo has *jɔ-*.

1.3.3 Eastern Huon

Kovai, spoken across the Vitiaz Straight on Umboi Island at some distance from the Huon Peninsula, has lost all object verbs. The pronominal object suffixes of Kovai can be derived from the Proto-Eastern Huon free pronouns. Hence, Kovai contributes nothing to the reconstruction of the Proto-Eastern Huon object verbs. We are left with a direct comparison between the Huon Tip family and the Kalasa family. The genealogical distance between these two families is considerable and there are only two object verbs that they share. In the following tables, only a selection of reflexes from the Huon Tip family is given. The full evidence is to be seen in the tables in 1.3.2.

Table 1-22: Proto-Eastern Huon **naku* 'hit'

		1SG	2SG	3SG	RECP
pEH	hit	*naku	*gaku	*kpa	*jaku
pKalasa	hit	*näku	*gäku	*kpe	*jaku
Sialum	hit	nuku	guku	kpe	jaku
Ono	hit	neku	geku	gbe	jaku
pHuon Tip	hit	*nu	*gu	*kpa	
Sene	hit	nu	gu	kpɔ	
Momare	stab	nu	gu	hwa	ju ' fight'
Wamorâ	hit	nu	gu	kpa	
Wemo	hit	nu	gu	kpa	
Naga	hit	nu	gu	kpa	

	1DU	2DU	3DU	1PL	2PL	3PL
pEH						
pKalasa	*netku	*ŋetku	*jetku	*ŋengu	*ŋeku	*jeku
Sialum	nutku	ŋutku	jutku	nungu	ŋuku	juku
Ono	ŋetku	ŋitku	etku	ŋengu	ŋingu	engu
pHuon Tip	*nüpV	*ŋapV	*japV	*nübV	*ŋabV	*jabV
Sene	nuhɔ	ŋɔhɔ	jɔhɔ	nuba	ŋaba	jaba
Momare	nopa	ŋapa	japa	noba	ŋaba	jaba
Wamorâ	nɔfe	ŋafe	jafe	nɔbe	ŋabe	jabe
Wemo	nɔfo	ŋofa	jofa	nɔpo	ŋopa	jopa
Naga	nɔpu	ŋapu	japu	nɔbu	ŋabu	jabu

All three singular forms of the object verb **naku* 'hit' can be reconstructed (Table 1-22). There is suppletion between the root **kpa* in the third person singular and the root **-ku* in the first and the second person singular and, in the Kalasa languages, also in the dual and the plural. The intervocalic **-k-* of the first and the second person singular forms has evidently disappeared in the Huon Tip languages. When pEH **-k-* disappears in the Huon Tip languages and when it is replaced with *-ŋ-* (cf. Table 1-18) is a problem of the historical phonology that has not been solved yet. Kovai *o* 'hit' may reflect pEH **kpa* 'hit him/her'. Migabac and Momare have a verb *ju* 'fight' that is etymologically the reciprocal form of the object verb **nu* 'hit'. This attestation allows us to reconstruct the reciprocal form pEH **jaku* 'hit each other'. In the dual and plural, the Huon Tip languages show an innovative suppletive root **-bV*, which precludes a Proto-Eastern Huon reconstruction of these forms.

There is a second reciprocal form that can be reconstructed to Proto-Eastern Huon. Ono *jai* 'copulate with each other' corresponds to Wemo *jegi* 'copulate with each other'. It is not clear why the Ono form *jai* lacks the final *t* of the root **git* 'copulate' (cf. Table 1-15), perhaps this is a transcription error. In any event, we must reconstruct pEH **jaŋgit* 'copulate with each other'.

Table 1-23: Proto-Eastern Huon **nawa* 'take'

		1SG	2SG	3SG
pEH	take	*nawa	*gawa	
Ono	take	neu	geu	ma
pHuon Tip	take from	*nawâ[(ʔ)-tâ]	*gawâ[(ʔ)-tâ]	
Momare	take from	nawala[-ba]	gawala[-ba]	awala-ba
pKâte-Mape	take from	*nawoʔ-to	*gawoʔ-to	*jɔwoʔ-to
Parec	take from	nawɯʔ-to	gawɯʔ-to	jɔwɯʔ-to
Mâgobineng	take from	naoʔ-to	gaoʔ-to	jɔoʔ-to
Wemo	take from	nowaʔ-lo	gowaʔ-lo	jɔoʔ-lo
Naga	take from	naoʔ-lo	gaoʔ-lo	jɔoʔ-lo

	1DU	2DU	3DU	1PL	2PL	3PL
pEH	*natwa	*ŋatwa	*jatwa	*nanwa	*ŋawa	*jawa
Ono	ŋepu	ŋipu	epu	ŋebu	ŋibu	ebu
pHuon Tip	*nüʔwâ[(ʔ)-tâ]	*ŋaʔwâ[(ʔ)-tâ]	*jaʔwâ[(ʔ)-tâ]	*nüwâ[(ʔ)-tâ]	*ŋawâ[(ʔ)-tâ]	*jawâ[(ʔ)-tâ]
Momare	noʔkpa[la-ba]	ŋaʔkpa[la-ba]	jaʔkpa[la-ba]	nowa[la-ba]	ŋawa[la-ba]	jawa[la-ba]
pKâte-Mape	*nɔfoʔ-to	*ŋafoʔ-to	*jafoʔ-to	*nɔwoʔ-to	*ŋawoʔ-to	*jawoʔ-to
Parec	nɔfɯʔ-to	ŋafɯʔ-to	jafɯʔ-to	nɔwɯʔ-to	ŋawɯʔ-to	jawɯʔ-to
Mâgob.	nɔfoʔ-to	ŋafoʔ-to	jafoʔ-to	nɔwoʔ-to	ŋawoʔ-to	jawoʔ-to
Wemo	nɔfoʔ-lo	ŋofaʔ-lo	jofaʔ-lo	nɔwoʔ-lo	ŋowaʔ-lo	jowaʔ-lo
Naga	nɔfoʔ-lo	ŋafoʔ-lo	jafoʔ-lo	nɔoʔ-lo	ŋaoʔ-lo	jaoʔ-lo

In Table 1-23 the Ono object verb *neu* 'take' is compared to the initial part of the composite Huon Tip object verb **nawâ(ʔ)-tâ* ' take sth away from sb' (cf. Table 1-20 in 1.3.2). Ono has a composite object verb *neu-ma* 'take sth away from sb' that matches the Huon Tip object verb in structure and meaning (cf. Appendix A). Its second part *ma* is the regular verb meaning 'take' like Huon Tip **tâ*. The initial part does not occur on its own in the Huon Tip languages but is a separate object verb meaning 'take sb' in Ono. I reconstruct the same meaning for Proto-Eastern Huon **nawa* 'take sb'.

The final variable glottal stop tentatively reconstructed to Proto-Huon Tip **nawâ(ʔ)-* has no counterpart in Ono *neu* and is also absent in Momare. For this reason, we must consider it an innovation of the Kâte-Mape dialects. The Ono reflexes of pEH **nawa* have undergone a considerable number of changes. The second syllable of the root **-wa* was compressed to *-u*, originally probably in the first and the second person singular forms and then by extension also in the dual and plural forms. For the dual forms I postulate a consonant cluster **-tw-*, which developed into *-p-* in Ono and into *-f-* < **-p-* in the Kâte-Mape dialects while producing the distinct reflex *-ʔkp-* in Momare. It is not necessary to assume that the cluster **-nw-* in the first person plural form changed to *-b-* in Ono. It is more likely that the phonetically expected intervocalic consonant *-w-* in the second and the third person plural

forms was replaced by *-b-* to bring the consonant alternation between dual and plural forms in line with the majority of other object verbs in which the alternating consonants are homorganic voiceless and voiced stops (cf. 1.3.1). In Ono, the verb *ma* 'take' serves as a suppletive third person singular form whereas the Huon Tip languages have a prefixed form of the root **-wa*.

1.3.4 Pindiu

Among the Western Huon languages, the Pindiu family stands out as the subfamily that has preserved the greatest number of object verbs. For Borong no less than 22 object verbs are attested and for Somba-Siawari twenty (Appendix A). This is the maximum number of object verbs to be found in Huon Peninsula languages. Dedua has the smallest number of object verbs in the Pindiu family, namely nine; Mongi and Tobo cover the middle ground with thirteen and fifteen, respectively. The great number of object verbs in Somba-Siawari, which has branched off first from Proto-Pindiu, makes it possible to reconstruct thirteen object verbs to Proto-Pindiu, more than for any other low-level subfamily.

Table 1-24: Proto-Pindiu **nuɣu* 'hit'

		1SG	2SG	3SG	RECP
pPindiu	hit	*nuɣu	*guɣu	*kʷe	*aɣu
Dedua	hit	nu	gu	kpe	[ewe]
Mongi	hit	nu	gu	kpe	[eu]
Tobo	hit	nu	gu	kpi	[iju]
Borong	hit	nu	gu	kpe	ao
Somba	hit	nuŋgu	gu(ɣu)	kʷe	au

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netku	*ŋetku	*jetku	*nenku	*ŋenku	*jenku
Dedua	nuru	ŋuru	juru	nunu	ŋunu	junu
Mongi	nuru	uru	uru	nunu	unu	unu
Tobo	nuru	uru	uru	nunu	unu	unu
Borong	nuru	uru	uru	nunu	uŋu	uŋu
Somba	netku	(j)etku	(j)etku	nengu	(j)engu	(j)engu

The original forms of the object verb **nuɣu* 'hit' can be reconstructed by combining the evidence from Dedua and Somba (Table 1-24). In the first and the second person singular, Somba is the only language that preserves the original disyllabic structure of the forms. However, the second person singular form *guɣu* varies with *gu*. As in *gu*, ɣ before *u* has also disappeared in the reciprocal form *au* < **aɣu*. The first person dual form **netku* is directly reflected by Somba *netku*; the form *nuru* of the other languages has developed from **neruɣu*, which has a vowel inserted between the prefix **net-* and the root **-ku* (see below). The final syllable of **neruɣu* has regularly disappeared and the vowel of the initial syllable has been

assimilated to the following vowel, resulting in *nuru*. The other dual and plural forms of Dedua, Mongi, Tobo, and Borong have been transformed analogously.

Dedua is the only Pindiu language in which the second and the third person dual and plural are not identical. The Dedua non-singular prefixes beginning with *n-, ŋ-* and *j-* match those of the Huon Tip family (see 1.3.2). This suggests that the Dedua forms are old and must be projected back to Proto-Pindiu. The disappearance of **ŋ-* in the second person dual and plural forms is due to regular sound change. The few Huon Peninsula lexical cognates starting with **ŋ-* generally lose this sound in the Pindiu languages, including Dedua. That Dedua nevertheless retained *ŋ-* in all second person non-singular pronominal forms must be due to the influence of the neighboring Huon Tip languages. The former presence of initial **ŋ-* in the second person non-singular forms of Proto-Pindiu is confirmed by the free pronouns of Somba. The Somba personal pronouns *iŋiri* 2/3DU and *iŋini* 2/3PL go back to second person non-singular forms with initial **ŋ-* compounded with the third person singular pronoun *i* 'he, she' (cf. Tables 2-3 and 2-4 in 2.2.2). In the object verbs, initial **ŋ-* was regularly lost in Somba. After this loss, the second person non-singular forms started with a vowel (e.g. *etku* < **ŋetku* 'hit you two') while the third person non-singular forms started with *j-* (e.g. *jetku* 'hit them two'). These two forms were soon confounded and both of them were used promiscuously for the second and the third person non-singular. This stage was reached when Pilhofer (1928) recorded the Somba object verbs. Later, the forms without initial *j-* prevailed and became the new forms of the second as well as the third person non-singular. The data in Olkkonen and Olkkonen (1983) reflects this stage. A similar development must be responsible for the loss of initial *j-* in the second and third person non-singular forms of Mongi, Tobo, and Borong.

Table 1-25: Proto-Pindiu **nemə* 'take'

		1s	2s	3s	RECP
pPindiu	take	*nemə	*gemə	*mə	*amə
Dedua	give	neŋ	geŋ	mi	eme
Mongi	give	nəŋ	gəŋ	mi	amu
Tobo	give	nəm	gəm	mi	am
Borong	give	noŋ	goŋ	mu	
Somba	take	nəmi	gəmi	[ami]	a[ŋgə]mi

	1d	2d	3d	1p	2p	3p
pPindiu	*netmə	*ŋetmə	*jetmə	*nenmə	*ŋenmə	*jenmə
Dedua	neʔme	ŋeʔme	jeʔme	nemme	ŋemme	jemme
Mongi	nərəʔmi	ərəʔmi	ərəʔmi	nənəʔmi	ənəʔmi	ənəʔmi
Tobo	nərəpə	ərəpə	ərəpə	nənəpə	ənəpə	ənəpə
Borong	noroŋ	oroŋ	oroŋ	nonoŋ	oŋoŋ	oŋoŋ
Somba	ne[kə]mi	e[kə]mi	e[kə]mi	neŋ[gə]mi	eŋ[gə]mi	eŋ[gə]mi

The original meaning of Proto-Pindiu **nemə* 'take sb' has been narrowed in Somba *nəmi* 'marry, have sex (literally: take sb)' and shifted to 'give' in the other languages (Table 1-

25). In Dedua, Mongi, Tobo, and Borong this verb replaces pWH **neŋgi* 'give' (cf. Table 1-65 in 1.3.10), which only survives in Somba. The shift to the high frequency meaning 'give' must be responsible for the shortening of the first and the second person singular forms. In Dedua, Mongi, Tobo, and Borong these forms have lost the final vowel, though it was preserved in the third person singular. In Borong, the final vowel was also eliminated from the dual and plural forms. The root vowel **ə* induced umlaut in the prefix vowel of the first and the second person singular in all languages but Dedua. In the dual and plural, both Dedua and Somba retain the original vowel of the prefixes, the other languages show umlaut. We can reconstruct a reciprocal form **amə* with some confidence. The Somba reciprocal form *aŋgəmi* contains an intrusive velar stop, as do all dual and plural forms. If we subtract this intrusive syllable, we get *ami*, which happens to be the third person singular form. It is likely that this is the old reciprocal form that has shifted its allegiance, a plausible change given the inherent reciprocity of the actions this verb expresses.

The non-singular forms of Dedua are archaic. The dual forms of the Dzeigoc dialect of Dedua and the plural forms contain no vowel between the prefix and the root: *neʔ-me* 1DU, *nem-me* 1PL etc. This is normal in the Cromwell languages and must be a retention in Dedua. Mongi, Tobo, and Borong have introduced a vowel between prefix and root, and Somba a whole syllable starting with a velar stop. The far-reaching change in Somba, affecting most object verbs, must have its origin in the object verb *nuŋgu* 'hit' (Table 1-24) and particularly in the object verb *niŋgi* 'give' (cf. Appendix A), which has a high frequency in discourse. The first person dual and plural forms of these verbs must be analyzed diachronically as *net-ku, net-ki* and *nen-gu, nen-gi*, respectively, i.e. in the dual forms the prefix ended in *-t* and the root started with *k-* and in the plural forms the prefix ended in *-n* and the root started with *g-*. The consonant clusters *-tk-* and *-ng-*, which arose regularly across a morpheme boundary in these two verbs, were reinterpreted as marking dual and plural number and hence belonging to the person-number prefix. Then they were extended to all other object verbs, replacing earlier **-t-* and **-n-* as signals of dual and plural number (e.g. **netmə* 'take us two' ⇒ **netkəmə* > *nekəmi*, **nenmə* 'take us all' ⇒ **nengəmə* > *neŋgəmi*). The heterorganic clusters *-tk-* and *-ng-*, consistently recorded as such by Pilhofer (1928), were later simplified to *-k-* and *-ŋg-,* at least in fast speech. Olkkonen and Olkkonen (1983, 2007) always give the homorganic cluster *-ŋg-* in the plural forms and sometimes *-k-* (as in Table 1-25) and sometimes *-tk-* in the dual forms.

The non-singular forms of Mongi and Tobo are difficult to explain. The following scenario comes to mind. The prefix-final stop of the dual forms was retained when the sequence *-rə-* was introduced in analogy with other object verbs, e.g. **netmə* 1DU ⇒ **nərətmə* > Mongi *nərəʔmi*. This stop was then extended to the plural forms and seems now to be a part of the root in the dual and plural. In Tobo, the sequence of prefix-final stop plus *m* changed into *p*: **nərətmə* 1DU > *nərəpə*.

Table 1-26: Proto-Pindiu **nek* 'see'

		1SG	2SG	3SG	RECP
pPindiu	see	*nek	*gek	*ek	*aek
Dedua	see	[neŋ]	[geŋ]	[heŋ]	[eŋeŋ]
Mongi	see	[nəŋ]	[gəŋ]	[həŋ]	[aŋaŋ]
Tobo	see	[nən]	[gən]	[kən]	[aŋən]
Borong	see	nii	gii	ii	ai
Somba	see	nek	gek	ek	aek

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netek	*ŋetek	*jetek	*nenek	*ŋenek	*jenek
Dedua	[nereŋ]	[ŋereŋ]	[jereŋ]	[neneŋ]	[ŋeneŋ]	[jeneŋ]
Mongi	niriʔ	iriʔ	iriʔ	niniʔ	iniʔ	iniʔ
Tobo	nirik	irik	irik	ninik	inik	inik
Borong	nirii	irii	irii	ninii	iŋii	iŋii
Somba	net[k]ek	(j)et[k]ek	(j)et[k]ek	nen[g]ek	(j)en[g]ek	(j)en[g]ek

All forms of the object verb *nek* 'see' can be reconstructed (Table 1-26). However, the original singular forms and the reciprocal form have only been preserved in Borong and Somba; Dedua, Mongi, and Tobo have introduced a different verb root. Dedua carried the innovative root over into the dual and plural, but Mongi and Tobo reflect the old root **-ek*. Somba has replaced the intervocalic consonants **-t-* and **-n-* in the dual and the plural forms, respectively, with the clusters *-tk-* and *-ng-*, as in all object verbs that did not already have such clusters from the beginning. The Borong second and third person plural form *iŋii* ⇐ **jenek* owes its aberrant velar nasal to the free personal pronoun, cf. *noro* 'we two', *nono* 'we all', *oŋo* 'you all' with *nirii* 'see us two', *ninii* 'see us all', *iŋii* 'see you all/them'. The analogical velar nasal in the prefix of the second and third person plural is to be found in all Borong object verbs.

Table 1-27: Proto-Pindiu **nezə* 'tell'

		1SG	2SG	3SG	RECP
pPindiu	tell	*nezə	*gezə	*ezə	
Dedua	tell	nede	gede	ede	
Mongi	tell	nətsə	gətsə	ətsə	emi
Tobo	tell	nətsə	gətsə	ətsə	imu
Borong	tell	nizo	gizo	izo	
Siawari	tell	nətsə	gətsə	etsə	aigetsə

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netzə	*ŋetzə	*jetzə	*nenzə	*ŋenzə	*jenzə
Dedua	neʔde	ŋeʔde [-ŋuru]	jeʔde [-juru]	nende	ŋende	jende
Mongi	nərətsə	ərətsə	ərətsə	nənətsə	ənətsə	ənətsə
Tobo	nərətsə	ərətsə	ərətsə	nənətsə	ənətsə	ənətsə
Borong	nirizo	irizo	irizo	ninizo	iŋizo	iŋizo
Siawari	net[ke]tsə	et[ke]tsə	et[ke]tsə	neŋ[ge]tsə	eŋ[ge]tsə	eŋ[ge]tsə

The object verb *nede* 'tell' has fallen out of use in contemporary Dedua, but McElhanon recorded an almost complete set of forms in 1968 which turn out to be archaic (Table 1-27). As in the object verb **nemə* 'take' (Table 1-25), the vowel of the prefixes in the singular forms has been assimilated to the root vowel in all languages but Dedua. But note that the third person singular form *etsə* of Siawari has not been affected by this change. In the dual and plural, Dedua and Siawari preserve the original prefix vowel whereas the other languages have umlauted it. Dedua shows archaic dual and plural forms without a vowel between prefix and root. Mongi, Tobo and Borong have introduced a vowel and Siawari has inserted a vowel as well as a velar stop between the original prefix and the root, yielding the consonant clusters *-tk-* and **-ng-* > *-ŋg-* in the dual and plural forms, respectively.

Table 1-28: Proto-Pindiu **niɣi* 'bite'

		1SG	2SG	3SG	RECP
pPindiu	bite	*niɣi	*giɣi	*ki, *jiɣi	
Dedua	bite	ni	gi	ki	
Mongi	bite	ni	gi	ki	iŋi
Tobo	bite	ni	gi	ki	iŋi
Borong	bite	ni	gi	ki	
Somba	bite	nəɣə	gəɣə	jəɣə	aŋgəɣə

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netiɣi	*ŋetiɣi	*jetiɣi	*neniɣi	*ŋeniɣi	*jeniɣi
Dedua	niri	ŋiri	jiri	nini	ŋini	jini
Mongi	niri	iri	iri	nini	ini	ini
Tobo	niri	iri	iri	nini	ini	ini
Borong	niri	iri	iri	nini	iŋi	iŋi
Somba	ne[k]əɣə	e[k]əɣə	e[k]əɣə	neŋ[g]əɣə	eŋ[g]əɣə	eŋ[g]əɣə

The object verb **niɣi* 'bite' has a single root which appears as **ki* in the unprefixed third person singular form and as **-ɣi* in all prefixed forms (Table 1-28). Intervocalic *-ɣ- regularly disappeared in Dedua, Mongi, Tobo, and Borong and the resulting vowel sequence **ii* contracted to *i*. In this verb, the prefixes of the first and the second person singular were umlauted in all languages, including Dedua, which is why I reconstruct Proto-Pindiu **niɣi* 1SG and **giɣi* 2SG. In the third person singular, Dedua, Mongi, Tobo, and Borong show the

bare root *ki* but Somba has the prefixed form *jəɣə*. Since there is no analogical model for the creation of *jəɣə* in sight and *ki* cannot have lost a prefix, I reconstruct both **ki* and **jiɣi*. These forms may have been semantically differentiated according to the animacy of the object in Proto-Pindiu, i.e. **ki* 'bite it' and **jiɣi* 'bite him/her'. In the dual and plural, all five languages reflect a vowel **i* between the prefixes and the original root **-ɣi*. This vowel is a copy of the root vowel.

Table 1-29: Proto-Pindiu **nuɣul* 'call'

		1SG	2SG	3SG	RECP
pPindiu	call	*nuɣul	*guɣul	*kʷët	
Dedua	call	nuru	guru	kpaʔ	
Mongi	call	nuru	guru	kpaʔ	eŋuru
Tobo	call	nuru	guru	kpat	
Borong	call	nooŋ	gooŋ	[ooŋ]	
Somba	call	noɣol	goɣol	[oɣol]	aŋgoɣol

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netuɣul	*ŋetuɣul	*jetuɣul	*nenuɣul	*ŋenuɣul	*jenuɣul
Dedua	nururu	ŋururu	jururu	nunuru	ŋunuru	junuru
Mongi	nururu	ururu	ururu	nunuru	unuru	unuru
Tobo	nururu	ururu	ururu	nunuru	unuru	unuru
Borong	norooŋ	orooŋ	orooŋ	nonooŋ	oŋooŋ	oŋooŋ
Somba	net[k]oɣol	(j)et[k]oɣol	(j)et[k]oɣol	nen[g]oɣol	(j)en[g]oɣol	(j)en[g]oɣol

The reconstruction of Proto-Pindiu **nuɣul* 'call' is assured by the match of the Somba reflexes with those of Borong (Table 1-29). Dedua, Mongi, and Tobo show a root *-uru* which does not derive regularly from **-uɣul*, hence its inclusion in the etymology is uncertain. In the third person singular, Dedua, Mongi, and Tobo have a form **kpat* that is homonymous with the noun **kpat* 'name'. This must be the old third person singular form. Borong and Somba have ousted it from the paradigm, but it lingers on as a separate invariable verb root: Borong *kpa* 'call out, shout', Somba *kʷet* 'call, shout, scream'. In its stead, Borong and Somba have analogically extended the root **-ɣul* of the first and the second person singular to the third person.

Table 1-30: Proto-Pindiu **noɣo* 'burn'

		1SG	2SG	3SG	'cook'	RECP
pPindiu	burn	*noɣo	*goɣo	*ze	*oɣo	
Dedua	burn	noho	goho	ze 3SG	oho 'cook'	
Mongi	burn	no	go	ze 3SG	o 'cook'	
Tobo	burn	noɣo	goɣo	zi 3SG	oɣo 'cook'	oɣo-am
Borong	burn	noo	goo	ze 'burn' (intrans.)	oo 3SG	
Somba	burn	noɣo	goɣo	ze 'burn' (intrans.)	oɣo 3SG	aŋgoɣo

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netoɣo	*ŋetoɣo	*jetoɣo	*nenoɣo	*ŋenoɣo	*jenoɣo
Dedua	noroho	ŋoroho	joroho	nonoho	ŋonoho	jonoho
Mongi	noro	oro	oro	nono	ono	ono
Tobo	noroɣo	oroɣo	oroɣo	nonoɣo	onoɣo	onoɣo
Borong	noroo	oroo	oroo	nonoo	oŋoo	oŋoo
Somba	ne[k]oɣo	e[k]oɣo	e[k]oɣo	neŋ[g]oɣo	eŋ[g]oɣo	eŋ[g]oɣo

The paradigm of Proto-Pindiu **noɣo* 'burn sb' was made up of two different verb roots. The third person singular form was **ze*, the root in the other forms was **-oɣo* (Table 1-30). This suppletive paradigm has been preserved in Dedua, Mongi, and Tobo; in Borong and Burum the root **oɣo* has been extended to the third person singular. The root **ze* also exists in the two last-mentioned languages but is not part of the paradigm of **noɣo* 'burn sb'. Its reflexes in Borong and Somba are intransitive verbs meaning 'burn'. In the three languages that have **ze* as the third person singular form of **noɣo* 'burn sb' a regular verb root reflecting **oɣo* can be found. Just like its cognate in the Kabwum languages, this verb means 'cook' in Dedua, Mongi, and Tobo. The third person singular form **ze* is a remnant of an earlier object verb pHP **naza* 'burn sb' (cf. Table 1-76 in 1.3.11) which was made up entirely of forms of the root pHP **za* (> Proto-Pindiu **ze*). The intrusion of the root **oɣo* 'cook' into this paradigm is a common innovation of the Pindiu languages. In Borong and Somba, where the root **ze* has been ousted from the paradigm, a new object verb built entirely on the root **oɣo* has come into being. This example shows how a root that did not originally take object prefixes can acquire them through time.

Table 1-31: Proto-Pindiu **noŋgit* 'pass by'

		1SG	2SG	3SG	RECP
pPindiu	pass by	*noŋgit	*goŋgit	*oŋgit	
Mongi	pass by	nogiʔ	gogiʔ	ogiʔ	
Tobo	pass by	nuɣit	guɣit	uɣit	
Borong	pass by	nuugu	guugu	uugu	
Somba	pass by	noŋgit	goŋgit	oŋgit	aŋgoŋgit

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netoŋgit	*ŋetoŋgit	*jetoŋgit	*nenoŋgit	*ŋenoŋgit	*jenoŋgit
Mongi	norogiʔ	orogiʔ	orogiʔ	nonogiʔ	onogiʔ	onogiʔ
Tobo	nuruɣit	uruɣit	uruɣit	nunuɣit	unuɣit	unuɣit
Borong	nuruugu	uruugu	uruugu	nunuugu	uŋuugu	uŋuugu
Somba	net[k]oŋ-git	(j)et[k]oŋ-git	(j)et[k]oŋ-git	nen[g]oŋ-git	(j)en[g]oŋ-git	(j)en[g]oŋ-git

Table 1-32: Proto-Pindiu **nuaŋgit* 'take'

		1SG	2SG	3SG	RECP
pPindiu	take	*nuaŋgit	*guaŋgit	*waŋgit	
Mongi	take	noagiʔ	goagiʔ	wagiʔ	eagiʔ-amu
Tobo	bring	nuaɣit	guaɣit	waɣit	iŋurat-am
Borong	feed	nuagi	guagi	wagi	
Somba	take	nuaŋgit	guaŋgit	waŋgit	aŋguaŋgit

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netuaŋgit	*ŋetuaŋgit	*jetuaŋgit	*nenuaŋgit	*ŋenuaŋgit	*jenuaŋgit
Mongi	noroagiʔ	oroagiʔ	oroagiʔ	nonoagiʔ	onoagiʔ	onoagiʔ
Tobo	noraɣit	oraɣit	oraɣit	nonaɣit	onaɣit	onaɣit
Borong	nuruagi	uruagi	uruagi	nunuagi	uŋuagi	uŋuagi
Somba	net[k]uaŋ-git	(j)et[k]uaŋ-git	(j)et[k]uaŋ-git	nen[g]uaŋ-git	(j)en[g]uaŋ-git	(j)en[g]uaŋ-git

The object verbs **noŋgit* 'pass by' (Table 1-31) and **nuaŋgit* 'take' (Table 1-32) are only reflected in four Pindiu languages, Dedua has lost them. In both verbs, the third person singular form represents the root, which recurs with prefixation in the other person-number combinations.

The reflexes of Proto-Pindiu **nuaŋgit* 'take' differ in their semantics. The Mongi and the Somba verb agree in having the two meanings 'take sb somewhere' and 'take sth away from sb'. These meanings must be reconstructed to Proto-Pindiu. Tobo 'get, bring, accompany' reflects the first of these meanings. The Borong meaning 'feed' presumably developed from an earlier meaning 'take sth to sb', where the thing taken was narrowed down to food. Thus, Proto-Pindiu **nuaŋgit* must have meant 'take' in various syntactic frames. In the dual and plural, Mongi and Tobo have simplified the vowel cluster **-ua-* to the single vowel *-a-*. This reduction is a recent process in Mongi since Pilhofer (1928) still recorded the vowel cluster *-oa-* (as given in Table 1-32).

Table 1-33: Proto-Pindiu **nosei* 'touch'

		1SG	2SG	3SG	RECP
pPindiu	touch	*nosei	*gosei	*osei	
Tobo	touch	nose	gose	ose	emse-am
Borong	touch	noosiri	goosiri	oosiri	
Somba	touch	nosei	gosei	osei	aŋgosei

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netosei	*ŋetosei	*jetosei	*nenosei	*ŋenosei	*jenosei
Tobo	norose	orose	orose	nonose	onose	onose
Borong	noroosiri	oroosiri	oroosiri	nonoosiri	oŋoosiri	oŋoosiri
Somba	net[k]osei	et[k]osei	et[k]osei	neŋ[g]osei	eŋ[g]osei	eŋ[g]osei

Table 1-34: Proto-Pindiu **nualəŋ* 'jump'

		1SG	2SG	3SG	RECP
pPindiu	jump	*nualəŋ	*gualəŋ	*waləŋ	
Borong	jump on	nualeeŋ	gualeeŋ	waleeŋ	
Somba	jump over	nualəŋ	gualəŋ	waləŋ	aŋgualəŋ

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netualəŋ	*ŋetualəŋ	*jetualəŋ	*nenualəŋ	*ŋenualəŋ	*jenualəŋ
Borong	norowaleeŋ	orowaleeŋ	orowaleeŋ	nonowaleeŋ	oŋowaleeŋ	oŋowaleeŋ
Somba	net[k]ualəŋ	et[k]ualəŋ	et[k]ualəŋ	neŋ[g]ualəŋ	eŋ[g]ualəŋ	eŋ[g]ualəŋ

The object verb **nosei* 'touch' (Table 1-33) is attested in Tobo, Borong, and Somba and the object verb **nualəŋ* 'jump' (Table 1-34) in Borong and Somba. The reflexes of the root of **nosei* 'touch' in Tobo, Borong, and Somba do not completely match, hence the reconstruction is tentative. In the dual and plural forms of **nualəŋ* 'jump', Borong shows a transitional vowel *o* between the prefixes and the root whereas no such vowel occurs in **nuaŋgit* 'take' (Table 1-32), cf. *norowaleeŋ* 'jump on us two' vs. *nuruagi* 'feed us two'. Somba has no transitional vowel in either case.

Table 1-35: Proto-Pindiu **nəməsaot* 'leave'

		1SG	2SG	3SG	RECP
pPindiu	leave	*nəməsaot	*gəməsaot	*məsaot	
Borong	leave	nomesao	gomesao	mesao	
Somba	leave	nəmosot	gəmosot	mosot	aŋgəmosot

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netəmə-saot	*ŋetəmə-saot	*jetəmə-saot	*nenəmə-saot	*ŋenəmə-saot	*jenəmə-saot
Borong	noromesao	oromesao	oromesao	nonomesao	oŋomesao	oŋomesao
Somba	ne[k]əmo-sot	e[k]əmo-sot	e[k]əmo-sot	neŋ[g]əmo-sot	eŋ[g]əmo-sot	eŋ[g]əmo-sot

Table 1-36: Proto-Pindiu **nəməti* 'anoint'

		1SG	2SG	3SG	RECP
pPindiu	anoint	*nəməti	*gəməti	*məti	
Borong	anoint	nomori	gomori	mori	
Somba	anoint	nəməri	gəməri	məri	aŋgəməri

	1DU	2DU	3DU	1PL	2PL	3PL
pPindiu	*netəməti	*ŋetəməti	*jetəməti	*nenəməti	*ŋenəməti	*jenəməti
Borong	noromori	oromori	oromori	nonomori	oŋomori	oŋomori
Somba	ne[k]əməri	e[k]əməri	e[k]əməri	neŋ[g]əməri	eŋ[g]əməri	eŋ[g]əməri

The object verbs **nəməsaot* 'leave' (Table 1-35) and **nəməti* 'anoint' (Table 1-36) are only attested in Borong and Somba. This is enough for a reconstruction as Somba was the first language to split off from Proto-Pindiu. It is possible that these two verbs are compounds with **nemə* 'take' as first part. If this hypothesis is correct, the first person singular forms had better be reconstructed as **neməsaot* 'leave me' and **neməti* 'anoint me' though both Borong and Somba assimilated the prefix vowel of the first and the second person singular forms to the root vowel. In the dual and plural forms, both Borong and Somba show a transitional vowel **ə* between the prefixes and the root. This transitional vowel, too, may be secondary.

1.3.5 Sankwep

In contrast to all other Huon Peninsula languages, Mesem and Nabak have object prefixes that are productive (cf. 1.1.4). Vanaria and Vanaria (1996a:25) claim that about half of all transitive verb stems in Mesem can take object prefixes. The problem with this description is that it is not borne out by the published data. In the whole Mesem grammar only a handful of verbs taking object prefixes can be found. The situation in Nabak is similar. Only about a dozen verbs taking object prefixes can be found in the grammar and the published texts. A good part of these verbs are historically object verbs, i.e. the prefixed verb forms were inherited as a whole from Proto-Western Huon (Nabak *nik* 'see', *ni* 'bite') or from Proto-Huon Peninsula (*no* 'hit', *nele* 'shoot'). For these verbs, the synchronic description that they contain the prefix *n(a)-* OBJ, which is homonymous with the verb 'give', is historically incorrect. The best evidence for the existence of a productive set of prefixes comes from the two verbal adjuncts *mukulem (mi)* 'help' and *damung (mi)* 'care for' to which the full forms *na-* 1SG:OBJ etc. can attach. In no other Huon Peninsula language have verbal adjuncts been observed to take object prefixes; this must be an innovation. The verbal adjuncts testify to at least

marginal productivity of the object prefix *n(a)-*. This is confirmed by a process of change. It seems that *n(a)-* OBJ is making inroads into the original object verbs. For the verb *ek ~ -ik* 'see' two different first person plural forms are attested: *ndik* and *ndaek* (Fabian, Fabian and Waters 1998:43). The first of these variants is the inherited object verb form, the second is a new formation treating the third person singular form *ek* like a verb root to which the productive prefix *nda-* 1PL:OBJ is attached. The existence of a prefix set *n(a)-* OBJ is therefore not in question, only the extent of its productivity. Among the verbs with object prefixation in Nabak, eight can be identified as old formations, i.e. inherited object verbs. Mesem has five ancient object verbs.

Table 1-37: Proto-Sankwep **nü* 'give'

		1SG	2SG	3SG	RECP
pSankwep	give	*nü	*gü		
Mesem	OBJ	n(ɘ)-	g(ɘ)-	Ø	
Nabak	OBJ	n(a)-	g(a)-	Ø	

	1DU	2/3DU	1PL	2/3PL
pSankwep	*niTü	*jiTü	*niNü	*jiNü
Mesem	ni[g](i)-	li[g](i)-	niŋ[g](i)-	liŋ[g](i)-
Nabak	n[d](a)-	i[d](a)-	n[d](a)-	in[d](a)-

The productive object prefixes of Mesem and Nabak appear to be cognate (Table 1-37). In Nabak, the full forms of the object prefixes (containing the vowel *a*) are homonymous with the verb 'give', differing only in the third person singular, where the verb form is *sa* 'give him/her' while the prefix is a zero form. In Mesem, the object prefixes seem at first sight to be identical with the forms of the verb *nɘ* 'bite' if I correctly derive the forms of this object verb from the unsatisfactory description in the grammar (cf. Appendix A). However, this must be a case of accidental homonymy. The Mesem object verb for 'give' is *nɘga*. Conceivably, this verb could be cognate with Nabak *na* 'give' since intervocalic **-g-* disappears in Nabak. But the Mesem object prefixes do not contain the syllable *-ga* and would then be unrelated to Nabak *n(a)-* < **nüga-*. It is more plausible to consider the object prefixes Mesem *n(ɘ)-* and Nabak *n(a)-* etymologically related and, consequently, Mesem *nɘga* 'give' unrelated to Nabak *na* 'give'. The Mesem and Nabak object prefixes in Table 1-37 are therefore most likely cognate and go back to a verb meaning 'give' surviving in Nabak *na* 'give'. That an object verb grammaticalizes into a set of object prefixes, rather than suffixes, is a unique development within the Huon Peninsula family, though the same has been observed in the neighboring Finisterre language Numanggang of the Erap family (Suter 2012:30).

Table 1-38: Proto-Sankwep **ne* 'leave'

		1SG	2SG	3SG	RECP
pSankwep	leave	*ne	*ge	*pe	
Mesem	leave	ne	ge	pe	
Nabak	leave	ne	ge	pe	

	1DU	2/3DU	1PL	2/3PL
pSankwep	*niTe	*jiTe	*niNe	*jiNe
Mesem	ni[g]e	li[g]e	niŋ[g]e	liŋ[g]e
Nabak	n[d]e	i[d]e	n[d]e	in[d]e

The second object verb that doubles as a grammatical marker is **ne* 'leave' (Table 1-38). It is used as a suffix with a benefactive or an object function in both languages (see 1.1.4 for Nabak). The verb forms and the suffixal forms are identical, even in the third person singular, which is a suppletive form. The dual and plural forms of **ne* 'leave' and all other object verbs diverge strongly between Mesem and Nabak. Whereas the prefixes of Mesem end in a velar stop, the Nabak prefixes contain a dental stop. The two languages agree in using prenasalization to differentiate between dual and plural in the second and third person. The homonymy of the first person dual and plural forms in Nabak is unusual. Most likely this conflation was brought about by vowel syncopation: **nid-* 1DU > *nd-*, **nind-* 1PL > *nd-*. If these internal reconstructions are correct, the prenasalization opposition between dual and plural forms pertained to both person forms in Nabak, just as in Mesem. The initial parts of the dual and plural prefixes point to Proto-Sankwep **ni°* in the first person and **ji°* in the second and third person, which agrees well with the forms in the Pindiu languages. But the remaining part of the prefixes defies a bottom-up reconstruction. The velar stop in Mesem and the dental stop in Nabak must have been taken from different verbs that started with such stops. Which verbs these were and how their initial consonant became a part of the non-singular prefixes cannot be retrieved. Using comparative evidence from other Western Huon languages, I reconstruct **niTe* 1DU and **jiTe* 2/3DU with an intervocalic stop of undetermined place of articulation and **niNe* 1PL and **jiNe* 2/3 PL with an intervocalic nasal of undetermined place of articulation. It is fairly clear that such consonants must have preceded the velar stop *g* in Mesem and the dental stop *d* in Nabak. The stops themselves, as already mentioned, belonged to different verb roots and must be eliminated in a reconstruction.

Table 1-39: Proto-Sankwep **no* 'hit'

		1SG	2SG	3SG	RECP
pSankwep	hit	*no	*go	*ku	*ao
Mesem	hit	no	go	ku	a[g]o
Nabak	hit	no	go	ku	au

	1DU	2/3DU	1PL	2/3PL
pSankwep	*niTo	*jiTo	*niNo	*jiNo
Mesem	ni[g]o	li[g]o	niŋ[g]o	liŋ[g]o
Nabak	n[d]o	i[d]o	n[d]o	in[d]o

The whole paradigm of the object verb **no* 'hit', including the reciprocal form, can be reconstructed (Table 1-39). The singular forms are straightforward matches, in the dual and the plural we find the discrepancy between a prefix extension with *g* in Mesem and with *d* in Nabak, as just discussed above. The extension with *g* is also found in the Mesem reciprocal form *ago*, similar to what we have seen in Somba in 1.3.4, though there is no extension in Nabak *au*. The verb root in all forms except the third person singular is **-o*. In the third person singular we find the suppletive form **ku*.

Table 1-40: Proto-Sankwep **nik* 'see'

		1SG	2SG	3SG	RECP
pSankwep	see	*nik	*gik	*ik	
Mesem	see	ne	ge	i	
Nabak	see	nik	gik	ek	ak

	1DU	2/3DU	1PL	2/3PL
pSankwep	*niTik	*jiTik	*niNik	*jiNik
Mesem	ni[g]e	li[g]e	niŋ[g]e	liŋ[g]e
Nabak	n[d]ik	i[d]ik	n[d]ik	in[d]ik

Proto-Sankwep **nik* 'see' is the only object verb in which the root in the forms other than the third person singular consists of more than a vowel (Table 1-40). The other object verbs differ only in their final vowel, cf. **nü* 'give' (Table 1-37), **ne* 'leave' (Table 1-38), **no* 'hit' (Table 1-39), and **ni* 'bite' (Table 1-41). The root-final consonant **-k* regularly disappears in Mesem but is preserved in Nabak.

Table 1-41: Proto-Sankwep **ni* 'bite'

		1SG	2SG	3SG	RECP
pSankwep	bite	*ni	*gi	*ji	
Mesem	bite	nə	gə	je	
Nabak	bite	ni	gi	i	

	1DU	2/3DU	1PL	2/3PL
pSankwep	*niTi	*jiTi	*niNi	*jiNi
Mesem	ni[g]i	li[g]i	niŋ[g]i	liŋ[g]i
Nabak	n[d]i	i[d]i	n[d]i	in[d]i

The object verb **ni* 'bite' has the root **-i* in all forms (Table 1-41). After the testimony of the Mesem reflex *je* 'bite him/her/it', the third person singular form had the prefix **j-*, opposing **n-* of the first person and **g-* of the second person singular.

1.3.6 Rawlinson

The Rawlinson family is made up of the Pindiu family and the Sankwep family. Of the two subfamilies, the Pindiu languages are more conservative and preserve a greater number of object verbs. The Sankwep languages have undergone far-reaching phonological and morphological changes. For this reason, the Proto-Rawlinson reconstructions lean on the Pindiu languages. Only four object verbs can be reconstructed to Proto-Rawlinson. In the following tables, the reflexes from the Pindiu family are limited to three languages, the remaining forms can be looked up in 1.3.4.

Table 1-42: Proto-Rawlinson **nuɣu* 'hit'

		1SG	2SG	3SG	RECP
pRawlinson	hit	*nuɣu	*guɣu	*kʷe	*aɣu
pPindiu	hit	*nuɣu	*guɣu	*kpe	*aɣu
Dedua	hit	nu	gu	kpe	[ewe]
Borong	hit	nu	gu	kpe	ao
Somba	hit	nuŋgu	gu(ɣu)	kʷe	au
pSankwep	hit	*no	*go	*ku	*ao
Mesem	hit	no	go	ku	a[g]o
Nabak	hit	no	go	ku	au

	1DU	2DU	3DU	1PL	2PL	3PL
pRawlinson	*netku		*jetku	*nenku		*jenku
pPindiu	*netku	*ŋetku	*jetku	*nenku	*ŋenku	*jenku
Dedua	nuru	ŋuru	juru	nunu	ŋunu	junu
Borong	nuru	uru	uru	nunu	uŋu	uŋu
Somba	netku	(j)etku	(j)etku	nengu	(j)engu	(j)engu
pSankwep	*nito	*jito	*jito	*nino	*jino	*jino
Mesem	ni[g]o	li[g]o	li[g]o	niŋ[g]o	liŋ[g]o	liŋ[g]o
Nabak	n[d]o	i[d]o	i[d]o	n[d]o	in[d]o	in[d]o

Except for the second person dual and plural, all forms of the object verb **nuɣu* 'hit' can be reconstructed (Table 1-42). Somba is the only language reflecting both syllables of the first and the second person singular forms **nuɣu* 1SG and **guɣu* 2SG. In these forms as well as in the reciprocal form **aɣu* the root is **-ɣu*, which is identical with the dual and plural root **-ku* following a consonant. The third person singular form *ku* of Mesem and Nabak is a contraction of expected **kʷi*. Together with Somba *kʷe*, these reflexes suggest the reconstruction of **kʷe* 3SG with a labialized velar stop.

Table 1-43: Proto-Rawlinson **nek* 'see'

		1SG	2SG	3SG	RECP
pRawlinson	see	*nek	*gek	*ek	*a(e)k
pPindiu	see	*nek	*gek	*ek	*aek
Tobo	see	[nən]	[gən]	[kən]	[aŋən]
Borong	see	nii	gii	ii	ai
Somba	see	nek	gek	ek	aek
pSankwep	see	*nik	*gik	*ïk	
Mesem	see	ne	ge	i	
Nabak	see	nik	gik	ek	ak

	1DU	2DU	3DU	1PL	2PL	3PL
pRawlinson	*netek		*jetek	*nenek		*jenek
pPindiu	*netek	*ŋetek	*jetek	*nenek	*ŋenek	*jenek
Tobo	nirik	irik	irik	ninik	inik	inik
Borong	nirii	irii	irii	ninii	iŋii	iŋii
Somba	net[k]ek	(j)et[k]ek	(j)et[k]ek	nen[g]ek	(j)en[g]ek	(j)en[g]ek
pSankwep	*nitik	*jitik	*jitik	*ninik	*jinik	*jinik
Mesem	ni[g]e	li[g]e	li[g]e	niŋ[g]e	liŋ[g]e	liŋ[g]e
Nabak	n[d]ik	i[d]ik	i[d]ik	n[d]ik	in[d]ik	in[d]ik

The object verb **nek* 'see' is best preserved in Somba and in Nabak (Table 1-43). The root **-ek* occurs in all reconstructible forms, including the third person singular. The Nabak reciprocal form *ak* may be a contraction of **a-ek* > Somba *aek*, Borong *ai*. In the dual and plural, the Proto-Pindiu forms make it clear that the intervocalic consonants with unspecified place of articulation that were reconstructed to Proto-Sankwep in 1.3.5 are in fact dental stops and nasals. For this reason, the transcription of these reconstructions is changed here, **niTik* 1DU, **niNik* 1PL etc. being replaced with **nitik* 1DU, **ninik* 1PL etc.

Table 1-44: Proto-Rawlinson **niɣi* 'bite'

		1SG	2SG	3SG	RECP
pRawlinson	bite	*niɣi	*giɣi	*jiɣi	
pPindiu	bite	*niɣi	*giɣi	*ki, *jiɣi	
Dedua	bite	ni	gi	ki	
Tobo	bite	ni	gi	ki	iŋi
Somba	bite	nəɣə	gəɣə	jəɣə	aŋgəɣə
pSankwep	bite	*ni	*gi	*ji	
Mesem	bite	nə	gə	je	
Nabak	bite	ni	gi	i	

	1DU	2DU	3DU	1PL	2PL	3PL
pRawlinson	*netiɣi		*jetiɣi	*neniɣi		*jeniɣi
pPindiu	*netiɣi	*ŋetiɣi	*jetiɣi	*neniɣi	*ŋeniɣi	*jeniɣi
Dedua	niri	ŋiri	jiri	nini	ŋini	jini
Tobo	niri	iri	iri	nini	ini	ini
Somba	ne[k]əɣə	e[k]əɣə	e[k]əɣə	neŋ[g]əɣə	eŋ[g]əɣə	eŋ[g]əɣə
pSankwep	*niti	*jiti	*jiti	*nini	*jini	*jini
Mesem	ni[g]i	li[g]i	li[g]i	niŋ[g]i	liŋ[g]i	liŋ[g]i
Nabak	n[d]i	i[d]i	i[d]i	n[d]i	in[d]i	in[d]i

The original disyllabic structure of the singular forms of **niɣi* 'bite' and the trisyllabic structure of the dual and plural forms is only preserved in Somba (Table 1-44). The other languages have reduced the forms by one syllable. In the third person singular, the prefixed variant **jiɣi* of Proto-Pindiu matches **ji* of Proto-Sankwep. All Rawlinson languages except Dedua have conflated the forms of the second and the third person dual and plural. In the Sankwep languages, it is the original third person form which has been extended to the second person. As second person dual and plural forms corresponding to the Dedua forms are not attested in the Sankwep family, these forms cannot be reconstructed to Proto-Rawlinson in a bottom-up approach.

Table 1-45: Proto-Rawlinson **netu* 'shoot'

		1SG	2SG	3SG	RECP
pRawlinson	shoot	*netu	*getu	*etu	
Somba	shoot	neri	geri	eri	aŋgeri
Nabak	shoot	nele	gele	ele	

	1DU	2DU	3DU	1PL	2PL	3PL
pRawlinson	*netetu		*jetetu	*nenetu		*jenetu
Somba	ne[k]eri	ekeri	e[k]eri	neŋ[g]eri	eŋgeri	eŋ[g]eri
Nabak	n[d]ele	idele	i[d]ele	n[d]ele	indele	in[d]ele

The object verb **netu* 'shoot' is only attested in Somba and Nabak (Table 1-45). The verb root in the singular is **-tu*, in the dual and plural it is **-etu*. In Nabak, the rounded root vowel has umlauted the preceding vowel, e.g. *nele* 1SG < **nülü* ⇐ **netu*, *ndele* 1PL ⇐ **niNülü* ⇐ **nenetu* while Somba preserves the original vowel *e*.

1.3.7 Dallman

The data for the three Dallman languages comes from McElhanon's survey of 1968. The Nomu object verbs I collected in 1996 mostly confirm McElhanon's data, but the occasional fluctuation in the data for Kinalaknga and Kumukio cannot be resolved as there is no other data source for these languages. The Dallman languages occupy a middle position as far as the number of object verbs is concerned. Nine object verbs were recorded for Nomu, eight for

Kinalaknga, and seven for Kumukio. As Kinalaknga and Kumukio are more closely related to each other than to Nomu, a match between either of them and Nomu is required for a Proto-Dallman reconstruction.

Table 1-46: Proto-Dallman **noŋgo* 'take'

		1SG	2SG	3SG	RECP
pDallman	take	*noŋgo	*goŋgo		*aŋgo
Nomu	take	nogo	gogo	mo	ago
Kinalaknga	give	noŋgo	goɣo	waŋga	aŋgo
Kumukio	give	noŋgo	goɣo	waŋga	[aŋga]

	1DU	2/3DU	1PL	2/3PL
pDallman	*netko	*jetko	*nengo	*jeŋgo
Nomu	netko	jetko	nengo	jego
Kinalaknga	netko	etko	nengo	eŋgo
Kumukio	netko	etko	nengo	eŋgo

The Proto-Dallman object verb **noŋgo* 'take' preserved its meaning in Nomu and changed it to 'give' in Kinalaknga and Kumukio (Table 1-46). For the meaning 'give', Nomu retains the Proto-Cromwell object verb **neŋgi* 'give' (cf. Table 1-58) which was replaced with *noŋgo* 'give' in Kinalaknga and Kumukio. The third person singular form is suppletive in Nomu where the verb *mo* 'take' fills this slot. Kinalaknga and Kumukio have *waŋga* 'give him/her', which is difficult to analyze. The Kumukio reciprocal form *aŋga* 'give each other' seems to have its root vowel from *waŋga* 3SG. In the dual and the plural number, the Dallman languages only differentiate between two forms in object verbs, one for the first person and the other for the second and the third person.

Table 1-47: Proto-Dallman **noku* 'hit'

		1SG	2SG	3SG	RECP
pDallman	hit	*noku	*goku	*kp{e,o}	*aku
Nomu	hit	noku	goku	kpe	aku
Kinalaknga	hit	nuku	guku	kpo	aku
Kumukio	hit	nuku	guku	kpo	aku

	1DU	2/3DU	1PL	2/3PL
pDallman	*netku	*jetku	*nenku	*jeku
Nomu	netku	jetku	nenku	jeku
Kinalaknga	netku	etku	nenku	eku
Kumukio	netku	etku	nenku	eku

Table 1-48: Proto-Dallman **nokun* 'call'

		1SG	2SG	3SG	RECP
pDallman	call	*nokun	*gokun	*kp{e,o}n	*akun
Nomu	call	nokun	gokun	kpen	akun[-agi]
Kinalaknga	call	nukun	gukun	kpon	akul[-aŋga]
Kumukio	call	nukun	gukun	kpon	

	1DU	2/3DU	1PL	2/3PL
pDallman	*netkun	*jetkun	*nenkun	*jekun
Nomu	netkun	jetkun	nenkun	jekun
Kinalaknga	netkun	etkun	nenkun	ekun
Kumukio	netkun	etkun	nenkun	ekun

The paradigms of **noku* 'hit' and **nokun* 'call' are exactly parallel, the only difference being the additional final **-n* of the forms of the latter object verb (Tables 1-47 and 1-48). Presumably, this **-n* was once a separate verb root that formed a compound with **noku* 'hit'. There is one discrepancy in the reflexes of these verbs. Whereas Nomu has third person singular forms with the vowel *e* the same forms in Kinalaknga and Kumukio show the non-corresponding vowel *o*. The reciprocal form **akun* 'call each other' has been recorded in combination with the reciprocal form of the regular object suffixes in Nomu and Kinalaknga.

Table 1-49: Proto-Dallman **niko* 'bite'

		1SG	2SG	3SG	RECP
pDallman	bite	*niko	*giko	*joko	*aiko
Nomu	bite	niko	giko	joko	aiko
Kinalaknga	bite	niko	giko	joko	aiko
Kumukio	bite	niko	giko	joko	aiku[-aŋga]

	1DU	2/3DU	1PL	2/3PL
pDallman	*netiko	*jetiko	*neniko	*jeiko
Nomu	neriko	jeriko	neniko	jeiko
Kinalaknga	neriko	eriko	neniko	eiko
Kumukio	niriko	iriko	niniko	[iŋko]

Table 1-50: Proto-Dallman **nito* 'shoot'

		1SG	2SG	3SG	RECP
pDallman	shoot	*nito	*gito		
Nomu	shoot	nito	gito	joto	aito
Kinalaknga	shoot	nito	gito	ito	
Kumukio	shoot	nito	gito	ito	

	1DU	2/3DU	1PL	2/3PL
pDallman	*netito	*jetito	*nenito	*jeito
Nomu	nerito	jerito	nenito	jeito
Kinalaknga	nerito	erito	nenito	eito
Kumukio	nirito	irito	ninito	[iɣito]

The object verbs **niko* 'bite' and **nito* 'shoot' have parallel forms (Tables 1-49 and 1-50). As we will see in 1.3.10, the mutual assimilation of these two paradigms is an innovation of the Dallman languages. The roots of the two verbs are **-iko* 'bite' and **-ito* 'shoot'. Only in the third person singular do we find the shorter roots **-ko* 'bite' and **-to* 'shoot' in Proto-Dallman **joko* and Nomu *joto*.

Table 1-51: Proto-Dallman **nozi* 'burn'

		1SG	2SG	3SG	RECP
pDallman	burn	*nozi	*gozi	*ze	
Nomu	burn	nozi	gozi	ze	wo-agi
Kinalaknga	burn	nozi	gozi	ze	

	1DU	2/3DU	1PL	2/3PL
pDallman	*netzi	*jetzi	*nenzi	*jezi
Nomu	netsi	jetsi	nenzi	jezi
Kinalaknga	nesi	esi	nezi	ezi

The object verb **nozi* 'burn' is only attested in Nomu and Kinalaknga (Table 1-51). In the third person singular we find the prefixless form **ze*, in the rest of the paradigm the root is **-zi*. There is no reciprocal form of this root. The consonant cluster **-tz-* in the dual forms turns up as *-ts-* in Nomu and as *-s-* in Kinalaknga, alternating with *-z-* in the plural.

Table 1-52: Proto-Dallman **n{u,i}aŋ* 'cut'

		1SG	2SG	3SG	RECP
pDallman	cut	*n{u,i}aŋ	*g{u,i}aŋ	*jaŋ	
Nomu	cut	nuaŋ	guaŋ	jaŋ	auŋ
Kinalaknga	cut	niaŋ	giaŋ	jaŋ	ajaŋ[-aŋga]

	1DU	2/3DU	1PL	2/3PL
pDallman	*netaŋ	*jetaŋ	*nenaŋ	*jeaŋ
Nomu	neraŋ	jeraŋ	nenaŋ	jeaŋ
Kinalaknga	neraŋ	eraŋ	nenaŋ	eaŋ

The object verb **n{u,i}aŋ* 'cut', too, is only attested in Nomu and Kinalaknga (Table 1-52). The third person singular form **jaŋ* seems to be the prefixless root that reappears in the first and the second person singular forms of Kinalaknga. In the dual and plural forms, the

root is only *-aŋ*. The first vowel of the Nomu forms *nuaŋ* 1SG and *guaŋ* 2SG and that of the Kinalaknga forms *niaŋ* 1SG and *giaŋ* 2SG does not match.

1.3.8 Kabwum

Selepet and Timbe have the same five object verbs, Komba boasts another four. Two of these object verbs, **niɣi* 'give' (Table 1-53) and **niɣi* 'bite' (Table 1-57) are accidentally homonymous except for the third person singular forms. The object verbs of Komba have undergone more changes than those of Selepet and Timbe. For a Proto-Kabwum reconstruction, agreement between Komba and either Selepet or Timbe is required.

Table 1-53: Proto-Kabwum **niɣi* 'give'

		1SG	2SG	3SG	RECP
pKabwum	give	*niɣi	*giɣi		*aŋgi
Komba	give	niɣ	giɣ	pindʌ	aŋgʌ
Selepet	give	niɣi	giɣi	waŋ	aŋgi
Timbe	give	[niŋ]	[giŋ]	waŋ	aŋgi

	1DU	2/3DU	1PL	2/3PL
pKabwum	*netki	*jetki	*nengi	*jeŋgi
Komba	nikʌ	zikʌ	niŋgʌ	ziŋgʌ
Selepet	nitki	jitki	ningi	jingi
Timbe	netki	jetki	nengi	jeŋgi

The object verb **niɣi* 'give' has a suppletive third person singular form, *pindʌ* in Komba and *waŋ* in Selepet and Timbe (Table 1-53). In Timbe, the first and the second person singular forms *niŋ* ⇐ **niɣi* and *giŋ* ⇐ **giɣi* were transformed in analogy with the third person singular form *waŋ*. The consonant cluster **-tk-* of the dual forms was simplified to *-k-* in Komba and the cluster **-ng-* of the first person plural form was assimilated to *-ŋg-*. As a result, Komba now has a general consonant alternation between *-k-* in the dual and *-ŋg-* in the plural. The same alternation is found in all other object verbs with the exception of **nʌβan* 'leave' where we find an alternation between *-p-* in the dual and *-mb-* in the plural.

Table 1-54: Proto-Kabwum **nek* 'see'

		1SG	2SG	3SG	RECP
pKabwum	see	*nek	*gek	*ek	
Komba	see	nek	gek	ek	aŋak
Selepet	see	nek	gek	ek	eɣ-ak
Timbe	see	nek	gek	ek	eɣ-ak

	1DU	2/3DU	1PL	2/3PL
pKabwum				
Komba	nikit	zikit	niŋgit	ziŋgit
Selepet	nelek	jelek	nenek	jek
Timbe	nelek	jelek	nenek	jek

Only the singular forms of the object verb **nek* 'see' can be reconstructed to Proto-Kabwum (Table 1-54). In the dual and plural, Selepet and Timbe show the same verb root **-ek* as in the singular, but Komba has a suppletive root *-kit ~ -ŋgit*. As in the Dallman family, there are only two different forms in the dual and plural in the Kabwum languages, one for the first person and the other for the second and third person.

Table 1-55: Proto-Kabwum **noɣo* 'hit'

		1SG	2SG	3SG	RECP
pKabwum	hit	*noɣo	*goɣo	*ko	*aɣo
Komba	hit	noɣ	goɣ	ko ~ ku	aɣo[-jaŋgʌ]
Selepet	hit	noɣo	goɣo	ku	aɣo
Timbe	hit	nuɣu	guɣu	ko	aɣu

	1DU	2/3DU	1PL	2/3PL
pKabwum	*netko	*jetko	*nengo	*jeŋgo
Komba	nʌko	zʌko	nʌŋgo	zʌŋgo
Selepet	notko	jotko	nongo	jongo
Timbe	netku	jetku	nengu	jeŋgu

Table 1-56: Proto-Kabwum **noɣon* 'call'

		1SG	2SG	3SG	RECP
pKabwum	call	*noɣon	*goɣon	*kon	
Komba	call	non	gon	kon	
Selepet	call	noɣon	goɣon	kun	aɣon-ak
Timbe	call	noɣon	goɣon	kon	aɣon-ak

	1DU	2/3DU	1PL	2/3PL
pKabwum	*netkon	*jetkon	*nengon	*jeŋgon
Komba	nʌkon	zʌkon	nʌŋgon	zʌŋgon
Selepet	notkon	jotkon	nongon	jongon
Timbe	netkun	jetkun	nengun	jeŋgun

The forms of the object verbs **noɣo* 'hit' and **noɣon* 'call' differ only in that the latter have an additional final *-n* (Tables 1-55 and 1-56). In Selepet and Timbe, the vowel of the prefixes of the first and the second person singular forms harmonizes with the root vowel. In Selepet the vowel harmony also extends to the dual and plural forms, but in Timbe the dual

and plural prefixes retain the original vowel **e*. The second and third person plural form *jongo* of Selepet has its nasal consonant from the first person plural form *nongo*. In Timbe, we do not find the expected form †*jeɣu* 2/3PL but rather *jeŋgu* or *jeŋu* (cf. Appendix A). The nasalization of the root-initial consonant in Timbe may also be due to the influence of the first person plural form or it may follow the example of the second and third person plural forms of the other object verbs. The Komba reciprocal form *aɣo-jaŋgʌ* 'hit each other' is suffixed with the reciprocal suffix of the object class I. For the object verb *non* 'call' no reciprocal form is attested.

Table 1-57: Proto-Kabwum **niɣi* 'bite'

		1SG	2SG	3SG	RECP
pKabwum	bite	*niɣi	*giɣi	*jiɣi	
Komba	bite	niɣ	giɣ	ziɣ	
Selepet	bite	niɣi	giɣi	iɣi	aŋgi
Timbe	bite	niɣi	giɣi	iɣi	

	1DU	2/3DU	1PL	2/3PL
pKabwum	*netki	*jetki	*nengi	*jeŋgi
Komba	nikʌ	zikʌ	niŋgʌ	ziŋgʌ
Selepet	nitki	jitki	ningi	jingi
Timbe	netki	jetki	nengi	jeŋgi

The object verb **niɣi* 'bite' has the root **-ɣi ~ -ki ~ -gi* whose alternants are conditioned by the preceding phoneme (Table 1-57). The prefixes of the singular forms harmonize with the root vowel *i*. In the third person singular, Komba *ziɣ* provides unequivocal evidence for a prefix **ji-*. In the dual and plural, the prefixes of Komba and Selepet harmonize with the original root vowel, but Timbe retains the original prefix vowel.

1.3.9 Cromwell

The Dallman family and the Kabwum family combine into the Cromwell family. The Cromwell languages are fairly closely interrelated. Despite the rather small number of object verbs of some member languages such as Kumukio, Selepet, and Timbe, no less than seven object verbs can be reconstructed to Proto-Cromwell. The reflexes presented below are usually limited to four of the six Cromwell languages; the data left away can be looked up in 1.3.7 and 1.3.8 above.

Table 1-58: Proto-Cromwell **neŋgi* 'give'

		1SG	2SG	3SG	RECP
pCromwell	give	*neŋgi	*geŋgi	*waŋgi	*aŋgi
Nomu	give	nogi	goi	wagi	agi
pKabwum	give	*niɣi	*giɣi		*aŋgi
Selepet	give	niɣi	giɣi	waŋ	aŋgi
Timbe	give	[niŋ]	[giŋ]	waŋ	aŋgi

	1DU	2/3DU	1PL	2/3PL
pCromwell	*netki	*jetki	*nengi	*jeŋgi
Nomu	netki	jetki	nengi	jegi
pKabwum	*netki	*jetki	*nengi	*jeŋgi
Selepet	nitki	jitki	ningi	jingi
Timbe	netki	jetki	nengi	jeŋgi

The object verb **neŋgi* 'give' is attested in all three Kabwum languages but only in one Dallman language, viz. Nomu (Table 1-58). In the first and the second person singular, the vowel of the prefixes in Nomu and in Proto-Kabwum does not match. The prefix vowel of Proto-Kabwum shows umlaut induced by the following root vowel. The prefix vowel of Nomu is best explained as transformed in analogy with the free pronouns *no* 'I' and *go* 'you'. It is rather unlikely that the prefix vowel of Nomu showed umlaut before the transformation, for a similar umlaut took place in the object verb *niko* 'bite' and survives there (cf. Table 1-62). Using external evidence, the original prefix vowel can be determined to have been *e*, hence we can reconstruct **neŋgi* 'give me' and **geŋgi* 'give you'. In the third person singular, there is only a partial match between Nomu *wagi* and the form *waŋ* found in Selepet and Timbe. However, whereas the third person singular form of the verb 'give' is *waŋ* in Selepet, in the related benefactive suffixes we find *-waŋgi*, matching Nomu *wagi*. Presumably, the original form **waŋgi* 3SG was retained in the benefactive suffix paradigm for accentual reasons while it was irregularly shortened to *waŋ* in the main verb paradigm. For the reciprocal form and for all dual and plural forms, the reflexes in Nomu and in Timbe are perfect matches.

Table 1-59: Proto-Cromwell **nek* 'see'

		1SG	2SG	3SG	RECP
pCromwell	see	*nek	*gek	*ek	*a(e)k
Kinalaknga	see			ek	aek
Kumukio	see	nik	gik	ek	
pKabwum	see	*nek	*gek	*ek	
Selepet	see	nek	gek	ek	[eɣ]-ak
Timbe	see	nek	gek	ek	[eɣ]-ak

	1DU	2/3DU	1PL	2/3PL
pCromwell	*netek	*jetek	*nenek	*jeek
Kinalaknga	nerik	erik	nenik	eik
Kumukio	nirik	irik	ninik	[inik]
pKabwum	*netek	*jetek	*nenek	*jek
Selepet	nelek	jelek	nenek	jek
Timbe	nelek	jelek	nenek	jek

The verb *ek* 'see' is regularly inflected with object suffixes in Nomu, the other Cromwell languages retain the object verb **nek* 'see' (Table 1-59). The first and the second person singular forms are not attested in Kinalaknga; the Kumukio forms match the Proto-Kabwum forms. The third person singular form **ek* 'see him/her/it' is attested in all six Cromwell languages. The reciprocal form *eɣ-ak* of Selepet and Timbe is made up of the third person singular form *ek* and the reciprocal suffix *-ak* of the object class I. The suffixes of the object class I are related to the verb 'see', hence we can assume that *ak* was the reciprocal form of the verb 'see' before it was replaced with a complex form. Selepet and Timbe *ak* does not completely match Kinalaknga and Nomu *aek* 'see each other', but the forms are no doubt cognate. In the dual and plural, we find the root **-ek* with the same object prefixes as were reconstructed above for **neŋgi* 'give' (Table 1-58). The second and third person plural form **jeek* was contracted to *jek* in Selepet and Timbe and replaced with *inik*, formed in analogy with *ninik* 1PL, in Kumukio.

Table 1-60: Proto-Cromwell **nuku* 'hit'

		1SG	2SG	3SG	RECP
pCromwell	hit	*nuku	*guku	*k^{w}e	*aku
pDallman	hit	*noku	*goku	*kpe	*aku
Nomu	hit	noku	goku	kpe	aku
Kumukio	hit	nuku	guku	kpo	aku
pKabwum	hit	*noɣo	*goɣo	*ko	*aɣo
Selepet	hit	noɣo	goɣo	ku	aɣo
Timbe	hit	nuɣu	guɣu	ko	aɣu

	1DU	2/3DU	1PL	2/3PL
pCromwell	*netku	*jetku	*nenku	*jeku
pDallman	*netku	*jetku	*nenku	*jeku
Nomu	netku	jetku	nenku	jeku
Kumukio	netku	etku	nenku	eku
pKabwum	*netko	*jetko	*nengo	*jeŋgo
Selepet	notko	jotko	nongo	jongo
Timbe	netku	jetku	nengu	jeŋgu

Table 1-61: Proto-Cromwell **nukun* 'call'

		1SG	2SG	3SG	RECP
pCromwell	call	*nukun	*gukun	*k^{w}en	*akun
pDallman	call	*nokun	*gokun	*kpen	*akun
Nomu	call	nokun	gokun	kpen	akun[-agi]
Kumukio	call	nukun	gukun	kpon	
pKabwum	call	*noɣon	*goɣon	*kon	*aɣon
Selepet	call	noɣon	goɣon	kun	aɣon[-ak]
Timbe	call	noɣon	goɣon	kon	aɣon[-ak]

	1DU	2/3DU	1PL	2/3PL
pCromwell	*netkun	*jetkun	*nenkun	*jekun
pDallman	*netkun	*jetkun	*nenkun	*jekun
Nomu	netkun	jetkun	nenkun	jekun
Kumukio	netkun	etkun	nenkun	ekun
pKabwum	*netkon	*jetkon	*nengon	*jeŋgon
Selepet	notkon	jotkon	nongon	jongon
Timbe	netkun	jetkun	nengun	jeŋgun

The object verb **nukun* 'call' has forms parallel to **nuku* 'hit', differing only in the final segment *-n* (Table 1-60 and 1-61). It is not clear whether the rounded back vowel of the prefixes of the first and the second person singular in the Dallman languages is due to umlaut or to analogy with the free pronouns. In the first case, we would have to reconstruct **nuku* 1SG and **guku* 2SG to Proto-Cromwell, in the second case, **neku* 1SG and **geku* 2SG. The third person singular form Proto-Kabwum **ko* probably derives from **k^{w}e*. It is likelier that the labialization component of **k^{w}* merged with the following vowel *e* to produce **ko* than that a hypothetical proto-sound **kp* with simultaneous labiovelar closure produced that result. The reciprocal forms are **aku* 'hit each other' and **akun* 'call each other', the latter occurring in combination with a reciprocal object suffix in Nomu, Selepet and Timbe. For the dual forms **netku* 1DU and **jetku* 2/3DU there are straightforward matches between Nomu and Timbe. Nomu also preserves the original plural forms **nenku* 1PL and **jeku* 2/3PL while the root-initial consonant of Timbe *nengu* 1PL and *jeŋgu* 2/3PL has acquired voicing from the preceding nasal.

Table 1-62: Proto-Cromwell **niki* 'bite'

		1SG	2SG	3SG	RECP
pCromwell	bite	*niki	*giki	*jiki	
pDallman	bite	*niko	*giko	*joko	*aiko
Nomu	bite	niko	giko	joko	aiko
Kinalaknga	bite	niko	giko	joko	aiko
pKabwum	bite	*niɣi	*giɣi	*jiɣi	
Komba	bite	niɣ	giɣ	ziɣ	
Selepet	bite	niɣi	giɣi	iɣi	aŋgi

	1DU	2/3DU	1PL	2/3PL
pCromwell				
pDallman	*netiko	*jetiko	*neniko	*jeiko
Nomu	neriko	jeriko	neniko	jeiko
Kinalaknga	neriko	eriko	neniko	eiko
pKabwum	*netki	*jetki	*nengi	*jeŋgi
Komba	nikʌ	zikʌ	niŋgʌ	ziŋgʌ
Selepet	nitki	jitki	ningi	jingi

The reconstruction of **niki* 'bite' and **neto* 'shoot' relies on the reflexes in the Kabwum languages; the Dallman languages have transformed these object verbs so that they acquired parallel forms although they were originally dissimilar (Tables 1-62 and 1-63). The transformation of Proto-Dallman **niko* 'bite' is not easy to retrieve. It seems that the third person singular form **joko* played a pivotal role. The prefix of Proto-Cromwell **jiki* must have changed its vowel in analogy with the free pronoun Proto-Dallman **jok* 'he, she'. At the same time the root vowel was changed from *i* to *o*, yielding **joko* 'bite him/her/it'. This change was facilitated by the existence of the parallel verb form **joto* 'shoot him/her/it'. The new verb root **-ko* was then extended to the first and the second person singular **niko* ⇐ **niki* and **giko* ⇐ **giki*. Note that these forms preserved the umlauted prefix vowel *i*. This vowel was analyzed as being part of the root and the old root **-ki* was replaced with **-iko* in the reciprocal and the dual and plural forms. These non-singular forms are exactly parallel to the forms of the object verb **nito* 'shoot', but they do not match the Proto-Kabwum forms.

Table 1-63: Proto-Cromwell **neto* 'shoot'

		1SG	2SG	3SG	RECP
pCromwell	shoot	*neto	*geto	*jeto	
pDallman	shoot	*nito	*gito		
Nomu	shoot	nito	gito	joto	aito
Kinalaknga	shoot	nito	gito	ito	
pKabwum					
Komba	shoot	nerʌ	gerʌ	zerʌ	

	1DU	2/3DU	1PL	2/3PL
pCromwell	*netVto	*jetVto	*nenVto	*jeVto
pDallman	*netito	*jetito	*nenito	*jeito
Nomu	nerito	jerito	nenito	jeito
Kinalaknga	nerito	erito	nenito	eito
pKabwum				
Komba	ne[k]ʌrʌ	ze[k]ʌrʌ	neŋ[g]ʌrʌ	zeŋ[g]ʌrʌ

The object verb **neto* 'shoot' is attested in all three Dallman languages but in the Kabwum family only in Komba (Table 1-63). The vowel *i* in the prefixes of the first and the second person singular forms of the Dallman languages cannot be due to umlaut. It must have been introduced in analogy with the object verb **niko* 'bite'. External evidence confirms that Komba *nerʌ* 1SG and *gerʌ* 2SG preserve the original prefix vowel. The forms attested in the third person singular diverge. The form *ito* 3SG of Kinalaknga and Kumukio represents the verb root in these languages and may be an innovation. The prefix *jo-* in Nomu *joto* 3SG probably has its vowel from the free pronoun **jok* 'he, she'. We can combine this form with Komba *zerʌ* 3SG which points to Proto-Cromwell **jeto* 3SG.

In the dual and plural, we find an unexpected velar stop at the border between prefix and root in Komba. The intrusive velar stop reminds of Somba-Siawari where, as we saw in 1.3.4, the prefix-final *-t* of the dual forms was analogically extended to *-tk* and the *-n* of the plural forms was extended to *-ng*. The same happened in Komba in the object verbs *nerʌ* 'shoot', *nise* 'burn', and *nose* 'pierce' (cf. Appendix A). Komba is only separated by an uninhabited stretch of mountains from Somba-Siawari and it is likely that this parallel development is due to language contact. In Komba, the cluster **-tk-* in the dual number was simplified to *-k-* and the cluster **-ng-* in the plural number to *-ŋg-*. In a comparison with other languages we must remove the intrusive velar stops. What remains is the dual and plural root *-ʌrʌ* corresponding to **-ito* in the Dallman languages. Note that there is no evidence for a geminate **-tt-* in the dual forms of Proto-Cromwell but rather evidence for a vowel preceding the root **-to* in the dual and plural forms.

Table 1-64: Proto-Cromwell **neze* 'burn'

		1SG	2SG	3SG	RECP
pCromwell	burn	*neze	*geze	*ze	
pDallman	burn	*nozi	*gozi	*ze	
Nomu	burn	nozi	gozi	ze	wo-agi
Kinalaknga	burn	nozi	gozi	ze	
pKabwum					
Komba	burn	nise	gise	se	

	1DU	2/3DU	1PL	2/3PL
pCromwell	*netze	*jetze	*nenze	*jeze
pDallman	*netzi	*jetzi	*nenzi	*jezi
Nomu	netsi	jetsi	nenzi	jezi
Kinalaknga	nesi	esi	nezi	ezi
pKabwum				
Komba	ni[kʌ]se	zi[kʌ]se	niŋ[gʌ]se	ziŋ[gʌ]se

The object verb **neze* 'burn' is only attested in Nomu, Kinalaknga, and Komba (Table 1-64). The vowel *o* in the prefixes of Proto-Dallman **nozi* 1SG and **gozi* 2SG has been influenced by the free pronouns **no* 'I' and **go* 'you'. The original vowel *e* is reflected in Komba. The third person singular form **ze* carries no prefix. In the dual and plural, the Dallman languages show forms consisting of a prefix followed by the verb root with no intervening vowel. This pattern is old and must be reconstructed to Proto-Cromwell.

1.3.10 Western Huon

The Western Huon family comprises thirteen languages grouped in two subfamilies, the Rawlinson family and the Cromwell family. For a Proto-Western Huon reconstruction we need at least one reflex from both subgroups. As we have seen in the foregoing sections, the Rawlinson and the Cromwell languages share many of the same object verbs. No less than eight of them can be reconstructed to Proto-Western Huon. This is a good deal more than the two object verbs that could be reconstructed to Proto-Eastern Huon (cf. 1.3.3) and shows that the Rawlinson and the Cromwell families are relatively closely interrelated. In the following tables only selected reflexes are presented, usually limited to the most conservative language of a subfamily.

Table 1-65: Proto Western Huon **neŋgi* 'give'

		1SG	2SG	3SG	RECP
pWH	give	*neŋgi	*geŋgi	*waŋgi	
Somba	give	niŋgi	gi(ɣi)	waŋgi	aŋgu
pCromwell	give	*neŋgi	*geŋgi	*waŋgi	*aŋgi
Nomu	give	nogi	goi	wagi	agi
pKabwum	give	*niɣi	*giɣi	*waŋ	*aŋgi
Komba	give	niɣ	giɣ	[pindʌ]	aŋgʌ
Selepet	give	niɣi	giɣi	waŋ	aŋgi
Timbe	give	[niŋ]	[giŋ]	waŋ	aŋgi

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netki		*jetki	*nengi		*jeŋgi
Somba	netki	(j)etki	(j)etki	nengi	(j)engi	(j)engi
pCromwell	*netki	*jetki	*jetki	*nengi	*jeŋgi	*jeŋgi
Nomu	netki	jetki	jetki	nengi	jegi	jegi
pKabwum	*netki	*jetki	*jetki	*nengi	*jeŋgi	*jeŋgi
Komba	nikʌ	zikʌ	zikʌ	niŋgʌ	ziŋgʌ	ziŋgʌ
Selepet	nitki	jitki	jitki	ningi	jingi	jingi
Timbe	netki	jetki	jetki	nengi	jeŋgi	jeŋgi

The object verb **neŋgi* 'give' is only attested in Somba, Nomu, and the three Kabwum languages (Table 1-65). In all these languages it is not only a main verb but also performs the function of a benefactive marker. The root of this verb is **-ŋgi*, assimilating to the preceding voiceless stop in the dual forms. The third person singular form shows the unique prefix **wa-*, opposing **ne-* 1SG and **ge-* 2SG. The reciprocal form cannot be reconstructed as Somba shows the unexpected form *aŋgu*. The dual and plural forms of Somba and Komba derive straightforwardly from the reconstructed Proto-Western Huon forms. In them, the consonant clusters *-tk-* and *-ng-* (later simplified to *-k-* and *-ŋg-*) straddling the boundary between prefix and root have arisen regularly. From verbs such as this *-tk-* (> *-k-*) and *-ng-* (> *-ŋg-*) were isolated and generalized as markers of dual and plural number (cf. 1.3.4 for Somba and 1.3.8 for Komba).

Table 1-66: Proto-Western Huon **nek* 'see'

		1SG	2SG	3SG	RECP
pWH	see	*nek	*gek	*ek	*a(e)k
pRawlinson	see	*nek	*gek	*ek	*a(e)k
pPindiu	see	*nek	*gek	*ek	*aek
Tobo	see	[nən]	[gən]	[kən]	[aŋən]
Somba	see	nek	gek	ek	aek
pSankwep	see	*nik	*gik	*ïk	
Nabak	see	nik	gik	ek	ak
pCromwell	see	*nek	*gek	*ek	*a(e)k
Kinalaknga	see			ek	aek
Kumukio	see	nik	gik	ek	
pKabwum	see	*nek	*gek	*ek	
Selepet	see	nek	gek	ek	[eɣ]-ak

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netek		*jetek	*nenek		*jeek
pRawlinson	*netek		*jetek	*nenek		*jenek
pPindiu	*netek	*ŋetek	*jetek	*nenek	*ŋenek	*jenek
Tobo	nirik	irik	irik	ninik	inik	inik
Somba	net[k]ek	(j)et[k]ek	(j)et[k]ek	nen[g]ek	(j)en[g]ek	(j)en[g]ek
pSankwep	*nitik	*jitik	*jitik	*ninik	*jinik	*jinik
Nabak	n[d]ik	i[d]ik	i[d]ik	n[d]ik	in[d]ik	in[d]ik
pCromwell	*netek	*jetek	*jetek	*nenek	*jeek	*jeek
Kinalaknga	nerik	erik	erik	nenik	eik	eik
Kumukio	nirik	irik	irik	ninik	[inik]	[inik]
pKabwum	*netek	*jetek	*jetek	*nenek	*jek	*jek
Selepet	nelek	jelek	jelek	nenek	jek	jek

The object verb **nek* 'see' is well attested in all four second-order subgroups of the Western Huon family (Table 1-66). The third person singular form **ek* has a zero syllable onset, contrasting with **n-* and **g-* in the first and the second person singular. The verb root in the dual and plural forms **-ek* is identical with the third person singular form. Even in the reciprocal form we find the same root in Somba *a-ek* and Kinalaknga *a-ek*. The reciprocal forms *ak* of Nabak and *-ak* of Selepet may be independently contracted descendants of pWH **aek*. The second person dual and plural forms cannot be reconstructed in a bottom-up approach as Dedua is the only Western Huon language that preserves separate prefixes for these forms. All other Western Huon languages have conflated the second and the third person dual and plural in all object verbs and it is the original third person form that survives in the new conflated forms.

In the non-singular forms, there is a consonant alternation between **-t-* in the dual and **-n-* in the plural in Proto-Rawlinson. A comparison with the third person plural forms of the Cromwell languages suggests that the **-n-* of the Proto-Rawlinson third person plural form **jenek* has been taken from the first person plural form **nenek*. The second and third person plural form *jek* of Selepet lacks such an *-n-*. In all other Selepet object verbs we find an *-n-* in the form of the second and third person plural alternating with a *-t-* in the second and third person dual (cf. Appendix A). Its absence in *jek* 2/3PL is an archaism. The Kinalaknga reflex *eik* 2/3PL confirms that we must reconstruct an n-less form **jeek* 2/3PL to Proto-Cromwell. In Kumukio *inik* 2/3PL, the *-n-* of the first person plural form *ninik* has been introduced, much like in the Rawlinson languages. The analogical extension of the *-n-* of the first person plural form to the second and third person plural form, turning it into a plural marker in a semantically significant consonant alternation, must have happened at least twice independently in the Western Huon family. Only Kinalaknga, Selepet, and Timbe have not been affected by this change. The archaic forms of these languages require the reconstruction of **jeek* 3PL to Proto-Western Huon.

Table 1-67: Proto-Western Huon **nuku* 'hit'

		1SG	2SG	3SG	RECP
pWH	hit	*nuku	*guku	*kʷe	*aku
pRawlinson	hit	*nuɣu	*guɣu	*kʷe	*aɣu
pPindiu	hit	*nuɣu	*guɣu	*kʷe	*aɣu
Dedua	hit	nu	gu	kpe	[ewe]
Somba	hit	nuŋgu	gu(ɣu)	kʷe	au
pSankwep	hit	*no	*go	*ku	*ao
Mesem	hit	no	go	ku	a[g]o
pCromwell	hit	*nuku	*guku	*kʷe	*aku
pDallman	hit	*noku	*goku	*kpe	*aku
Nomu	hit	noku	goku	kpe	aku
pKabwum	hit	*noɣo	*goɣo	*ko	*aɣo
Timbe	hit	nuɣu	guɣu	ko	aɣu

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netku		*jetku	*nenku		*jeku
pRawlinson	*netku		*jetku	*nenku		*jenku
pPindiu	*netku	*ŋetku	*jetku	*nenku	*ŋenku	*jenku
Dedua	nuru	ŋuru	juru	nunu	ŋunu	junu
Somba	netku	(j)etku	(j)etku	nengu	(j)engu	(j)engu
pSankwep	*nito	*jito	*jito	*nino	*jino	*jino
Mesem	ni[g]o	li[g]o	li[g]o	niŋ[g]o	liŋ[g]o	liŋ[g]o
pCromwell	*netku	*jetku	*jetku	*nenku	*jeku	*jeku
pDallman	*netku	*jetku	*jetku	*nenku	*jeku	*jeku
Nomu	netku	jetku	jetku	nenku	jeku	jeku
pKabwum	*netko	*jetko	*jetko	*nengo	*jeŋgo	*jeŋgo
Timbe	netku	jetku	jetku	nengu	jeŋgu	jeŋgu

The object verb **nuku* 'hit' is reflected by all Western Huon languages without exception (Table 1-67). In the first and the second person singular it seems that all languages have umlauted the prefix vowel, though this is not certain for the Dallman languages (cf. Table 1-60 in 1.3.9). The reciprocal form **aku* is very well attested. In the dual, the reflexes in Somba and Nomu are straightforward matches. In the plural, the Rawlinson languages have extended the prefix-final nasal from the first person to the second and the third person forms. Nomu preserves the original form **jeku* 3PL.

Table 1-68: Proto-Western Huon **nukul* 'call'

		1SG	2SG	3SG	RECP
pWH	call	*nukul	*gukul		*akul
pPindiu	call	*nuɣul	*guɣul	*kʷët	
Dedua	call	nuru	guru	kpaʔ	
Somba	call	noɣol	goɣol	[oɣol]	a[ŋgo]ɣol
pCromwell	call	*nukun	*gukun	*kʷen	*akun
pDallman	call	*nokun	*gokun	*kpen	*akun
Nomu	call	nokun	gokun	kpen	akun[-agi]
pKabwum	call	*noɣon	*goɣon	*kon	
Timbe	call	noɣon	goɣon	kon	aɣon[-ak]

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netkul		*jetkul	*nenkul		*jekul
pPindiu	*netuɣul	*ŋetuɣul	*jetuɣul	*nenuɣul	*ŋenuɣul	*jenuɣul
Dedua	nururu	ŋururu	jururu	nunuru	ŋunuru	junuru
Somba	net[k]o-ɣol	(j)et[k]o-ɣol	(j)et[k]o-ɣol	nen[g]o-ɣol	(j)en[g]o-ɣol	(j)en[g]o-ɣol
pCromwell	*netkun	*jetkun	*jetkun	*nenkun	*jekun	*jekun
pDallman	*netkun	*jetkun	*jetkun	*nenkun	*jekun	*jekun
Nomu	netkun	jetkun	jetkun	nenkun	jekun	jekun
pKabwum	*netkon	*jetkon	*jetkon	*nengon	*jeŋgon	*jeŋgon
Timbe	netkun	jetkun	jetkun	nengun	jeŋgun	jeŋgun

The object verb **nukul* 'call' is attested in all second-order subfamilies with the exception of the Sankwep family (Table 1-68). However, the third person singular form survives as an invariable verb root in the Sankwep languages, cf. Mesem *ko* 'call' and Nabak *ku* 'call'. In the first and the second person singular, the reflexes in Somba perfectly match the forms reconstructed to Proto-Cromwell. These forms seem to be made up of pWH **nuku* 'hit me' respectively **guku* 'hit you' plus a morpheme **-l*. Perhaps **-l* was once a verb root with the meaning 'call' that was compounded with **nuku* 'hit' to express object person and number. The third person singular forms **kʷët* of Proto-Pindiu and **kʷen* of Proto-Cromwell do not match. Proto-Cromwell **kʷen* < **kʷel* is probably the original form as it can be analyzed as a compound of **kʷe* 'hit him/her' and **-l*. Proto-Pindiu **kʷët* 'call him/her' is homonymous with the noun **kʷët* 'name' and is most likely an innovation. The Somba reciprocal form *aŋgoɣol* contains an intrusive velar stop *-ŋg-* followed by the epenthetic vowel *-o-*, like the dual and plural forms. If we subtract these innovations, the Somba form matches Proto-Cromwell **akun* 'call each other'. In the dual and plural, Proto-Pindiu shows an epenthetic vowel **-u-* between the prefix and the verb root. A similar epenthetic vowel can be also be found in **niɣi* 'bite' (cf. Tabe 1-69) and seems to be spreading through the object verbs of the Pindiu languages. But note that there is no epenthetic vowel in the dual and plural forms of **nuɣu* 'hit' (cf. Table 1-67), of which **nuɣul* 'call' is presumably a compound. This epenthetic vowel is an

innovation of the Pindiu and probably also the Sankwep languages and must be eliminated in a Proto-Western Huon reconstruction.

Table 1-69: Proto-Western Huon **niki* 'bite'

		1SG	2SG	3SG	RECP
pWH	bite	*niki	*giki	*jiki	
pRawlinson	bite	*niɣi	*giɣi	*jiɣi	
pPindiu	bite	*niɣi	*giɣi	*ki, *jiɣi	
Dedua	bite	ni	gi	ki	
Somba	bite	nəɣə	gəɣə	jəɣə	aŋgəɣə
pSankwep	bite	*ni	*gi	*ji	
Nabak	bite	ni	gi	i	
pCromwell	bite	*niki	*giki	*jiki	
pDallman	bite	[*niko]	[*giko]	[*joko]	*aiko
Nomu	bite	niko	giko	joko	aiko
pKabwum	bite	*niɣi	*giɣi	*jiɣi	
Selepet	bite	niɣi	giɣi	iɣi	aŋgi

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netki		*jetki	*nenki		*jeki
pRawlinson	*netiɣi		*jetiɣi	*neniɣi		*jeniɣi
pPindiu	*netiɣi	*ŋetiɣi	*jetiɣi	*neniɣi	*ŋeniɣi	*jeniɣi
Dedua	niri	ŋiri	jiri	nini	ŋini	jini
Somba	ne[k]əɣə	e[k]əɣə	e[k]əɣə	neŋ[g]əɣə	eŋ[g]əɣə	eŋ[g]əɣə
pSankwep	*niti	*jiti	*jiti	*nini	*jini	*jini
Nabak	n[d]i	i[d]i	i[d]i	n[d]i	in[d]i	in[d]i
pCromwell	*netki		*jetki	*nenki		*jeki
pDallman	[*netiko]	*jetiko	[*jetiko]	[*neniko]	*jeiko	[*jeiko]
Nomu	neriko	jeriko	jeriko	neniko	jeiko	jeiko
pKabwum	*netki	*jetki	*jetki	*nengi	*jeŋgi	*jeŋgi
Selepet	nitki	jitki	jitki	ningi	jingi	jingi

The reflexes of the object verb **niki* 'bite' in the Pindiu, Sankwep, and Kabwum families correspond well to each other (Table 1-69). The forms of **niko* 'bite' in the Dallman family, on the other hand, deviate in unexpected ways from the forms reconstructed to Proto-Western Huon. I tried to account for the Dallman forms in 1.3.9 (cf. Table 1-62), but here they are simply ignored. Where we find disyllabic reflexes of the singular forms, i.e. in Somba and in the Kabwum languages, the prefix vowel has been assimilated to the root vowel. For this reason, I reconstruct singular forms with umlauted prefixes, though it cannot be excluded that the assimilation happened in two or more of the daughter languages independently.

In the third person singular, the bare root *ki* appears in the paradigms of Dedua, Mongi, Tobo, and Borong (cf. Table 1-28 in 1.3.4). A matching word form can be found in

the Eastern Huon languages, namely in the object verb forms Sialum *ke* 'bite him/her/it' and Ono *ki* 'bite him/her/it', and in the invariable verbs Sene *ke* 'bite', Momare *hi* 'bite', and Wemo *ki* 'bite'. This suggests that the Pindiu languages have inherited **ki* from Proto-Huon Peninsula. Accordingly, **ki* 3SG must have existed in Proto-Western Huon. But there is also evidence for another third person singular form. Somba agrees with the Sankwep and the Kabwum languages in reflecting pWH **jiki*. Presumably, the two third person singular forms **ki* and **jiki* coexisted in Proto-Western Huon. As already adumbrated in 1.3.4, it is conceivable that the unprefixed form **ki* was used for inanimate object referents and the prefixed form **jiki* for human referents. Appealing as this hypothesis is, it remains speculative as it is not supported by a direct reflex in any of the modern languages. There is, however, a parallel in the object verb **nezu* 'tell' (cf. Table 1-71). For this object verb, the third person singular form is **ezu* 'tell him/her'. However, there is also the unprefixed form **zu* 'say' (> Dedua *de*, Tobo *zə*, Siawari *tsə*) which is used to introduce reported speech.

Table 1-70: Proto-Western Huon **netu* 'shoot'

		1SG	2SG	3SG	RECP
pWH	shoot	*netu	*getu	*jetu	
pRawlinson	shoot	*netu	*getu	*jetu	
Somba	shoot	neri	geri	eri	aŋgeri
Nabak	shoot	nele	gele	ele	
pCromwell	shoot	*neto	*geto	*jeto	
Nomu	shoot	nito	gito	joto	aito
Komba	shoot	nerʌ	gerʌ	zerʌ	

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netetu		*jetetu	*nenetu		*jeetu
pRawlinson	*netetu		*jetetu	*nenetu		*jenetu
Somba	ne[k]eri	ekeri	e[k]eri	neŋ[g]eri	eŋgeri	eŋ[g]eri
Nabak	n[d]ele	idele	i[d]ele	n[d]ele	indele	in[d]ele
pCromwell	*netVto	*jetVto	*jetVto	*nenVto	*jeVto	*jeVto
Nomu	nerito	jerito	jerito	nenito	jeito	jeito
Komba	ne[k]ʌrʌ	ze[k]ʌrʌ	ze[k]ʌrʌ	neŋ[g]ʌrʌ	zeŋ[g]ʌrʌ	zeŋ[g]ʌrʌ

In the Rawlinson family the object verb **netu* 'shoot' is only attested in Somba and Nabak, in the Cromwell family it is reflected in Komba and all three Dallman languages (Table 1-70). The reflexes in the Dallman family seem to have been contaminated with the forms of the object verb **niko* 'bite' (cf. Tables 1-62 and 1-63 in 1.3.9). For this reason, the reconstruction of the Proto-Western Huon forms relies mostly on Komba and the two Rawlinson languages. These languages agree well for the singular forms. In the light of the Komba form, the reconstruction of the third person singular form in Proto-Rawlinson is emended from **etu* to **jetu* (cf. Table 1-45 in 1.3.6) since both Somba and Nabak regularly lose word-initial **j-*. In the dual and plural, not only the Rawlinson languages but also the

Cromwell languages show an epenthetic vowel between prefix and root. I tentatively reconstruct this vowel as *-*e*-.

Table 1-71: Proto-Western Huon **nezu* 'tell'

		1SG	2SG	3SG	RECP
pWH	tell	*nezu	*gezu	*ezu	
pPindiu	tell	*nezə	*gezə	*ezə	
Dedua	tell	nede	gede	ede	
Tobo	tell	nətsə	gətsə	ətsə	imu
Siawari	tell	nətsə	gətsə	etsə	aigetsə
pDallman					
Nomu	tell	nozo	gozo	jozo	ago

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netzu		*jetzu	*nenzu		*jezu
pPindiu	*netzə	*ŋetzə	*jetzə	*nenzə	*ŋenzə	*jenzə
Dedua	neʔde	ŋeʔde -ŋuru	jeʔde -juru	nende	ŋende	jende
Tobo	nərətsə	ərətsə	ərətsə	nənətsə	ənətsə	ənətsə
Siawari	net[ke]tsə	et[ke]tsə	et[ke]tsə	neŋ[ge]tsə	eŋ[ge]tsə	eŋ[ge]tsə
pDallman						
Nomu	netso	jetso	jetso	nenzo	jezo	jezo

Reflexes of the object verb **nezu* 'tell' occur in the Pindiu languages and in Nomu (Table 1-71). In the singular forms, the prefixes of Nomu have been altered in analogy with the free pronouns *no* 'I', *go* 'you', and *jok* 'he, she'. Dedua preserves the original prefixes **ne*- 1SG, **ge*- 2SG, and **e*- 3SG. In the dual and plural, Dedua and Nomu lack a vowel between prefix and root. This is a safe indication that no such vowel must be reconstructed to Proto-Western Huon.

Table 1-72: Proto-Western Huon **niaŋ* 'cut'

		1SG	2SG	3SG	RECP
pWH	cut	*niaŋ	*giaŋ	*jaŋ	
Borong	cut	niaŋ	giaŋ	[k]iaŋ	
pDallman	cut	*niaŋ	*giaŋ	*jaŋ	
Nomu	cut	nuaŋ	guaŋ	jaŋ	auŋ
Kinalaknga	cut	niaŋ	giaŋ	jaŋ	ajaŋ[-aŋga]

	1DU	2DU	3DU	1PL	2PL	3PL
pWH	*netiaŋ		*jetiaŋ	*neniaŋ		*jeiaŋ
Borong	niriaŋ	iriaŋ	iriaŋ	niniaŋ	iŋiaŋ	iŋiaŋ
pDallman	*netaŋ	*jetaŋ	*jetaŋ	*nenaŋ	*jeaŋ	*jeaŋ
Nomu	neraŋ	jeraŋ	jeraŋ	nenaŋ	jeaŋ	jeaŋ
Kinalaknga	neraŋ	eraŋ	eraŋ	nenaŋ	eaŋ	eaŋ

The object verb **niaŋ* 'cut' is attested in one Pindiu language, Borong, and in the two Dallman languages Nomu and Kinalaknga (Table 1-72). In the first and the second person singular there is a perfect match between the forms of Borong and Kinalaknga. Nomu has altered the first vowel assimilating it to that of the free pronouns. In the third person singular, both Nomu and Kinalaknga have *jaŋ*, which is the bare root of this verb. Borong seems to have compounded this word form with *ki* 'bite him/her/it'. I take this to be an innovation. The root *-iaŋ* also occurs throughout the dual and plural in Borong, but in the Dallman languages the initial *i* is missing. Presumably, the abolition of this sound is due to cluster simplification.

1.3.11 Huon Peninsula

In this section, all 21 Huon Peninsula languages are taken into consideration although one of them, Kovai, has lost all object verbs. The following reconstructions build on those set forth in the preceding sections. An ampler selection of reflexes is given here than in the forgoing section on Proto-Western Huon because the Huon Peninsula languages as a whole are less closely interrelated and there is more variation. In fact, for the object verb 'see' (Table 1-74) the discrepancy between Eastern Huon and Western Huon languages is so great that comparative reconstruction can only recover a single form and we must resort to internal reconstruction to arrive at hypotheses about other forms of the paradigm. With the exception of the universally attested object verb 'hit' (Table 1-73), in each other case only one of the two major subgroups of the Eastern Huon family partakes in the comparison with the Western Huon languages. The object verb 'tell' (Table 1-75) is reflected in the Huon Tip family, the object verbs 'burn' and 'shoot' (Tables 1-76 and 1-77) are only attested in the Kalasa family. Altogether five object verbs can be reconstructed to Proto-Huon Peninsula.

Table 1-73: Proto-Huon Peninsula **naku* 'hit'

		1SG	2SG	3SG	RECP
pHP	hit	*naku	*gaku	*kʷa	*(j)aku
pEH	hit	*naku	*gaku	*kʷa	*jaku
pKalasa	hit	*näku	*gäku	*kpe	*jaku
Sialum	hit	nuku	guku	kpe	jaku
Ono	hit	neku	geku	gbe	jaku
pHuon Tip	hit	*nu	*gu	*kʷa	
Sene	hit	nu	gu	kpɔ	
Momare	stab	nu	gu	hwa	ju
Wamorâ	hit	nu	gu	kpa	
Wemo	hit	nu	gu	kpa	
Mape	hit	nu	gu	kpa	
pWH	hit	*nuku	*guku	*kʷe	*aku
pRawlinson	hit	*nuɣu	*guɣu	*kʷe	*aɣu
pPindiu	hit	*nuɣu	*guɣu	*kʷe	*aɣu
Dedua	hit	nu	gu	kpe	[ewe]
Borong	hit	nu	gu	kpe	ao
Somba	hit	nuŋgu	gu(ɣu)	kʷe	au
pSankwep	hit	*no	*go	*ku	*ao
Mesem	hit	no	go	ku	a[g]o
Nabak	hit	no	go	ku	au
pCromwell	hit	*nuku	*guku	*kʷe	*aku
pDallman	hit	*noku	*goku	*kpe	*aku
Nomu	hit	noku	goku	kpe	aku
Kumukio	hit	nuku	guku	kpo	aku
pKabwum	hit	*noɣo	*goɣo	*ko	*aɣo
Komba	hit	noɣ	goɣ	ko ~ ku	aɣo[-jaŋgʌ]
Timbe	hit	nuɣu	guɣu	ko	aɣu

	1DU	2DU	3DU	1PL	2PL	3PL
pHP	*natku	*ŋatku	*jatku	*nanku	*ŋaku	*jaku
pEH						
pKalasa	*netku	*ŋetku	*jetku	*nengu	*ŋeku	*jeku
Sialum	nutku	ŋutku	jutku	nungu	ŋuku	juku
Ono	ŋetku	ŋitku	etku	ŋengu	ŋingu	engu
pHuon Tip	[*nüpV]	[*ŋapV]	[*japV]	[*nübV]	[*ŋabV]	[*jabV]
Sene	nuhɔ	ŋɔhɔ	jɔhɔ	nuba	ŋaba	jaba
Momare	nopa	ŋapa	japa	noba	ŋaba	jaba
Wamorâ	nɔfe	ŋafe	jafe	nɔbe	ŋabe	jabe
Wemo	nɔfo	ŋofa	jofa	nɔpo	ŋopa	jopa
Mape	nɔpe	ŋape	jape	nɔbe	ŋabe	jabe
pWH	*netku	*ŋetku	*jetku	*nenku	*jeku	*jeku
pRawlinson	*netku	*ŋetku	*jetku	*nenku	*ŋenku	*jenku
pPindiu	*netku	*ŋetku	*jetku	*nenku	*ŋenku	*jenku
Dedua	nuru	ŋuru	juru	nunu	ŋunu	junu
Borong	nuru	uru	uru	nunu	uŋu	uŋu
Somba	netku	(j)etku	(j)etku	nengu	(j)engu	(j)engu
pSankwep	*nito	[*jito]	*jito	*nino	[*jino]	*jino
Mesem	ni[g]o	li[g]o	li[g]o	niŋ[g]o	liŋ[g]o	liŋ[g]o
Nabak	n[d]o	i[d]o	i[d]o	n[d]o	in[d]o	in[d]o
pCromwell	*netku	[*jetku]	*jetku	*nenku	[*jeku]	*jeku
pDallman	*netku	*jetku	*jetku	*nenku	*jeku	*jeku
Nomu	netku	jetku	jetku	nenku	jeku	jeku
Kumukio	netku	etku	etku	nenku	eku	eku
pKabwum	*netko	*jetko	*jetko	*nengo	*jeŋgo	*jeŋgo
Komba	nʌko	zʌko	zʌko	nʌŋgo	zʌŋgo	zʌŋgo
Timbe	netku	jetku	jetku	nengu	jeŋgu	jeŋgu

Ono is the only language that reflects the original vowel of the prefixes of the first and the second person singular of the object verb **naku* 'hit' (Table 1-73). All other Huon Peninsula languages have assimilated this vowel to the root vowel. This change happened more than once independently. I reconstruct the third person singular form **k^{w}a* with a labialized velar stop because the distribution of reflexes suggests that the shift to simultaneous labiovelar closure is an areal phenomenon that has not reached a few languages in several subgroups. The reciprocal form pHP **(j)aku* is well attested, even in some languages which otherwise have no prefixed reciprocal forms. The Huon Tip languages generally have phrasal expressions to express reciprocity, but the Momare verb *ju* 'fight' is an ancient reciprocal form of the object verb *nu* 'stab' (< 'hit'). It agrees with **jaku* in the Kalasa languages in showing initial *j-*. Such a consonant is absent in the Western Huon languages whose reflexes can be subsumed under pWH **aku* 'hit each other'. It is not clear whether the Proto-Huon Peninsula form should be reconstructed with or without initial *j-*.

In the dual and plural, the Huon Tip languages have replaced the root **-ku* with **-bV*. For this reason, no Proto-Eastern Huon forms can be reconstructed. But the forms of the Kalasa languages, containing the root **-ku*, correspond well to the Proto-Western Huon forms. The dual and plural forms are most directly reflected by Sialum, Somba, and Nomu. The first person dual forms of these languages derive straightforwardly from pHP **natku*. In the first person plural, Sialum and Somba have voiced the root initial consonant following the prefix-final nasal *-n* and only Nomu *nenku* 1PL directly continues pHP **nanku*. The initial consonant *ŋ-* of the second person non-singular has been retained in a single Western Huon language, Dedua, the other Western Huon languages have conflated the second and the third person non-singular. The Eastern Huon languages Sialum and Ono agree with Dedua in showing *ŋ-* initial prefixes in the second person dual and plural. Ono and the Rawlinson languages have extended the final *-n* of the first person plural prefix **nan-* to the second and the third person plural, thereby creating a general consonant alternation between dual and plural forms. Sialum and Nomu have resisted the trend and reflect the original prefixes **ŋa-* 2PL and **ja-* 3PL.

Table 1-74: Proto-Huon Peninsula **âak* 'see each other'

		1SG	2SG	3SG	RECP
pHP	see				*âak
pKalasa	see			*ka	*aek
Sialum	see	no	go	ka	[jo-nagu]
Ono	see	nan	gan	ka	aek
pHuon Tip	see	*naŋâ(në)	*gaŋâ(në)	*(ja-)ŋânë	
Sene	see	nɔŋɔ[-nu]	gɔŋɔ[-nu]	jɔŋɔne	
Momare	see	naŋane	gaŋane	ŋane	
Wamorâ	see	naŋona	gaŋona	ŋona	
Mape	see	naŋone	gaŋone	ŋone	
pWH	see	*nek	*gek	*ek	*aek
pRawlinson	see	*nek	*gek	*ek	*a(e)k
Tobo	see	[nən]	[gən]	[kən]	[aŋən]
Borong	see	nii	gii	ii	ai
Somba	see	nek	gek	ek	aek
Nabak	see	nik	gik	ek	ak
pCromwell	see	*nek	*gek	*ek	*a(e)k
Kinalaknga	see			ek	aek
Kumukio	see	nik	gik	ek	
Selepet	see	nek	gek	ek	[eɣ]-ak

	1DU	2DU	3DU	1PL	2PL	3PL
pHP						
pKalasa		*ŋot	*jot		*ŋo	*jo
Sialum	ut	ŋot	jot	un	ŋo	jo
Ono	ŋot	ŋut	ot	ŋon	ŋun	on
pHuon Tip	*nükâ(në)	*ŋakâ(në)	*jakâ(në)	*nüŋâ(në)	*ŋaŋâ(në)	*jaŋâ(në)
Sene	nekɔ [-nuhɔ]	ŋɔkɔ [-nuhɔ]	jɔkɔ [-nuhɔ]	neŋɔ [-nuba]	ŋɔŋɔ [-nuba]	jɔŋɔ [-nuba]
Momare	nokane	ŋakane	jakane	noŋane	ŋaŋane	jaŋane
Wamorâ	nɔhona	ŋahona	jahona	nɔŋona	ŋaŋona	jaŋona
Mape	nɔkone	ŋakone	jakone	nɔŋone	ŋaŋone	jaŋone
pWH	*netek	*ŋetek	*jetek	*nenek	*ŋeek	*jeek
pRawlinson	*netek	*ŋetek	*jetek	*nenek	*ŋenek	*jenek
Tobo	nirik	irik	irik	ninik	inik	inik
Borong	nirii	irii	irii	ninii	iŋii	iŋii
Somba	net[k]ek	(j)et[k]ek	(j)et[k]ek	nen[g]ek	(j)en[g]ek	(j)en[g]ek
Nabak	n[d]ik	[idik]	i[d]ik	n[d]ik	[indik]	in[d]ik
pCromwell	*netek	[*jetek]	*jetek	*nenek	[*jeek]	*jeek
Kinalaknga	nerik	erik	erik	nenik	eik	eik
Kumukio	nirik	irik	irik	ninik	[inik]	[inik]
Selepet	nelek	jelek	jelek	nenek	jek	jek

The only form of the paradigm of the object verb 'see' for which there is comparative evidence for a Proto-Huon Peninsula reconstruction is the reciprocal form **âak* ' see each other' (Table 1-74). This form has been retained in Ono, Somba, and Kinalaknga. The verb root in it is pHP **-ak*. The same root occurs throughout the paradigm of Proto-Western Huon whereas in Eastern Huon we find a root **ka*, which is reflected in the third person singular form of the Kalasa languages and in all forms but the third person singular of Sene. The object verb form Proto-Kalasa **ka* 'see it' has cognates in several Finisterre language families: Yau (Uruwa) *a* 'see it' (Wegmann 1996), Nek (Erap) *ka* 'see it' (Linnasalo 1995), Wantoat (Wantoat) *ka* 'see it' (Davis 2008), Yopno (Yupna) *ka ~ ko* 'see' (Reed 2000). From these reflexes we can reconstruct a third person singular form **ka* 'see it' to Proto-Finisterre-Huon. We can be sure that this form was present in Proto-Huon Peninsula as it is continued in Proto-Kalasa. It is older than the Proto-Western Huon form **ek* 'see it' which must be an analogical form abstracted from **nek* 1SG and **gek* 2SG. The latter forms appear to be old. Through internal reconstruction we can infer the same forms for Pre-Ono (cf. 49).

Ono (Wacke 1931:174ff)

49a *a-irot* 'bite each other'
a-ito 'cut each other'
a-ek 'see each other'

49b *n-irot* 'bite me' (cf. Table 1-11)
n-ito 'cut me' (cf. Table 1-14)
**n-ek* 'see me'

When we compare Ono *aek* 'see each other' with the reciprocal forms *airot* 'bite each other' and *aito* 'cut each other' (49a), we recognize that this verb form contains the reciprocal prefix *a-*. If we replace this prefix with *n-,* we get the first person singular forms *nirot* 'bite me' and *nito* 'cut me' as well as a hypothetical form **nek* for the verb 'see', which matches Proto-Western Huon **nek* 'see me'. Presumably, at an earlier stage of the language Ono had the forms **nek* 1SG and **gek* 2SG built on the same root **-ek* as the reciprocal form **aek*. If this hypothesis is correct, we can reconstruct the first and the second person singular forms **nak* 'see me' and **gak* 'see you' to Proto-Huon Peninsula. The third person singular form was pHP **ka* 'see him/her/it'. In the Western Huon family, **ka* 3SG was replaced with **ek* 3SG. In Sene, the opposite happened: The root **ka* of the third person singular was generalized to the first and the second person singular as well as all dual and plural forms. The dual and plural forms of Proto-Western Huon may be old, but as they do not match either the forms of Proto-Kalasa or Proto-Huon Tip no top-level reconstruction is possible.

Table 1-75: Proto-Huon Peninsula **nazu* 'tell'

		1SG	2SG	3SG	RECP
pHP	tell	*nazu	*gazu	*azu	
pHuon Tip	tell	*nazü	*gazü	*azü	
Sene	tell	nɔze	gɔze	[eze]	
Migabac	tell	nedo	gedo	edo	
Wamorâ	tell	nazɯ	gazɯ	[ɔzɯ]	
Mâgobineng	tell	naze	gaze	[ɔze-ʔna]	
Mape	tell	nazɯ	gazɯ	[ɔzɯ]	
pWH	tell	*nezu	*gezu	*ezu	
pPindiu	tell	*nezə	*gezə	*ezə	
Dedua	tell	nede	gede	ede	
Tobo	tell	nətsə	gətsə	ətsə	imu
Siawari	tell	nətsə	gətsə	etsə	aigetsə
pDallman					
Nomu	tell	nozo	gozo	jozo	ago

	1DU	2DU	3DU	1PL	2PL	3PL
pHP	*natzu	*ŋatzu	*jatzu	*nanzu	*ŋazu	*jazu
pHuon Tip	[*nüʔzü]	*ŋaʔzü	*jaʔzü	[*nüzü]	*ŋazü	*jazü
Sene	neze	ŋɔze	jɔze	neze	ŋɔze	jɔze
Migabac	noto	ŋeto	jeto	nodo	ŋedo	jedo
Wamorâ	nɔsɯ	ŋasɯ	jasɯ	nɔzɯ	ŋazɯ	jazɯ
Mâgobineng	nɔse	ŋase	jase	nɔze	ŋaze	jaze
Mape	nɔsɯ	ŋasɯ	jasɯ	nɔzɯ	ŋazɯ	jazɯ
pWH	*netzu	*ŋetzu	*jetzu	*nenzu	*ŋezu	*jezu
pPindiu	*netzə	*ŋetzə	*jetzə	*nenzə	*ŋenzə	*jenzə
Dedua	neʔde	ŋeʔde [-ŋuru]	jeʔde [-juru]	nende	ŋende	jende
Tobo	nərətsə	ərətsə	ərətsə	nənətsə	ənətsə	ənətsə
Siawari	net[ke]tsə	et[ke]tsə	et[ke]tsə	neŋ[ge]tsə	eŋ[ge]tsə	eŋ[ge]tsə
pDallman						
Nomu	netso	[jetso]	jetso	nenzo	[jezo]	jezo

The Huon Tip languages reflect the original vowel of the prefixes of the first and the second person singular forms of the object verb **nazu* 'tell'; the Pindiu languages, with the exception of Dedua, and Nomu have assimilated it to the root vowel (Table 1-75). In the third person singular, Sene and the Kâte-Mape dialects reflect a form **üzü* with irregular rounding of the prefix vowel (cf. 1.3.2). However, the Migabac form *edo* 3SG without such rounding matches Siawari *etsə* 3SG. I take this to be an archaism and reconstruct pHP **azu* 3SG. There may have been no reciprocal form of the root **-zu* 'tell' in Proto-Western Huon. This is suggested by the fact that both the Pindiu languages Mongi and Tobo and the Dallman language Nomu use another root to form the reciprocal 'tell each other'. The Siawari reciprocal form from the root **-zu* is a regular formation and may well be of recent origin. But note that, if the derivation of the isolated Ono object verb form *au* 'discuss with each other' from **azu* is correct, there may have been such a reciprocal form in Proto-Eastern Huon.

In the first person dual and plural, the Huon Tip languages have rounded the prefix vowel (cf. 1.3.2). In other object verbs, like pHP **naku* 'hit' (cf. Table 1-73), the Proto-Western Huon prefixes **net-* 1DU and **nen-* 1PL have correspondents in the Eastern Huon language Ono. They can therefore be safely projected to Proto-Huon Peninsula even though the forms in question of the object verb **nazu* 'tell' have not been preserved in Ono. The prefixes of the second and the third person dual and plural are well reflected in the Huon Tip languages, and the Dedua reflexes confirm the original distinction between second and third person.

Table 1-76: Proto-Huon Peninsula **naza* 'burn'

		1SG	2SG	3SG	RECP
pHP	burn	*naza	*gaza	*za	
pKalasa	burn	*naze	*gaze	*ze	
Sialum	burn	nize	gize	ze	
Ono	burn	nae	gae	ze	
pCromwell	burn	*neze	*geze	*ze	
Nomu	burn	nozi	gozi	ze	wo-agi
Kinalaknga	burn	nozi	gozi	ze	
Komba	burn	nise	gise	se	

	1DU	2DU	3DU	1PL	2PL	3PL
pHP	*natza	*ŋatza	*jatza	*nanza	*ŋaza	*jaza
pKalasa	*netzë	*ŋetzë	*etzë	*nenzë	*ŋezë	*ezë
Sialum	[itse]	ŋitse	etse	[ize]	ŋize	eze
Ono	ŋeso	ŋiso	eso	ŋezo	ŋizo	ezo
pCromwell	*netze	[*jetze]	*jetze	*nenze	[*jeze]	*jeze
Nomu	netsi	jetsi	jetsi	nenzi	jezi	jezi
Kinalaknga	nesi	esi	esi	nezi	ezi	ezi
Komba	ni[kʌ]se	zi[kʌ]se	zi[kʌ]se	niŋ[gʌ]se	ziŋ[gʌ]se	ziŋ[gʌ]se

The object verb **naza* 'burn' is only attested in five languages (Table 1-76), but most other Huon Peninsula languages retain the third person singular form **za* as an invariable verb root. The first and the second person singular forms are directly reflected by Ono and Komba. Nomu and Kinalaknga have changed the vowel of the prefixes in analogy with the free pronouns. It is not clear why Sialum has raised the prefix vowel to *i*. In the dual and plural, Ono and the Cromwell languages reflect the first person forms **natza* 1DU and **nanza* 1PL. The second person forms are only preserved in the Kalasa languages, the Cromwell languages have replaced them with the third person forms. In the third person, the Kalasa languages unexpectedly show the prefixes **et-* 3DU and **e-* 3PL. However, the expected forms **jat-* 3DU and **ja-* 3PL are reflected in other verbs, like **nazu* 'tell' (cf. Table 1-75), in the Huon Tip subfamily of the Eastern Huon family. For this reason, we can project the Proto-Cromwell prefixes **jet-* 3DU and **je-* 3PL to Proto-Huon Peninsula.

Table 1-77: Proto-Huon Peninsula **natu* 'shoot'

		1SG	2SG	3SG	RECP
pHP	shoot	*natu	*gatu	*jatu	
Ono	shoot	nato	gato	jato	
pWH	shoot	*netu	*getu	*jetu	
pRawlinson	shoot	*netu	*getu	*jetu	
Somba	shoot	neri	geri	eri	aŋgeri
Nabak	shoot	nele	gele	ele	
pCromwell	shoot	*neto	*geto	*jeto	
Nomu	shoot	nito	gito	joto	aito
Komba	shoot	nerʌ	gerʌ	zerʌ	

	1DU	2DU	3DU	1PL	2PL	3PL
pHP						
Ono	ŋekotat	ŋikotat	ekotat	ŋegotat	ŋigotat	egotat
pWH	*netetu	*ŋetetu	*jetetu	*nenetu	*ŋeetu	*jeetu
pRawlinson	*netetu	*ŋetetu	*jetetu	*nenetu	*ŋenetu	*jenetu
Somba	ne[k]eri	e[k]eri	e[k]eri	neŋ[g]eri	eŋ[g]eri	eŋ[g]eri
Nabak	n[d]ele	[idele]	i[d]ele	n[d]ele	[indele]	in[d]ele
pCromwell	*netVto	[*jetVto]	*jetVto	*nenVto	[*jeVto]	*jeVto
Nomu	nerito	jerito	jerito	nenito	jeito	jeito
Komba	ne[k]ʌrʌ	ze[k]ʌrʌ	ze[k]ʌrʌ	neŋ[g]ʌrʌ	zeŋ[g]ʌrʌ	zeŋ[g]ʌrʌ

The singular forms of the object verb **natu* 'shoot' are best preserved in Ono and Komba (Table 1-77). These two languages bear witness to the third person singular prefix **ja-* . In the dual and plural, Ono has the suppletive root *-kotat ~ -gotat* whereas the Western Huon languages show the root **-etu*, an enlarged version of the singular root **-tu*. For this reason, no Proto-Huon Peninsula reconstruction is possible. The object verb pHP **natu* 'shoot' is probably cognate with Proto-Finisterre **nut* 'hit' (Suter 2012:40).

1.4 Conclusion

The Huon Peninsula languages have a small closed class of verbs taking prefixes that index the person and number of their object referent. Between five and 22 such object verbs have been recorded for individual languages. The concepts that recur most often across the family are 'give', 'hit', and 'see'. Most transitive verbs cannot take object-indexing prefixes and instead use a suffixed auxiliary that is homonymous with an object verb. The etymology of these object-indexing suffixes differs from subfamily to subfamily so that there is no agreement across the Huon Peninsula family. They variously derive from object verbs meaning 'give' (Pindiu, Dallman, Kabwum), 'hit' (Huon Tip, Kabwum), 'see' (Kalasa, Kabwum), or 'leave' (Sankwep). The Kabwum languages have more than one set of object-indexing suffixes. It is evident that the present-day object-indexing suffixes came into being after the separation of the Huon Peninsula family into several subfamilies. Proto-Huon

Peninsula may well have lacked such a construction. Given that the number of object verbs in contemporary languages is in decline, as revealed by the early record of Pilhofer (1928), it is likely that Proto-Huon Peninsula had a larger set of object verbs than any of today's daughter languages. The object-indexing suffixes of Kovai, which has lost all object verbs, go back to the free personal pronouns. This can be interpreted as a residue of an earlier stage in the development of the Huon Peninsula languages in which transitive verbs that could not take object-indexing prefixes co-occurred with free personal pronouns in object function. The object-indexing suffixes of the peninsular languages would then be a parallel development, a result of drift propelled by language contact.

There is another construction that arose through the grammaticalization of an object verb. All Huon Peninsula languages, with the exception of Kovai, have benefactive verb forms in which an object verb serves as a beneficiary-indexing auxiliary. In the great majority of the languages the object verb grammaticalized has the meaning 'give', but in the Sankwep languages Mesem and Nabak it has the meaning 'leave'. In the Pindiu, the Dallman, and the Kabwum languages the object verb 'give' serves as a benefactive auxiliary as well as indexing object referents. Likewise, the object verb 'leave' in the Sankwep languages has both these functions. The object-indexing function has no doubt developed from the beneficiary-indexing function. Hence, there is a path of development leading from the verbs 'give' and 'leave' to object indexation in which benefaction is an intermediate stage. Unfortunately, no intermediate stage has been observed in the development of the object verbs meaning 'hit' and 'see' to object-indexing suffixes in the Kalasa, Huon Tip, and Kabwum languages. My best guess is that these constructions had a lexical origin, starting out with a small number of verbs and then being generalized.

Five object verbs can be completely or partially reconstructed to Proto-Huon Peninsula: **naku* 'hit', **nak* 'see', **nazu* 'tell', **naza* 'burn', and **natu* 'shoot'. Another ancient object verb is Proto-Western Huon **niki* 'bite', which has cognates in Finisterre languages (Suter 2012:32). Up to twenty further object verbs can be reconstructed for lower level families, among them three etymologically different object verbs meaning 'give', but they lack cognates outside their subfamily. Suppletion is often observed in object verbs, but seems in most cases to be a relatively recent innovation. The most frequent version is suppletion between the third person singular form and all other forms of the paradigm, e.g. Proto-Kalasa **ki ~ *-dët* 'bite', Dedua *ze ~ -ho* 'burn', Nomu *mo ~ -go* 'take'. In the first two of these examples, the third person singular form reflects the verb root that was originally found throughout the paradigm and the root of the other forms is a later intrusion. The Kalasa family is most prone to suppletion, less is encountered in the Western Huon subfamilies.

The object verbs are extraordinarily resistant to borrowing. No case of borrowing of any of these lexical items or one of its forms has been observed. The only case of matter borrowing that I am aware of concerns an object-indexing suffix, Migabac *-nagu* (McEvoy 2008:36). This suffix has been borrowed from Ono and has in both languages a reflexive function if the subject of the verb is in the singular and a reciprocal function if it is in the dual or plural. Dedua shows a case of pattern borrowing, again in the object-indexing suffixes. The four other Pindiu languages use the object verb 'give' both as a benefactive and an object marker. In Dedua, the verb 'give' is only used to index beneficiaries and the verb 'hit' is used to index objects, much like in neighboring Huon Tip languages such as Wamorâ. That the

forms of the object-indexing suffixes have not been borrowed can be seen if we compare the Dedua first person forms *-nu* 1SG, *-nuru* 1DU, *-nunu* 1PL with the corresponding Wamorâ forms *-nu* 1SG, *-nɔfe* 1DU, *-nɔbe* 1PL. The dual and plural forms of Dedua are not cognate with the Wamorâ forms but rather with the corresponding forms of the object verb 'hit' in the other Pindiu languages. Remarkably, the reciprocal form *-eme* of the Dedua object-indexing paradigm is identical with that of the benefactive paradigm and belongs etymologically to the verb *neŋ* 'give'. This is a telltale sign of the former identity of the object and the benefactive suffix paradigms in Dedua, as in the other Pindiu languages. The reciprocal suffix is a retention while the object-indexing forms going back to the verb 'hit' are innovative and have been calqued on those of the Huon Tip languages.

Another case of calquing is found in the phrasal reciprocal forms of Borong. The Pindiu languages have generally preserved prefixed reciprocal forms for all or many of their object verbs. The one exeption is Borong. Borong has introduced phrasal reciprocal forms that combine the forms of the first and the second person singular, e.g. *nizena gizemaŋa* 'you tell me and I tell you'. This construction is an obvious imitation of the phrasal reciprocal forms found in the Huon Tip languages, e.g. Mape *nazɯʔ gazɯŋ e* 'tell each other'. Finally, there is a conspicuous parallel innovation in the dual and plural forms of some object verbs in Somba-Siawari and Komba. Both languages have replaced the final consonant of the first person dual and plural prefixes with a consonant cluster containing a velar stop: **ᵒt-* 1DU ⇒ **ᵒtk-* > **ᵒk-* and **ᵒn-* 1PL ⇒ **ᵒng-* > *ᵒŋg-*, cf. Somba *nekeri* 1DU, *neŋgeri* 1PL, Komba *nekʌrʌ* 1DU, *neŋgʌrʌ* 1PL ⇐ pWH **netetu* 'shoot us two', **nenetu* 'shoot us all'. The analogical model for this transformation was object verbs whose root begins with a velar stop, such as pWH **neŋgi* 'give' and **nuku* 'hit'. While the transformation certainly did not happen in the common ancestor of Somba-Siawari and Komba, it is doubtful whether it happened independently in the two languages. The more far-reaching and therefore probably earlier change in Somba-Siawari may have triggered the parallel development in Komba, assuming that there was a sufficient number of bilingual speakers.[4]

[4] McElhanon (1970f:218) reports that "The people living in the upper villages of languages K [Somba] and Q [Komba] have considerable contact and intermarriage."

2 Pronouns

2.1 Introduction

Pronouns are among the diachronically most stable items in languages all over the world and the Huon Peninsula languages are no exception. Most of the Huon Peninsula personal pronouns go back to the pronouns that have been postulated for Proto-Trans New Guinea (Ross 2005). Several demonstratives can be reconstructed to Proto-Finisterre-Huon as the cognates extend from the Huon Peninsula family to Western Finisterre subfamilies. Only the interrogatives step partly out of line. Only one interrogative pronoun can be safely reconstructed to Proto-Huon Peninsula. In 2.2, these different pronouns will be studied and reconstructions proposed. But before I embark on a comparison of specific sets of pronouns I want to give a brief preview of the types of pronouns to be found in the Huon Peninsula languages.

Komba (Southwell 1979:34, 38, 18)

1 *Gʌ nen sot ʌrʌndʌŋ ku-nat.*
2s 1p COM together 3s:OBJ.hit-F.FUT:1p
'You will dance together with us.'

2 *Gikʌ go-bi.*
2s:EMPH 2s:OBJ.hit-F.FUT:3p
'You are the one that they will strike.'

3 *ʌtʌ-zat-nʌ*
older.brother-DU-1s:POSS
'my two older brothers'

In the previous chapter, the pronominal object prefixes of object verbs (like *go* 'hit you' in 2) were introduced and reconstructed along with the verb stems. In 2.2.1 I will gather the different sets of Proto-Huon Peninsula object prefixes to facilitate the comparison with the personal pronouns reconstructed in 2.2.2. The Huon Peninsula languages are "pro-drop" languages, i.e. personal pronouns such as *gʌ* 'you' and *nen* 'we' in (1) are not obligatorily present in subject or object function but are only used when the context requires an overt pronoun. The basic personal pronouns are reconstructed in 2.2.2. Beside the basic set of personal pronouns, all Huon Peninsula languages except Kovai have in addition emphatic personal pronouns like *gikʌ* 'yourself' in (2). An attempt is made to reconstruct a set of singular emphatic pronouns in 2.2.5. The emphatic pronouns of the Huon Tip languages (2.2.4) and the ergative pronouns of the Trans-Vitiaz languages (2.2.3) must be studied separately as they stand alone in the Huon Peninsula family. To refer to the possessor of a noun, all Huon Peninsula languages have a set of pronominal possessive suffixes such as *-nʌ* 'my' in (3). The possessive suffixes of the Eastern Huon and the Western Huon languages are reconstructed in 2.2.6. There are number suffixes for dual and plural number, such as *-zat* DU in (3), which are usually used in combination with the possessive suffixes. They are compared in 2.2.7.

Mongi (Lee and Lee 1993:88, 93)

4	*Iʔ*	*i-mi*	*eri*	*naŋ-tsaʔ.*
	man	that-SPEC	over.there	stand-PRS:3s
	'The man is standing over there.'			

5	*I-mu-huʔ*	*zə-tsua.*
	that-SPEC-like	say-PRS:1s
	'I said like that.'	

There are three sets of demonstrative pronouns in most Huon Peninsula languages. All languages have basic demonstratives like *imi* 'that' in (4). A majority of the languages only distinguish between a proximal and a distal demonstrative, such as Selepet *ju* 'this' and *ja* 'that'. But Kâte, like other Huon Tip languages, has three demonstratives that are correlated with the three grammatical persons: *zi* 'this (near the speaker)', *i* 'that (near the hearer)', *oʔni* 'that (away from both speaker and hearer)'. The second set of demonstratives are elevationals like *eri* 'over there' in (4). Huon Peninsula languages typically have three elevational demonstratives for 'up', 'down' and 'across'. Some languages, like Selepet, combine the elevationals with the proximal-distal opposition: *endu* 'this over there', *enda* 'that over there'. The Huon Peninsula languages further have a set of manner demonstratives such as *imuhuʔ* 'like that' in (5), which are used to introduce reported speech. The demonstratives that lend themselves to reconstruction are dealt with in 2.2.8.

Kovai (Brown 1992:49, 48)

6	*Gog*	*ziŋ-og*	*neg?*
	2s	name-2s:POSS	who?
	'What is your name?'		

7	*Ai*	*ŋozug*	*u-pe?*
	person	how.many?	come-PST:3p
	'How many people came?'		

The Huon Peninsula languages generally have interrogative words for 'who?', 'what?', 'why?', 'where?', 'which?', 'how?' and 'how many?'. The interrogative for 'how many?' is often a monomorphemic word, like *ŋozug* in (7). To ask for somebody's name, the interrogative for 'who?' is used in Kobai (6) as well as other Trans-Vitiaz languages. The few reconstructible interrogative pronouns are discussed in 2.2.9.

2.2 Reconstruction

In this section the different kinds of pronouns to be found in the Huon Peninsula languages are reconstructed. In the tables presenting the reflexes and the reconstructions the same conventions are followed as in the chapter on object verbs (cf. 1.3). The results are summarized in 2.3.

2.2.1 Pronominal object prefixes

In Chapter 1, the inflectional forms of the closed class of verbs with pronominal object prefixes were reconstructed. Although these stem forms often show signs of fusion in the contemporary languages, the forms that can be reconstructed to Proto-Huon Peninsula turned out to be agglutinative so that the pronominal object prefixes can be neatly separated from the verb roots. Table 2-1 gathers the object prefixes that can be extracted from different Proto-Huon Peninsula and Proto-Western Huon object verbs.

Table 2-1: Proto-Huon Peninsula and Proto-Western Huon pronominal object prefixes

		1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL	Table
pHP	'hit'	*na-	*ga-	*Ø	*nat-	*ŋat-	*jat-	*nan-	*ŋa-	*ja-	1-73
pHP	'tell'	*na-	*ga-	*a-	*nat-	*ŋat-	*jat-	*nan-	*ŋa-	*ja-	1-75
pHP	'shoot'	*na-	*ga-	*ja-							1-77
pWH	'bite'	*ni-	*gi-	*ji-, *Ø	*net-		*jet-	*nen-		*je-	1-69
pWH	'give'	*ne-	*ge-	*wa-	*net-		*jet-	*nen-		*je-	1-65

The Proto-Huon Peninsula object prefixes for all person-number combinations except the third person singular agree among the different object verbs (Table 2-1). The first person forms all begin with the consonant *n*. To the first person singular form **na-* 'me' a final *-t* is added in the dual and a final *-n* in the plural: **nat-* 'us two' and **nan-* 'us all'. The second person forms do not all begin with the same consonant. The singular prefix **ga-* 'you' starts with a prenasalized velar stop, but in the dual and plural the initial consonant is a velar nasal: **ŋat-* 'you two' and **ŋa-* 'you all'. The second person dual prefix ends in *-t* like the first person dual prefix, but in the second person plural there is no final *-n* as in the first person plural. The third person dual and plural forms follow the pattern of the second person forms: **jat-* 'them two' and **ja-* 'them all' have the sound shapes *Cat* and *Ca* like the second person forms. Their characteristic consonant *j* recurs in one of the third person singular forms, **ja-* 'him, her' in pHP 'shoot'. Although the system of reconstructions suggests that the third person singular and the third person plural were homonymous in verbs taking the alternant **ja-* in the third person singular, it must be said that no such homonymy can be observed in any of the contemporary languages. In fact, no dual and plural forms can be reconstructed for pHP **natu* 'shoot' and in Proto-Western Huon there seems to have been an opposition between **je-tu* 3SG and **je-etu* 3PL (cf. Table 1-77 in 1.3.11).

In the third person singular, different object verbs show different prefixes. Altogether four prefixes are found: pHP **Ø, *a-, *ja-* and pWH **wa-* (Table 2-1). The three forms with a phonological exponence correspond to the Proto-Trans New Guinea personal pronoun forms reconstructed by Ross (2005:29). The coexistence of these different third person singular forms in Proto-Huon Peninsula at first sight supports Ross's conjecture that all three of them must be postulated for Proto-Trans-New Guinea. A closer examination of them suggests, however, that they have different historical origins.

The prefix **a-* has been found in the verb form pHP **a-zu* 'tell him/her'. It is a partial zero form; compared to the first and the second person singular forms **na-* and **ga-* it lacks an

initial consonant. Such a subtractive third person singular form can easily be derived from the first and the second person singular forms. In the history of the Huon Peninsula languages this happened in the case of the object verb 'see'. The Western Huon languages replaced Proto-Finisterre-Huon **ka* 'see him/her/it' with pWH **e-k* 'see him/her/it', built by analogy with **ne-k* 'see me' and **ge-k* 'see you' (cf. Table 1-74 in 1.3.11). The prefix **a-* may well have arisen in this manner several times independently in different Trans-New Guinea subfamilies and need not be projected back to Proto-Trans-New Guinea.

An object prefix **ja-* is reflected by the third person singular form of the verbs pHP **ja-tu* 'shoot him/her/it' and pWH **ji-ki* 'bite him/her/it' and in general for the third person plural of Proto-Huon Peninsula object verbs (see Table 2-1). Ross (2005:29) reconstructs a pronoun pTNG **ja* only for the third person singular. His proposal of pTNG **i* 'they' for the third person plural is in line with the other plural forms **ni* 'we' and **ŋgi* 'you all' but is only weakly supported by comparative evidence. There is at least as good comparative evidence for a pronominal form pTNG **ja* 'they' (with or without a suffix marking plural). An explanation for the appearance of the same form **ja* in the third person singular and plural is the hypothesis that these personal pronoun forms had a demonstrative origin. Indeed, in the Huon Peninsula family there is scattered evidence for a basic demonstrative pHP **ja* 'that' (cf. Table 2-11 in 2.2.8).

The prefix pWH **wa-* is a relic form in the Huon Peninsula family. It only occurs in the Proto-Western Huon object verb **wa-ŋgi* 'give him/her'. But this third person singular prefix has cognates in Trans-New Guinea languages spread from one end of the island of New Guinea to the other (Suter 2012). There is not much evidence for pTNG **wa* 'he, she' among the free pronouns of the Trans-New Guinea languages, but several widely separated languages have a prefix **wa-* 'him, her' on one of their object verbs. It is likely that the verbal prefixes are archaic and reflect an earlier stage than the free pronouns. Given that the pronominal object prefixes probably go back to proclitic personal pronouns, **wa* has a good chance to be the earliest form of the Proto-Trans-New Guinea personal pronoun of the third person singular.

There remains one form in the object prefix paradigm of many Huon Peninsula languages that has not been discussed so far: the reciprocal form. Only some Western Huon languages such as Tobo, Somba-Siawari, Nomu, and Selepet have prefixed reciprocal forms for most object verbs. In the other languages, a reciprocal form is only attested for a minority of the object verbs. The Huon Tip languages have abandoned prefixation and use a phrasal construction that has the form of a rhyming jingle to express reciprocity, e.g. Kâte *nareŋ gareŋ e* 'give each other, exchange' from *nare* 'give'.

8	pHP	**ka* 'see him/her/it',		**â-ak* 'see each other'
9	pEH	**git* 'copulate with him/her',		**ja-ŋgit* 'copulate with e. o.'
10	pEH	**k^{w}a* 'hit him/her/it',		**ja-ku* 'hit each other'
11	pWH	**k^{w}e* 'hit him/her/it',	**je-ku* 'hit them',	**a-ku* 'hit each other'
12	pWH		**je-kul* 'call them',	**a-kul* 'call each other'
13	pCro.	**wa-ŋgi* 'give him/her',	**je-ŋgi* 'give them',	**a-ŋgi* 'give each other'

Some reciprocal forms reconstructed in the previous chapter (see 1.3) are given in (8) through (13), together with the third person singular and the third person plural forms of the respective object verb. Only one reciprocal form can be reconstructed to Proto-Huon Peninsula: *â-ak* 'see each other' (8). The reciprocal prefix pHP **â-* > pWH **a-* of this form recurs in other object verbs in the Western Huon family, for instance, pWH **a-ku* 'hit each other' (11), pWH **a-kul* 'call each other' (12), and Proto-Cromwell **a-ŋgi* 'give each other' (13). It is also found in two further object verbs in the Eastern Huon language Ono, namely, *a-irot* 'bite each other' and *a-ito* 'cut each other'. A reciprocal prefix **â-* can therefore be safely postulated for Proto-Huon Peninsula. Surprisingly, the reciprocal form of the object verb pHP **naku* 'hit' in the Eastern Huon family is **ja-ku* (10), mismatching pWH **a-ku* (11). The same reciprocal prefix recurs in pEH **ja-ŋgit* 'copulate with each other' (9). One may suspect that the Eastern Huon reciprocal prefix **ja-* derives from the Proto-Huon Peninsula third person plural prefix **ja-*. While this prefix is preserved as such in the Huon Tip subfamily, it irregularly turned into **e-* 3PL in the Kalasa subfamily. Further changes have differentiated Sialum *uku* 'hit them' and Ono *engu* 'hit them' (< Proto-Kalasa **eku*) from *jaku* 'hit each other'.

2.2.2 Basic personal pronouns

All Huon Peninsula languages have personal pronouns for first, second, and third person in the three numbers singular, dual, and plural. Some Huon Tip languages and some neighboring Pindiu languages differentiate between inclusive and exclusive forms in the first person dual and plural. This is a recent innovation that was no doubt introduced as a result of language contact with Austronesian languages of the North New Guinea cluster. In general, the exclusive forms are the inherited first person non-singular forms while the inclusive forms are taken from a paradigm of emphatic pronouns. Thus, the Kâte exclusive forms *nəhe* 'I and he/she' and *nəŋe* 'I and they' are inherited from proto Huon Tip **nükë* 'we two' and **nüŋë* 'we all'. The inclusive forms *nəhəʔ* 'I and you alone' and *nəŋəʔ* 'I and you all', on the other hand, are the emphatic pronouns *nəhəʔ* 'we two ourselves' and *nəŋəʔ* 'we all ourselves' doing double duty as inclusive basic personal pronouns. In discourse, the emphatic pronouns usually co-occur with the corresponding basic pronoun, e.g. *nəhe nəhəʔ* 'we two ourselves', and there is no inclusive-exclusive distinction in this paradigm. In Momare, too, the inclusive pronouns *nokileʔ* 'I and you alone' and *noŋineŋ* 'I and you all' are taken from an emphatic set of pronouns (cf. Appendix B). The same situation is found in Dedua, where the exclusive pronouns *neri* and *neni* go back to Proto-Pindiu **nete* 'we two' and **nene* 'we all' while the inclusive pronouns *neraŋ* and *nenaŋ* are identical with the first person dual and plural forms of a possessive-emphatic set of pronouns. The external origin of the first person non-singular inclusive pronouns is still transparent in the contemporary Huon Tip and Pindiu languages that have them. They are recent intrusions into the paradigm of basic personal pronouns. Other pronoun sets in these languages, such as the emphatic pronouns or the possessive suffixes, do not differentiate between inclusive and exclusive forms.

Table 2-2: Proto-Huon Peninsula singular personal pronouns

	1SG	1SG	2SG	2SG	3SG	3SG
pHP	*na		*ga		*ja	
pEH	*na		*ga		*ja[(ŋa)]	
pKalasa	*na		*gä		*jäŋä	
Sialum	na		ga		jaŋa	
Ono	na	no-ŋo ERG	ge	go-ŋo ERG	eŋe	oŋo ERG
Kovai	no[n]	-n OBJ	go[g]	-g OBJ	[i]	-j OBJ
pHuon Tip	*nâ		*gâ		*ja, *jüŋë	
Sene	na		ga		[ɔe]	
Migabac	na		ga		je	jehuʔ EMPH
Momare	na[ne]		ga		e	jahaʔ EMPH
Wamorâ	no		go		juŋɔ	
Mâgobineng	no		go		e	jɔheʔ EMPH
Wemo	no		go		e	jahaʔ EMPH
Naga	no[ŋ]		go		jɔŋa	
Mape	no[ŋ]	no-i ERG	go	go-i ERG	iŋɔ	
pWH	*ne		*ge		*je, [*juk]	
pPindiu	*ne		*ge		*je	
Dedua	ni	ne-ŋ ERG	ge	ge-ŋ ERG	je	
Mongi	ni	ne-ŋ ERG	gi	ge-ŋ ERG	i	
Tobo	ni	ne-n ERG	gi	ge-n ERG	i	
Borong	nii	ni-wo COM	gii	gi-wo COM	ii	i-wo COM
Somba	ni	nə-ŋən ERG	gi	gə-ŋən ERG	i	ja-ŋən ERG
pSankwep	[*nüŋ]		[*güŋ]		*jük	
Mesem	nə		gə̃		lə	
Nabak	neŋ	nɔ-gɔt GEN	geŋ	gɔ-gɔt GEN	ek	
pCromwell	[*no]		[*go]		*jok	
Nomu	no		go		jok	
Kinalaknga	no		go		jok	
Kumukio		no-ŋgot GEN		go-ɣot GEN	jok	
Komba	nʌ		gʌ		zʌk	
Selepet	nɔ		gɔ		jɔk	
Timbe	nɔ		gɔ		jɔk	

In Tables 2-2 to 2-4 the basic personal pronouns of the Huon Peninsula languages are presented along with reconstructions for various interstages as well as the top level. A table is devoted to each of the three numbers: singular, dual, and plural. Forms that are enclosed in square brackets cannot be directly derived from the superordinate reconstruction. They may have undergone some phonologically irregular development or analogical change or be

entirely unrelated. Unrelated accretions to an inherited pronoun are also enclosed in square brackets. Variable parts of a reflex or a reconstruction are enclosed in parentheses. There are two columns for every person-number combination. In the first, the basic pronoun forms without any bound morphemes attached are given. In the second, combinations with case enclitics are given in which the pronoun deviates in an interesting way from the basic form.

Table 2-2 gathers the three singular pronouns. A look across the table at the pronouns of the first and the second person singular shows that they have identical vowels in all languages except Ono. For this reason, I reconstruct pHP **na* 'I' and **ga* 'you' with the same vowel. It is not clear to me why the Ono reflexes *na* 'I' and *ge* 'you' have different vowels. The phonological developments leading to the Ono vowels *a* and *e* are still imperfectly understood.

The Kovai free basic pronouns *non* 'I' and *gog* 'you' are cognate with the ergative forms of the Huon Tip languages such as Migabac *nani* 'I-ERG' and *gagi* 'you-ERG' (see Table 2-5 in 2.2.3). Kovai has given up the ergative case but has retained the former first and second person singular ergative forms, which replaced the unsuffixed pronouns **na* 'I' and **ga* 'you' as free subject pronouns. Direct reflexes of **na* and **ga* can probably be found in the object suffixes *-n* and *-g*. The first person singular form *noŋ* of Naga and Mape most likely also goes back to the ergative form Proto-Huon Tip **nâni*. In the Mape dialects, the ergative forms of the personal pronouns end in *-i* (cf. Table 2-5). The final *-i* was subtracted from **noni* 'I-ERG' to derive the basic pronominal form, just like the subtraction of *-i* from *goi* 'you-ERG' yields *go* 'you'. The result is *noŋ*, a form ending in a velar nasal, the only nasal permitted in syllable final position. The Momare first person singular form *nane* also has its second syllable from the ergative form *nani*. The new basic form *nane* stands in the same relationship to *nani* as the basic first person dual and plural forms *noke* and *noŋe* to the respective ergative forms *noki* and *noŋi*.

The reconstructions pHP **na* 'I' and **ga* 'you' are based on the reflexes in the Eastern Huon languages as well as those of the Pindiu subfamily of the Western Huon family. The other Western Huon languages show an irregular phonological development. The first and the second person singular pronouns of the Sankwep, Dallman, and Kabwum languages point to **nu* and **gu* rather than **na* and **ga*. The unexpected vowel quality of these pronouns has a syntagmatic explanation. The vowel of the ergative enclitic pHP **-ŋu* exerted an assimilatory influence on the preceding personal pronouns of the first and the second person singular having a CV phonological shape. The Proto-Western Huon ergative pronouns **ne-ŋu* and **ge-ŋu* thus became **nu-ŋu* and **gu-ŋu*. The root vocalism **u* was then transferred to the basic pronoun forms so that **ne* and **ge* were supplanted by **nu* and **gu*. The presence of the vowel **u* in another frequently occurring case enclitic, the genitive pWH **-gut*, may have reinforced this development. The initial part of this scenario has a parallel in Ono, where the singular pronouns copied the vowel of the ergative enclitic, compare *no-ŋo* 'I-ERG' and *go-ŋo* 'you-ERG' with *na* 'I' and ge 'you'. However, in Ono the vocalism of the ergative pronouns was not transferred to the basic pronouns, which remained unchanged. The assimilation in Ono happened independently and it must be assumed that the developments in the Western Huon languages also happened at least twice independently, namely in Proto-Sankwep and in Proto-Cromwell (i.e. the family encompassing the Dallman and the Kabwum languages). In the Cromwell languages the vowel change ran its full course, for the Sankwep languages this is

not clear. The contemporary first and second person singular basic pronouns of Mesem and Nabak go back to earlier ergative forms (e.g. Mesem *gə̃* 'you', Nabak *geŋ* 'you' < **güŋ* < **gu-ŋu*) and there is no ergative-absolutive distinction. However, in McElhanon's Nabak data from 1967 a distinction between a basic pronoun *ge* 'you' (< **gü*) and an ergative form *geŋ* 'you' is recorded. If this record is reliable, the changed vowel was transferred to the unsuffixed pronouns in Nabak, too.

The Pindiu family is the only Western Huon subfamily that directly reflects the Proto-Huon Peninsula third person singular pronoun **ja* 'he, she' (> Proto-Pindiu **je*). The other subfamilies show a deviant form pWH **juk*. It seems that **je* and **juk* coexisted in Proto-Western Huon, though they do not co-occur in the record of any of the daughter languages. This makes it likely that the fuller form **juk* was once a modified variant of **je*. An attractive etymological possibility is the analysis of **juk* as originally made up of the inherited pronoun **je* suffixed with the focus particle pWH **-uk* 'only' (> Somba *-ək*, Komba *-ʌk*, Selepet *-ək*, Timbe *-ək*). The focus meaning of **juk* (< **je-uk*) 'only he, only she' must have faded over time in the Sankwep and the Cromwell families and the fuller form **juk* 'he, she' (> Nabak *ek*, Nomu *jok*, Selepet *jək*) eventually ousted the older form **je* 'he, she'. In the Pindiu family, the composite pronoun **juk* was lost.

The third person singular pronoun Proto-Pindiu **je* 'he, she' has been retained unchanged in Dedua *je* and contracted in Mongi, Tobo, Borong, and Somba *i* < **ji* < **je*. In Somba, the third person singular pronoun *i* has the alternant *ja-* in combination with case enclitics, e.g. *ja-ŋən* 's/he-ERG' or *ja-ŋgət* 's/he-GEN'. The corresponding first and second person singular forms show the root vowel *ə*, e.g. *nə-ŋən* 'I-ERG' and *nə-ŋgət* 'I-GEN'. Here, too, the vowel of the case enclitic has assimilated the root vowel of the pronoun (*nə-ŋgət* < **nu-ŋgut* < **ne-ŋgut*). In the third person singular form, the expected vowel *ə* was lowered to *a* (**je-ŋgut* > **ju-ŋgut* > **jə-ŋgət* > *ja-ŋgət*). The allomorph *ja-* in Somba is welcome evidence that the third person singular pronoun *i* ~ *ja-* indeed goes back to Proto-Pindiu **je*.

In the Eastern Huon family there is a remarkable near match between Proto-Kalasa *jäŋä* 'he, she' and a form **jüŋë* 'he, she' that captures the reflexes in the Huon Tip languages Wamorâ, Naga, and Mape. The appearance of the vowel quality **ü* in the third person singular form **jüŋë* brings to mind some object verbs. The Huon Tip languages in question have a third person singular object prefix **ü-* beside the first and second person singular forms **na-* and **ga-*, e.g. Naga *na-le* 'give me' versus *ɔ-te* 'give him/her' < **ü-tâ*, *na-zɔ* 'tell me' versus *ɔ-zɔ* 'tell him/her' < **ü-zü*. In the free pronoun, the back rounded vowel quality of the initial syllable of the third person singular form is all that distinguishes it from the third person plural form, cf. Naga *jɔŋa* 'he, she' versus *jaŋa* 'they. It looks therefore as if the languages in question have introduced an ablaut in the third person singular to differentiate it from the third person plural. We are led to conclude that the sound shape of Proto-Kalasa *jäŋä* is older than that of Proto-Huon Tip **jüŋë* and, in fact, that both forms go back to Proto-Eastern Huon **jaŋa* 'he, she'.

Momare and the Kâte dialects Mâgobineng and Wemo have a third person singular form *e* 'he, she'. At first sight the Ono ergative form *o-ŋo* < **e-ŋo* seems to correspond. On second thought, however, it appears to be more likely that Ono *oŋo* is the result of a haplological shortening of the regular pronoun *eŋe* 'he, she' appended with the ergative enclitic *-ŋo*: **eŋeŋo* > **eŋo* > *oŋo*. Momare, Mâgobineng, and Wemo *e* may be derived from pEH **ja* 'he, she' under the assumption that its vowel was assimilated to the preceding palatal

glide and then that glide was lost: **ja* > **je* > *e*. This is not, however, a regular phonetic development as can be seen from the third person dual and plural pronouns Wemo *jahe* 'they two' and *jaŋe* 'they all'. Migabac *je* 'he, she' seems to preserve the intermediate step in this development, but the neighboring Western Huon language Dedua, from which Migabac has borrowed extensively, also has *je* 'he, she'. The possibility of a derivation of *e* from **ja* gains in likelihood by the fact that Momare, Mâgobineng and Wemo preserve a clear reflex of pEH **ja* 'he, she' in their emphatic pronouns (see Table 2-6 in 2.2.4), compare Momare *ja-haʔ* 'himself, herself' (< **jâ-kaʔ*), Mâgobineng *jɔ-heʔ* 'himself, herself', and Wemo *ja-haʔ* 'himself, herself' (both < **jü-kaʔ* < **jâ-kaʔ*) with Momare *na-haʔ* 'myself', Mâgobineng *na-heʔ* 'myself' and Wemo *na-haʔ* 'myself' (all < **na-kaʔ*). The irregular phonetic change **ja* > *e* therefore only applied to the monosyllabic basic personal pronoun but did not affect the emphatic pronoun, presumably because the latter bore a heavy stress on the first syllable in discourse.

The Kovai object suffix alternant *-j* 'him, her' may be a reflex of pEH **ja* 'he, she' whereas the free pronoun *i* 'he, she' seems to go back to a demonstrative. The Proto-Kalasa form **jäŋä* 'he, she' matches pEH **ja* in the first two phonemes, but contains the extra syllable *-ŋä*. The Huon Tip languages, as we have seen, reflect both of these forms: Migabac, Momare, Mâgobineng, and Wemo reflect **ja*, Wamorâ, Naga, and Mape reflect **jüŋë* < **jaŋa*. For this reason, we must reconstruct both **ja* and **jaŋa* to Proto-Eastern Huon. The longer form **jaŋa* is an erstwhile emphatic pronoun that lost its emphatic semantic component and came to compete with the original third person singular basic pronoun pHP **ja* (cf. Table 2-7 in 2.2.5). These emphatic pronouns were made up of the basic personal pronoun plus the corresponding possessive suffix. Thus, pEH **jaŋa* can be analyzed as consisting of the free pronoun **ja* 'he, she' and the possessive suffix **-ŋa* 'his, her'. A problem with this analysis is that the Proto-Eastern Huon possessive suffix of the third person singular is **-ina* rather than **-ŋa* (cf. Table 2-8 in 2.2.6). The matching possessive suffix is only found in the Western Huon family in pWH **-ŋe* 'his, her' (cf. Table 2-9 in 2.2.6). To maintain our analysis, we must therefore project **-ŋa* 'his, her' to Proto-Huon Peninsula. The variant third person singular pronoun pEH **jaŋa* 'he, she' originated in Proto-Huon Peninsula and existed side by side with pEH **ja* 'he, she' down to proto Huon Tip.

In Table 2-3 the dual forms of the basic personal pronoun are given. It is necessary to reconstruct two variants. The short forms pHP **nat* 'we two', **ŋat* 'you two', and **jat* 'they two' are identical with the object prefixes (cf. Table 2.1 in 2.2.1). In Ono (EH) and Somba (WH) short forms are used when followed by certain case enclitics, e.g. Ono *ŋet-o* 'we two-ERG', Somba *net-ŋən* 'we two-ERG' < pHP **nat-ŋu*. In the absence of a case enclitic, the long forms pHP **nata* 'we two', **ŋata* 'you two', **jata* 'they two' appear in both languages, e.g. Ono *ŋere* 'we two', Somba *niri* 'we two' < pHP **nata*. The long forms are reflected by the Kalasa, the Huon Tip, and the Pindiu languages. The Sankwep and the Cromwell languages only have reflexes of the short forms. The dual pronouns of Kovai cannot be classified with certainty because of the regular loss of final vowels. The long forms differ from the short ones in having an additional final vowel pHP **-a*. That the intervocalic **-t-* of the long forms surfaces as *-r-* is only to be expected in the Pindiu languages, where **-t-* > *-r-*, but in the Kalasa languages, where **-t-* > *-t-* in lexemes, such a lenition only occurs before a morpheme boundary. The final **-a* of the long forms must therefore once have been a separate morpheme and one may surmise that it was an enclitic focus particle.

Table 2-3: Proto-Huon Peninsula dual personal pronouns

	1DU	1DU	2DU	2DU	3DU	3DU
pHP	*nat(a)		*ŋat(a)		*jat(a)	
pEH	*nat(a), *it(a)		*ŋat(a)		*jat(a)	
pKalasa	*net(-ä), *it(-ä)		*ŋet(-ä)		*et(-ä)	
Sialum	ira		ŋera		era	
Ono	ŋere	ŋet-o ERG	ŋire	ŋit-o ERG	ere	et-o ERG
Kovai	it		ŋot		jot	
pHuon Tip	[*nükë]		[*ŋâkë]		[*jakë]	
Sene	neke		ŋɔke		jɔke	
Migabac	noke		ŋeke		jeke	
Momare	noke		ŋake		jake	
Wamorâ	nɯhɔ		ŋohɔ		jɔhɔ	
Mâgobineng	nehɔ		ŋohɔ		jɔhɔ	
Wemo	nɔhe		ŋohe		jahe	
Naga	nɔka		ŋoka		jaka	
Mape	nɯkɔ	nɯka-leʔ GEN	ŋokɔ	ŋoka-leʔ GEN	jɔkɔ	jaka-leʔ GEN
pWH	*net(e)		*ŋet(e)		*jet(e)	
pPindiu	*net(e)		*ŋet(e)		*jet(e)	
Dedua	neri	nere-ŋ ERG	ŋeri	ŋere-ŋ ERG	jeri	jere-ŋ ERG
Mongi	niri	nere-ŋ ERG	iri	ere-ŋ ERG	iri	
Tobo	niri	ner-ən ERG	iri	er-ən ERG	iri	
Borong	noro		oro		[ij]oro	
Somba	niri	net-ŋən ERG	[i]ŋiri	et-ŋən ERG	[iŋiri]	jet-ŋən ERG
pSankwep	*nit		*ŋit		*jit	
Mesem	ni		[li]		[lede], li 2DU	
Nabak	nit		ŋit		[eget]	
pCromwell	*net		[*jet]		*jet	
Nomu	net		jet		jet	
Kinalaknga	net		et		et	
Kumukio	net		et		et	
Komba	net		zet		zet	
Selepet	net		jet		jet	
Timbe	net		jet		jet	

Table 2-4: Proto-Huon Peninsula plural personal pronouns

	1PL	1PL	2PL	2PL	3PL	3PL
pHP	*nan(a)		*ŋan(a)		*ja(ŋa)	
pEH	*nan(a), *in(a)		*ŋan(a)		*jaŋa	
pKalasa	*nenä, *inä		*ŋenä		*eŋä	
Sialum	ina		ŋeŋa		eŋa	
Ono	ŋene	ŋed-o ERG	ŋine	ŋid-o ERG	eŋe	
Kovai	in		ŋon		joŋ	
pHuon Tip	[*nüŋë]		[*ŋâŋë]		*jaŋë	
Sene	neŋe		ŋɔŋe		jɔŋe	
Migabac	noŋe		ŋeŋe		jeŋe	
Momare	noŋe		ŋaŋe		jaŋe	
Wamorâ	nɯŋɔ		ŋoŋɔ		jɔŋɔ	
Mâgobineng	neŋɔ		ŋoŋɔ		jɔŋɔ	
Wemo	nɔŋe		ŋoŋe		jaŋe	
Naga	nɔŋa		ŋoŋa		jaŋa	
Mape	nɯŋɔ	nɯŋa-leʔ GEN	ŋoŋɔ	ŋoŋa-leʔ GEN	jɔŋɔ	jaŋa-leʔ GEN
pWH	*nen(e)		*ŋen(e)		*je(ŋe)	
pPindiu	*nen(e)		*ŋen(e)		*je(ŋe)	
Dedua	neni	nene-ŋ ERG	ŋeni	ŋene-ŋ ERG	[jeni]	jene-ŋ ERG
Mongi	nini	nene-ŋ ERG	ini	ene-ŋ ERG	[ini]	(i)ene-ŋ ERG
Tobo	nini	nen-ən ERG	ini	en-ən ERG	[ini]	ijen-ən ERG
Borong	nono		[oŋo]		[ij]oŋo	
Somba	nini	nen-ŋən ERG	[i]ŋini	en-ŋən ERG	[iŋini]	jen-ŋən ERG
pSankwep	*nin		*ŋin		*jin	
Mesem	nĩ		[lĩ]		[lene], lī 2DU	
Nabak	nin		ŋin		[ekŋen]	
pCromwell	*nen		[*je]		*je	
Nomu	nen		je		je	
Kinalaknga	nen		[ek]		[ek]	
Kumukio	nen		[ek]		[ek]	
Komba	nen		ze[n]		ze[n]	
Selepet	nen	nen-ŋe ERG	je[n]	je-ŋe ERG	je[n]	je-ŋe ERG
Timbe	nen		je		je	

In the first person dual and plural, the two Eastern Huon languages Sialum and Kovai deviate from the other languages, which agree in reflecting pHP **nat(a)* 'we two' and **nan(a)* 'we all' (Tables 2-3 and 2-4). Sialum has the pronouns *ira* 'we two' and *ina* 'we all' and Kovai

has the matching forms *it* 'we two' and *in* 'we all'. We note that the word initial *n-* characteristic of first person forms is missing from these pronouns. By no stretch of the imagination can they be derived from **nat(a)* and **nan(a)*. The object prefixes of the first person dual and plural in Sialum have the same deviant sound shape (cf. Tables 1-8 to 1-14, except 1-10, in 1.3.1). Sialum and Kovai are not immediate sister languages but relate to each other at the level of the Eastern Huon family. Therefore, we must reconstruct pEH **it(a)* 'we two' and **in(a)* 'we all'. These pronouns must have coexisted with **nat(a)* and **nan(a)* in Proto-Eastern Huon and indeed still in Proto-Kalasa, for Sialum's immediate sister language Ono shows reflexes of the latter pair of pronouns. The question arises: Why did Proto-Eastern Huon have two sets of first person non-singular personal pronouns? The answer that immediately comes to mind is that Proto-Eastern Huon may have distinguished between inclusive and exclusive first person dual and plural pronouns, though this opposition was lost in all daughter languages before being resurrected in recent times in some Huon Tip languages through language contact. It is likely that the pronouns beginning with *n-* were the exclusive forms and the other pair were the inclusive forms. I assume, therefore, that Sialum and Kovai retained the former inclusive pronouns pEH **it(a)* 'I and you alone' and **in(a)* 'I and you all' and lost the former exclusive pronouns pEH **nat(a)* 'I and he/she' and pEH **nan(a)* 'I and they'. In the other Eastern Huon languages the opposite happened.

The first person dual and plural pronouns of Ono begin with the consonant *ŋ-* rather than *n-*: *ŋere* 'we two' < **nata*, *ŋene* 'we all' < **nana*. The sound change **n- > ŋ-* is frequent in Ono, though not entirely regular. Remarkably, only the dual and plural forms of personal pronouns have been affected by it, but not the singular form *na* 'I' < **na*. The same bifurcating sound change has happened to the pronominal prefixes of object verbs (cf. Tables 1-8 through 1-15 in 1.3.1).

In the Huon Tip languages, the consonant alternating between the dual and the plural forms of the personal pronoun has shifted from the dental to the velar place of articulation. In addition, the first vowel of the first person dual and plural pronouns reflects **ü* (< pHP **u*) rather than **a* (< pHP **a*), cf. Proto-Huon Tip **nükë* 'we two' and **nüŋë* 'we all'. The same rounded back vowel occurs in the first person dual and plural prefixes of object verbs (cf. Tables 1-16 through 1-20 in 1.3.2). In certain object verbs, a vowel alternation **a* : **ü* can be observed between the first person singular and plural, e.g. Wemo *nare* < **na-ta* 'give me' versus *nɔre* < **nü-ta* 'give us all'. The disappearance of the final *n* in the first person plural object prefix pHP **nan-* would have rendered the first person singular and the first person plural forms homonymous. It seems that an ablauting **ü* was introduced into the first person plural prefix to differentiate it from the first person singular. From the first person plural prefix, the **ü* spread to the first person dual prefix and eventually also to the first person non-singular forms of the personal pronoun.

The second person dual and plural forms of the personal pronoun start with the velar nasal *ŋ* in the Eastern Huon languages: Sialum *ŋera*, Kovai *ŋot* < pEH **ŋata* 'you two', Sialum *ŋena*, Kobai *ŋon* < pEH **ŋana* 'you all'. The Huon Tip languages, despite having renewed the consonant alternation between dual and plural forms, follow suit: Naga *ŋoka*, Migabac *ŋeke* < **ŋâkë* 'you two', Naga *ŋoŋa*, Migabac *ŋeŋe* < **ŋâŋë* 'you all'. Whereas initial *ŋ* in second person non-singular pronouns is ubiquitous in Eastern Huon languages, there is only limited evidence for it among Western Huon languages, the reason being that word initial *ŋ-* regularly

disappears in them. Dedua is the only contemporary Western Huon language that preserves *ŋ*-initial second person dual and plural forms of the personal pronoun: *ŋeri* 'you two' and *ŋeni* 'you all'. The retention of initial *ŋ*- in personal pronouns and object verbs, despite the fact that it regularly disappears in lexical items, is presumably due to the influence of the neighboring Huon Tip languages. Note that the Dedua second person non-singular pronouns cannot have been borrowed from a Huon Tip source, as a comparison of Dedua *ŋeri* 'you two' and *ŋeni* 'you all' with Proto-Huon Tip **ŋâkë* 'you two' and **ŋâŋë* 'you all' shows. They only have irregularly retained their initial *ŋ*- in the paradigmatic context *nV°* first person, *ŋV°* second person and *jV°* third person non-singular, which has an exact counterpart in the Huon Tip languages.

Apart from Dedua, there is evidence from Somba and Nabak confirming the hypothesis that word initial *ŋ*- was still present in their common ancestor, i.e. in Proto-Rawlinson. In the other Western Huon subfamily, the Cromwell family, there is no trace of second person non-singular pronouns with initial *ŋ*-, suggesting that the sound had already been lost in the proto-language. In Somba, the second and the third person non-singular basic pronouns have been conflated: *iŋiri* 'you two, they two' ⇐ Proto-Pindiu **ŋete* 'you two', *iŋini* 'you all, they all' ⇐ Proto-Pindiu **ŋene* 'you all'. The initial *i*- in these Somba pronouns is the third person singular pronoun *i* 'he, she', which was used to differentiate third person from second person non-singular pronouns after their conflation (as in Borong, cf. *oro* 'you two' vs. *ij-oro* 'they two'). The disambiguated form **iŋiri* 'they two' stood beside the ambiguous form **ŋiri* 'you two, they two' for a while until the latter form was given up in favor of the former. Thanks to the word-initial *i*-, the velar nasal was preserved in *iŋiri* and *iŋini*. Remarkably, while second and third person non-singular were conflated in the unsuffixed forms of the personal pronoun in Somba, they were still kept apart in the forms followed by case enclitics when Pilhofer made his survey. Pilhofer (1928:301) recorded the ergative forms *net-ŋən* 'we two', *et-ŋən* (< **ŋet-ŋən*) 'you two', *jet-ŋən* 'they two', where the originally *ŋ*-initial second person form has left a different reflex than the third person form. Later, the pronominal forms *etŋən* and *jetŋən* came to be used interchangeably so that in contemporary Somba they are variants of each other: *ekən ~ jekən* 'you two, they two' (Olkkonen and Olkkonen 1983:81). Thus, the pronouns with case enclitics attached followed the lead of the unsuffixed pronouns in conflating second and third person non-singular.

In the possessive suffixes (discussed in 2.2.6) the initial *ŋ* of the second person dual and plural forms was not in word initial position, hence there was no phonetic reason for its elimination. Somba has kept the *ŋ*-initial second person dual and plural possessive suffixes without enlarging them with *i*-: *-ŋiri* 'your (du.), their (du.)' and *-ŋini* 'your (pl.), their (pl.)'. Similarly, Nabak has retained *ŋ*-initial second person dual and plural possessive suffixes following vowel final nouns: *-ŋit* 'your (du.), their (du.)' and *-ŋin* 'your (pl.), their (pl.)'. In both languages the original second person forms have been extended to the third person. In the Nabak data McElhanon collected in 1967, the same forms occur as basic personal pronouns: *ŋit* 'you two' and *ŋin* 'you all'. Fabian, Fabian and Waters (1998) give *it* 'you two' and *in* 'you all'. In the Cromwell family, all languages show the same form in the second and the third person non-singular of the personal pronoun. Nomu, Komba, Selepet, and Timbe have extended the third person dual pronoun **jet* to the second person dual. The same account may be applied to Kinalaknga and Kumukio **et* 'you two, they two', though one wonders why the

initial *j-* should have been lost in this form when it was retained in the singular form **jok* 'he, she'. An alternative account derives **et* from pWH **ŋet* 'you two'. If this derivation is correct, Proto-Cromwell and Proto-Dallman must have differentiated between **et* 'you two' and **jet* 'they two'.

The plural forms of the personal pronoun (Table 2-4) are partly parallel to the dual forms, partly they are idiosyncratic. As in the dual, a long form and a short form can be reconstructed for all three plural pronouns. In the first and the second person plural the long and the short form again differ in the presence of a final **-a*. The long form pHP **nana* 'we all' is reflected by Ono (EH) *ŋene* 'we all' and by Proto-Pindiu (WH) **nene* 'we all' > Dedua *neni*, Somba *nini*. The short form pHP **nan* 'we all' is the only form retained in the Sankwep (Nabak *nin*), Dallman (Nomu *nen*), and Kabwum (Selepet *nen*) subfamilies of the Western Huon family and is found in combination with case enclitics in Somba, as in the ergative form *nen-ŋən* 'we all-ERG', and in Ono, as in the ergative form *ŋed-o* 'we all-ERG'. The expected Ono form †*ŋen-(ŋ)o* 'we all-ERG' has been transformed in analogy with object verbs containing an alternating *-t-* in the dual number, e.g. 'tell' (cf. *ŋetan* 'tell us two' vs. *ŋedan* 'tell us all'). In the second person plural, the Eastern Huon languages reflect the long form **ŋana* 'you all' > Ono *ŋine*, Kobai *ŋon*. In the Cromwell languages, the second person plural has been conflated with the third person. The short form pWH **je* 'they all' has been extended to the second person: Nomu *je* 'you all, they all', Timbe *je* 'you all, they all'. In Komba and Selepet, the final *-n* of the first person plural form *nen* has been transferred to the second and third person form: Komba *zen* 'you all, they all', Selepet *jen* 'you all, they all'. In these languages, *-n* has become a general plural marker alternating with *-t* in the dual. But note that Selepet retains the original *n*-less form **je* in the ergative form *je-ŋe*. The same development can be observed in the Sankwep language Mesem, where the second person plural form *lĩ* 'you all' must go back to a former third person plural form **jin* 'they all', which has been replaced by *lene* 'they all'. Kinalaknga and Kumukio *ek* 'you all, they all' is harder to explain. The form may simply be an innovation that has taken the place of **je*. Alternatively, *ek* might be derived from pWH **ŋe* 'you all' > **e*. The final *-k* of *ek* could be a reinforcement copied from the third person singular form *jok* 'he, she'. The problem with this account is that a personal pronoun pWH **ŋe* 'you all' is nowhere else attested. Like the Eastern Huon languages, the Pindiu languages reflect the long form pHP **ŋana* 'you all' > Proto-Pindiu **ŋene* in their unsuffixed personal pronouns. A short form pWH **ŋen* is attested in the Somba ergative form *en-ŋən* 'you all-ERG' as well as Nabak *ŋin* 'you all'. A second person plural form pWH **ŋe-*, on the other hand, is only attested in some object verbs (cf. Table 2-1). The reflexes of a long form pHP **ŋana* and a short form pHP **ŋan* in both first-order subfamilies mandates the reconstruction of pHP **ŋan(a)* 'you all'. In the last analysis, the *-n(-)* of this form has been taken analogically from the first person plural form **nan(a)*. But this transfer must already have been accomplished in Proto-Huon Peninsula.

The conflation of the second and the third person dual and plural in most Western Huon languages was triggered by the sound change **ŋ- > ∅*, which weakened the opposition between these forms. The ensuing collapse of the opposition has been described above for Somba. There was, of course, a model for the non-distinction of the second and the third person non-singular in these languages, namely the subject-tense endings of the verb (see Chapter 3). Nevertheless, the resulting ambiguity must have been felt to be annoying at times

so that a good number of the languages concerned reintroduced new, unambiguous third person dual and plural pronouns. This was done by compounding the ambiguous second/third person non-singular form with the third person singular form: Mongi *i-iri* 'they two', *i-ini* 'they all', Borong *ij-oro* 'they two', *ij-oŋo* 'they all', Komba *zʌk-zet* 'they two', *zʌk-zen* 'they all', Selepet *jɔk-jet* 'they two', *jɔk-jen* 'they all', Timbe *jɔk-jet* 'they two', *jɔk-je* 'they all' (cf. Appendix B). The Nabak third person dual and plural pronouns *eget* 'they two' < **jük-ŋet* and *ekŋen* 'they all' < **jük-ŋen* also go back to such compounds. The uncompounded forms generally seem to retain their potential to refer to the third as well as the second person (cf. McElhanon 1970d:25 for Selepet). Compounding is therefore just a disambiguation device and does not create a new cell in the paradigm.

In the third person plural, the Huon Tip languages reflect **jaŋë* 'they all', the only non-singular form that can be directly derived from a Proto-Huon Peninsula antecedent. This form was the point of departure for renewing the opposition between dual and plural forms. In the third person, the opposition between the long dual and plural forms, pHP **jata* 'they two' and **jaŋa* 'they all', involved an alternation between the unlike consonants **-t-* and **-ŋ-*. In the first and the second person the alternating consonants shared the same place of articulation: pHP **nata* 'we two' versus **nana* 'we all' and **ŋata* 'you two' versus **ŋana* 'you all'. The simplest change to bring these forms into line with one another was to replace the velar nasal of the third person plural form with a dental nasal. This happened in the Pindiu language Dedua, which has *jeri* 'they two' and *jeni* 'they all'. The Huon Tip languages, however, chose a different path. They kept the third person plural form **jaŋë* and shifted the alternating consonant of all other dual and plural forms to the velar place of articulation. Thus, **ŋana* 'you all' was replaced with **ŋâŋë* 'you all' and **ŋata* 'you two' was replaced with **ŋâkë* 'you two'. The first part of this change also took place in Sialum. The change of pHP **ŋana* to Sialum *ŋeŋa* 'you all' may have been due to an assimilation of the nasals. The incipient change in Sialum suggests that the shift to the velar place of articulation happened first in the plural forms of Pre-Huon Tip and then spread to the dual forms. There was a model for the new type of consonant alternation in the object verb 'see', cf. Proto-Huon Tip **jakâ(në)* 'see them two' versus **jaŋâ(në)* 'see them all' (cf. Table 1-18 in 1.3.2). The result of this change was a general alternation between **-k-* and **-ŋ-* in all dual respectively plural pronouns.

Sialum *eŋa* 'they all' and Ono *eŋe* 'they all' can be subsumed under Proto-Kalasa **eŋä*, which descends from pEH **jaŋa*. The Ono third person singular form *eŋe* 'he, she' < **jaŋa* preserves the homonymy with the third person plural form, but in Sialum we find the differing form *jaŋa* 'he, she'. The same treatment of the sound sequence **ja* as in the third person singular form of the personal pronoun can be observed in the frozen possessive suffix of the first person singular form of the emphatic pronoun, cf. Sialum *na-ja* 'myself ' and Ono *na-e* 'myself ' < **na-ja* (Table 2-7 in 2.2.5). It appears, therefore, that the regular outcome of pEH **jaŋa* is Sialum *jaŋa* and Ono *eŋe*. The Sialum third person plural pronoun *eŋa* must have undergone an irregular development which resulted in a differentiation between the third person singular and the third person plural. The pronominal prefixes of the object verbs follow the free pronoun in that they show *e-* < **ja-* in the third person plural in both Kalasa languages, with the exception of the object verb 'see', whose third person plural starts with *j-* in Sialum (cf. Table 1-8 in 1.3.1). The development **ja° > e°* is thus characteristic of third person plural forms in Sialum.

Sialum *eŋa* 'they all' and Ono *eŋe* 'they all' confirm the velar place of articulation of the nasal in the pronoun of the third person plural. We have already seen that the Western Huon language Dedua has shifted the nasal in *jeni* 'they all' to the dental place of articulation in analogy with the first and the second person plural. The *-n* in Somba *jen(-ŋən)* 'they all(-ERG)' has also been introduced in analogy with the first and the second person plural, but here the final *-n* was presumably added to the short form **je* 'they all'. Therefore, Dedua *jeni* and Somba *jen(-ŋən)* yield no direct correspondence which would require the reconstruction of Proto-Pindiu †*jene*. On the contrary, the velar nasal in the Borong second and third person plural form *oŋo* < **jeŋe* suggests that the Proto-Pindiu third person plural pronoun contained a velar nasal. Borong *oŋo* is welcome evidence from a Western Huon language confirming that the long form **jaŋa* 'they all' must be projected back to Proto-Huon Peninsula.

The short third person plural form pHP **ja* 'they all' has been retained in the two Cromwell languages Nomu (> *je* 'you all, they all') and Timbe (> *je* 'you all, they all'). For this reason, we must postulate the co-existence of the variants **ja* 'they all' and **jaŋa* 'they all' in Proto-Huon Peninsula. In the singular, there is only evidence for **ja* but not for **jaŋa* in the Western Huon subfamily, which is why I only reconstructed pHP **ja* 'he, she'. It is, however, unlikely that the different reconstructions of the third person singular and plural reflect a real difference in the proto-language. The pronoun **ja* was originally a demonstrative meaning 'that' (see Table 2-11 in 2.2.8) and had the additional function of a third person singular and plural personal pronoun in Proto-Huon Peninsula. The long form **jaŋa* was originally an emphatic pronoun of the third person singular (see Table 2-7 in 2.2.5). It must have had a paradigmatic connection with **ja* 's/he, they all' in Proto-Huon Peninsula, serving as its focalized counterpart. The long forms of the other dual and plural personal pronouns presumably stood in the same relation to the short forms. A comparison with the pronominal prefixes of the object verbs (Table 2-1 in 2.2.1) shows that they agree with the short forms of the personal pronoun. The short forms are therefore older than the long forms.

2.2.3 Trans-Vitiaz ergative pronouns

There is a set of case-marked personal pronouns that cannot in all forms be analyzed as being made up of a basic personal pronoun plus a case enclitic. They are the ergative pronouns of the Huon Tip languages. The Kovai basic personal pronouns of the first and the second person singular evidently match the corresponding ergative pronouns of the Huon Tip languages (Table 2-5). They show a reduplicative structure, the initial consonant being repeated. Kovai regularly loses the final vowel in words of CVCV structure, so we cannot be sure if the final **-i* of the Proto-Huon Tip ergative pronouns **nâni* and **gâgi* had a counterpart in an earlier form of Kovai or if the Kovai pronouns *non* and *gog* go back to perfect reduplications like **nana* and **gaga*. A final **-i* is found in all forms of the Proto-Huon Tip ergative pronoun. In the dual and plural forms, it replaces the final vowel **ë* of the basic pronoun, compare **nüki* 'we two-ERG' > Migabac *noki*, Naga *nəki* with **nükë* 'we two' > Migabac *noke*, Naga *nəka*. The final **-i* of the Huon Tip ergative pronouns was once an ergative enclitic, as it still is in Sene (cf. Table 4-1 in 4.2.1). It is quite certain that the Proto-Trans-Vitiaz pronouns **nanV* and **gagV* had ergative function as we can also reconstruct basic pronouns **na* and **ga* to Proto-Trans-Vitiaz, based on internal and external evidence. However, Kovai has lost the ergative

case. After the demise of the ergative, the former ergative pronouns *non* 'I' and *gog* 'you' came to be used as basic personal pronouns, replacing **na* 'I' and **ga* 'you'.

Table 2-5: Proto-Trans-Vitiaz ergative pronouns

		1SG	2SG	3SG
pTrans Vitiaz	ergative	*nanV	*gagV	
Kovai	basic	non	gog	i
pHuon Tip		*nâni	*gâgi	
Sene	ergative	nani	gagi	ɔi
Migabac	ergative	nani	gagi	jei, jedi
Momare	ergative	nani	gagi	eɖi
Wamorâ	ergative	noni	[goi]	jɔŋi
Mâgobineng	ergative	noni	gogi	egi
Wemo	ergative	noni	goki	eki
Naga	ergative	[noŋzi]	[goi]	jɔŋi
Mape	ergative	[noi, nonzi]	[goi, gozi]	iŋai, iŋazi

	1DU	2DU	3DU	1PL	2PL	3PL
pHuon Tip	*nüki	*ŋaki	*jaki	*nüŋi	*ŋaŋi	*jaŋi
Sene	neki	—	—	neŋi	—	—
Migabac	noki	ŋeki	jeki	noŋi	ŋeŋi	jeŋi
Momare	noki	ŋaki	jaki	noŋi	ŋaŋi	jaŋi
Wamorâ	nɔki	ŋaki	jaki	nɔŋi	ŋaŋi	jaŋi
Mâgobineng	—	—	—	—	—	—
Wemo	—	—	—	—	—	—
Naga	nɔki	ŋaki	jaki	nɔŋi	ŋaŋi	jaŋi
Mape	nɔki	ŋaki	jaki	nɔŋi	ŋaŋi	jaŋi

We do not know what the dual and plural forms of the ergative pronoun looked like in Proto-Trans-Vitiaz. Conceivably, the Kovai basic pronouns included in Tables 2-3 and 2-4 above could go back to ergative pronouns cognate with the Huon Tip dual and plural forms given in Table 2-5. But owing to the disappearance of their final vowel, their reflexes would have fallen together with the reflexes of the basic pronouns. Furthermore, it is not clear whether any Proto-Trans-Vitiaz dual and plural ergative pronouns existed at all. In fact, the Proto-Huon Tip reconstructions given in Table 2-5 may capture parallel developments rather than true proto-forms. Note that the Kâte dialects Mâgobineng and Wemo have no dual and plural ergative pronouns, there are only three singular forms. It is hard to explain this, or the gap in the second and the third person non-singular in Sene, as loss. It is easier to explain the dual and plural ergative pronouns of the other Huon Tip languages as secondary formations made up of the basic personal pronouns suffixed with the ergative enclitic **-i*. In Wamorâ, the unexpected medial *-k-* (rather than *-h-*) of the dual ergative pronouns gives them away as

loans from Mape. That is, Wamorâ originally probably also lacked dual and plural ergative pronouns.

In the third person singular, there is no significant agreement among the ergative pronouns of the Huon Tip languages, or between them and the basic personal pronoun *i* 'he, she' of Kovai. Sene *ɔi*, and Naga *jəŋi* are formed like the dual and plural forms, with **-i* replacing the final vowel of the basic personal pronoun. In the Migabac variant *jei* and the Mape variant *iŋai*, **-i* is added to the basic personal pronoun without gobbling up its final vowel. The Migabac variant *jedi*, Momare *eḍi*, and the Mape variant *iŋazi* contain the ergative enclitic **-zi*. Only Mâgobineng *egi* and Wemo *eki* cannot be readily analyzed. These forms have a chance to be old, but their isolation precludes a reconstruction.

2.2.4 Huon Tip emphatic personal pronouns

Beside the basic personal pronouns, the Huon Peninsula languages have emphatic personal pronouns that are used under focus. Only Kovai lacks such a set of pronouns. The emphatic pronouns of the Huon Tip languages diverge from those of the other Huon Peninsula languages and are therefore presented first. They are made up of the basic pronoun and an invariable emphatic suffix. All Huon Tip languages reflect this set of emphatic pronouns.

Table 2-6: Proto-Huon Tip emphatic personal pronouns

	1SG	2SG	3SG	1DU	1PL
pHuon Tip	*naka?	*gaka?	*j{a,ü}ka?	*nüka?	*nüŋa?
Sene	nɔkɔ?	gɔkɔ?	ekɔ?	neka?	neŋa?
Migabac	nehu?	gehu?	jehu?	noku?	noŋuŋ
Momare	naha?	gaha?	jaha?	noha?	noŋa?
Wamorâ	nahe?	gahe?	[jɔŋe?]	nɔhe?	nɔŋe?
Mâgobineng	nahe?	gahe?	jɔhe?	nɔhe?	nɔŋe?
Wemo	naha?	gaha?	jaha?	nɔhɔ?	nɔŋɔ?
Naga	nake?	gake?	[jɔŋe?]	nɔke?	nɔŋe?
Mape	nake?	gake?	[jɔŋe?]	nɔke?	nɔŋe?

	2DU	2PL	3DU	3PL
pHuon Tip	*ŋaka?	*ŋaŋa?	*jaka?	*jaŋa?
Sene	ŋɔkɔ?	ŋɔŋɔ?	jɔkɔ?	jɔŋɔ?
Migabac	ŋeku?	ŋeŋuŋ	jeku?	jeŋuŋ
Momare	ŋaha?	ŋaŋa?	jaha?	jaŋa?
Wamorâ	ŋahe?	ŋaŋe?	jahe?	jaŋe?
Mâgobineng	ŋahe?	ŋaŋe?	jahe?	jaŋe?
Wemo	ŋaha?	ŋaŋa?	jaha?	jaŋa?
Naga	ŋake?	ŋaŋe?	jake?	jaŋe?
Mape	ŋake?	ŋaŋe?	jake?	jaŋe?

The emphatic pronouns of the Huon Tip languages are straightforward cognates (Table 2-6). They can be analyzed as consisting of the basic personal pronouns followed by the emphasizing suffix **-kaʔ* (sg.) ~ **-aʔ* (du. and pl.). The only form with divergent reflexes is the third person singular. Wamorâ, Naga, and Mape have replaced **j{a,ü}kaʔ* with *jəŋeʔ*, the third person singular basic pronoun **jüŋë* suffixed with **-aʔ*. The other languages show the short third person singular pronoun **ja* rather than the long form **jüŋë* in **ja-kaʔ* 'himself, herself'. Sene, Mâgobineng, and Wemo have introduced the vowel **ü* in the first syllable of this form, just like Wamorâ and the Mape dialects have replaced pEH **jaŋa* 'he, she' with **jüŋë* (see 2.2.2). The same vowel change happened in the third person singular forms of some object verbs (cf. Tables 1-19 to 1-21 in 1.3.2). In Migabac, the emphasizing suffix irregularly shows the vowel *u* and in the plural forms the final **ʔ* has been replaced with *ŋ*, thereby introducing a consonant alternation *-ʔ : -ŋ* between dual and plural forms as in the possessive suffixes (cf. Table 2-8 in 2.2.6).

Pilhofer (1928:302f) presents the emphatic pronouns of the Huon Tip languages on their own, as in Table 2-6. But at least in Kâte, these pronouns are hardly ever used in isolation. Rather, they are usually preceded by the corresponding basic pronoun as in (14).

Kâte (author's fieldnotes)

14	*E*	*buʔ-tiʔne.*	*"Soŋaŋ-te*		*gie*	*ba-pe*	*me*
	3s	alone-3s:POSS	church.elder-GEN		work	do-PRS.IMP:1s	or
	no	*naha?-ne*	*gie*	*ba-pe?"*	*Ira*	*ju-eka?.*	
	1s	1s:EMPH-GEN	work	do-PRS.IMP:1s	there	be-HAB.PRS:3s	

'He's alone. He's in a situation where he wonders: "Should I do the church elder's work or my own?"'

In the Kâte sentence (14), the first person singular is under contrastive focus. The appropriate way to express this is the phrase *no naha?* 'I myself', a combination of the basic pronoun *no* 'I' and the emphatic pronoun *naha?* 'myself'.

2.2.5 Huon Peninsula emphatic personal pronouns

The emphatic personal pronouns of the Huon Tip languages discussed in 2.2.4 are clearly unrelated to the emphatic pronouns of the other Huon Peninsula languages. They are a common innovation of the Huon Tip languages. The emphatic personal pronouns of the Kalasa and the Western Huon languages are at first sight disparate, but a closer look reveals a shared structure (Table 2-7). The Ono second person singular emphatic pronoun *geŋone* 'yourself' is transparently made up of the basic personal pronoun *ge* 'you' and the pronominal possessive suffix *-ŋone* 'your'. The Sialum third person singular pronoun *jaŋina* 'himself, herself' is composed of the basic personal pronoun *jaŋa* 'he, she' and the possessive suffix *-ina* 'his, her'. In the Pindiu family, an element **an* intervenes between the basic personal pronoun and the possessive suffix, cf. Dedua *ne-an-na* 'myself, mine' (from *ni* 'I' and *-na* 'my') and Borong *gi-aŋ-ga* 'yourself' (from *gii* 'you' and *-ga* 'your'). In the remaining Western Huon languages the structure is less transparent, but the final possessive suffix can still often be

perceived, cf. Mesem *gi-gi* 'yourself' (*-gi* 'your'), Nomu *no-n* 'myself' (*-n* 'my'), and Selepet *ik-ŋe* 'himself, herself' (*-ŋe* 'his, her'). The structure that shines through in all these examples is a compositional structure in which a basic personal pronoun is combined with a possessive suffix of the same person and number. This structure of the emphatic pronouns is so pervasive that I presume it to be inherited from Proto-Huon Peninsula.

Table 2-7: Proto-Huon Peninsula singular emphatic pronouns

		1SG	2SG	3SG
pHP				*ja-ŋa
pKalasa	emphatic	*na-jä	*ge-(ŋu)nä	*jäŋ[-inä]
Sialum	emphatic	naja	gena	jaŋina
Ono	emphatic	nae	geŋone	eŋine
pWH		*ne-ne		*je-ŋe, [*je-ki-ŋe]
pPindiu		*ne[-an]-na	*ge-an-ga	*jeŋe[-n-a]
Dedua	emph-poss	neanna	geaŋga	jeŋena
Mongi	emph-poss	nena	geŋga	eŋena
Tobo	emph-poss	nena	geŋga	[jəɣəna]
Borong	emphatic I	niana	giaŋga	[ijaŋa]
Somba	emphatic I	[nani]	[nangi]	[nanŋi]
pSankwep		*ne-n	*gi-gi	*ik-ŋ
Mesem	emphatic	nen	gigi	igŋ
Nabak	emphatic	nen	[giti]	igŋ[aŋ]
pDallman				
Nomu	emphatic	non	goi	[jokŋe]
pKabwum		*nine	*gike	*jiki-ŋe
Komba	emphatic	ninʌ	gikʌ	zikŋʌ
Selepet	emphatic I	nine	gike	ikŋe
Timbe	emphatic I	nune	guɣe	ikiŋe

In Selepet and Timbe, there are only the three singular emphatic pronouns given in Table 2-7. There are no dual or plural forms. The dual and plural forms of the other Western Huon and Kalasa languages are so disparate that they give the impression of being secondary formations. In Komba, for instance, the dual and plural emphatic pronouns resemble the ergative pronouns but have a long root vowel: *niikŋʌ* 'we two ourselves' (cf. *nikŋʌ* 'we two-ERG'), *ziiŋʌ* 'they all themselves' (cf. *ziŋʌ* 'they all-ERG'). Long vowels are a recent innovation of Komba, postdating the separation from Selepet and Timbe Their exploitation as a diacritic to introduce dual and plural forms of the emphatic pronoun betrays the recent origin of these forms. Previously, Komba probably lacked them, like its sister languages Selepet and Timbe. The original restriction of the emphatic pronoun to the singular number reminds of the Trans-Vitiaz ergative pronouns (cf. Table 2-5 in 2.2.3). There, too, it is likely that there were originally only singular forms. It is conceivable that the Trans-Vitiaz ergative pronouns branched off from the Huon Peninsula emphatic pronouns. If they did, however,

they underwent a radical transformation that makes the connection unprovable. Note that the second person singular possessive suffix of Proto-Huon Tip is **-ŋünë* 'your'. There is no sign of it ever having been a part of the Proto-Huon Tip ergative pronoun **gâgi* 'you-ERG'.

The singular pronominal possessive suffixes of the Eastern Huon and the Western Huon languages do not match (see 2.2.6). For this reason, the Kalasa and the Western Huon emphatic pronouns of the first and the second person singular containing these suffixes do not agree and no Proto-Huon Peninsula reconstruction is possible. For the Western Huon family, a combination of the basic personal pronoun and the possessive suffix of the first and the second person singular, as reconstructed in 2.2.2 and 2.2.6, yields the reconstructions pWH **ne-ne* 'myself' and **ge-ge* 'yourself'. In the first person singular, the attested forms of the Western Huon languages conform well with the expected reflexes of **ne-ne*. The interfix **-an-* in the Pindiu languages is an innovation and must be disregarded. Somba has replaced the initial personal pronoun with an invariable morpheme *nan-,* hence the Somba emphatic pronouns cannot be combined with those of the other Pindiu languages. In Nomu *non* 'myself', the initial part **ne* has been replaced with *no* 'I', whose vowel was altered due to the influence of a following ergative enclitic (cf. 2.2.2). The unexpected vowel *u* in Timbe *nune* 'myself' is probably also due to analogical influence from the basic personal pronoun *nɔ* 'I'. In the second person singular, we find the expected reflexes of pWH **ge-ge* 'yourself' in the Rawlinson family, but not in the Cromwell family. In the Pindiu languages, the interfix **-an-* must again be disregarded. Mesem *gigi* 'yourself' is a perfect reflex of **ge-ge* whereas in Nabak *giti* 'yourself' the second part has been replaced with an innovative form (cf. the possessive suffix *-ndi* 'your'). Nomu *goi* 'yourself' and Proto-Kabwum **gike* 'yourself' both depart from the expected reflexes of **ge-ge*. As I have no good explanation for these attested forms, I refrain from reconstructing **ge-ge* 'yourself' to Proto-Western Huon. Such a form is only clearly reflected in the Rawlinson subfamily.

In the Western Huon family, we find two different third person singular forms, one appearing in the Pindiu family, the other in the remaining families. Proto-Sankwep **ik-ŋ* 'himself, herself' is cognate with Proto-Kabwum **jiki-ŋe* 'himself, herself', both of them going back to pWH **je-ki-ŋe*, which is made up of the third person singular basic personal pronoun pWH **je* 'he, she', an interfix **-ki-* of unknown origin, and the third person singular possessive suffix pWH **-ŋe* 'his, her'. The vowel of the interfix **-ki-* is only reflected in Timbe *ikiŋe*, in the other languages it has been syncopated. Nomu *jokŋe* 'himself, herself' may be an altered reflex of pWH **jeki-ŋe*, its first part having been replaced with the personal pronoun *jok* 'he, she', as in the first person singular. Dedua and Mongi attest to another third person singular emphatic pronoun in Proto-Western Huon. Dedua *jeŋe-n-a* 'himself, herself, his/her own' contains the interfix **-an-*, like the first and the second person forms, followed by the third person singular possessive suffix *-a* 'his, her'. Both the middle and the final component of this composite form are secondary additions to *jeŋe*, which was in all likelihood the original third person singular emphatic pronoun. In Proto-Western Huon, Dedua *jeŋe-* < pWH **je-ŋe* can be analyzed as consisting of **je* 'he, she' and **-ŋe* 'his, her'. The replacement of the possessive suffix pWH **-ŋe* with *-a* made *jeŋe* unanalyzable in Dedua. To this opaque form the new possessive suffix *-a* was added as well as the interfix **-an-*, yielding *jeŋe-n-a*. I interpret Dedua *jeŋena* and Mongi *eŋena* as evidence for the reconstruction of a Proto-Western Huon third person singular emphatic pronoun **je-ŋe*.

Of the two Proto-Western Huon third person singular emphatic pronouns, pWH **je-ki-ŋe* and **je-ŋe*, the latter is the older form. It has a correspondent in Proto-Kalasa **jäŋ-inä*. As in Dedua, the third person singular possessive suffix **-inä* of this form is an addition to what had already become an opaque form **jaŋa* 'himself, herself' in Proto-Eastern Huon. If we superpose the compositionality of the Proto-Western Huon correspondent **je-ŋe* on this form, we arrive at a Proto-Huon Peninsula reconstruction **ja-ŋa*, in which **ja* is the third person singular basic personal pronoun and **-ŋa* is the corresponding possessive suffix. This emphatic pronoun is the only piece of evidence we have for a Proto-Huon Peninsula possessive suffix **-ŋa* 'his, her'. The postulation of a Proto-Huon Peninsula emphatic pronoun **ja-ŋa* 'himself, herself' is not only plausible on grounds of the evidence from attested emphatic pronouns but is also necessitated by the occurrence of a long variant pHP **jaŋa* of the third person singular and plural basic personal pronoun pHP **ja* (cf. 2.2.2).

2.2.6 Pronominal possessive suffixes

The pronominal possessive suffixes of the Huon Peninsula languages are a challenge for reconstruction. In the singular, the forms that can be reconstructed to Proto-Eastern Huon and to Proto-Western Huon are totally different from each other. Their combination in a Proto-Huon Peninsula reconstruction is impossible. This finding casts doubt on the reasonableness of combining those dual and plural forms which appear to be comparable. In this section, I abstain from presenting a table uniting all Huon Peninsula languages. Instead, I split the possessive suffixes up into two tables, one gathering the forms of the Eastern Huon family (Table 2-8), the other presenting the Western Huon forms (Table 2-9). The forms of the two subfamilies are compared separately and reconstructions are suggested for Proto-Eastern Huon and Proto-Western Huon. At the end of the section, I compare the two sets of reconstructions and try to explain the discrepancy between them.

In the Eastern Huon languages, there are reflexes of two different first person singular possessive suffixes (Table 2-8). One is pEH **-na* 'my' found in almost all languages. The other is pEH **-ja* 'my' found as a productive possessive suffix only in Naga *-je* 'my'. A trace of **-ja* 'my' is probably also present in the Wemo diminutive ending *-ma-e* 'my dear', in which an aberrant first person singular possessive suffix *-e* occurs, cf. the second and third person singular forms *-maʔ-ge* 'your dear' and *-maʔ-ne* 'his/her dear' (Pilhofer 1933:57), which show regular possessive suffixes. A cognate suffix can be extracted from the first person singular emphatic pronouns of Sialum and Ono. As we have seen in 2.2.5, the emphatic pronouns are made up of a basic personal pronoun plus the possessive suffix of the same person and number. This structural information allows us to analyze the Sialum and Ono emphatic pronouns *naja* 'myself' and *nae* 'myself' as consisting of the free pronoun *na* 'I' and the possessive suffixes Sialum *-ja* 'my' and Ono *-e* 'my' (< Proto-Kalasa **-jä*). In combination with Naga *-je* 'my', these fossilized possessive suffixes lead to the reconstruction of pEH **-ja* 'my'. A first person singular pronominal form of this phonological shape is without parallel in the Huon Peninsula family. The competing form pEH **-na* 'my', on the other hand, is identical to the free personal pronoun pEH **na* 'I' (cf. Table 2-2 in 2.2.2). An explanation for **-na* 'my' is therefore not far to seek: it is an intrusion from the paradigm of the free personal pronouns. No such analogical reduction is possible for **-ja* 'my'. For this reason, I conclude that **-ja* 'my'

is the original possessive suffix of the first person singular in the Eastern Huon family. It was gradually replaced by *-*na* 'my' in most Eastern Huon languages. When exactly this replacement began is hard to tell. Given that *-*na* 'my' is reflected in both first-order subfamilies, I reconstruct it as a variant already for Proto-Eastern Huon. But it is equally well possible that the replacement of *-*ja* 'my' with *-*na* 'my' is a parallel development having taken place independently in the Kalasa and the Trans-Vitiaz families.

Table 2-8: Proto-Eastern Huon pronominal possessive suffixes

	1SG	2SG	3SG	1DU	1PL
pEH	*-ja, *-na	*-(ŋu)na	*-ina		
pKalasa	*-nä, *[na]-jä EMPH	*-(ŋu)nä	*-inä	*-(i)sä	*-(i)zä
Sialum	-na, na-ja EMPH	-na	-ina	-isa	-iza
Ono	-ne, na-e EMPH	-ŋone	-ine	-se	-ze
Kovai	-[i]n, -[ai]n	[-og, -ag]	-[o]n, -[a]n	-(V)bit	-(V)bin
pHuon Tip	*-jë, *-në	*-ŋünë	*-inë	*-nükëʔ	*-nüŋëʔ
Sene	[-nɔne]	[-ŋone]	[-tiʔne]	-neke, [-nikite]	-neŋe, [-niŋine]
pSopâc	*-ne	*-ŋone	*-ine	[*-noŋgeʔ]	[*-noŋgeŋ]
Migabac	-ne	-ŋone	-ine	-noŋgeʔ	-noŋgeŋ
Momare	-ne	-ŋone	-ine	-noŋgeʔ	-noŋgeŋ
pKâte-Mape	*-jä, *-nä	*-ŋɯnä, *-gä	*-inä	*-nɯkäʔ	*-nɯŋäʔ
Wamorâ	[-ne]	[-ŋonɔ], -nɯŋɔ	-inɔ	-nɯhaʔ	-nɯŋaʔ
Mâgobineng	[-ne]	-ŋinɔ	[-tiʔnɔ]	-nehaʔ	-neŋaʔ
Wemo	-[na]ne, [-ma]-e DIM	-ge	-ne, [-tiʔne]	-nɔheʔ	-nɔŋeʔ
Naga	-je	-ge	-ine	[-nɔkɔŋ]	[-nɔŋɔŋ]
Mape	-ne	[-gɔ]	-ine	[-nɔkɯŋ]	[-nɔŋɯŋ]

	2DU	2PL	3DU	3PL
pEH	*-ŋat-ina	*-ŋa-ina		
pKalasa	*-ŋetnä	*-ŋenä	*-etnä	*-enä
Sialum	-ŋetna	-ŋena	-etna	-ena
Ono	-ŋitne	-ŋine	-etne	-ene
Kovai	-(v)ŋot, -(v)ŋat	-(v)ŋon, -(v)ŋan	-(v)bot	-(v)bon
pHuon Tip			*-jakiteʔ	*-jaŋineŋ
Sene	[-ŋɔkite]	[-ŋɔŋine]	-jɔkite	-jɔŋine
pSopâc	[*-ŋineʔ]	*-ŋine[ŋ]	*-jäkileʔ	*-jäŋineŋ
Migabac	-ŋineʔ	-ŋineŋ	-jekileʔ	-jeŋineŋ
Momare	-ŋineʔ	-ŋineŋ	-jakileʔ	-jaŋineŋ
pKâte-Mape	[*-ŋakɯŋ]	[*-ŋaŋɯŋ]	[*-jakɯŋ]	[*-jaŋɯŋ]
Wamorâ	-ŋahɯŋ	-ŋaŋɯŋ	-jahɯŋ	-jaŋɯŋ
Mâgobineng	[-ŋakiʔ]	[-ŋaŋiʔ]	[-jakiʔ]	[-jaŋiʔ]
Wemo	[-ŋekiʔ]	[-ŋeŋiʔ]	[-jekiʔ]	[-jeŋiʔ]
Naga	-ŋakɔŋ	-ŋaŋɔŋ	-jakɔŋ	-jaŋɔŋ
Mape	-ŋakɯŋ	-ŋaŋɯŋ	-jakɯŋ	-jaŋɯŋ

In the second person singular, there are also two competing forms. Kovai, Wemo, Mape, and Naga show a form that could be reconstructed as **-ga* 'your', all other languages reflect **-(ŋu)na* 'your'. This time, the distribution of the reflexes clearly speaks in favor of reconstructing only one of these forms to Proto-Eastern Huon. Only **-(ŋu)na* 'your' is attested in both first-order branches of the Eastern Huon family. The form **-ga* 'your' is limited to the Trans-Vitiaz family and is best explained as an intrusion from the paradigm of the free personal pronouns. Analogical influence of the second person singular free pronoun on the corresponding possessive suffix is still ongoing. Pilhofer (1928:307) recorded the variant forms *-ŋone* 'your' and *-gone* 'your' for Migabac. Only the second of these forms survives in contemporary Migabac (McEvoy 2008:42). The older form *-ŋone* was replaced by a form with an initial *g-*, the consonant characteristic of the second person singular in the free pronouns. Whereas in the first person singular the analogical form **-na* 'my' has almost ousted the original form pEH **-ja* 'my', in the second person singular the older form pEH **-(ŋu)na* 'your' has been retained by a majority of the Eastern Huon languages. The variant **-ŋuna* 'your' is reflected in Ono, Migabac, Momare, and Mâgobineng. Sene *-ŋone* and Wamorâ *-ŋonɔ* are loans from Momare, the Wamorâ variant *-nɯŋɔ* can be considered a reflex of **-ŋuna* under the assumption that its two nasal consonants have undergone a metathesis. The variant **-na* 'your' is only reflected by Sialum. Note that in Sialum the possessive suffixes of the first and the second person singular are homonymous: *-na* 'my' and *-na* 'your' (cf. Appendix B). This is hardly a diachronically stable situation. The intrusion of **-na* 'my' into the paradigm of possessive suffixes led to homonymy with the original second person singular possessive suffix pEH **-na* 'your'. To remedy this situation, **-na* 'your' was reinforced with a morpheme **-ŋu* that is reminiscent of the adversative particle **ŋu* 'but'. The resultant form **-ŋuna* 'your' must already have arisen in Proto-Eastern Huon, for it is reflected both in the Kalasa and in the Trans-Vitiaz subfamily. The variation of **-ŋuna* with **-na* that must have obtained in Proto-Eastern Huon is not directly attested in any of the daughter languages. Sialum continues

*-*na* 'your' while five other Eastern Huon languages reflect the disambiguated form *-*ŋuna* 'your'. There is little doubt that the original possessive suffix of the second person singular coexisting with the first person form pEH *-*ja* 'my' was pEH *-*na* 'your'.

In the third person singular, there is almost unanimous agreement among the Eastern Huon languages, the reflexes pointing to pEH *-*ina* 'his, her'. In addition to the reflex *-ne* < *-*ina*, the Wemo dialect of Kâte has the variant form *-tiʔne* and the Mâgobineng dialect the cognate form *-tiʔnə*. These forms seem to contain a suffix *-tiʔ* in addition to *-ne*, but its origin is obscure. Sene has borrowed the suffix *-tiʔne* 'his, her' and, it seems, also the first person singular suffix *-nəne* 'my' from Wemo. In Wemo, the elision of the initial vowel of the third person singular suffix *-*ina* > *-ne* 'his, her' led to homonymy of the first and the third person singular suffixes. This was remedied by replacing *-*ne* 'my' with *-nane* 'my', a form reinforced with the free personal pronoun.

In the first person dual and plural, the Kalasa languages Sialum and Ono again show forms that bear no resemblance to the free personal pronouns. Sialum *-isa* 'of us two' and *-iza* 'of us all' and Ono *-se* 'of us two' and *-ze* 'of us all' contain a sibilant whose voicing alternates between the dual and the plural number. Consonant alternations of this sort are familiar from object verbs. The same alternation between a voiceless sibilant in the dual number and a voiced sibilant in the plural number can be found in Ono *ŋeso* 'burn us two' versus *ŋezo* 'burn us all'. Apart from this reminiscence, the Sialum and Ono first person dual and plural possessive suffixes stand out as unique among the pronominal forms of the Huon Peninsula languages. They share this attribute with the original Proto-Eastern Huon singular possessive suffixes and one may surmise that they are the last traces of Proto-Eastern Huon first person non-singular forms that happen not to have been retained in any Trans-Vitiaz language.

For Proto-Huon Tip, I tentatively reconstruct the first person dual and plural possessive suffixes *-*nükëʔ* and *-*nüŋëʔ*. These forms strongly resemble the free personal pronouns **nükë* 'we two' and **nüŋë* 'we all'. The forms of Migabac and Momare as well as those of Naga and Mape cannot be derived from these reconstructions and the Sene forms are ambiguous. It is therefore doubtful whether the proposed reconstructions are real or the possessive suffixes of the different Huon Tip subgroups have developed independently in analogy with the free personal pronouns. In Wemo, the diminutive endings show the shortened forms *-ma-heʔ* 'our (du.) dear' and *-ma-ŋeʔ* 'our (pl.) dear', cf. *-nəheʔ* 'our (du.)' and *-nəŋeʔ* 'our (pl.)' (Pilhofer 1933:57). In these forms, the possessive suffixes lack the initial syllable *nə°* characteristic of the first person non-singular in free pronouns and object prefixes. It seems that the initial syllable was lost through syncopation, but conceivably that syllable had a different phonological shape than *nə°*, e.g. **sV°* or **zV°*, matching up with the forms of the Kalasa languages. The loss of such an initial syllable might have been facilitated because it was no longer recognizable as a sign of the first person non-singular. The Kovai forms differ from both the Kalasa and the Huon Tip forms. They contain a number marker *-b-* that also appears in the forms of the third person dual and plural.

The second and the third person dual and plural possessive suffixes of Sialum and Ono are made up of two parts. The first part is identical with the object prefixes *(*ŋet-* 2DU, **ŋe-* 2PL, **et-* 3DU, **e-* 3PL) and the second part *-*nä* probably comes from the third person singular suffix *-*inä* 'his, her', whose initial vowel was lost through syncopation. In Ono *-ŋitne* 'of you two' and *-ŋine* 'of you all' the root vowel has been raised as in all pronominal

paradigms (cf. 1.3.1 and 2.2.2). There is residual evidence for similar forms in the Huon Tip languages Migabac and Momare. Their second person plural possessive suffix *-ŋineŋ* 'of you all' is very different from the corresponding free personal pronoun forms Migabac *ŋeŋe* 'you all' and Momare *ŋaŋe* 'you all' and cannot have been derived from them. Instead, it can be derived from the a Proto-Eastern Huon possessive suffix **-ŋa-ina* if we subtract the final velar nasal as a later addition and assume that the vowel cluster **-ai-* was simplified to *-i-*: *-ŋineŋ* ⇐ **-ŋine* < **-ŋa-ina.* The second person dual form *-ŋine?* 'of you two' does not directly descend from pEH **-ŋat-ina* (as reflected in Proto-Kalasa **-ŋetnä*) but has been modeled after the second person plural form. It has a final glottal stop alternating with a velar nasal in the corresponding plural form like all dual possessive suffixes. This opposition was used to derive the second person dual form from the plural form. Kovai *-(V)ŋot ~ -(V)ŋat* 'of you two' may go back to pEH **-ŋat-ina*, but note that the free personal pronoun is also *ŋot* 'you two'.

We can therefore tentatively reconstruct second person dual and plural possessive suffixes pEH **-ŋat-ina* and **-ŋa-ina*. Such forms are clearly reflected in the Kalasa languages and there is some supportive evidence for them in Migabac, Momare, and Kovai. If we similarly projected the Proto-Kalasa third person dual and plural possessive suffixes into Proto-Eastern Huon, we would get pEH **-jat-ina* 'of them two' and **-ja-ina* 'of them all'. Unfortunately, there is no supportive evidence for such proto-forms in any Trans-Vitiaz language. Kovai has totally unrelated forms and the forms of the Huon Tip languages are built on the free personal pronouns. One may suspect that the forms **-jakite?* 'of them two' and **-jaŋine?* 'of them all', reflected in Sene, Migabac, and Momare, are blends of the original possessive suffixes **-jat-ina* and **-ja-ina* and the free personal pronouns **jakë* 'they two' and **jaŋë* 'they all'. But this remains a conjecture.

If we look at the Eastern Huon possessive suffixes of the singular number and the first person non-singular, we get the following picture. An ancient paradigm of pronominal forms that is different from the set of pronouns reflected in the free personal pronouns is being replaced by the latter. In the first person singular, the evidence for pEH **-ja* 'my' is slim but convincing. Reflexes of **-ja* 'my' occur in both the Kalasa and the Trans-Vitiaz subfamilies of the Eastern Huon family and it is not possible to explain them away as parallel independent innovations. Such an explanation suggests itself for the competing form **-na* 'my' which has an obvious source in the free personal pronoun pEH **na* 'I'. In the second person singular, there is good evidence for the reconstruction of pEH **-(ŋu)na* 'your' and the few apparent reflexes of **-ga* 'your' can be explained as an intrusion from the paradigm of the free personal pronouns. A careful diachronic analysis suggests that the variant **-ŋuna* 'your' was introduced to distinguish the original form **-na* 'your' from the intrusive form **-na* 'my'. The original second person singular possessive suffix was therefore pEH **-na* 'your', reflected in Sialum *-na* 'your'. In the third person singular, there are no competing reflexes. The form **-ina* 'his, her', bearing no resemblance to the free personal pronoun pEH **ja(ŋa)* 'he, she', is reflected in almost all daughter languages. In the first person dual and plural, the original possessive suffixes have only been preserved in the Kalasa family. Proto-Kalasa **-(i)sä* 'of us two' and **-(i)zä* 'of us all' are again clearly distinct from the free personal pronouns. In the Huon Tip family, on the other hand, the attested possessive suffixes of the first person dual and plural all resemble the free personal pronouns. We must assume that these analogical forms replaced earlier forms that were cognate with the forms preserved in the Kalasa family.

To find an etymological connection for the Eastern Huon possessive suffixes just discussed, we must leave the Huon Peninsula and look outside of the Finisterre-Huon stock. For the Madang stock, Ross (2000:40) reconstructs the singular free personal pronouns *_ya_ 'I', *_na_ 'you', *_ua_ 'he, she' and *_nu_ 'he, she'. Of these pronominal forms, the first person singular _ya_ 'I' and the second person singular _na_ 'you' are straightforward matches of pEH *_-ja_ 'my' and *_-na_ 'your'. In the third person singular, we note that proto Madang *_nu_ 'he, she' and pEH *_-ina_ 'his, her' contain the same consonant _n_, but the overall similarity between these two forms is too faint to count as a possibleg correspondence. For the first person non-singular, Ross reconstructs a pronominal root Proto-Madang *_i-_ 'we'. This reconstruction is, however, less certain than the reconstructions of the singular pronouns because of the less wide distribution of *_i-_ 'we' in the Madang stock. In the Rai Coast family, we find a divergent first person non-singular root, which Ross (2000:43) reconstructs as *_si-_. This root combines with dual and plural marking suffixes yielding pronominal forms such as Sinsauru (Evapia family) _sɛnɛ_ 'we', Siroi (Kabenau family) _sile_ 'we two', _sine_ 'we all', Saep (Yaganon family) _suba_ 'we two', _siga_ 'we all', Usino (Peka family) _sin_ 'we', Rerau (Nuru family) _sili_ 'we two', _sini_ 'we all' (Z'graggen 1980). Similar forms occur in Kalam and Kobon, e.g. Kobon _hol_ 'we two', _hon_ 'we all'. Ross (2000:45) interprets the agreement between the first person non-singular pronouns of the Rai Coast languages and Kalam-Kobon as a common innovation. Given the shaky status of proto Madang *_i-_ 'we', which *_si-_ is supposed to have supplanted, another interpretation seems possible. The *_s-_initial first person non-singular pronominal root of the Rai Coast languages and Kalam-Kobon may be a common inheritance from Proto-Madang. If we can project this pronoun to Proto-Madang, a connection with the Proto-Kalasa pronominal possessive suffixes *_-(i)sä_ 'of us two' and *_-(i)zä_ 'of us all' might be feasible. But the reconstruction of *_sV-_ 'we' as the first person non-singular pronoun root of the Madang stock is presently just as uncertain as the reconstruction of *_i-_ 'we'. Thorough research into the subgrouping of the Madang languages will be necessary to show if such a reconstruction can be made. Pending the results of such research, the connection between the Kalasa first person non-singular possessive suffixes and the Rai Coast and Kalam-Kobon first person non-singular free pronouns remains just a hypothesis.

The comparison of the Eastern Huon pronominal possessive suffixes with the Proto-Madang free personal pronouns yields the following picture. There is a perfect match between the first person singular and the second person singular forms. A connection between the seemingly ancient first person non-singular forms of the Kalasa languages and similar forms in the Rai Coast languages and Kalam-Kobon is possible, but not yet substantiated. A correspondence in two, possibly three, forms of a closed paradigm such as this transcends the threshold of chance similarity. There is definitely an etymological connection between the pronominal possessive suffixes of the Eastern Huon languages and the free personal pronouns of the Madang languages.

Table 2-9: Proto-Western Huon pronominal possessive suffixes

	1SG	2SG	3SG	1DU	1PL
pWH	*-ne	*-ge	*-ŋe	*-net(-ŋe)	*-nen(-ŋe)
pPindiu	*-në	*-gë		*-nit[ë]	*-nin[ë]
Dedua	-na	-ga	[-a ~ -ja]	-nira	-nina
Mongi	-na	-ga	[-a ~ -ja]	-nira	-nina
Tobo	-na	-ga ~ -ka	[-a ~ -ja]	-nira	-nina
Borong	-na	-ga	[-a ~ -ja, -ia]	-nara	-nana
Somba	-ni	-gi	-ŋi	-niri	-nini
pSankwep	*-n		*-ŋ	*-net(-ŋ)	*-nen(-ŋ)
Mesem	-n	-gi	-ŋ	-nedn	-nen
Nabak	-n	[-ndi]	-ŋ[aŋ]	-nit ~ -it	-n
pCromwell	*-ne	*-ge	*-ŋe	*-net-ŋe	*-nen-ŋe
Nomu	-n ~ -ne	-ge	-ŋe	[-ŋere]	[-ŋene]
Kinalaknga	-ni	-ŋgo	[-o ~ -jo]	[-nero]	[-neno]
Kumukio	-ne	-ŋge	[-o]	-netŋe	-nenŋe
Komba	-nʌ	-gʌ	-ŋʌ	-nikŋʌ	-niŋʌ
Selepet	-ne	-ge	-ŋe	-netŋe	-nenŋe
Timbe	-ne	-ɣe	-ŋe	-netŋe	-nenŋe

	2DU	2PL	3DU	3PL
pWH	*-ŋet(-ŋe)	*-ŋen(-ŋe)	*-jet(-ŋe)	*je(-ŋe)
pPindiu	*-ŋit[ë]	*-ŋin[ë]		
Dedua	-ŋira	-ŋina	-jir[a]	-ji[na]
Mongi	[-gira]	[-gina]	[-gira]	[-gina]
Tobo	[-gira ~ -kira]	[-gina ~ -kina]	[-gira ~ -kira]	[-gina ~ -kina]
Borong	[-gara]	[-gia]	[-gara]	[-gia]
Somba	-ŋiri	-ŋini	[-ŋiri]	[-ŋini]
pSankwep	*-ŋit(-ŋ)	*-ŋin(-ŋ)	[*-ŋit(-ŋ)]	[*-ŋin(-ŋ)]
Mesem	-igŋ	-iŋ	-igŋ	-iŋ
Nabak	-ŋit ~ -it	-ŋin ~ -in	-ŋit ~ -it	-ŋin ~ -in
pCromwell	[*-jet-ŋe]	[*-je-ŋe]	*-jet-ŋe	*-je-ŋe
Nomu	-(j)etŋe	-(j)eŋe	-(j)etŋe	-(j)eŋe
Kinalaknga	[-ero]	[-eɣo]	[-ero]	[-eɣo]
Kumukio	[-jere]	-jeŋe	[-jere]	-jeŋe
Komba	-zikŋʌ	-ziŋʌ	-zikŋʌ	-ziŋʌ
Selepet	-jetŋe	-jeŋe	-jetŋe	-jeŋe
Timbe	-jetŋe	-jeŋe	-jetŋe	-jeŋe

We turn now to the possessive suffixes of the Western Huon languages (Table 2-9). The first person singular suffix pWH **-ne* 'my' is reflected in all daughter languages, the second person singular suffix pWH **-ge* 'your' in all languages but Nabak. These forms are identical with the free personal pronouns pWH **ne* 'I' and **ge* 'you'. But note that the

possessive suffixes of the Cromwell languages show the original vowel *e* rather than the umlauted back vowel of the free pronouns, cf. Nomu *-ge* 'your' and *go* 'you', Selepet *-ne* 'my' and *nɔ* 'I'. Obviously, these possessive suffixes were not subjected to umlaut induced by a following ergative enclitic (cf. 2.2.2). In the third person singular, languages from all four second-order subfamilies reflect pWH **-ŋe* 'his, her'. The four Pindiu languages Dedua, Mongi, Tobo, and Borong have replaced this form with *-a ~ -ja* 'his, her', the first of these allomorphs occurring after consonants, the second after vowels. The postconsonantal allomorph *-a* is a zero onset form which has been formed analogically after *-na* 'my' and *-ga* 'your'. The postvocalic allomorph *-ja* starts with a hiatus filling *j*. Similarly, Kinalaknga and Kumukio have replaced **-ŋe* with *-o ~ -jo* 'his, her'.

In the first person dual and plural, we find possessive suffixes that resemble the free personal pronouns and others that consist of these pronouns plus the third person singular possessive suffix **-ŋe*. The Proto-Cromwell possessive suffixes **-net-ŋe* 'of us two' and **-nen-ŋe* 'of us all' are of the latter type. Kinalaknga has replaced **-ŋe* with the new third person singular suffix *-o*. The Nomu forms with initial *ŋ* are surprising and I have no explanation for them. In the Sankwep family, the Mesem reflexes *-nedn* 'of us two' and *-nen* 'of us all' seem to go back to forms with added **-ŋe* while Nabak only reflects **-net* and **-nen*. The Somba suffixes *-niri* 'of us two' and *-nini* 'of us all' are identical with the free personal pronouns. I assume that these forms descend from **-net* and **-nen* and that the additional final vowel was introduced in analogy with the personal pronouns. The other Pindiu languages show a final vowel *a* in the possessive suffixes of the first person dual and plural, as do all forms of the paradigm. These forms probably also descend from **-net* and **-nen*.

There was a trend to eliminate the distinction between the second person non-singular and the third person non-singular in the possessive suffixes throughout the Western Huon family. However, the trend did not always go in the same direction. Somba, Mesem, and Nabak extended the second person forms to the third person. In the Cromwell family, the extension went in the opposite direction. Dedua is the only Western Huon language for which distinct second and third person non-singular forms are attested. When Pilhofer (1928) recorded his morphological data, Dedua still retained the third person forms *-jira* and *-jina*, but they had given way to the second person forms *-ŋira* and *-ŋina* by the time the Ceders (1990) wrote their Dedua grammar. Evidently, gDedua was the last language to be reached by the family-wide trend to conflate these forms. The Pindiu languages Mongi, Tobo, and Borong show innovative forms. Presumably the consonant *g-*, characteristic of the second person in the singular, was introduced into the second person non-singular forms after the initial *ŋ-* had disappeared. Then these forms were extended to the third person non-singular. As in the first person non-singular, there are languages which reflect possessive suffixes that are identical with the short forms of the personal pronouns in the second and third person non-singular, and languages that add the third person singular suffix **-ŋe*.

The pronominal possessive inflections we have seen so far are all suffixes. There is one Western Huon language, however, which has preserved clear traces of the earlier prefixation of the possessive inflections. Selepet has a fixed expression that contains a petrified noun with prefixal possessive marking.

Selepet (McElhanon and McElhanon 1970, s.v. *nâhâitŋe sâ-)*

15	1SG *nə-ɣɔit-ŋe*	1DU *net-kɔit-ŋe*
	2SG *gə-ɣɔit-ŋe*	2DU *jet-kɔit-ŋe*

The noun *kɔit* in (15) is only used in collocation with the verb *sə* 'speak'. The fixed expression *nəɣɔitŋe səmu* means 'he did not say my name' and refers to the taboo under which the use of one's in-laws' names was put in traditional society. Only first and second person singular and dual forms of this fixed expression are in common use. Note that the noun in (15) carries the third person singular possessive suffix *-ŋe* at the same time as a prefix specifying the person and number of the possessor. The suffix must have come to be associated with the possessive construction when possession was still expressed by prefixes. The following stage, in which possession was expressed by a circumfix, can still be seen in the Selepet relic noun in (15). As a next step, the use of the suffix was extended to contexts in which there was no possessive prefix, presumably in constructions with alienably possessed nouns that only occasionally took possessive marking. It was then reinterpreted, no longer as a concomitant of the possessive construction, but as an exponent of the third person singular possessor. Around this pivotal form the possessive construction was reorganized. The possessive prefixes of the other persons and numbers shifted their position and became suffixes. In Selepet and other Cromwell languages, the shifted person-number affixes combined with the suffix **-ŋe* in the dual and plural number to form complex suffixes.

The shift from prefixation to suffixation has not been entirely completed in Selepet. Although the Selepet possessive inflections are usually suffixes, they can exceptionally be prefixed to the possessed noun.

Selepet (McElhanon 1970d:40)

16a	*denenŋe*	16b	*nenŋeren*
	den-nenŋe		*nenŋe-den*
	language-1p:POSS		1p:POSS-language
	'our language'		'OUR language'

(16a) shows the common possessive construction, in which the possessive marker is a suffix. In (16b) the possessive affix is permuted to the front of the possessed noun. The prefixal position of the possessive marker in (16b) expresses emphasis. Such a permutation of the possessive marker has only been observed for the dual and plural numbers. The singular suffixes, which are monosyllabic, have lost this freedom of movement (McElhanon 1970d:40). The permutability of the dual and plural possessive suffixes is a remnant of the shift from prefixation to suffixation. Selepet preserves a stage in the shift in which the possessive inflections can occur in prefixal as well as in suffixal position, with a functional difference attached to the two options. The prefixal position is clearly the marked option in that it is not open to the singular affixes and carries an additional pragmatic meaning. Suffixation is the unmarked option open to all affixes and much more common than prefixation. The last stage in the shift is reached when the non-singular suffixes, too, lose the ability to permute. This stage has been reached by the other Western Huon languages, which have immovable possessive suffixes.

In Selepet, there is thus clear evidence of the former prefixation of the possessive inflections. The possessive prefixes to be seen in the petrified noun *nɔɣɔitŋe* (15) are identical with the pronominal prefixes on object verbs. The same relationship of identity or near identity between possessive prefixes on nouns and object prefixes on verbs can be found in several Trans-New Guinea subfamilies. (17) through (20) show the singular number of these prefixes on nouns (a) and verbs (b) in four Trans-New Guinea languages spread along the mountainous spine of New Guinea.

Fore (Gorokan family; Scott 1978:71f, 51f)

17a	*na-ba:wé* 'my father'	17b	*na-gaye* 'he sees me'
	ka-ba:wé 'your father'		*ka-gaye* 'he sees you'
	a-ba:wé 'his/her father'		*a-gaye* 'he sees him/her'

Telefol (Ok family; Healey and Healey 1977, s.v.)

18a	*mom* 'my uncle'	18b	*ni-támamin* 'see me'
	ko-got 'your uncle'		*ka-támamin* 'see you'
	o-got 'his/her etc. uncle'		*a-támamin* 'see him'
			u-támamin 'see her'

Marind (Anim stock; Drabbe 1955:104, 76)

19a	*na-va*^{i} 'my/our father'	19b	*na-kov* 'feed me/us'
	ha-va^{i} 'your father'		*ha-kov* 'feed you'
	e-va^{i} 'his/her/their father'		^{o}*a-kov* 'feed him/her'

Grand Valley Dani (Great Dani family; Bromley 1981:190f)

20a	*na-su* 'my net'	20b	*na-the* 'he hit me'
	ha-su 'your net'		*ha-the* 'he hit you'
	a-su 'his/her net'		*wa-the* 'he hit him/her'

In Fore as well as other Gorokan languages, the possessive prefixes to nouns and the object prefixes to verbs are exactly identical (17). In the other languages in (18) to (20) there are minor differences between the two sets of paradigms, most commonly in the third person singular. This partial divergence is not surprising given the long time these paradigms must have existed side by side. Ultimately, both paradigms go back to the Trans-New Guinea personal pronouns used as proclitics before nouns and verbs. In Marind (19) and Grand Valley Dani (20), the object prefix of the third person singular reflects a proto-form **wa-*, which has a chance to be the oldest version of the Trans-New Guinea personal pronoun of the third person singular. This pronominal form has survived as an object prefix to verbs in a number of widely separated Trans-New Guinea families and as a free pronoun in a few families, but it is absent from the possessive prefixes on nouns. Instead, we find third person singular prefixes consisting of a single vowel in the possessive paradigm, most often the same vowel as in the first and the second person singular prefixes **na-* and **-ga*. Compared to these two prefixes, the third person singular prefix **a-* has an empty syllable onset. Such a partial zero-form for the third person singular could easily have arisen several times independently.

Nonetheless, the comparative evidence suggests that the common Trans-New Guinea possessive prefix of the third person singular was **a-*.

The languages in (17) through (20) are morphologically conservative in that they have preserved prefixes in the possessive inflection paradigm of nouns and the object inflection paradigm of verbs. The Western Huon languages have innovated in both paradigms by introducing suffixes. In the case of the object inflections we found clear evidence in the form of the irregular object verbs that prefixation is the original pattern (cf. 1.1.5). The object person-number suffixes, which are the regular form of object inflection in the Western Huon (as well as the Eastern Huon) languages, are an innovation. For the possessive inflections we have found evidence in Selepet that a shift from prefixation to suffixation has taken place. There are further traces of an ancient possessive prefix in other Western Huon languages beside Selepet, corroborating the assumption that the possessive inflections were originally prefixed.

In three cognates, one reconstructible to Proto-Huon Peninsula and two to Proto-Western Huon, an unexpected initial vowel occurs in certain Western Huon languages but is missing in most others. The (a)-examples in (21) to (23) exhaustively list the reflexes with a prothetic vowel, the (b)-examples give a selection of reflexes without this vowel.

21 pHP **mat* 'woman's house'

a		b	
	Nomu *emere*		Ono *mat*
	Selepet *emet*		Kovai *mot* 'village'
	Timbe *emet*		Somba *miri*
			Kinalaknga *mere*
			Kumukio *mere*

22 pWH **zut* 'tooth'

a		b	
	Nomu *ezet*		Mongi *zər-*
	Kinalaknga *ezer-*		Somba *zit, zət*
	Kumukio *endzer-*		Nabak *zet*
			Selepet *sət*

23 pWH **tep* 'bowels, feces'

a		b	
	Somba *irip*		Mesem *ti*
	Nomu *etep*		Nabak *tip*
	Kinalaknga *etep*		Komba *tep ~ tip-*
	Kumukio *etep*		Selepet *tep*

The word for 'woman's house' starts with *m-* in the Eastern Huon languages Ono and Kovai as well as the Western Huon languages Somba, Kinalaknga, and Kumukio (21b). This agreement across the two first-order families of the Huon Peninsula family suggests that the proto-form of this word be reconstructed with initial **m-*, viz. as pHP **mat*. The reflexes in Nomu, Selepet and Timbe deviate from the reconstructed form in that they show an initial vowel *e-* (21a). The same prothetic vowel occurs in the two body part terms in (22a) and (23a). We note that in all three cases Nomu is among the languages with an extra initial

vowel. But whereas the closely related languages Kinalaknga and Kumukio side with Nomu in the cognates in (22) and (23), they show no prothetic vowel in the cognate in (21). Similarly, Selepet shows a prothetic vowel in the cognate in (21), but not in the cognates in (22) and (23). The distribution of the extra initial vowel across the Western Huon languages is therefore erratic.

The idea that the prothetic vowel in the (a)-examples in (21) to (23) might be phonetically conditioned finds no support in the data. A phonetic prothesis would be natural in words with an initial liquid, like Burum *irip* (23a). But the comparative evidence shows that this word in fact originally started with the stop *t-* rather than the liquid *r-*. The three cognates in (21) to (23) started with three different consonants, **m-*, **z-* and **t-*, which do not appear to have any significant phonological feature in common. Furthermore, if the prothesis was phonetically conditioned, we would expect other words with the same initial consonants to have it, but this is not the case. The examples of prothetic vowels in (21a) to (23a) are exhaustive.

Having discarded a phonetic reason, we can envisage a morphological origin of the prothetic vowel. All three nouns in (21) to (23) are naturally possessed, and it can be assumed that they frequently occurred with a possessive affix. The initial *e-* in the (a)-examples must be a vestige of an earlier possessive prefix. In fact, pWH **e-* is the expected reflex of the Trans-New Guinea third person singular possessive prefix **a-*. In a few words this prefix evidently continued to be present after the switch from prefixation to suffixation and was then reinterpreted as being a part of the word root. The afterlife of pWH **e-* 'his, her' was facilitated by the fact that this possessive prefix was the only one that did not change its position. It was eventually replaced by pWH **-ŋe* 'his, her', whose origin is unknown but which has always been a suffix.

Thus, we find good evidence of the earlier prefixation of the possessive inflections in Selepet and scattered evidence in other Western Huon languages. The permutability of the dual and plural possessive affixes in Selepet is an archaic feature which must go down to Proto-Western Huon. We can conclude that the possessive affixes could be prefixed in Proto-Western Huon, as in other conservative Trans-New Guinea languages. On the other hand, the fact that the possessive inflections are immovable suffixes in all other Western Huon languages suggests that suffixation was also an option in Proto-Western Huon. It is therefore likely that possessive affixation was in a transitional stage in Proto-Western Huon. The switch from prefixation to suffixation was under way and the possessive affixes could appear as prefixes as well as suffixes.

Above, I have given separate accounts of the pronominal possessive suffixes of the Eastern Huon and the Western Huon languages. It should have become clear by now that the possessive suffixes of the two families have different histories. The forms of the first and the second person singular are totally different between them and preclude a synthesis. The oldest forms that can be reconstructed for the Eastern Huon family are the suffixes pEH **-ja* 'my' and **-na* 'your'. As we have seen, these forms have an etymological connection in the personal pronouns of the Madang languages. The oldest forms that can be inferred for the Western Huon family are the prefixes pWH **ne-* 'my' and **ge-* 'your'. These forms have correspondents in several morphologically conservative Trans-New Guinea families spoken along the central

cordillera of New Guinea. Both pairs of possessive affixes thus have an outside connection and must have a history that goes back in time much further than Proto-Huon Peninsula.

In the third person singular, there is good evidence for the reconstruction of pEH **-ina* 'his, her' and pWH **-ŋe* 'his, her'. Through internal reconstruction, combining the evidence from personal pronouns and emphatic pronouns, I arrived at the conclusion that the Western Huon suffix must be the older of the two, going back to pHP **-ŋa*. It is likely that pWH **-ŋe* formed a circumfix with pWH **e-* 'his, her', which it later replaced. The antecedent pHP **-ŋa* may originally have been something other than a pronominal element.

For the second person dual and plural, I reconstructed pEH **-ŋat-ina* and **-ŋa-ina* and pWH **-ŋet(-ŋe)* and **-ŋen(-ŋe)*. For the third person dual and plural, the forms pEH **-jat-ina* and **ja-ina* and pWH **-jet(-ŋe)* and **-je(-ŋe)* can be inferred. These forms consist of a pronominal element that is identical with the corresponding free personal pronoun plus the possessive suffix of the third person singular. Although these Eastern Huon and Western Huon suffixes are obviously comparable, it would be a mistake to project them to Proto-Huon Peninsula. Presumably, the Eastern Huon languages originally had different possessive suffixes, which were replaced with personal pronouns. We do not know when this replacement took place, possibly later than Proto-Huon Peninsula. The apparent match between the Proto-Eastern Huon and the Proto-Western Huon possessive suffixes of the second and the third person dual and plural is an instance of parallel development.

I have abstained from giving Proto-Huon Peninsula reconstructions of the pronominal possessive suffixes for the reason that the paradigms reconstructible to Proto-Eastern Huon and to Proto-Western Huon appear to be unrelated. The question remains: What was the situation in Proto-Huon Pensinsula? Proto-Huon Peninsula seems to have had a more complex system of possessive inflection than any of its daughter languages. It must have had a set of possessive suffixes as well as a set of possessive prefixes composed of different pronominal forms. There is no direct evidence of such coexisting possessive affix paradigms in any Huon Peninsula language and I am unaware of a parallel in any other related language family. The question of what might have been the functional difference between the possessive prefix paradigm and the possessive suffix paradigm is accordingly unanswerable.

2.2.7 Nominal number suffixes

In conjunction with the pronominal possessive suffixes one finds dual and plural markers that specify the number of the possessed noun. Phinnemore and Phinnemore (1985:25) state that in Ono the number markers only occur in the presence of a possessive suffix. The same seems to be the case in Selepet (McElhanon 1972:64). In Kâte, the number markers also usually occur on possessed nouns, but they can be used alone in vocative phrases (Pilhofer 1933:56). This exception has also been noted for Dedua (Ceder and Ceder 1990:98) and for Borong (Olkkonen and Olkkonen 2000:11). The number markers are generally used for human referents. With kinship terms, their use is obligatory in Mongi (Lee and Lee 1993:66), Somba (Olkkonen and Olkkonen 1983:56) and Komba (Southwell 1979:83).

Somba (Olkkonen and Olkkonen 1983:116)

24	*Bərat-jaɣət-ni*	*jaɣət.*	*Naɣən-urup-ni*	*kimbim*	*k^{w}aɣəp.*
	daughter-DU-1s:POSS	two	son-PL-1s:POSS	thumb	without
	'I have two daughters and four sons.'				

Nabak (Fabian, Fabian and Waters 1998:23)

25	*nemu-ndi-ne*
	son-2s:POSS-PL
	'your sons'

As a rule, the number suffixes precede the pronominal possessive suffixes. The kinship terms in the Somba example (24) carrying the dual suffix *-jaɣət* < pHP **-jâk{a,u}t*, respectively the plural suffix *-urup* < pWH **-utup* illustrate this. Mesem and Nabak deviate from this pattern. In these two languages, the plural suffix *-ne* follows the possessive suffix (25). The same order is found in the neighboring Erap languages. Mesem and Nabak also deviate from the norm in that they only have a plural suffix, but no dual suffix, and that the plural suffix is often used on nouns with an inanimate referent. The Mesem and Nabak plural suffix *-ne* is an innovation, but it has no cognate in any of the documented Erap languages.

Kovai (A. Brown 1992:27)

26a	*gim-in*	26b	*gim-b-in*	26c	*gim-bi-b-in*
	son-1s:POSS		son-PL-1s:POSS		son-PL-PL-1s:POSS
	'my son'		'my sons' or 'our son'		'our sons'

Kovai has also changed the number morphology of possessed nouns. It has introduced a plural marker *-b* which is ambiguous. If *-b* is added to a possessive suffix of the first person singular, either the possessor or the possessed can be interpreted as being in the plural (26b). Suffixing *-b* a second time over results in both the possessor and the possessed noun being pluralized (26c). There is no dual marker in Kovai. Bugenhagen (1994:78) notes the similarity of the Kovai plural suffix *-b* with the prefix *b-* used in plural constructions in the neighboring Oceanic language Mangap-Mbula and suggests that the Mangap-Mbula affix may have been borrowed from Kovai. However, the Kovai plural suffix *-b* has no etymological connection in any other Huon Peninsula language and is just as mysterious as is apparently the Mangap-Mbula affix *b-* among the related Oceanic languages.

Table 2-10: Proto-Huon Peninsula nominal number suffixes

	two	DU	PL
pHP	*jâk{a,u}t	*-jâk{a,u}t	
pKalasa	[*etkä]	[*etkä]	*ekpäp
Sialum	etka	-etkir, -etkara	-ekpap ~ -eku
Ono	etke	-etke	-ekop
Kovai	[lolon)]	—	-b
pHuon Tip	*jâkëʔ	*-jâkëʔ	*-püʔ
Sene	jakeʔ[kɔ]	-jakeʔ	-he
Migabac	jaheʔ[kaŋ]	[-keʔ]	-foʔ
Momare	jaheʔ[kaŋ]	-jaheʔ	-poʔ, [-foʔ]
Wamorâ	jojohaʔ		
Mâgobineng	jojohaʔ		
Wemo	jajaheʔ	-jaheʔ	-fɔʔ
Naga	jojokaʔ	-jokaʔ	-pɔʔ
Mape	jojokaʔ	-jokaʔ	-puʔ
pWH	*jâkut	*-jâkut	*-utup
Dedua	johoʔ[kaŋ]	-hoʔ ~ -hor-	[-foʔ ~ -for-]
Mongi	ərəhəʔ	-ərəhəʔ	[-həʔ ~ -hər-]
Tobo	jəɣət	-jəɣət	-ərət
Borong	[woi]	[-woi]	-uru
Somba	jaɣət	-jaɣət	-urup
Mesem	[zebɔk]	—	[-ne]
Nabak	[zut]	—	[-ne]
Nomu	okop	-okot	-itop
Kinalaknga	ikop	-ikot	-urip
Kumukio	iko[sop]	-ikot	-urip
Komba	zaɣʌt	-zaat[5]	-rʌp
Selepet	jɔɣɔp	-jɔɣɔt	-lip
Timbe	[lɔuwɔ]	-loɣɔt	-lup

In most Huon Peninsula languages, the dual suffix is identical with or similar to the numeral 'two'. For ease of comparison, this numeral is given in the column next to the dual suffixes in Table 2-10. The cognate for 'two' in the Kalasa languages Sialum and Ono and the dual suffixes derived from it have no correspondents in any other HP language. pHP **jâk{a,u}t* 'two' is reflected in the Huon Tip languages, in the Pindiu languages with the exception of Borong, in the Dallman languages, and in the Kabwum languages Komba and Selepet. The Eastern Huon and the Western Huon languages disagree in their reflexes of the second vowel; whereas the Huon Tip languages reflect **a*, the Western Huon languages reflect **u*. In Nomu, Kinalaknga and Selepet, the final *-t* of pWH **jâkut* 'two' has irregularly been changed to *-p*. In most of these languages, the dual suffix is homonymous or near homonymous with the

5 The form *-zaat* with expected long vowel was recorded by McElhanon. Southwell (1979) gives *-zat*.

numeral 'two', leading to the reconstruction of the dual suffix pHP *-*jâk{a,u}t*. In the Huon Tip family, the first syllable of the numeral 'two' is reduplicated in the Kâte and the Mape dialects. There is no such reduplication in the corresponding dual suffix, which is the more conservative form. The coverage of the Huon Tip languages is not complete because Pilhofer (1928) did not include the nominal number suffixes in his morphological survey. The Migabac dual suffix *-ke?* looks like a truncation of proto Huon Tip *-*jâkë?*. The loss of the first syllable is paralleled in Dedua *-ho?*. In Komba, the dual suffix *-zaat* has lost the intervocalic *-ɣ*, a regular phonological development between like vowels, whereas the numeral *zaɣʌt* 'two' preserves it. In Mongi and Timbe, the initial consonant **j-* has been irregularly replaced with *ər-* and *l-*, respectively. In Mongi, Tobo, Nomu, Selepet and Timbe the first vowel of pWH *-*jakut* has been assimilated to the rounded second vowel. Somba *-jaɣət* and Komba *-zaat* preserve the original quality of the first vowel.

For the plural suffix, no top-level reconstruction is possible. The Huon Tip languages reflect a plural suffix *-*pü?*. This suffix has been borrowed by the neighboring Pindiu languages Dedua and Mongi. The prevocalic allomorphs Dedua *-for-* and Mongi *-hər-* need not imply that the final consonant of the borrowed suffix had an alveolar place of articulation. The alternation between word final glottal stop *-ʔ* and prevocalic *-r-* follows the productive morphophonological rules of both languages. The phonological reconstruction of the Proto-Western Huon plural suffix is difficult and *-*utup* is only a best guess. For the reconstruction of the intervocalic *-*t-* I rely on Nomu *-itop*. It is strange, however, that the Kinalakgna and Kumukio reflex *-urip* has *-r-* instead of *-t-*. The three Pindiu languages Tobo, Borong, and Somba and the Dallman languages agree in showing an initial vowel which must have been lost in the Kabwum languages. The **u* I reconstruct was not lowered in Borong, Somba, Kinalaknga and Kumukio, presumably because the suffix *-*utup* carried no primary stress. The majority of the reflexes point to **u* as the vowel of the second syllable, too, and this vowel also failed to be lowered in Borong, Somba and Timbe. Kinalaknga, Kumukio and Selepet unexpectedly reflect this vowel as *-i-*. Another irregularity is the final *-t* instead of *-p* in Tobo *-ərət*. The reason for the many irregular phonological developments in the nominal number suffixes is probably the fact that they are unstressed.

2.2.8 Demonstratives

The Huon Peninsula languages have two sets of demonstrative roots that lend themselves to reconstruction. First, there are the basic demonstratives. Most often they are monosyllabic roots, but in some languages the demonstrative root carries an invariable suffix, e.g. Migabac *ja-go* 'this', *jo-go* 'that', Dedua *jo-mo?* 'this', *i-mo?* 'that', Komba *zi(-rʌ)* 'this', *zo(-rʌ)* 'that'. In Komba, the suffix is optional and it is found not only on the basic but also on the elevational demonstratives. Sialum and Ono are the only languages in which the suffix is variable and meaningful. The suffix *-wa* in Ono *i-wa* 'this' and *je-wa* 'that' indicates that the object is visible whereas the suffix *-ka* in *i-ka* 'this' and *je-ka* 'that' indicates that the speaker is not sure where the object is located (Phinnemore and Phinnemore 1985:31). The manner demonstratives, such as Komba *i-tʌ* 'like this' and *ja-tʌ* 'like that', are made up of a basic demonstrative root plus a manner suffix. If the demonstrative root enclosed in a manner demonstrative is

different from the root in the basic demonstrative, as in Komba, the manner demonstrative is included in Table 2-11.

The second type of demonstrative root is the elevational demonstratives. The Western Huon languages have three such demonstratives for the locations 'over there' (pWH **edi*), 'up there' (pWH **ewu*) and 'down there' (pWH **emu*). A comparison with the cognate forms *andu* 'over there', *awu* 'up there' and *amu* 'down there' of the Finisterre language Rawa (Gusap-Mot family; Toland and Toland 1991:44) shows that these demonstratives have been inherited from Proto-Finisterre-Huon. The Eastern Huon languages have lost the ancient elevational demonstratives for 'up there' and 'down there' and only retain the form for 'over there'. In the Huon Tip family, this cognate has changed its function. It became associated with third person referents and joined the basic demonstratives. I follow Pilhofer's (1933:61) analysis saying that Kâte and the other Huon Tip languages have three basic demonstratives that are correlated with the three grammatical persons. It must be said, however, that the Kâte demonstrative *i* 'that', which is associated with the second person in some of its uses, is the most common demonstrative and is frequently used anaphorically. The third person demonstrative *oʔni* 'yon', on the other hand, is hardly ever used anaphorically and usually refers to a distant third person referent in situation deixis. Kovai also seems to have a tripartite system of basic demonstratives. All other Huon Peninsula languages have only two basic demonstratives, a proximal one and a distal one.

A look at Table 2-11 shows that the basic demonstratives of the Huon Peninsula languages are far less conservative than the personal pronouns. There has been frequent renewal and several languages have demonstratives that have no correspondents in any other language. The closely related languages Mesem and Nabak, for instance, have totally different basic demonstratives. The Siawari and the Somba dialect of the Somba-Siawari language have different proximal demonstratives and the distal demonstrative is only a partial match. Kinalaknga and Kumukio share proximal and distal demonstratives with an initial *b-*, but similar forms recur in no other language. Even borrowing is in evidence among the basic demonstratives. The Nomu demonstratives *iwa* 'this' and *jewa* 'that' have no doubt been borrowed from Ono. The suffix *-wa* indicating visibility in Ono but having no meaning in Nomu gives away the loan. The match between Tobo *muju* 'this' and *miɣi* 'that', on the one hand, and Siawari *muɣu* 'this' and *miɣi* 'that', on the other, also looks suspiciously like borrowing.

Table 2-11: Proto-Huon Peninsula basic demonstratives

	this	that	yon
pHP	*i	*ja	
pKalasa	*i[-wa]	*ja[-wa]	
Sialum	e-wa	ja-wa	—
Ono	i-wa	je-wa, ja[-le] 'like that'	—
Kovai	[(i)ne)], [(i)]je 'here'	[(i)na], [(i)]ja 'there'	(i)rin
pHuon Tip	[*ja]	[*i]	*andi
Sene	[na]	i	ɔdi
Migabac	ja, ja[-go]	i, [jo-go]	edi
Momare	[nai]	i	anti
Wamorâ	[e], je	[ɔi], i	andi
Mâgobineng	je	i	adi
Wemo	[zi]	i	[oʔni]
Naga	[i]	[ɔi]	alɔ
Mape	[i]	[ɔi]	adɯ
pWH		*ja	
Dedua	[jo-moʔ]	[i-moʔ], jai 'there'	—
Mongi	[jo-mi, jou-mi]	[i-mi]	—
Tobo	[muju]	[miɣi]	—
Borong	[yuu, koi, loo]	[ii]	—
Siawari	[muɣu, muŋgu]	[miɣi, miŋgi]	—
Somba	[ki]	[mi]	—
Mesem	[mi]	[mu]	—
Nabak	[pi]	[ke]	—
Nomu	[iwa]	[jewa, jowa]	—
Kinalaknga	[bi]	[bo]	—
Kumukio	[bi]	[bo, bu]	—
pKabwum	*ji	*ja	
Komba	zi[(-rʌ)], i[-tʌ] 'like this'	[zo(-rʌ)], ja(-tʌ) 'like that'	—
Selepet	[ju], ji	ja	—
Timbe	i[(-re)]	a[(-re)]	—

In spite of the significant amount of disagreement, there is enough agreement among the basic demonstratives of the Huon Peninsula languages to allow us to propose Proto-Huon Peninsula reconstructions. The crucial correspondence is that between the Kalasa languages (EH) and the Kabwum languages (WH). For the Kalasa languages Sialum and Ono, the demonstrative roots **i-* 'this' and **ja-* 'that' can be reconstructed. They match the Proto-

Kabwum roots *ji* 'this' and *ja* 'that'. The Proto-Kabwum forms are reflected by Timbe *i(-re)* 'this' and *a(-re)* 'that' which lost the initial *j-, an otherwise attested, albeit not regular sound change. In Selepet, the basic demonstratives in common use are *ju* 'this' and *ja* 'that', showing an alternation between the vowels *u* and *a* that recurs in the elevational demonstratives (see Table 2-12). The forms with *u* are proximal, those with *a* distal. This vowel alternation symbolizing distance must have arisen in the elevational demonstratives and was then extended to the basic demonstratives. The Selepet dictionary (McElhanon and McElhanon 1970, s.v. *yi*) contains another proximal demonstrative *ji* 'this'. It seems that the older form *ji* is being pushed aside by the newer form *ju* which conforms to the pattern of distance symbolism evident in the elevational demonstratives. In Komba, the proximal demonstrative *zi(-rʌ)* 'this' is a straightforward reflex of proto Kabwum *ji, but the distal demonstrative *zo(-rʌ)* 'that' has a deviant vowel. However, we do find the expected vowel in the manner demonstrative *ja-tʌ* 'like that', which preserves an older form of the demonstrative root. It is not clear why the initial *j-* of *ja-tʌ* escaped the regular sound change *j- > z- or why *j- disappeared altogether in the corresponding proximal form *i-tʌ* 'like this'. No source is in sight from which these manner demonstratives might have been borrowed. But Komba has many different dialects, which did not always undergo the same sound changes.

The Komba, Selepet, and Timbe forms just discussed lead to the reconstruction of Proto-Kabwum *ji 'this' and *ja 'that'. The phonological correspondence of both these forms to proto Kalasa *i- 'this' and *ja- 'that' is not exactly as expected. The distal demonstrative pHP *ja 'that' should surface with a vowel -e in the Kabwum languages. We find this expected outcome in the reflexes of the etymologically identical personal pronoun pHP *ja 'he/she, they' > Timbe *je* 'they', Selepet *jen* 'they' and Komba *zen* 'they'. By contrast, the demonstrative Proto-Kabwum *ja 'that' retained its vowel quality because it was felt to contain a sound symbolic indication of distance. A shift to a front vowel would have destroyed the sound symbolism. The proximal demonstrative proto Kabwum *ji 'this' also does not perfectly correspond to its Kalasa counterpart. It starts with a *j- for which there is no evidence in the Kalasa languages. Adding a *j- to pHP *i 'this' enhanced the sound symbolic opposition between the proximal and the distal demonstratives. Proto-Kabwum *ji and *ja have a submorphemic element *j- in common and only differ in their vowels, which symbolize nearness and farness, respectively.

Apart from the Kabwum languages, there is one other Western Huon language with a reflex of a Proto-Huon Pensinsula basic demonstrative. It occurs in the Dedua deictic *jai* 'there', which has undergone the cross-linguistically common shift in reference from people and things to places (C. Brown 1985:289ff). The final -*i* in *jai* was presumably once a locative enclitic, though there is no other trace of it in contemporary Dedua. Just like the Kabwum reflexes of pHP *ja 'that', Dedua *jai* 'there' has irregularly retained the vowel -*a*. There is, however, also a local deictic *jei* 'here' whose vowel has the quality the sound laws let us expect. The two local deictics are no doubt etymologically identical. When *ja underwent the sound change *a > e it lost its sound symbolic force to signal distance. The unshifted form *ja was retained because it had this force. The shifted form *jei* stands in opposition to *jai* 'there' and has assumed the meaning 'here' because of its front vowel. The unshifted Dedua reflex *jai* confirms the account given above for Proto-Kabwum *ja. The distal demonstrative pHP *ja 'that' resisted the Western Huon sound change *a > e for sound symbolic reasons.

In the Eastern Huon language Kovai, too, the reflexes of the Proto-Huon Peninsula basic demonstratives are local deictics. Like the basic demonstratives *(i)ne* 'this' and *(i)na* 'that', *(i)je* 'here' and *(i)ja* 'there' occur in a long and in a short form. The long form contains an initial *i-* which is absent from the short form. It is probably etymologically identical with the personal pronoun *i* 'he, she'. The vowel of the proximal local deictic *je* 'here' has been lowered in analogy to the proximal demonstrative *ne* 'this'. Now the local deictics parallel the basic demonstratives in showing a minimal opposition between the vowel *-e* in the proximal form and the vowel *-a* in the distal form. The initial *j-* in *je* 'here' may have arisen as a transitional glide in the long form *ije*. It is therefore possible to derive Kovai *je* 'here' and *ja* 'there' from pHP **i* 'this' and **ja* 'that'.

For Proto-Huon Tip, the basic demonstratives **ja* 'this', **i* 'that' and **andi* 'yon' correlated with the first, second, and third person, respectively, can be reconstructed. The first person demonstrative **ja* 'this (mine)' is widely reflected in the Huon Tip area by Migabac *ja*, Mâgobineng *je* and Wamorâ *je*. It is, however, absent from the Mape dialects. The Mape first person demonstrative *i* 'this (mine)' seems to go back to the Proto-Huon Tip second person demonstrative **i* 'that (yours)' which must have extended its referential range to the first person and was then reduced to a first person proximal demonstrative when the innovative form *ɔi* 'that (yours)' took over the referential range associated with the second person. The second person demonstrative Proto-Huon Tip **i* 'that (yours)' is reflected in all daughter languages with the exception of the Mape dialects, and the third person demonstrative **adi* 'yon (his/hers)' in all languages except Wemo.

If the Proto-Huon Tip demonstratives **ja* 'this (mine)' and **i* 'that (yours)' are compared with the Proto-Huon Peninsula demonstratives **i* 'this' and **ja* 'that', it seems as if they had been switched. However, a real permutation is hardly a possible diachronic development. We must look for a scenario that leads in plausible steps from the Proto-Huon Peninsula forms to the Proto-Huon Tip forms. Several such scenarios could be conceived, but I will only present the one that I consider the most plausible.

The series of changes that affected the Proto-Huon Peninsula demonstratives in the Huon Tip family was initiated by the intrusion of pHP **andi* 'that over there' into the realm of the basic demonstratives. Pre-Huon Tip **andi* 'yon (his, hers)' encroached upon the referential range of pHP **ja* 'that' with the effect that this demonstrative lost its distance specification. The neutral demonstrative Pre-Huon Tip **ja* 'this, that' was now no longer in direct opposition to pHP **i* 'this'. Rather, the latter demonstrative complemented Pre-Huon Tip **andi* 'yon (his, hers)' and became associated with the second as well as the first person. Pre-Huon Tip **i* 'this (mine, yours)' was then challenged by **ja* 'this, that'. The change of a neutral demonstrative to a proximal demonstrative is well attested in the Indo-European language family (Brugmann 1904:56ff) and I propose the same change for Pre-Huon Tip **ja* 'this, that' > proto Huon Tip **ja* 'this (mine)'. This semantic change had the effect that Pre-Huon Tip **i* 'this (mine, yours)' restricted its referential range to the second person. Proto-Huon Tip **ja* 'this (mine)', **i* 'that (yours)' and **andi* 'yon (his/hers)' now formed a tripartite demonstrative system associated with the three grammatical persons.

If the above scenario is correct, Proto-Huon Tip **i* 'that (yours)' and **ja* 'this (mine)' can be traced back to pHP **i* 'this' and **ja* 'that'. There is thus ample evidence for the reconstructed Proto-Huon Peninsula basic demonstratives in the Eastern Huon family, but

only limited evidence in the Western Huon family. In both families, the manner demonstratives usually contain demonstrative roots that are identical with the basic demonstratives. The suffixes turning them into manner demonstratives do not agree across the boundary separating the Eastern Huon from the Western Huon languages. For the Huon Tip family, the suffix **-ŋuʔ* 'like' can be reconstructed, cf. the manner demonstratives meaning 'like that' in Migabac *i-ŋuʔ*, Momare *i-ŋuʔ*, Sene *i-ŋu*, Mâgobineng *i-ŋuʔ*, Kâte *i-ŋuʔ*, Wamorâ *i-ŋiʔ*, Mape *ə-ŋɯʔ* and Naga *ə-ŋəʔ*. In the Western Huon family, there is a significant agreement between Somba-Siawari (Pindiu family) *mewə, mi ewə* 'like that' and Selepet (Kabwum family) *ja-wu* 'like that'. The correspondence between these two languages allows the tentative reconstruction of a particle pWH **epu* 'like'.

Table 2-12: Proto-Huon Peninsula elevational demonstratives

	across	up	down
pHP	*andi		
pKalasa	*ädi	*wäti	
Sialum	ida[-wa]	watia[-wa]	
Ono	eri[-wa]	weti[-wa]	gbe-wa
Kovai	(i)rin	pugarin	ingarin
pHuon Tip	*andi 'yon'	*paiʔ	
Sene	ɔdi	[use]	dome
Migabac	edi	feiʔ, [hewaʔ]	leleŋ, dumeŋ
Momare	anti	[hawaʔ]	bina
Wamorâ	andi	faiʔ	duŋ, juwiʔ
Mâgobineng	adi	faiʔ	duaŋ, juwiʔ
Wemo	[oʔni]	faiʔ	duŋ, juwiʔ
Naga	alɔ	paiʔ	jɔkɔʔ
Mape	adɯ	paiʔ	dɯnɯ, jukuʔ
pWH	*endi	*ewu	*emu
Dedua	edi 'far', edai 'near'	wi 'far', wai 'near'	emu 'far', emai 'near'
Mongi	eri	ou	emu
Tobo	ere	u	imu
Borong	endu	eu	emu
Somba-Siawari	endu	eu	emu
Mesem	inda	ua	ima
Nabak	inda	[gʷa]	[ba], [ka-]im
Nomu	edi[-wa]	eu[-wa]	emu[-wa]
Kinalaknga	[b-]eri	[b-]eu	[b-]emu
Kumukio	indi	ju[-a]	imu[-a]
Komba	ʌndi[(-rʌ)]	u[(-rʌ)]	[ʌmbi(-rʌ)]
Selepet	enda 'far', endu 'near'	ewa 'far', ewu 'near'	[emba 'far', embu 'near']
Timbe	indɔ[-re]	ɔu[-re]	[imbɔ-re]

As previously mentioned, the Proto-Finisterre-Huon elevational demonstratives have been well preserved in the Western Huon languages (Table 2-12). The Eastern Huon languages only reflect pHP **andi* 'that over there'. Sialum and Ono preserve the threefold system of elevational demonstratives but have replaced the terms for 'that up there' and 'that down there'. Like the basic demonstratives, the elevational demonstratives must contain a suffix such as **-wa* indicating visibility in the Kalasa languages. The Kovai elevationals *pu-ga-rin* 'that up there' and *in-ga-rin* 'that down there' are made up of the prefixes *pu-* 'up' and *in-* 'down', respectively, plus the verb *ga* 'go' and the basic demonstrative *(i)rin* 'yon' (A. Brown 1992:46). The Huon Tip languages do not seem to have any real elevational demonstratives. The words given under 'up' and 'down' in Table 2-12 were taken from the entries for 'oben' and 'unten' from Pilhofer's (1929) word list because the elevational demonstratives of the Western Huon languages appear under these headings. In Kâte, the word *fai?* 'over, above' is often followed in discourse by the locative form *ira* 'there' of the basic demonstrative *i* 'that', which indicates that it is not in itself deictic. As already discussed, the Proto-Huon Peninsula elevational demonstrative **andi* 'that over there' joined the basic demonstratives in the Huon Tip family. Proto Huon Tip **andi* 'yon' is given under the heading 'across' in Table 2-12 for etymological reasons. pHP **andi* shows regular phonological reflexes in the Huon Tip languages. The Sialum reflex *ida-* is surprising. This form was collected by McElhanon in 1968. It differs from the form *idi-* he collected from a speaker from Qambu village in 2012. *Idi-* shows the expected final vowel *i*, the final vowel of *ida-* may be due to a suffix that is also in evidence in *watia-* 'that up there', cf. Ono *weti-*. Why the initial vowel of both *ida-* and *idi-* was raised to *i* is not clear. Kovai *(i)rin* 'yon' probably derives from pHP **andi* whose initial vowel was replaced by the variable *i-* characteristic of the basic demonstratives and local deictics (cf. Table 2-11). The final *-n* may be etymologically identical with the *n-* of the basic demonstratives *ne* 'this' and *na* 'that'.

For the Western Huon family, the elevational demonstratives **endi* 'that over there', **ewu* 'that up there' and **emu* 'that down there' can be reconstructed. In four languages the elevationals appear with an affix. Komba *(-rʌ)* and Timbe *-re* are invariable suffixes that also occur on the basic demonstratives (cf. Table 2-11). The Nomu suffix *-wa* is a loan from Ono and was borrowed together with the roots of the basic demonstratives. The Kinalaknga reflexes contain a prefixed *b-* that comes from the basic demonstratives, both of which begin with *b-*. Two languages have introduced a vowel alternation that signals a difference in distance. In Dedua, the forms ending in *-ai* signaling nearness are an innovation. The far distance elevationals *edi* 'that over there, far away' and *emu* 'that down there, far away' are the inherited forms. *Wi* 'that up there, far away' shows an irregular phonological development if indeed it derives from **ewu*. In Selepet, the far distance elevationals ending in *-a* are innovative. The vowel alternation *a : u* must have taken its origin in the 'up' and 'down' forms and was then extended to the 'across' form. *Ewu* 'that up there, nearby' is the inherited form.

There are analogical changes of the final vowel in some languages. Borong and Somba-Siawari *endu* 'that over there' ⇐ **endi* has adopted the final vowel of *eu* 'that up there' and *emu* 'that down there'. In Komba and Timbe, the change went in opposite directions. Komba *ʌmbi(-rʌ)* 'that down there' followed *ʌndi(-rʌ)* 'that over there' whereas Timbe *indɔ-re* 'that over there' followed *imbɔ-re* 'that down there'. It is not clear why the final vowel of all elevationals in Mesem is *-a*. Possibly *-a* was a suffix that supplanted the original final vowel.

Final *-a* also appears in Nabak *inda* 'that over there' but is missing from *ka-im* 'below'. The latter word is made up of the specifier *ka-* that also appears, for instance, in *ka-nda* 'specifically over there' (Fabian, Fabian and Waters 1998:28) and the cranberry morpheme *im*, which presumably derives from **emu*.

2.2.9 Interrogatives

The comparison of the interrogative words of the Huon Peninsula languages is made difficult by the often rudimentary description of their syntax and semantics. The example sentences in the best described languages suggest that the meaning of some interrogative words varies with the syntactic construction. Selepet *ɔlɔ*, for instance, usually has the meaning 'who?' if it is used as the head of a noun phrase. Used attributively after a noun, it means 'a, another'. In one example sentence in McElhanon's grammar, however, in which *ɔlɔ* is the head of an object noun phrase it has the meaning 'what?' (McElhanon 1970d:34f). One wonders if the meaning 'what?' is restricted to certain collocations. The Kâte interrogative *mo* 'who?' resembles *mo?* 'a, another'. Formal identity or similarity between words with these meanings recurs in several Huon Peninsula languages, as in Selepet. In the collocation *mo dameŋ-ko* (which time-LOC) 'when?' *mo* does not refer to people but means something like 'which?'. Again, we find a different meaning in a different construction. Aberrant meanings that are only found in certain collocations may be important for semantic reconstruction. Unfortunately, the lack of precision in the description of the interrogatives in most grammars and dictionaries often makes it hard even to recognize the basic meaning of an interrogative. The Ono grammar, for instance, mentions the following forms of the interrogative *dia*: *dia-o* 'whither?', *dia-ŋo* 'with which one?' (Phinnemore and Phinnemore 1985:33). The dictionary, however, has *dia* 'where?' and *dia-wa* 'which?' (McElhanon and Gambungtine 1976, s.v.). The interrogative *dale-o* is glossed 'how?' in the grammar but 'what?' in the dictionary, as is the unsuffixed *dale*. As neither the grammar nor the dictionary contains any enlightening example sentences the semantics of these interrogatives remains unclear.

In Table 2-13, the interrogative pronouns referring to a person (who?) and those referring to a thing (what?) have been compiled. For further comparisons the uncertainty about the semantics of the interrogatives in individual languages and about their paths of development is too great. There appears to be an additional interrogative root starting with *d-*, but the data is so difficult and entangled that it would take an article-length treatment to unravel it. This cannot be done here. In the third column of Table 2-13 I merely present some interrogatives which seem to be built on this root.

There is agreement between the Sialum and Ono interrogatives for 'who?' and those of most Huon Tip languages (Table 2-13). All of the latter languages except Momare and Sene reflect Proto-Huon Tip **ma* 'who?'. Momare *ama* and Sene *jɔmə* also seem to contain this root but have been enlarged with an unidentifiable prefixal element. Contemporary Ono *ma* 'who?' is a perfect match of the proto Huon Tip form, but in Wacke's (1931) early article this word is transcribed as *ŋma*. The status of the Ono labiovelar nasal *ŋm* in the historical phonology of the Huon Peninsula languages is not clear yet. For this reason, I reconstruct pEH **ma* 'who?'. The aberrant vowel of Sialum *mu* may be an effect of the earlier initial labiovelar nasal, which became a bilabial nasal like in all other Eastern Huon languages. The Western Huon

languages show a large variety of different forms for the interrogative 'who?' and no reconstruction is possible.

Table 2-13: Proto-Huon Peninsula interrogatives

	who?	what?	
pHP		*wân	
pEH	*ma		
Sialum	mu	wane	diawa 'where?'
Ono	ŋma	[ono-ka]	dia 'which?', dale 'what?'
Kovai	[neg]	[mug]	
pHuon Tip	*ma	[*wama]	
Sene	[jɔmɔ]	[jumɔ, jɔbe]	
Migabac	ma	oma	
Momare	[ama]	[moma]	
Wamorâ	mo	wamo	
Mâgobineng	mo	[bamo]	
Wemo	mo	wemo	
Naga	mo	wamo	
Mape	mo	wamo	
pWH		*wan	
Dedua	meraʔ	[noʔ]	damoc 'which?', dahai 'where?'
Mongi	mərə	[nəma]	dahe 'how many?',
Tobo	mərə	[nəma]	dasun 'how?'
Borong	moro	[naama]	daeŋ 'where?', dawi 'how many?'
Somba-Siawari	da-ŋən	wani, wan[at]	denəke 'where?', dawik 'how many?'
Mesem	kwaŋ	wanə	de 'where?'
Nabak	kwi	ene, [kwileki]	de 'where?'
pCromwell		*wan	
Nomu	ŋola	wan	dawa 'where?'
Kinalaknga	ŋolo	wan	dia 'where?', dapgot 'how?'
Kumukio	ŋolo	wan	dawa 'where?'
Komba	ŋʌi	wan	dap 'what?' dawutʌ 'how many?'
Selepet	ɔlə	wuɔn	
Timbe	niŋe	wan	

The interrogatives for 'what?' are used as glossonyms in the Eastern Huon family. The language Ono and the Wemo dialect of Kâte have their names from this interrogative and the Momare and Wamorâ languages take their names from its genitive-purposive forms (*moma-re* 'why?', *wamo-râ* 'why?') as does Bamotâ, an alternative name for the Mâgobineng dialect of Kâte. This naming practice exploits some recent irregular phonological changes. The Proto-Huon Tip form is most plausibly reconstructed as **wama* 'what?'. Momare *moma* and

Mâgobineng *bamo* have irregularly changed the initial *w-* of this form and the *-e-* of Kâte *wemo* is also unexpected. The Migabac interrogative *we* 'what (did you say)?' suggests that **wama* is made up of **wa* and **ma*, the latter part probably identical with the interrogative **ma* 'who?'.

For the Western Huon family, a proto-form **wan* 'what?' is reconstructible. In the Pindiu family, only Somba-Siawari has retained this interrogative, albeit in slightly altered form. The variants *wani* 'what?, which?' and *wanat* 'what?, which?' both contain a suffix of unknown origin. Mesem *wanə* 'what?' also has a final vowel that appears to be suffixal. The other Western Huon languages reflect **wan* straightforwardly as *wan* with the exception of Selepet *wuɔn* which shows an unexpected change of the vowel. pWH **wan* 'what?' corresponds closely to Sialum *wane* 'what?'. Again, we find a final vowel. It cannot be excluded that the Proto-Huon Peninsula form had a final vowel, but since the vowel of Sialum *wane* and those of Somba-Siawari *wani* and Mesem *wanə* do not match I consider it more likely that the final vowel of the Sialum form, too, is an accretion. For this reason, I reconstruct pHP **wân* 'what?'. The root of the Ono interrogative *ono-ka* 'what?' bears some resemblance to Sialum *wane* but cannot be reconciled with it on closer inspection. Therefore, I do not include it in the etymology.

2.3 Conclusion

The Huon Peninsula languages have personal pronouns for three persons and three numbers. However, for Proto-Eastern Huon two different first person dual and plural pronouns can be reconstructed. The simplest explanation for this finding is the assumption that Proto-Eastern Huon differentiated between inclusive and exclusive first person non-singular pronouns. But there is no trace of the putative inclusive forms in any Western Huon language nor am I aware of potential cognates in any related language further afield. A distinction between inclusive and exclusive first person non-singular pronouns is decidedly rare among Trans-New Guinea languages. The additional pair of Proto-Eastern Huon first person non-singular pronouns is therefore somewhat mysterious. The two Eastern Huon languages that reflect the putative inclusive pronouns, Sialum and Kovai, do not differentiate between inclusive and exclusive first person non-singular pronouns. The only contemporary Huon Peninsula languages that draw such a distinction are some geographically adjacent Huon Tip and Pindiu languages. In all of them, the inclusive personal pronouns can be seen to be derived from emphatic pronouns. The inclusive-exclusive distinction is evidently of recent origin in these languages and is most likely due to Austronesian influence.

For the free personal pronoun, long and short dual and plural forms can be reconstructed to Proto-Huon Peninsula. The short forms are largely identical with the pronominal prefixes of object verbs, suggesting that the latter arose through proclisis. The fusion of the proclitics with the verb root may not go back further in time than Proto-Huon Peninsula as it is doubtful whether the presence of dual forms in this paradigm is old. The long variants of the dual and plural personal pronouns have probably been extended by a focus particle that attached to the end of the word. Ono and Somba show short forms when a case enclitic is attached to the pronoun and long forms when it is unsuffixed. The long variant of the third person plural pronoun can be traced to an emphatic pronoun, confirming the

hypothesis that the long forms of the personal pronouns were focused. The extension of the long third person plural pronoun is not a former focus particle but a former possessive suffix. Most Huon Peninsula languages have a set of emphatic pronouns that are made up of a personal pronoun plus the possessive suffix of the same person and number. Presumably, there were originally only singular forms of this emphatic pronoun, as is still the case in Selepet and Timbe.

The free personal pronouns of the Huon Peninsula languages descend from the Proto-Trans-New Guinea pronouns, as reconstructed by Ross (2005). This is evident for the singular forms, for the non-singular number the scholarly debate about what proto-forms need to be postulated is still ongoing. Reflexes of the Trans-New Guinea pronouns also appear in the pronominal possessive suffixes of the Western Huon languages. There is good evidence in Selepet that these suffixes were originally prefixes, as in other Trans-New Guinea subfamilies. Surprisingly, the possessive suffixes of the Eastern Huon languages do not link up with those of the Western Huon family. The possessive suffixes of the first and the second person singular that can be reconstructed to Proto-Eastern Huon are totally different from the Western Huon forms. They rather seem to correspond to the personal pronouns of the Madang stock. I conclude that the pronominal possessive suffixes of the Western Huon and the Eastern Huon languages continue two different paradigms. Proto-Huon Peninsula had a prefixal as well as a suffixal paradigm of possessive suffixes that were filled with non-congruent pronominal forms. This reconstruction is extraordinary and does not seem to have a parallel in any known related language, but it is in my opinion the best interpretation of the comparative evidence.

Proto-Huon Peninsula had two sets of demonstrative pronouns: basic demonstratives and elevational demonstratives. With the exception of the Trans-Vitiaz languages, the Huon Peninsula languages have two basic demonstratives, a proximal one and a distal one. The Trans-Vitiaz languages have a tripartite system correlated with the three grammatical persons. The demonstrative for the third person is an intrusion from the elevational set. The Trans-Vitiaz languages have lost the elevational demonstratives for 'up' and 'down' and do not appear to have rebuilt the system. The elevational demonstratives are in full bloom in the Western Huon family and, since they have cognates in Finisterre languages, it is clear that they have been inherited from Proto-Finisterre-Huon. For the basic demonstratives, there is a near match between the Kalasa and the Kabwum family. The distal demonstrative pHP **ja* 'that' attested in these languages is identical with the personal pronoun of the third person singular and plural.

3 Subject-tense endings of the verb

3.1 Introduction

This chapter deals with the verb inflections that make reference to the subject of the clause. They are suffixes and will here be called endings. There is a basic syntactic dichotomy between final and medial verbs. The final verb forms occur at the end of a sentence and are inflected for absolute tense or mood in addition to indexing the person and number of the subject. The medial verb forms occur in non-final position in the sentence, may be inflected for relative tense, and indicate whether their subject referent is the same as or different from that of the following clause. Morphologically, the final verbs and the different subject medial verbs have the same structure while the same subject medial verbs stand apart. The former index the subject of their clause whereas the latter do not.

The English technical terms "medial verb" and "final verb" replicate the German terms *Satzinnenform* and *Satzendform* coined by Pilhofer (1928, 1933). Pilhofer variously called the same verb forms *unselbständig* and *selbständig* (i.e. dependent and independent), as already in his morphological survey of the languages of the eastern half of the Huon Peninsula of 1928. That paper shows that he had a good understanding of the functioning of both types of verb forms. In his Kâte grammar of 1933 he gave a precise description of the syntax of the medial verb forms, distinguishing between *Durchgangsformen* (i.e. same subject forms) and *Wechselformen* (i.e. different subject forms). Pilhofer thus discovered "switch-reference" decades before the term was coined by Jacobsen (1967).

In this section, the different categories of verb forms are introduced and illustrated with examples from selected languages. In 3.1.1 and 3.1.2 final verbs are presented. 3.1.1 introduces the tense systems of the Huon Peninsula languages and 3.1.2 discusses the moods that can be found in most languages. 3.1.3 is devoted to medial verbs. Finally, in 3.1.4 I discuss some aspectual formations that can occur in final as well as medial verbs.

3.1.1 Final verb tenses

Final verbs index the person and number of the subject with which they form a clause. The Huon Peninsula languages differentiate between three persons in three numbers, singular, dual, and plural. The forms of the second and third person dual and plural are always homonymous. There is thus a total of seven distinct forms in every tense or mood. Morphologically, the exponence of person and number is fused with tense or mood. Sometimes a tense or mood marker can be isolated, but the remaining part of the ending is not a pure person-number composite but again a fused form corresponding to another tense or mood. Syncretism is common and also encompasses the different subject medial verb. For instance, all forms of the different subject medial verb except for the third person singular are homonymous with the corresponding forms of the imperative mood in Ono; and in Sene the plural forms of the sequential different subject medial verb are homonymous with the corresponding forms of the near past tense.

The Huon Peninsula languages differentiate between two and six absolute tenses in their final verb inflections. Kovai has the smallest tense system, distinguishing only between

past tense and non-past tense. The Sankwep languages, Mesem and Nabak, have the largest tense systems, encompassing three past tenses, a present tense, and two future tenses. The multiple past and future tenses express different degrees of remoteness from the moment of utterance. The other Huon Peninsula languages fall in between these extremes: The Kalasa languages have four tenses, The Huon Tip languages five, Dedua four, the Pindiu languages except Dedua three, the Dallman languages three, and the Kabwum languages four.

In the following, I present the tense systems of Dedua and Mesem. Dedua, (1) through (4), ranges in the middle with four tenses while Mesem, (5) through (10), illustrates the maximal elaboration of the tense system.

Dedua (Ceder and Ceder 1990:83)

1	*Senio*	*je*	*miti*	*ua*	*me-eʔ.*
	(name)	3s	gospel	work	make-F.PST:3s

'Senior Flierl preached the gospel.'

Dedua (Ceder and Ceder 1990:82)

2	*Neŋgaʔ*	*dahaiʔ*	—	*Ua-u*	*ken-daʔ.*
	mother	where		garden-LOC	go-N.PST:3s

'Where is mother? — She went to the garden.'

Dedua (Ceder and Ceder 1990:80)

3	*Maŋgaʔ*	*taweŋ*	*ne-de.*
	father	Chinese.taro	eat-PRS:3s

'Father is eating Chinese taro.'

Dedua (Ceder and Ceder 1990:83)

4	*Ni*	*jaguʔ*	*bedzo-u*	*kem-bade.*
	1s	now	bush.house-LOC	go-FUT:1s

'I am going to the bush house now.'

Dedua has a far past tense (1), a near past tense (2), a present tense (3), and a future tense (4). The present tense is used for actions happening at the moment of speaking, as in (3), and to express general truths. An action happening in the imminent future, as in (4), is expressed by the future tense, just like actions happening in the distant future. There is no remoteness distinction in the future domain in Dedua. There is, however, such a distinction in the past domain. Actions having happened earlier today, as in (2), or yesterday are designated by the near past tense. Anything having happened before yesterday falls in the domain of the far past tense, as the historical event in (1).

Mesem (Vanaria and Vanaria 1995:33)

5	*Bo*	*kʷep-gala*	*wago-zɘ-bin.*
	pig	one-other	follow-go-F.PST:1p

'We followed some other pig.'

Mesem (Vanaria and Vanaria 1995:34)

6	*Anĩge*	*niĩ*	*kututu*	*mət-zime.*
	yesterday	1p	market	go-INT.PST:1p

'Yesterday we went to the market.'

Mesem (Vanaria and Vanaria 1995:35)

7	*Tony*	*bib-m-bə*	*zupa*	*maka-e*	*mət-ləp.*
	(name)	father-3s:POSS-COM	sick	house-LOC	go-N.PST:3s

'Tony's father went to the aid post.'

Mesem (Vanaria and Vanaria 1995:36)

8	*Bo*	*ma-dam*	*ma-mi-nzuŋ.*
	pig	live-look	live-do-PRS:1p

'We always look after pigs.'

Mesem (Vanaria and Vanaria 1995:37)

9	*Ala*	*Sikioŋ*	*Waipəpə*	*kã-sanzi.*
	now	(name)	(place name)	come-N.FUT:3s

'Sikiong is coming to Waipʉpʉ today.

Mesem (Vanaria and Vanaria 1995:38)

10	*Oktaba*	*Neil-gə*	*ona-ŋ*	*Samanziŋ*
	October	(name)-GEN	second.daughter-3s:POSS	(place.name)

kã-bap.
come-F.FUT:3s
'Neil's second sister is coming to Samanzing in October.'

Mesem has no less than six tenses: a far past tense (5), an intermediate past tense (6), a near past tense (7), a present tense (8), a near future tense (9), and a far future tense (10). Three degrees of remoteness are distinguished in the past domain. Events that occurred prior to yesterday are designated by the far past tense, as in (1). For events that occurred yesterday, as in (6), the intermediate past tense must be used, and for events that occurred earlier today, as in (7), the near past tense is used. The present tense is used for events unfolding at the moment of speaking or that are generally true, as in (8). Events occurring later today, as in (9), are designated by the near future tense, and events occurring tomorrow or later than tomorrow, as in (10), are designated by the far future tense.

The descriptions of the uses of the tenses in Dedua and Mesem given above were taken from the grammars. It is clear that remoteness from the deictic origin is the crucial factor differentiating between multiple past and future tenses, not only in Dedua and Mesem, but in Huon Peninsula languages in general. However, the definitions used in the grammars, such as "earlier today" and "yesterday", are only prototypical values that may be stretched in discourse. Unfortunately, we have no detailed description of the uses of the tenses in discourse for any Huon Peninsula language so that not more can be said on this topic. There is

one tense that poses particular problems for a semantic analysis and for which there is no ready-made label. Consider the uses of the so-called present tense in Ono in (11) and (12).

Ono (P. Phinnemore 1990:41)

11 *Nalu keu-o okora-mamit.*
market center-LOC stand-PRS:3d
'They are standing in the center of the market.'

Ono (P. Phinnemore 1990:42)

12 *O kima-ne ge musele Lae taon*
O friend-1s:POSS 2s recently Lae town

ka-iken-ane sari-maine.
see-FUT:2s-PURP come-PRS:2s
'O my friend, you have recently come to see Lae Town.'

A man pointed out his sister and brother-in-law to a friend saying the sentence in (11). Here the situation predicated by the verb in the present tense holds at the moment of speaking. The final verb in (12), on the other hand, designates an action that occurred in the recent past. Nevertheless, it is also a present tense form. P. Phinnemore (1990:42) introduces this example with the comment: "Ono sometimes uses the present tense for events or situations which may actually have occurred in the very near past but the effects of which still hold at the present moment." For Kâte, Pilhofer sees the past time use of the present tense as a central part of its semantics: "This tense has a sharp boundary toward the future, but not toward the past. In general, an event can be expressed by the present tense if no night has passed since."[6] In other words, the so-called present tense of Kâte combines the functions of a present tense and of a hodiernal past tense. Olkkonen and Olkkonen (1983:22) say the same about the present tense of Somba: "The present tense or exactly taken the immediate past tense indicates activity that took place now or earlier today." As the Olkkonens opine, such a tense could just as well be called an immediate past tense as a present tense. For the cognate tense in the Pindiu family, the authors of the Mongi, Borong and Somba grammars decided to use the label present tense while the author of the Tobo grammar sketch used the label recent past tense (cf. Table 3-17 in 3.2.5). It is hardly the case that there is a difference in the uses of the Tobo recent past tense and the present tense of the other languages. In the Kabwum family, established terminology eschews the term present tense. But if one looks at the uses of the so-called immediate past tense[7], it seems to work much like the present tense of Ono, Kâte, and Somba. Consider the examples from Komba in (13) and (14).

6 "Dieses Tempus ist zwar nach der Zukunft zu scharf abgegrenzt, aber nicht nach der Vergangenheit zu. Im allgemeinen kann man jedes Geschehnis, über das noch keine Nacht vergangen ist, präsentisch ausdrücken; ..." (Pilhofer 1933:27).

7 In Appendix C, the labels of the tenses in the individual languages have been standardized. If there is a binary opposition in the past, the two tenses are called near past and far past. These labels are also used in the examples given here.

Komba (Southwell 1979:300)

13	*Wan-gʌt*	*ekap*	*zi*	*ga-ap?*	—	*Tosa-niŋ*	*ta-ap.*
	what-PURP	letter	this	come-N.PST:3s		debt-1p:POSS	stay-N.PST:3s

'Why has this letter come? — It has come because we still have a debt to pay.'

Komba (Southwell 1979:283)

14	*Den*	*kʌnok*	*zi*	*mʌn*	*dʌ-ɣo-man.*	*Irak*
	message	one	this	not	tell-2s:OBJ-HAB.PRS:1s	today

dʌ-ɣoɣ-an.	*Zo*	*nʌŋgʌ-na*	*suɣ-ik.*
tell-2s:OBJ-N.PST:1s	that	think-DS:2s	pierce-IMP:3s

'There is one thing that I have not been telling you. Today I am telling it to you. Listen, for it must sink into your mind.'

The final verbs in the question and in the answer of (13) are both in the near past tense, but they do not have the same temporal interpretation. The verbal predicate of the question designates a time earlier today, that of the answer the present time. In the second sentence of (14) we see another example of the use of the near past tense with a clear present time interpretation (*dʌ-ɣoɣ-an* 'I am telling you'). Thus, the near past tense of Komba combines the functions of a hodiernal past tense and a present tense just like the present tense of Kâte. We find the same double function of the tense abutting the future domain in all Huon Peninsula languages for which there is sufficient data to get a glimpse of its functions. The one exception is Kovai.

Kovai (Brown 1992:10)

15	*Gaun*	*ta-jat-pe.*
	dog	give-3d:OBJ-PST:3p

'They gave the two of them a dog.'

Kovai (Brown 1992:11)

16	*Mam-in*	*um-oŋ*	*g-il-tin-o.*
	father-1s:POSS	die-NMLZ	ASP-do-3s:OBJ-NON.PST:3s

'My father is sick.'

Kovai (Brown 1992:11)

17	*wom*	*ta-p*	*o*	*bibir-g-ip.*
	adze	take-NON:PST:1s	and	chase-2s:OBJ-NON.PST:1s

'I'll take my adze and chase you!'

Kovai (Brown 1992:6)

18	*Naŋa-on*	*aro*	*ga-p*	*mot.*
	tomorrow-3s:POSS	CONS	go-NON.PST:1s	village

'I'll go home tomorrow.'

Kovai only has two tenses, a past tense (15) and a non-past tense (16-18). The past tense covers the whole past domain, the non-past tense the present and future domains. The non-past tense can be used for present states, as in (16), as well as for future actions, as in (17) and (18). In its future interpretation, the verb in the non-past tense is usually accompanied by the particle *aro* 'then', as in (18). As (17) shows, however, this is not obligatory and an unaccompanied verb in the non-past tense can designate future time. The tense system of Kovai thus differs from the tense systems of the peninsular languages not only in that it is impoverished, comprising only two tenses, but also in the assignment of present time. As we have seen above, in the peninsular languages present time is expressed by a tense that can also designate immediate past time. As Pilhofer put it, there is a boundary toward the future but no boundary toward the past. For Kovai, the reverse is true. The non-past tense is bounded toward the past but merges present and future. The inherited tense system has been fundamentally transformed in Kovai.

3.1.2 Final verb moods

In the same suffixal position as the tenses, moods can be found in the final verbs of the Huon Peninsula languages. Two moods are encountered in most languages: imperative and irrealis. Some languages have more than one imperative or irrealis mood. The imperative mood occurs much more frequently in discourse than the irrealis mood.

The Huon Tip languages differentiate between a present imperative and a future imperative. This is illustrated with examples from Kâte (19-23).

Kâte (Pilhofer 1933:32)
19 *Mu-ʔ.*
say-PRS.IMP:2s
'Say it!'

Kâte (Pilhofer 1933:32)
20 *Wale-oʔ.*
come-PRS.IMP:3s
'May he come.'

Kâte (Pilhofer 1933:32)
21 *Gie ba-naŋ.*
work do-PRS.IMP:1p
'Let's work.'

Kâte (Pilhofer 1933:32)
22 *Tomoʔ-ko* *fɔ-ndzepieŋ.*
tomorrow-LOC follow-FUT.IMP:2p
'You are to follow tomorrow.'

Kâte (Pilhofer 1933:32)

23	*No*	*biaŋne*	*ju-tsepaʔ.*
	1s	good	be-FUT.IMP:1s

'I want to behave well.'

Examples (19) through (21) show the present imperative mood. The imperative mood is not confined to the second person in the Huon Peninsula languages but has a full person-number paradigm. In (19) we see a present imperative form of the second person singular, in (20) one of the third person singular, and in (21) one of the first person plural. A uniform translation of these forms into English is hardly possible though they are semantically alike. In general, the imperative mood expresses the wish of the speaker that the subject referent may do something. The present imperative demands that the action predicated be performed immediately whereas the future imperative stipulates that the action should be performed at a later time or generally in the future, as illustrated in examples (22) and (23). Apart from the Huon Tip languages and Dedua, all other Huon Peninsula languages have only one imperative mood.

If the final verb in the imperative mood is preceded by medial verb forms, the medial verbs must usually also be interpreted as being in the imperative mood. This can be seen in the following examples from Sialum (24), Nabak (25), and Komba (26).

Sialum (Stolz 1911:285)

24	*Ga*	*zeina*	*mor-i*	*ze-kap!*
	2s	fire	put-DS:2s	burn-IMP:3s

'Make a fire!' (Lit. 'Set a fire and it shall burn.')

Nabak (Fabian, Fabian and Waters 1998:410)

25	*Zit*	*zut-aŋ*	*tat-lup-gat*	*kot*	*nembet*	*nembet*	
	animal	two-FOC	stay-PRS:3d-BEN	come	half	half	
	da-en	*ti-mi-tot*	*ti-mi-tot*	*mi-mti*	*zit*	*ata-mti*	
	that-LOC	take-CAUS-descend	take-CAUS-descend	do-SS	animal	hold-SS	
	bim-maŋ	*mutum-ti-me*	*met-ne.*				
	neck-3s:POSS	snap-take-DS:2p	go-IMP:1p				

'Because there are two animals here, come and get on either side [of the towel] and hold each side down, and take hold of the animals, snap their necks, take them and let's go.'

Komba (Southwell 1979:281)

26	*Oi*	*ko*	*ekap*	*pʌ-na*	*gʌ-i*	*ik-pʌ.*
	and	then	letter	3s:OBJ.put-DS:2s	come-DS:3s	3s:OBJ.see-IMP:1s

'If so then send me a letter and let me see it.'

The sentences in (24) through (26) all contain at least one different subject medial verb that is inflected for another person and number of the subject than the final verb in the imperative mood. The illocutionary force of the final verb extends to all preceding medial verbs. In the Komba sentence in (26), for instance, verb forms in all three grammatical persons have an imperative interpretation. We can imitate this in English with the modal verb *must*: 'You must send the letter and it must come and I must see it.' This sentence nicely illustrates the unitary semantics of the imperative mood across the different grammatical persons.

Two Huon Peninsula languages have lost the imperative mood, namely Borong and Kovai. In Borong, the future tense is used to express volition in the way of an imperative, usually in combination with the particle *mono* 'just' (Olkkonen and Olkkonen 2000:7). In Kovai, the non-past tense is used in statements that convey the speaker's volition, as can be seen in (27) and (28).

Kovai (Brown 1992:8)
27 *G-em* *pai.*
go-NON.PST:2s house
'Go home.'

Kovai (Brown 1992:8)
28 *Ziŋ-ŋon* *pus-u.*
eye-2p:POSS close-NON.PST:3s
'Close your eyes.' (to several children)

All Huon Peninsula languages have at least one irrealis mood.[8] Kovai is no exception. The examples (29) and (30) show that Kovai has an irrealis mood whose functions parallel those of other Huon Peninsula languages, like Nabak, (31) and (32).

Kovai (Brown 1992:8)
29 *Me-n-nam.*
say-1s:OBJ-IRR:2s
'You should have told me.'

Kovai (Brown 1992:7)
30 *U-nam* *aro* *menaŋ* *ta-tin-nap.*
come-IRR:3s CONS food give-3s:OBJ-IRR:1s
'If he'd come, I would have given him some food.'

Nabak (Fabian, Fabian and Waters 1998:54)
31 *Maiŋ-bak.*
read-IRR:1s
'I should have read it.'

8 The irrealis mood is not attested in Parec, Kinalaknga and Kumukio, but there is little doubt that these languages have an irrealis mood.

Nabak (Fabian, Fabian and Waters 1998:54)

32	*Monip*	*da-en*	*tat-dak*	*neŋ*	*met-bak.*
	money	over.there-LOC	be-IRR:3s	1s	go-IRR:1s
	'If the money were there, I could go.'				

The irrealis mood is used for actions that are only imagined and do not in fact take place. In simple sentences, such as (29) and (31), one reason for using the irrealis mood is that the action was wished for but not performed. Often the irrealis mood is used in complex sentences, such as (30) and (32). They are counterfactual conditional sentences.

A good many Huon Peninsula languages have two irrealis moods. They are the Kalasa languages, the Huon Tip languages, and the Pindiu languages. The difference in function is not always clear owing to the sparseness of examples in the grammars. For Migabac, McEvoy (2008:39) distinguishes between a contrafactual and a hypothetical mood. Pilhofer (1928:208f) saw in these forms and in parallel forms in the other Huon Tip languages a past and a future variant of a mood for imagined actions. Following Pilhofer's analysis, these moods are labeled past irrealis and future irrealis in Appendix C.

Migabac (McEvoy 2008:350)

33	*Ga-le*	*aŋaʔ*	*ai-lu=baʔ*	*ga*	*baʔ-gu-deʔ.*
	2s-GEN	desire	do-SEQ:SS=first	2s	take-2s:OBJ-PST.IRR:3s
	Na-le	*aŋaʔ*	*ai-lu=baʔ*	*na*	*baʔ-nu-gaʔ-te*
	1s-GEN	desire	do-SEQ:SS=first	1s	take-1s:OBJ-PRS:3s-GEN

ai-lu=baʔ	*na*	*ŋiʔ-ne*	*hoʔne.*
do-SEQ:SS=first	1s	man-1s:POSS	only

'If he would have desired you, he would have taken you. He desires me so he takes me and he is only my man.'

Migabac (McEvoy 2008:344)

34	*Toŋge-ne*	*andoine*	*ba-lu*	*i-di*	*hije*
	kind.of.vine-1s:POSS	enough	take-SEQ:SS	that-INS	string.bag

fu-daʔka.
weave-FUT.IRR:1s
'I might be able to take that vine and weave a string bag.'

The first sentence of (33) is a clause chain with one final verb. The past irrealis mood of this final verb extends to the preceding medial verb so that the whole sentence resembles a counterfactual conditional semantically. As the following context shows, the events imagined in this sentence might have happened in the past, but in fact something else happened. It is therefore plausible to identify this irrealis mood with past time, as Pilhofer did. The future irrealis verb form in (34), on the other hand, projects the imagined action into the future.

Most Pindiu languages also have two irrealis moods, labeled irrealis I and irrealis II in Appendix C. Olkkonen and Olkkonen (1983:26) call these moods conditional and potential in their Somba grammar, but from the single example they give for either mood not much can be learned about their semantics. As can be seen in examples (35) and (36), taken from other parts of the grammar, both irrealis moods can be used in counterfactual conditional sentences.

Somba (Olkkonen and Olkkonen 1983:126)

35	*Kəwe*	*galəm*	*lək*	*ka-babuk.*	*Mi-a*	
	storage	boss	already	come-IRR.I:3s	that-EMPH	
	səŋgərə-ni		*niŋgi-iga*	*ajop*	*kʷekəm-nene*	*mir-e*
	salary-1s:POSS		1s:OBJ.give-DS:3s	OK	store	house-LOC
	kənəp-puk	*an-bileŋbuk.*				
	urge-COM	go-IRR.I:1s				

'If the treasurer had already come, he would have given me my salary and, all right, I would have gone to the store immediately.'

Somba (Olkkonen and Olkkonen 1983:171)

36	*Ala-ni*	*Wiwiroŋ*	*Wau*	*tat-pawak.*	*Mi*	*an-da*
	friend-POSS:1s	(name)	(town name)	sit-IRR.II:3s	that	go-SS
	jan-gə	*mir-e*	*tat-pileŋak.*			
	3s-GEN	house-LOC	sit-IRR.II:1s			

'If my friend Wiwirong happened to be in Wau, I would go and stay in his house.'

The Olkkonens separate the protasis and the apodosis of these conditional sentences with a period. This may have a correlate in the intonation. The apodosis starts with the demonstrative *mi* 'that'.

3.1.3 Medial verbs

The syntax of the Huon Peninsula languages is dominated by the interplay between medial and final verbs. Together they form clause chains. Whereas there is only one final verb in a clause chain, at its end, the number of medial verbs is only limited by speech processing constraints. As many as ten or twelve medial verbs in sequence can occasionally be found in narrative discourse. Example (37) from Migabac shows a clause chain with nine medial verbs.

Migabac (McEvoy 2008:178)

37	*Neŋgaʔ-ŋineŋ*	*hike*	*ŋani-me*	*doma-me*	*fiteʔ*
	mother-3p:POSS	come	see-SEQ:3s:DS	stand-SEQ:3s:DS	knife

wiʔke-lu	*kesowa*	*ube-in-a*	*weloʔke-me*
throw-SEQ:SS	cassowary	neck-3s:POSS-LOC	cut-SEQ:3s:DS

kesowa-di	*hige*	*wiʔke-lu*	*neŋgaʔ-ŋineŋ*
cassowary-ERG	leg	throw-SEQ:SS	mother-3p:POSS

lilo-lu	*yoʔ*	*moniʔ*	*hewaʔ*	*hewaʔ*	*kpodu-me*	*neŋgaʔ-ŋineŋ*
miss-SEQ:SS	tree	one	middle	middle	break-SEQ:3s:DS	mother-3p:POSS

kpataʔke-lu	*hige*	*mole-ine*	*teŋteŋ*	*kʷe-me*
be.startled-SEQ:SS	leg	hand-3s:POSS	carrying	stab-SEQ:3s:DS

doma-weʔ.
stand-F.PST:3s
'Their mother came and saw that it stood there, so she threw a knife at the cassowary and cut its neck, so the cassowary kicked at their mother but missed her and broke a tree right in the middle instead, so their mother jumped and she stood trembling.'

The story extract in (37) depicts a fight between a woman and a cassowary. The length of this sentence, with a succession of nine medial verbs followed by a final verb, leaves both the narrator and the audience breathless. The two protagonists were introduced before this sentence and are kept apart in it by the switch-reference morphology. The first medial verb *ŋani-me* (see-SEQ:3s:DS) has the woman as its subject. It is a different subject medial verb form, hence it is clear that the subject of the following verb form must be the cassowary. The following verb form *doma-me* (stand-SEQ:3s:DS) is also a different subject medial verb form signaling that the subject role switches back to the woman. The next medial verb *wiʔke-lu* (throw-SEQ:SS) is a same subject medial verb form telling us that the woman remains the subject of this and the following verb form. The following different subject medial verb form *weloʔke-me* (cut-SEQ:3s:DS), in turn, signals a switch back to the cassowary as subject. In this sequence of four medial clauses the subject is openly referred to by a noun phrase only in one clause, the first one. Reference tracking relies mostly on the switch-reference morphology. There are two types of medial verbs, same subject and different subject forms. They differ from each other in that the different subject medial verbs index the person and number of their current subject whereas the same subject medial verbs do not. Same subject medial verbs therefore have an invariable ending while different subject medial verbs have a paradigm of seven different endings like final verbs.

Final verbs do not anticipate the identity of the following subject referent, only medial verbs do this. For this reason, reference tracking breaks off in the final clause of a sentence. There is, however, a mechanism to circumvent this limitation. It is called tail-head linkage in the literature on Papuan languages (de Vries 2005). The verb in the last or tail clause of a sentence is repeated in the first or head clause of the following sentence. The following examples (38) and (39) from Sialum and Komba illustrate this.

Sialum (Stolz 1911:282)

38	*Kara*	*wesek-ikane.*	*Weseko-we-ma,*	*Zemneba*
	yam	steam.amid.stones-F.PST:3p	steam.amid.stones-3p:DS-SEQ	(name)

jaŋa	*watia-ŋina*	*kasak*	*ka-iako*	*jabo-mage-ika.*
3s	above-ABL	smoke	see-SEQ:SS	come-HAB-F.PST:3s

'They steamed yams in an earth oven. As they were doing this, Zemneba would see the smoke from above and come.'

Komba (Southwell 1979:213)

39	*Koŋe*	*nii*	*kaβʌŋ-an*	*mindumindu-jʌn*	*Ununu*	*sot*
	(place.name)	aircraft	clearing-LOC	gathering-LOC	(people's.name)	and

Lama	*Koŋe*	*kambʌm*	*jʌmbʌtŋʌ*
(people's.name)	(people's.name)	fight	heavy

aɣo-we.	*Aɣo-netʌ*	*zor-en-ʌk*	*Kiap*	*sot*
fight-F.PST:3p	fight-3p:DS	that-LOC-only	patrol.officer	and

polisiman	*ga-m-ŋʌ*	*aksik*	*dii-ziŋʌ-m*	*teŋgʌ*
policeman	come-SS-COMPL	all	lead-3p:OBJ-SS	line

kʷʌnʌŋgʌ-ziŋʌ-m	*gilʌm-ziŋ*	*ek-ŋʌ*	*mi-nziŋʌ-m*
stand.up-3p:OBJ-SS	blood-3p:POSS	see-COMPL	take-3p:OBJ-SS

Kabwum	*ʌi-we.*	*Zor-en*	*tʌk*	*nam-in*	*t-e.*
(place.name)	go-F.PST:3p	that-LOC	vine	house-LOC	sit-N.PST:3p

'At a meeting on Konge airstrip Ununu and Lama and Konge villagers had a serious fight. They fought and just then the Government Officer and policemen came and led the people away, lined them up and having looked at their wounds they took them to Kabwum. They are in prison there.'

The short extract from a Sialum story in (38) has two protagonists, a group of people and the mythical being Zemneba. The subject of the final verb of the first sentence *wesek-ikane* (steam-F.PST:3p) is the group of people. The same verb is repeated at the beginning of the second sentence, this time in medial form. The different subject inflection of *weseko-we-ma* (steam-3p:DS-SEQ) indicates that the subject role switches to Zemneba in the second sentence. Thus, reference tracking continues across the sentence boundary thanks to tail-head linkage. The same can be seen in the extract from a Komba report on an incident in (39). The final verb of the first sentence *aɣo-we* (fight-F.PST:3p) is repeated in medial form at the beginning of the second sentence. The different subject form *aɣo-netʌ* (fight-3p:DS) signals that the subject role switches from the fighting villagers to the patrol officer and the police. Tail-head linkage bridges the gap in reference tracking that arises at the end of every

sentence, where a final verb occurs. Reference tracking can so be maintained over long stretches of narrative discourse and even throughout a story.

Apart from switch-reference, medial verbs can also indicate temporal relations between clauses. The Huon Tip languages have a full-fledged system of relative tenses, distinguishing between sequential and simultaneous medial verbs both among same subject and different subject forms. The neighboring Pindiu language Dedua has probably adopted this distinction through areal contact (cf. Table 3-31 in 3.2.7). However, in Dedua only the different subject medial verb differentiates between sequential and simultaneous forms whereas the same subject medial verb does not. The examples (40) and (41) show the whole range of medial verb forms in Dedua.

Dedua (Ceder and Ceder 1990:185)

40	*De-ma*	*naso*	*mon-u*	*jaka*	*oho-ma*	*ewe-a*
	say-SS	time	one-LOC	food	cook-SS	husband-3s:POSS

mi-u	*ken-u*	*je*	*jaʔ-ma*	*modaʔ-ma*
3s:OBJ.give-SEQ:3s:DS	go-SEQ:3s:DS	3s	get.up-SS	follow-SS

kem-ma	*sufu-ma*	*nam-ma*	*hen-u*	*hofe-u*
go-SS	hide-SS	stand-SS	3s:OBJ.see-SEQ:3s:DS	abyss-LOC

uku-u	*keme-u*	*dzigene-ma*	*ha-eʔ.*
throw.down-SEQ:3s:DS	go.down-SEQ:3s:DS	return-SS	come-F.PST:3s

'As she had said, one time she cooked some food and gave it to her husband. He went away and she got up and followed him. She went, stood hidden and saw him throw it down the abyss. Then he returned and came here.'

Dedua (Ceder and Ceder 1990:186)

41	*Nadziʔ-ma*	*jiha-naʔ*	*ŋiʔ*	*jeni-goʔ*	*joaʔ-joaʔ*	*am-ma*
	wash-SS	there-ABL	man	3p-COM	talk-talk	do-SS

taʔ-mina	*Rerembiaŋ*	*ma-eʔ.*
sit-SIM:1p:DS	(name)	come.down-F.PST:3s

'We washed ourselves and talked with the men from that place and while we were sitting, Rerembiang came down.'

The sentence in (40) contains thirteen medial verbs, eight of them being same subject forms and five different subject forms. There is only one same subject form in Dedua. It has the ending *-ma* and makes no distinction between sequential temporal relationship (e.g. 'she got up and followed him') and simultaneous temporal relationship (e.g. 'she stood hidden and saw'). The different subject medial verbs in (40) are all sequential forms. In general, sequential forms are much more frequent than simultaneous forms in narrative discourse as they serve to connect successive actions. There is one simultaneous medial verb in (41), the

different subject form *taʔ-mina* (sit-SIM:1p:DS). It spells out that the speakers were sitting there and talking at the moment when Rerembiang came.

The Huon Tip languages systematically distinguish between sequential and simultaneous tense. The following examples from Kâte serve as illustration. In (42) we see three sequential medial verbs followed by a final verb. The sequential tense inflection makes it clear that the four actions in this sentence occured one after the other. In (43) the first medial verb is in the simultaneous tense, telling us that the events of the first and the second clause overlapped temporally. There is a second simultaneous medial verb in this sentence, but it is part of a periphrastic verb form and does not establish a temporal relation between two predications.

Kâte (Pilhofer 1933:36)

42	*Mu-pe*	*kpatala-me*	*haneʔke-pe*
	say-SEQ:1s:DS	contradict-SEQ:3s:DS	rebuke-SEQ:1s:DS

kio-weʔ.
weep-F.PST:3s
'I told him and he contradicted, then I rebuked him and he wept.'

Kâte (Pilhofer 1933:35)

43	*Kâte-o*	*ju-huʔ*	*hɔmeŋ*	*hone-lə*	*wasa-huʔ*	*ju-paʔ.*
	forest-LOC	be-SIM:SS	breadfruit	see-SEQ:SS	pick-SIM:SS	be-N.PST:1s

'When I was in the woods I saw breadfruit trees and began picking fruit.'

Kâte (Pilhofer 1933:36)

44	*Wiʔ*	*foŋke-ku-pe*	*somie-weʔ.*
	wound	dress-DUR-SEQ:1s:DS	heal-F.PST:3s

'I dressed the wound until it healed.'

Kâte (Pilhofer 1933:36)

45	*Woŋeʔ*	*ŋe-ku-hape*	*fisi-mbiŋ.*
	waiting	sit-DUR-SIM:1s:DS	arrive-F.PST:3p

'After I had waited for a long time and was still waiting, they arrived.'

The Kâte medial verbs are further differentiated into aspectually unmarked forms as in (42) and (43) and durative forms as in (44) and (45). The durative medial verb suffix *-ku* indicates a prolonged duration of the event predicated by the verb form. As can be seen from the examples, durative aspect combines both with sequential tense (44) and with simultaneous tense (45). The simultaneous durative forms are rare in discourse and there is no same subject counterpart to the different subject form shown in (45).

There is one Huon Peninsula language that has lost the morphosyntactic distinction between medial and final verbs. Consider the examples from Kovai in (46) and (47).

Kovai (Brown 1992:15)

46	*Bioŋ*	*ra*	*ril-e*	*laul-i*	*pu-ga-e*	*sual*	*gig-on.*
	bat	that	get.up-PST:3s	fly-PST:3s	up-go-PST:3s	sun	place-3s:POSS

'That bat arose and flew up to the sun.'

Kovai (Brown 1992:7)

47	*Jom*	*go-jo-i,*	*i*	*jot*	*u-pit.*
	stone	ASP-heat-PST:3s	FOC	3d	come-PST:3d

'While the stones were heating up, they (2) came.'

The sentences in (46) and (47) contain more than one predication, yet the same type of verb form is used in all of them. In (46) we find three past tense forms of the third person singular, in (47) there are two past tense forms with differing person-number inflection. In the peninsular Huon Peninsula languages, the same propositions would be expressed by a combination of medial and final verb forms, including a same subject medial verb in (46) and a different subject medial verb in (47). Kovai strings together verb forms inflected for absolute tense instead. There are no medial verbs inflected for switch-reference.

That the morphosyntactic distinction between medial and final verbs was lost in the synchronic grammar does not mean, however, that medial verbs have disappeared altogether. From a diachronic point of view, different subject medial verbs are well preserved in Kovai. Examples can be seen in (48) and (49).

Kovai (Brown 1992:58)

48	*El-om*	*su-g-o.*	
	do-SER:2s	in-go-NON.PST:3s	

'Put it in.'

Kovai (Brown 1992:59)

49	*Wai*	*masan-am*	*ga-e.*
	lamp	hang.up-SER:3s	go-PST:3s

'He hung the lamp up.'

Kâte (Suter 2014:28)

50	*Tase*	*lɔe-me*	*hu-jeʔ.*
	cup	put-SEQ:3s:DS	go.down-N.PST:3s

'She put the cup in [the sink].'

Kovai has a construction that Brown (1992:58) calls a serial verb phrase although both verbs making it up are obligatorily inflected. The first verb takes a special set of subject person-number suffixes labeled "serializing" which only occur in this construction. The second verb is a motion verb in the third person singular of one of the regular tenses. Brown (1992:58) notes that "the (implied) subject of V2 is the (implied) object of V1." There is a similar construction in Kâte (50). But in Kâte the inflection of the first verb is recognizable as a sequential different subject medial verb. A comparison of the serializing verb endings of

Kovai with the sequential different subject medial verb endings of the Huon Tip languages shows that the two paradigms have a common origin (see Table 3-12 in 3.2.3). Note, for instance, that the Kovai serializing ending *-am* (-SER:3s) in (49) is cognate with the Kâte medial verb ending *-me* (-SEQ:3s:DS) in (50). Evidently, the Kovai serializing verb forms are remnants of original different subject medial verb forms.

3.1.4 Aspectual formations

Verbs can also be inflected for aspect. The grammatical categories we have seen so far, apart from subject agreement, are complementarily distributed over medial and final verbs. Absolute tense and mood only occur on final verbs, relative tense and switch-reference only on medial verbs. Aspect is not connected to either of these types of verb form but can in principle combine with both of them. Nonetheless, individual aspect markers may be limited in their co-occurrence and only combine with either medial or final verbs. Such co-occurrence restrictions are morphological in nature and have no semantic rationale. In the grammars, aspect markers are usually illustrated with final verbs and it can be difficult to find out whether they also combine with medial verbs.

Typically, aspect markers are suffixes that precede the subject-tense suffixes in verb forms. Examples (51) and (52) from Mongi illustrate this.

Mongi (Lee and Lee 1993:43)
51 *Me-keʔ-na.*
hold-DUR-IMP:2s
'Keep holding it.'

Mongi (Lee and Lee 1993:45)

52	*Lei-iguʔ*	*ai*	*me-aŋ-i.*
	(town.name)-LOC	work	hold-HAB-PST:1s
	'I used to work in Lae.'		

Most aspect markers are grammaticalizations of a basic verb. The durative suffix *-keʔ* in (51), for instance, is homonymous with the verb *keʔ* 'be, live, stay' and the habitual suffix *-aŋ* in (52) derives from the verb *waŋ* 'do'. Aspect markers, in turn, can turn into tenses. In the Kalasa family, the contemporary present tense forms come from earlier near past habitual forms (Table 3.2 in 3.2.1), i.e. the habitual aspect marker changed into a present tense marker. The simultaneous different subject medial verb forms of Dedua probably derive from durative different subject forms (Table 3-31 in 3.2.7), i.e. the durative aspect marker changed into a simultaneous tense marker. Aspect is thus an intermediate stage in a chain of development that leads from verbs to tenses.

Ono has a rich variety of aspectual formations. The following examples show two of them, habitual aspect and iterative aspect.

Ono (Phinnemore and Phinnemore 1985:12)

53	*Sarere*	*baŋem*	*Kalasa*	*ari-mage-ke.*
	Saturday	every	Kalasa	go-HAB-F.PST:3s
	'He used to go to Kalasa every Saturday.'			

Ono (Wacke 1931:173)

54	*Kobu*	*ma-mage-ki-mo*	*gbe-kei.*
	theft	take-HAB-3s:DS-SEQ	3s:OBJ.hit-FUT:3p
	'If he keeps stealing they will beat him.'		

Ono (Phinnemore and Phinnemore 1985:13)

55	*Elen*	*eŋe*	*ŋo-le*	*gbe-okan-maike.*
	(name)	3s	younger.brother-3s:POSS	3s:OBJ.hit-ITER-PRS:3s
	'Elen is (repeatedly) hitting her younger brother.'			

Ono (Phinnemore and Phinnemore 1985:14)

56	*Eŋe*	*ŋara-ine*	*silom-go*	*so*	*rarap-ko*
	3s	food-3s:POSS	midday-LOC	and	afternoon-LOC
	ne-okan-mage-ake.				
	eat-ITER-HAB-FUT:3s				
	'He eats his food at midday and in the afternoon.'				

The habitual aspect marker *-mage* comes historically from a combination of the two verbs *ma* 'hold, take' and *ge* 'be, live'. It occurs in final verbs (53) as well as medial verbs (54). Habitual actions extend over a long period of time. They may take place repeatedly, but the repetition is not in focus as in the iterative aspect (Phinnemore 1990:30f). Iterative actions, on the other hand, need not last long. The iterative event in (55), for instance, happens in a moment. The iterative suffix *-okan* is homonymous with the verb *okan* 'do, be, become'. As can be seen in example (56), habitual aspect and iterative aspect can co-occur in a verb form.

Suffixation is the normal way of marking aspect in the Huon Peninsula languages. Prefixation is a minority pattern only found in the Sankwep languages and in Kovai, in both cases presumably due to Austronesian influence. The following examples show the aspectual prefix *ma-* in Nabak.

Nabak (Fabian, Fabian and Waters 1998:433)

57	*Imbi*	*nembip-maŋ*	*alak-ŋaŋ*	*nemba-ŋaŋ*			
	woman	young-3s:POSS	new-3s:POSS	child-3s:POSS			
	wat-wat-gat-en		*sindeŋ*	*temaŋ*	*penaŋ*	*nɔ-mti*	
	give.birth-give.birth-BEN-LOC		pain	big	very	feel-SS	
	ap-in	*zet*	*bekanaŋ*	*ma-di-m-indo-p.*			
	husband-3p:POSS	talk	bad	CONT-tell-do-3p:OBJ-PRS:3p			

'In giving birth to a child, new young wives feel very great pain and so they always say bad things to their husbands.'

Nabak (Fabian, Fabian and Waters 1998:459)

58	*Am-naŋ*	*belo*	*nɔ-mti*	*bie-n*	*eweŋaŋ*	*zawat*
	people-FOC	bell	hear-SS	father-1p:POSS	long.before	sick

	ma-we-me	*ek-temien-gat-mi-ti*	*nin-gat-en*
	CONT-lie-3s:DS	see-PST.CONT:3p-BEN-happen-DEF	1p-BEN-LOC

	mka-en	*su-sɔt-gɔt*	*kʷat-bien.*
	house-LOC	mourn-DESID-BEN	come.up-F.PST:3p

'People heard the bell. My father had been lying sick for a long time, they had observed [that fact] and therefore they came up to our house intending to mourn.'

The continuative aspect prefix *ma-* combines both with final and with medial verbs. We find it on the final verb form *ma-di-m-indo-p* 'they always say to them' in (57) and on the medial verb form *ma-we-me* 'he had been lying' in (58). It derives from the verb *ma* 'be, live'. Remarkably, we find a grammaticalized form of the same verb also in the common aspect position preceding the subject-tense endings of the verb. Consider the final verb in (59).

Nabak (Fabian, Fabian and Waters 1998:425)

59	*Ata-ti-mti*	*menzim*	*tat-wet-ma-mbien.*
	hold-take-SS	cooking.pot	SCON-put.in-DUR-F.PST:3p

'Having caught them they were putting them into a cooking pot.'

Nabak (Fabian, Fabian and Waters 1998:461)

60	*...*	*ma-we-ne-ti*	*nɔgɔt*	*kajak-ŋ*
		CONT-sleep-DUR-SS	1s.BEN	fifth.born.male-1s:POSS

	nemba	*bukuwak*	*sokbe-je.*
	child	person.born.after.father.died	be.born-F.PST:3s

'We lived there until my fifth-born brother, the fatherless one, was born.'

The final verb *tat-wet-ma-mbien* 'they were putting' in (59) is twice marked for aspect, by the salient continuative prefix *tat-* and by the durative suffix *-ma*. Durative aspect often co-occurs with one of the continuative prefixes *tat-* and *ma-*, in (59) with *tat-* and in (60) with *ma-*. The durative suffix *-ma* is restricted to final verb forms, in the medial verb form *ma-we-ne-ti* 'we lived' in (60) we find *-ne* instead. The durative suffixes *-ma* and *-ne* have the same function and are in complementary distribution (Fabian, Fabian and Waters 1998:40). In contemporary Nabak there is no verb that is homonymous with the durative suffix *-ne* but a homonymous suffix serves as a nominal plural marker (cf. Table 2-10 in 2.2.7). The aspectual functions of the prefix *ma-* and the suffix *-ma* appear to be rather similar. Of these two affixes, the final verb suffix *-ma* is no doubt the older one. Earlier it also occured on medial verbs, but the

former durative different subject forms became the basic, aspectually unmarked different subject forms of present-day Nabak (cf. Table 3-31 in 3.2.7). More recently, the verb *ma* 'be, live' was again grammaticalized into an aspect marker, this time becoming a prefix. This second grammaticalization event was most likely prompted by the influence of neighboring Austronesian languages of the Huon Gulf family.

3.2 Reconstruction

In this section the subject-tense endings of the Huon Peninsula languages are reconstructed from the bottom up. I start with the reconstruction of the endings of the Kalasa family (3.2.1) and the Huon Tip family (3.2.2). After the integration of Kovai (3.2.3), the subfamilies treated beforehand are combined in a reconstruction of the endings of the Eastern Huon family (3.2.4). The Western Huon family is built up in the same manner from its four second-order subfamilies over the two first-order subfamilies to the top-level family (3.2.5 through 3.2.11). Finally, the Eastern Huon and the Western Huon reconstructions are compared to each other and a synthesis is attempted (3.2.12). After the reconstruction of verb paradigms, the Huon Peninsula same subject medial verbs, which are not inflected for person and number, are presented separately at the end (3.2.13).

The paradigms compared are presented in two tables, the first naming the function and presenting the singular forms, the second presenting the dual and the plural forms. Reconstructions are given in the top row of a column and, in the tables combining more than one subfamily, at the top of each subsection of a column. Forms in a column that are put in square brackets do not descend from the superordinate reconstruction, all other forms are deemed to be reflexes of the starred form given above. Parts of a form that are deemed to be unrelated additions to the reflex of a reconstruction are similarly put in square brackets. Parts of a form that can be present or absent are enclosed in parentheses.

3.2.1 Kalasa

The two member languages of the Kalasa family, Sialum and Ono, are not equally well documented. For Ono we have a comprehensive description of the verb morphology by Wacke (1931) and an excellent account of the semantics of the most important verb forms by P. Phinnemore (1990). Sialum verb morphology has only been documented in surveys by McElhanon. For many of the aspectual formations of Ono we lack Sialum equivalents (see Appendix C). The labels of some Sialum verb paradigms must be taken with a grain of salt. McElhanon used the same comparative concepts as for the Huon Tip languages, but the verb morphology of the Kalasa languages and the Huon Tip languages is only partly congruent. There is no doubt, however, that McElhanon caught all ancient Sialum verb paradigms and the following Proto-Kalasa reconstructions represent the bulk of reconstructible forms.

Table 3-1: Proto-Kalasa far past tense

		1SG	2SG	3SG
pKalasa	far past	*ari(-ï)-ku-lä	*ari(-ï)-ku-nä	*ari(-ï)-kä
Sialum	far past	ari-kaja	ari-kana	ari-ka
Ono	far past	ari-kole	ari-kone	ari-ke

	1DU	2/3DU	1PL	2/3PL
pKalasa	*ari(-ï)-ku-tä	*ari(-ï)-ku-it	*ari(-ï)-ku-nä	*ari(-ï)-ku-i
Sialum	ari-kata	ari-ka[n]et	ari-kana	ari-ka[n]e
Ono	ari-kote	ari-koit	ari-kone	ari-koi

The person-number forms of the far past tense in Sialum and Ono all lend themselves to reconstruction, with a minor complication in the forms of the second and third person dual and plural (Table 3-1). They disagree, however, in the initial part of the ending, the suffix **-ï*. The same suffix occurs in both languages in the endings of the near past tense (cf. Table 3-2), but in the far past tense it is only present in Sialum. Its presence in the Sialum forms in Table 3-1 is given away by the raising of the final vowel of the verb *are* 'go' to *i*. In consonant-final verbs the initial **-ï* surfaces directly, as can be seen in the far past tense forms *jar-ika* 'he told him' and *man-ikane* 'they gave him' (Stolz 1911:282f). The Ono far past tense forms, on the other hand, start with the tense marker *-ko* and there is no trace of **-ï*. As far as the third person singular is concerned, we will see in Section 3.2.4 that it was probably **-ï-ka* 3SG, i.e. it contained the suffix **-ï*. The most likely scenario is that the suffix **-ï* spread from the third person singular to the other person-number forms in Sialum while it was abolished in Ono.

The Sialum and Ono far past tense forms of the second and the third person singular and of the first person dual and plural are straightforward matches. Note that the far past tense marker **-ku* is missing from the third person singular. The endings of the first person singular, Sialum *-ika-ja* and Ono *-ko-le*, probably derive from a common proto-form, even though the consonants Sialum *-j-* and Ono *-l-* do not match. The Ono form with *-l-* links up with the first person singular past tense ending **-al* of the Pindiu languages (cf. 3.2.5) and must therefore reflect the original Proto-Kalasa form. The deviant Sialum first person singular formative *-ja* (< **-lä*) presumably arose through a sporadic sound change **-l-* > *-j-*. In the second and third person dual and plural I also take the Ono forms to be conservative. The Sialum endings *-ika-net* 2/3DU and *-ika-ne* 2/3PL show an intrusive *n* compared with Ono *-ko-it* 2/3DU and *-ko-i* 2/3PL. This *n* was probably introduced into the endings *-i-net* 2/3DU and *-i-ne* 2/3PL of the near past tense and then the person-number formatives of these endings were transferred to the far past tense.

Table 3-2: Proto-Kalasa near past and near past habitual

		1SG	2SG	3SG
pKalasa	near past	*ari-ï-lä	*ari-ï-nä	
Sialum	near past	ari-a	ari-na	ari-ŋe
Ono	near past	ari-le	ari-ne	ari-ke

	1DU	2/3DU	1PL	2/3PL
pKalasa	*ari-ï-tä	*ari-ï-it	*ari-ï-nä	*ari-ï-i
Sialum	ari-ta	ari-[n]et	ari-na	ari-[n]e
Ono	ari-te	ari-[m]it	ari-ne	ari-[m]i

		1SG	2SG	3SG
pKalasa	near past habitual	*ari-maŋg-ï-lä	*ari-maŋg-ï-nä	
Sialum	present	are-magia	are-magina	are-mageŋe
Ono	present	ari-maile	ari-maine	ari-maike

	1DU	2/3DU	1PL	2/3PL
pKalasa	*ari-maŋg-ï-tä	*ari-ma-ï-it	*ari-maŋg-ï-nä	*ari-ma-ï-i
Sialum	are-magita	[are-maginet]	are-magina	[are-magine]
Ono	ari-maite	ari-[ma]mit	ari-maine	ari-[ma]mi

Table 3-2 presents the Sialum and Ono paradigms of the near past and the present tense. It can be seen at a glance that the person-number formatives of these two tenses are identical. In fact, most of the present tense endings in both languages consist of the near past tense endings preceded by the suffix **-maŋg(e)*. In combination with the far past tense and the future tense endings this suffix derives past habitual and future habitual forms, respectively (cf. Appendix C). Synchronically, there is a gap in the near past and the present tense; no habitual forms can be derived from these tenses. From a diachronic point of view, the reason for this gap is obvious: The present tense forms are historically habitual near past tense forms. It is likely that **-maŋge* generally served as a habitual aspect marker in Proto-Kalasa and the shift in function from near past habitual to present tense was completed after the separation of Sialum and Ono. The habitual suffix **-maŋge* goes back to a combination of the verbs **ma* 'take, do' and **ge* 'be, live', which had uses as aspectual auxiliaries (cf. for Ono P. Phinnemore 1990:22ff). According to this analysis, Proto-Kalasa had no present tense. Present time was expressed by the forms labeled near past.

The endings of the near past tense start with the suffix **-ï.* In Ono, this vowel coalesces with the final vowel of the verb *ari* 'go'. In consonant-final verbs it can be seen that the underlying forms of the near past tense endings are *-ile* 1SG, *-ine* 2SG, *-ike* 3SG etc. In Ono the suffix **-ï* marks the near past tense, in Sialum it can be found in the endings of the near past as well as the far past tense. The person-number formatives of the near past tense are largely the same as in the far past tense. The Sialum first person singular forms, transcribed as [aria] and [aremagia] by McElhanon, must be interpreted phonologically as /arija/ and /aremagija/, with the first person singular formative *-ja*, as in the far past tense (Table 3-1). The third person singular ending cannot be reconstructed as the Sialum ending *-iŋe* and the Ono ending *-ike* do not match. External evidence from the Huon Tip languages suggests that the Ono ending is old (cf. Table 3-14 in 3.2.4). Sialum introduced a new ending to differentiate the near past tense from the far past tense, which originally shared the third person singular form **-ïkä*.

The endings of the second and third person dual and plural do not match either. The Ono near past tense person-number formatives *-mit* 2/3DU and *-mi* 2/3PL show an additional initial consonant *m* in comparison with the formatives *-it* 2/3DU and *-i* 2/3PL of the far past tense (Table 3-1). I assume that these formatives originated in the near past habitual paradigm. In the second and third person dual and plural, the habitual marker in Proto-Kalasa was only **-ma* (< **ma* 'take, do') as opposed to **-maŋge* (< **ma* 'take, do' plus **ge* 'be, live') in the other person-number forms. The near past habitual endings **-ma-ï-it* 2/3DU and **-ma-ï-i* 2/3PL became Ono *-mit* 2/3DU and *-mi* 2/3PL through contraction. These endings were transferred to the non-habitual near past paradigm, presumably because the inherited formatives **-it* 2/3DU and **-i* 2/3PL were felt to be too short. After the transfer, the second and third person dual and plural forms of the near past habitual paradigm were reinforced with the habitual marker **-ma* to differentiate them from the corresponding non-habitual forms. The result is the contemporary near past tense endings *-i-mit* 2/3DU and *-i-mi* 2/3PL and the present tense endings *-mamit* 2/3DU and *-mami* 2/3PL. In Sialum, the near past tense endings of the second and third person dual and plural were reinforced with the consonant *n*. The different additions to the original formatives **-it* 2/3DU and **-i* 2/3PL, *n°* in Sialum and *m°* in Ono, show that the reinforcement took place separately in the two languages. I cannot explain the origin of the reinforcing consonant *n* in Sialum.

Although Sialum and Ono both have a future tense, no reconstruction is possible because the two languages have completely different formations (see Appendix C). However, the Sialum future tense has a counterpart in an aspectual formation of Ono. The Sialum future forms *are-gia* 'I will go', *are-gina* 'you will go' etc. correspond to the Ono near past continuative forms *ari-gile* 'I was going', *ari-gine* 'you were going' etc. (Wacke 1931:168f). These forms are made up of the verb **ge* 'be, live' and the endings of the near past tense. The Sialum future tense must have developed from a near past continuative at a time when the near past tense still included the time of speaking in its denotational range, i.e. before the rise of a separate present tense.

Table 3-3: Proto-Kalasa imperative mood and counterfactual mood

		1SG	2SG	3SG
pKalasa	imperative	*ari-mbä		*ari-käp
Sialum	imperative	are-ba	are-i	are-kap
Ono	imperative	ari-we	ari-nom	ari-kep

	1DU	2/3DU	1PL	2/3PL
pKalasa	*ari-tä	*ari-mbit	*ari-ŋäm	*ari-mbi
Sialum	are-ta	are-wet	are-ŋam	are-we
Ono	ari-te	ari-ut	ari-ŋem	ari-u

		1SG	2SG	3SG
pKalasa	counterfactual	*ari-mbä-darap		*ari-kï-darap
Sialum	past irrealis	are-wadarap	are-idarap	ari-kidarap
Ono	counterfactual	ari-werap	ari-nomrap	ari-kirap

	1DU	2/3DU	1PL	2/3PL
pKalasa	*ari-tä-darap	*ari-mbit-darap	*ari-ŋäm-darap	*ari-mbi-darap
Sialum	are-tadarap	[ari-netdarap]	are-ŋamdarap	[are-nedarap]
Ono	ari-terap	ari-utrap	ari-ŋemrap	ari-urap

The endings of the imperative mood (Table 3-3) and of the different subject medial verb (Table 3-4) are identical, except for the third person singular form. These endings differ from the person-number formatives we have seen in the far past and the near past tenses (Tables 3-1 and 3-2), with the exception of the first person dual **-tä*, which is the same across both sets. The endings of the counterfactual mood (Table 3-3) are composed of the different subject medial verb endings plus the suffix **-darap*. In Ono this suffix has been shortened to *-rap*, but Wacke (1931:166) mentions that a variant *ari-wedarap* could be heard beside the usual form *ari-werap* 'I would have gone'. The shortening had therefore not yet fully run its course at the time Wacke collected his data.

In the imperative as well as the different subject paradigm, the endings of the second person singular, Sialum *-i* and Ono *-nom*, are totally different and defy reconstruction. The remaining forms are straightforward matches. McElhanon recorded the Sialum ending of the first person singular as *-ba* in the imperative mood and in the different subject medial verb, but gives *-wa* in the past irrealis paradigm. This may be a transcription error. However, it is not clear why the ending of the first person singular is reflected with initial *b* and the endings of the second and third person dual and plural with intitial *w* in Sialum. External evidence from Kovai and the Huon Tip languages suggests that the initial consonant in all these endings was **mb* in Proto-Eastern Huon (cf. Table 3-16 in 3.2.4). The original presence of an initial stop in these endings can still be seen in their allomorphy in Ono. After vowel-final verbs, such as *ari* 'go', the endings are *-we* 1SG, *-ut* 2/3DU and *-u* 2/3PL, after verbs ending in a nasal consonant they are *-be* 1SG, *-bit* 2/3DU and *-bi* 2/3PL, and after verbs ending in a voiceless stop we find *-pe* 1SG, *-pit* 2/3DU and *-pi* 2/3PL (Wacke 1931:167). It is not known whether the Sialum endings display similar allomorphy. In the past irrealis, Sialum has replaced the original person-number formatives **-mbit* 2/3DU and **-mbi* 2/3PL with the near and far past tense formatives *-net* 2/3DU and *-ne* 2/3PL. In the third person singular, the imperative mood and the different subject medial verb have different endings. The imperative third person singular ending can be reconstructed as **-käp*, the corresponding different subject medial verb form, which is also found in the paradigm of the counterfactual mood, was **-kï*.

Table 3-4: Proto-Kalasa different subject and different subject habitual medial verb

		1SG	2SG	3SG
pKalasa	different subject	*ari-mbä		*ari-kï
Sialum	different subject	are-ba	are-i	are-ki
Ono	different subject	ari-we	ari-nom	ari-ki

	1DU	2/3DU	1PL	2/3PL
pKalasa	*ari-tä	*ari-mbit	*ari-ŋäm	*ari-mbi
Sialum	are-ta	are-wet	are-ŋam	are-we
Ono	ari-te	ari-ut	ari-ŋem	ari-u

		1SG	2SG	3SG
pKalasa	DS habitual	*ari-maŋge-mbä		*ari-maŋge-kï
Sialum	DS SEQ DUR	are-mageba[ko]	are-mageiko	are-mageki[ko]
Ono	DS habitual	ari-magewe	ari-magenom	ari-mageki

	1DU	2/3DU	1PL	2/3PL
pKalasa	*ari-maŋge-tä	*ari-maŋge-mbit	*ari-maŋge-ŋäm	*ari-maŋge-mbi
Sialum	are-mageta[ko]	are-magewet[ko]	are-mageŋam[ko]	are-magewe[ko]
Ono	ari-magete	ari-mageut	ari-mageŋem	ari-mageu

The habitual aspect suffix *-*maŋge* occured in medial as well as in final verb forms. For Ono, its combination with the far past and future tense, the imperative mood and the different subject verb is attested (Appendix C). Besides, it is found in the present tense, which developed out of a habitual near past tense (Table 3-2). The suffix has not developed uniformly in these tenses and moods. In the past habitual (*ari-maŋ-kole* 1SG < **ari-maŋge-kole)* and the future habitual (*ari-maŋ-kale* 1SG < **ari-maŋg-ikale*), where the following suffix has a velar stop, the syllable following **-ma°* was syncopated. In the present tense (*ari-ma-ile* 1SG < **ari-maŋg-ile*), the intervocalic consonant **-ŋg-* disappeared, but in the imperative habitual and in the different subject habitual forms (*ari-mage-we* 1SG < **ari-maŋge-we*) it was retained. The best explanation for this is a difference in the prosodic integration of the suffix. The present tense forms presumably had a unitary word accent on the first syllable of the verb root. In the imperative habitual and the different subject habitual forms, on the other hand, the suffix **-maŋge* carried a separate accent on its first syllable. Intervocalic **-ŋg-* is preserved in words that begin with a nasal consonant, elsewhere it is lost. In the imperative habitual and the different subject habitual verb forms **-maŋge* developed in the same manner as it would have in word-initial position carrying a word accent.

The different subject sequential durative forms of Sialum in Table 3-4 carry the suffix *-ko*, which is an optional addition. All medial verb forms can carry this suffix, different subject forms as well as same subject forms (cf. 3.2.13).

3.2.2 Huon Tip

The Huon Tip languages are divided in three subgroups. The three groups are the Sene language, the Sopâc family and the Kâte-Mape dialect chain. The Sopâc family comprises the two languages Migabac and Momare. Thanks to the surveys of Pilhofer (1928) and McElhanon, we have morphological data for six dialects of the Kâte-Mape dialect chain. For the purpose of reconstructing Proto-Huon Tip forms, agreement between at least two of the three aforementioned subgroups is required. The exemplary verb used by Pilhofer to show the

inflections is *ta* 'take' in Sene and **to* 'take' in the Kâte-Mape dialects. Migabac and Momare have lost this etymon and Pilhofer used the synonym **ba* 'take' instead. For Proto-Huon Tip, we can reconstruct **tâ* 'take', reflecting the Sene and Kâte-Mape verbs. The etymologically unrelated verb **ba* of Migabac and Momare has not been put in brackets in the following tables to flag it as unrelated as this would have been cumbersome.

Table 3-5: Proto-Huon Tip far past tense

		1SG	2SG	3SG
pHuon Tip	far past	*tâ-i-mbâ	*tâ(-i)-mVŋ, *tâ-i-ŋ	*tâ-wëʔ, *tâ-V
Sene	far past	ta-ba	ta-ma	ta-i
pSopâc	far past	*ba-i-mba		
Migabac	far past	ba-iba	ba-iŋ	ba-weʔ
Momare	far past	bi-mpa	bi-moŋ	ba-e
pKâte-Mape	far past	*to-i-mbo	*to-mäŋ	*to-wäʔ
Wamorâ	far past	ti-bo	to-maŋ	[to-jaʔ]
Parec	far past	to-po	to-maŋ	to-waʔ
Mâgobineng	far past	ti-bo[ŋ]	to-maŋ	to-waʔ
Wemo	far past	lo-po	lo-meŋ	lo-weʔ
Naga	far past	lo-bo	lo-meŋ	[lo-jaʔ]
Mape	far past	lo-bo	lo-meŋ	[lo-jaʔ]

	1DU	2/3DU	1PL	2/3PL
pHuon Tip	*tâ-i-mbëʔ	*tâ-i-mbüʔ	*tâ-i-mbëŋ	*tâ-i-mbüŋ
Sene	ta-he	ta-hi	ta-be	ta-bi
pSopâc	*ba-i-mbeʔ	*ba-i-mboʔ	*ba-i-mbeŋ	*ba-i-mboŋ
Migabac	ba-ibeʔ	ba-iboʔ	ba-ibeŋ	ba-iboŋ
Momare	bi-mpeʔ	bi-mpoʔ	bi-mpeŋ	bi-mpoŋ
pKâte-Mape	*to-i-mbäʔ	*to-i-mbɯʔ	*to-i-mbäŋ	*to-i-mbɯŋ
Wamorâ	ti-baʔ	ti-bɯʔ	ti-mbaŋ	ti-mbɯŋ
Parec	to-paʔ	to-piʔ	to-mbaŋ	to-mbiŋ
Mâgobineng	ti-baʔ	ti-biʔ	ti-baŋ	ti-biŋ
Wemo	lo-peʔ	lo-piʔ	lo-mbeŋ	lo-mbiŋ
Naga	lo-beʔ	lo-bɔʔ	lo-beŋ	lo-bɔŋ
Mape	lo-beʔ	lo-bɯʔ	lo-beŋ	lo-bɯŋ

In the far past tense (Table 3-5), there is evidence for a suffix **-i* that is reminiscent of the suffix **-ï* found in the near past tense of the Kalasa languages (cf. Table 3-2). That **-i* is a separate part of the ending is suggested by a comparison of the far past tense forms with the forms of the past irrealis (Table 3-8), which largely share the same set of person-number formatives. In both the far past tense (**tâ-i-mbâ* 1SG etc.) and the past irrealis (**tâ-i-nâ-mbâ* 1SG etc.) the suffix **-i* is the initial element of the ending, preceding the person-number

formative (*-*mbâ* 1SG etc.) in the far past tense, but separated from it by the intervening past irrealis marker *-*nâ* in the past irrealis. There is evidence for the suffix *-*i* in both Sopâc languages and in two dialects of the Kâte-Mape chain, but not in Sene. For the postulated proto-form **tâ-i-mbâ* 1SG we would expect †*te-ba* 1SG in Sene, however, we find *ta-ba* 1SG, with unaltered root vowel of the verb. The suffix *-*i* is retained as a part of the ending only in Migabac (*ba-iba* 1SG), in Momare it induced ablaut of the verb root and then disappeared from the ending (*bi-mpa* 1SG). The same happened in Wamorâ (*ti-bo* 1SG) and Mâgobineng (*ti-boŋ* 1SG); in the other Kâte-Mape dialects *-*i* disappeared without inducing ablaut of the verb root (e.g. Wemo *lo-po* 1SG). Migabac and Momare agree with Wamorâ and Mâgobineng in reflecting *-*i* in the first person singular and all forms of the dual and plural. None of these languages reflects *-*i* in the third person singular, which must be reconstructed without it. In the second person singular, Migabac and Momare suggest the former presence of *-*i* in the ending, but Wamorâ and Mâgobineng suggest its absence.

The plural endings of the far past tense in the Huon Tip languages are straightforward matches. The Sene reflexes *ta-be* 1PL and *ta-bi* 2/3PL show regular dropping of the word final velar nasal. In the dual number, word final glottal stop also regularly disappeared in Sene. As a result, the dual and the plural forms should have become homonymous. However, this did not happen. Instead, we find dual endings starting with *h°* < **p°* in Sene. Before the final consonants *-*ʔ* and *-*ŋ*, marking dual and plural number, respectively, dropped, the number opposition was reinforced by changing the initial **mb°* of the dual endings to **p°* in a distance assimilation of the manner of articulation to the final glottal stop. Now the opposition between the ending-initial consonants *h°* (< **p°*) and *b°* (< **mb°*) (*ta-he* 1DU vs. *ta-be* 1PL) is the only distinction between dual and plural number.

The reconstruction of the second person singular form poses problems owing to conflicting reflexes. All languages except Migabac reflect an ending **(-i)-mVŋ* 2SG, but Migabac has *-iŋ* 2SG, which seems to be old. It has already been mentioned that the Sopâc languages suggest the presence of the suffix *-*i* whereas the Kâte-Mape dialects suggest its absence. Similarly conflicting are the reflexes of the vowel of the person-number formative *-*mVŋ* 2SG. Sene, Momare and the Kâte-Mape dialects all point to a different original vowel. This divergence could be indicative of a secondary origin. The Migabac second person singular ending *-iŋ* looks like a retention descending from Proto-Trans Vitiaz *-*i-m* 2SG (cf. Table 3-10 in 3.2.3) and *-*mVŋ* might be an enlarged form of this ending. The enlargement *-*Vŋ* distinguishes the far past tense formative *-*mVŋ* 2SG from the near past tense ending *-*mëʔ* 2SG (cf. Table 3-6). The assumption that Migabac *-iŋ* 2SG reflects the original second person singular far past tense ending is corrobarated by the past irrealis ending *-*i-nzë-ŋ* 2SG (cf. Table 3-8), which contains the same person-number formative *-*ŋ* 2SG. The past irrealis generally has the same person-number formatives as the far past tense.

In the third person singular, there are also competing reflexes. Migabac and the Kâte-Mape dialects point to Proto-Huon Tip **tâ-wëʔ*. Sene and Momare have a different ending that only consists of a vowel. But Sene *-i* and Momare *-e* do not match phonologically. I tentatively reconstruct an alternative third person singular form **tâ-V*, with an ending that consists of a vowel of undetermined quality. Neither of the reconstructed third person singular forms contains the suffix *-*i*.

Table 3-6: Proto-Huon Tip near past and present tenses

		1SG	2SG	3SG
pHuon Tip	near past	*tâ-mbaʔ	*tâ-mëʔ	*tâ-(i)kë
Sene	near past	ta-be[ke]	ta-me	ta-ike
pSopâc	near past	*ba-mbaʔ		
Migabac	near past	ba-baʔ	ba-meʔ	[ba-jeʔ]
Momare	near past	ba-mpaʔ	[ba-monaŋ]	ba-ha
pKâte-Mape	near past	*to-mbaʔ	*to-mäʔ	[*to-(j)eʔ]
Wamorâ	near past	to-baʔ	to-maʔ	to-eʔ
Parec	near past	to-paʔ	to-maʔ	to-jeʔ
Mâgobineng	near past	to-baʔ	to-maʔ	to-jeʔ
Wemo	near past	lo-paʔ	lo-meʔ	lo-jeʔ
Naga	near past	lo-baʔ	lo-meʔ	lo-eʔ
Mape	near past	lo-baʔ	lo-meʔ	lo-eʔ

	1DU	2/3DU	1PL	2/3PL
pHuon Tip	*tâ-mbëtëʔ		*tâ-mbënëŋ	*tâ-mbiëŋ
Sene	[ta-aleke]	ta-alike	ta-bene	ta-bie
pSopâc		*ba-mbiäʔ		*ba-mbiäŋ
Migabac	ba-beleʔ	ba-bieʔ	[ba-beleŋ]	ba-bieŋ
Momare	[ba-mponaʔ]	ba-mpiaʔ	ba-mponaŋ	ba-mpiaŋ
pKâte-Mape	*to-mbäläʔ	*to-mbiläʔ	*to-mbänäŋ	*to-mbiäŋ
Wamorâ	to-bʉlaʔ	to-bilaʔ	to-mbʉnaŋ	to-mbeŋ
Parec	to-paleʔ	to-pilaʔ	to-mbaneŋ	to-mbeŋ
Mâgobineng	to-baleʔ	to-bileʔ	to-baneŋ	to-bi[n]eŋ
Wemo	lo-peleʔ	lo-pileʔ	lo-mbeneŋ	lo-mbieŋ
Naga	lo-beleʔ	lo-bɔleʔ	lo-beneŋ	[lo-biʔ]
Mape	lo-beleʔ	lo-bileʔ	lo-beneŋ	[lo-biʔ]

		1SG	2SG	3SG
pHuon Tip	present	*tâ-ŋgâ-mbaʔ, *tâ-ŋga	*tâ-ŋgâ-mëʔ, *tâ-ŋgâ-iʔ	*tâ-ŋgaʔ
Sene	present	ta-ga[eke]	ta-game	ta-eke
pSopâc	present	*ba-ŋga-mbaʔ	*ba-ŋga-meʔ, *ba-ŋgiʔ	*ba-ŋgaʔ
Migabac	present	ba-gabaʔ	ba-gameʔ, ba-giʔ	ba-gaʔ
Momare	present	ba-ŋkabaʔ	ba-ŋkiʔ	ba-ŋkaʔ
pKâte-Mape	present	*to-ŋgo-mbaʔ, *to-ŋga	*to-ŋgo-mäʔ, *to-ŋgo-iʔ	*to-ŋgaʔ
Wamorâ	present	to-gobaʔ	to-goʔ	to-gaʔ
Parec	present	to-kopaʔ	to-koʔ	to-kaʔ
Mâgobineng	present	to-gobaʔ	to-giʔ	to-gaʔ
Wemo	present	lo-kopaʔ	lo-komeʔ, lo-kiʔ	lo-kaʔ
Naga	present	lo-ga	lo-geʔ	lo-gaʔ
Mape	present	lo-gɔ	lo-geʔ	lo-gaʔ

	1DU	2/3DU	1PL	2/3PL
pHuon Tip	*tâ-ŋgâ-mbëtëʔ		*tâ-ŋgâ-mbënëŋ	*tâ-ŋgâ-mbiëŋ
Sene	[ta-galeke]	ta-galike	ta-gabene	ta-gabie
pSopâc				
Migabac	ba-gabeleʔ	ba-gabieʔ, ba-gaiʔ	[ba-gabeleŋ]	ba-gabieŋ, [ba-gaiŋ]
Momare	[ba-ŋkanaʔ]	ba-ŋkeaʔ	[ba-ŋkanaŋ]	[ba-ŋkeaŋ]
pKâte-Mape	*to-ŋgo-mbäläʔ	*to-ŋgo-mbiläʔ	*to-ŋgo-mbänäŋ	*to-ŋgo-mbiäŋ
Wamorâ	to-gobɯlaʔ	to-gobilaʔ	to-ŋgobɯnaŋ	to-ŋgobeŋ
Parec	to-kopaleʔ	to-kopilaʔ	to-ŋgopaneŋ	to-ŋgopeŋ
Mâgobineng	to-gobaleʔ	to-gobileʔ	to-gobaneŋ	to-gobi[n]eŋ
Wemo	lo-kopeleʔ	lo-kopileʔ	lo-ŋgopeneŋ	lo-ŋgopieŋ
Naga	lo-gobeleʔ	lo-gobɔleʔ	lo-gobeneŋ	[lo-goʔ]
Mape	lo-gobeleʔ	lo-gobileʔ	lo-gobeneŋ	[lo-gobiʔ]

Table 3-6 shows the forms of the near past tense and the present tense, which share the same set of person-number formatives. The present tense carries in addition the tense marker **-ŋgâ*, which derives from the verb **gâ* 'be (around), live'. The near past tense endings have been derived from the far past tense endings (Table 3-5), though this derivation is no longer transparent. In the dual number, the near past tense endings show an extension with the suffix **-ëʔ*, in the plural number, an extension with the suffix **-ëŋ*. This extension may have originally been a reduplication of the final VC-part of the far past tense person-number formatives (**-mbëtëʔ* 1DU < **-mbët-ët*, **-mbënëŋ* 1PL < **-mbën-ën*). The first and the second person singular endings of the near past tense end in a glottal stop, which is absent from the

corresponding forms of the far past tense. They could be analyzed as being made up of the Pre-Huon Tip far past tense person-number formatives *-*mbâ* 1SG and *-*m* 2SG plus a suffix *-*ë?*. Whatever the details may be, it is clear that the near past tense endings were derived from the far past tense endings by suffixal extension.

The first and the second person singular endings of the near past tense are reflected in all three Huon Tip subgroups. In Sene, the first person singular ending -*beke* (⇐ *-*mba?*) has been extended with the third person singular ending -*ike*. A similar extension took place in the dual number (-*aleke* 1DU, -*alike* 2/3DU). The initial part of these Sene dual forms cannot be reconciled with the apparently old Kâte-Mape forms and is an inexplicable innovation. In the third person singular, we find the same bipartition of the Kâte-Mape dialects as in the far past tense. Wamorâ, Naga and Mape, which have the far past tense ending -*ja?* 3SG, show -*e?* 3SG in the near past tense; Parec, Mâgobineng and Wemo, which reflect the far past tense ending *-*wä?* 3SG, show -*je?* 3SG in the near past tense. It is not clear whether the endings -*e?* 3SG and -*je?* 3SG can be combined, as has tentatively been done in Table 3-6. They must be innovative, as the Sene ending -*ike* 3SG has an external counterpart in the Ono near past tense ending -*ike* 3SG (cf. Table 3-2 in 3.2.1). The Momare ending -*ha* seems to go together with Sene -*ike*, despite the unexpected vowel, leading to the reconstruction of Proto-Huon Tip *-*(i)kë* 3SG.

The reconstruction of the first person dual ending *-*mbëtë?* is based on the match between the Kâte-Mape reflexes and the Migabac reflex. For the second and third person dual, no Proto-Huon Tip reconstruction is possible because Migabac and Momare have introduced an innovative ending *-*mbiä?.* This ending is the plural form *-*mbiäŋ* 2/3PL with replacement of the final velar nasal by a glottal stop characteristic of the dual number. In the first person plural, Migabac has innovated in the opposite direction. Migabac -*beleŋ* 1PL is the dual form -*bele?* 1DU with replacement of the final glottal stop by a velar nasal. The Momare ending -*mponaŋ* 1PL probably descends from Proto-Huon Tip *-*mbënëŋ* 1PL but shows an unexpected vowel in the first syllable. The ending of the second and third person plural, Proto-Huon Tip *-*mbiëŋ*, is straightforwardly reflected in Sene and both Sopâc languages as well as in a single Kâte-Mape dialect, Wemo. In Wamorâ and Parec -*mbeŋ*, the vowel sequence *ia* has coalesced to *e*. Mâgobineng -*bineŋ* has introduced an intervocalic *n* in analogy with the first person plural form. Naga and Mape, finally, have replaced the ending with -*bi?*, whose origin is unclear.

In the present tense, we find the tense marker *-*ŋgâ* preceding the person-number formatives. The only present tense ending that lacks this marker is the Sene third person singular form -*eke*, which differs from the near past ending -*ike* only in the initial vowel and must have the same origin. It is unclear whether this ending has replaced the ending *-*ŋga?* 3SG reconstructible from the other languages or if it is an isolated retention. It has been added to the first person singular form -*gaeke*, which seems to have lacked the person-number formative *-*mba?* 1SG reconstructible from most other languages. If one subtracts -*eke* from -*gaeke*, the remaining form matches Naga -*ga* and Mape -*gɔ*, which likewise lack the person-number formative *-*mba?* 1SG. This match between Sene, Naga and Mape is captured by the alternative reconstruction *-*ŋga* 1SG. Two forms must also be reconstructed for the second person singular. Sene, Migabac and Wemo reflect an ending *-*ŋgâ-më?* with the same person-number formative *-*më?* as in the near past tense. In addition, Migabac and Wemo have a

second ending displaying the person-number formative *-*iʔ*. The coexistence of these two endings in two daughter languages suggests that they were both already present as variants in Proto-Huon Tip. In the Kâte-Mape dialects, the postulated ending *-*ŋgo-iʔ* has not developed uniformly. In Mâgobineng -*giʔ* and Wemo -*kiʔ* the first vowel of the original cluster was lost, while in Wamorâ -*goʔ* and Parec -*koʔ* the second vowel was lost. The ending -*geʔ* found in Naga and Mape may result from a coalescence of the vowels *o* and *i* and is tentatively derived from *-*ŋgo-iʔ* in Table 3-6, though this is uncertain.

In the dual and plural of the present tense, the Kâte-Mape dialects show straightforward combinations of the tense marker *-*ŋgo* and the endings of the near past tense. In the plural, Sene agrees with this formation, but in the dual Sene has the same aberrant forms as in the near past tense, precluding a reconstruction of the second and third person dual form. Momare has innovative dual and plural forms that bear no relation to the near past tense forms. Perhaps they are truncations of earlier composite forms. Equally without parallel are the Migabac variant endings -*gaiʔ* 2/3DU and -*gaiŋ* 2/3PL reported by McEvoy (2008:38). These variant forms were not recorded by Pilhofer (1928) and seem to be recent innovations. The dual and plural forms that can be reconstructed to Proto-Huon Tip are combinations of the present tense marker *-*ŋgâ* and the endings of the near past tense. The same holds for the first and second person singular variants *-*ŋgâ-mbaʔ* 1SG and *-*ŋgâ-mëʔ* 2SG, but the variants *-*ŋga* 1SG and *-*ŋgâ-iʔ* 2SG cannot be so explained. It is unclear whether the latter forms are innovations. The third person singular present tense ending *-*ŋgaʔ* does also not contain the near past tense ending Proto-Huon Tip *-*(i)kë* 3SG.

Table 3-7: Proto-Huon Tip present imperative mood and near future tense

		1SG	2SG	3SG
pHuon Tip	pres. imperative	*tâ-mbë	*tâ-ʔ	*tâ-inâ, *tâ-ijâ
Sene	pres. imperative	ta-be	[te-jo]	te-jɔ
pSopâc	pres. imperative	*ba-mbe		*ba-(i)na
Migabac	pres. imperative	ba-be	ba-ʔ, [ba-noŋ]	ba-na
Momare	pres. imperative	ba-mpe	[bi]	bi-na
pKâte-Mape	pres. imperative	*to-mbä	*to-ʔ	*to-ino
Wamorâ	pres. imperative	to-bɔ	to-ʔ	ti-no
Parec	pres. imperative	to-pɔ	to-ʔ	to-no
Mâgobineng	pres. imperative	to-bɔ	to-ʔ	[ti-soʔ]
Wemo	pres. hortative	lo-pe	lo-ʔ	[lo-oʔ]
Naga	pres. imperative	lo-be	[lo-ŋ]	lo-jo
Mape	pres. imperative	lo-be	lo-ʔ	lo-no

	1DU	2/3DU	1PL	2/3PL
pHuon Tip	*tâ-inâʔ	*tâ-iniʔ	*tâ-inâŋ	*tâ-iniŋ
Sene	te-nə[kɔʔ]	te-ni[kɔʔ]	te-nɔ	te-ni
pSopâc	*ba-(i)naʔ	*ba-(i)niʔ	*ba-(i)naŋ	*ba-(i)niŋ
Migabac	ba-naʔ	ba-niʔ	ba-naŋ	ba-niŋ
Momare	bi-naʔ	bi-niʔ	bi-naŋ	bi-niŋ
pKâte-Mape	*to-inoʔ	*to-iniʔ	*to-inoŋ	*to-iniŋ
Wamorâ	ti-noʔ	ti-niʔ	[to-kiʔ]	ti-niŋ
Parec	ti-noʔ	ti-niʔ	[to-kiʔ]	ti-niŋ
Mâgobineng	ti-noʔ	to-niʔ	ti-noŋ	to-niŋ
Wemo	lo-naʔ	lo-niʔ	lo-naŋ	lo-niŋ
Naga	lo-noʔ	lo-niʔ	[lo-kiʔ]	lo-niŋ
Mape	lo-noʔ	lo-niʔ	[lo-kiʔ]	lo-niŋ

		1SG	2SG	3SG
pHuon Tip	near future	*tâ-mbë-mü		
Sene	near future	ta-bemə	te-jomə	te-jəmə
pKâte-Mape	near future	*to-mbä-mɯ	*to-ʔ-mɯ	*to-ino-mɯ
Wamorâ	near future	to-bəmɯ	to-ʔmɯ	ti-nomɯ
Parec	near future	to-pəmɯ	to-ʔmɯ	ti-nomɯ
Mâgobineng	near future	to-bəmə	to-ʔmə	[ti-soʔmə]
Wemo	near future	lo-pemu	lo-ʔmu	[lo-oʔmu]
Naga	near future	lo-bemu[ŋ]	lo-ʔmi[ŋ]	[lo-iŋ(go)]
Mape	near future	lo-bemu[ŋ]	lo-ʔmi[ŋ]	[lo-iŋ(go)]

	1DU	2/3DU	1PL	2/3PL
pHuon Tip	*tâ-inâʔ-mü	*tâ-iniʔ-mü	*tâ-inâŋ-mü	*tâ-iniŋ-mü
Sene	te-nə[kɔʔ]mə	te-ni[kɔʔ]mə	te-nɔmə	te-nimə
pKâte-Mape	*to-inoʔ-mɯ	*to-iniʔ-mɯ	*to-inoŋ-mɯ	*to-iniŋ-mɯ
Wamorâ	ti-noʔmɯ	ti-niʔmɯ	[to-kiʔmɯ]	ti-niŋmɯ
Parec	ti-noʔmɯ	to-niʔmɯ	[to-kiʔmɯ]	ti-niŋmɯ
Mâgobineng	ti-noʔmə	ti-niʔmə	ti-noŋmə	ti-niŋmə
Wemo	lo-naʔmu	lo-niʔmu	lo-naŋmu	lo-niŋmu
Naga	lo-noʔmi[ŋ]	lo-niʔmi[ŋ]	[lo-kiʔmiŋ]	lo-niŋmi[ŋ]
Mape	lo-noʔmi[ŋ]	lo-niʔmi[ŋ]	[lo-kiʔmiŋ]	lo-nimi[ŋ]

Most of the endings of the present imperative mood (Table 3-7) began with the vowel **i*, which induced ablaut in the root vowel of the verb in Sene, Momare, Wamorâ, Parec and Mâgobineng. However, these languages do not always agree in showing ablaut. In Sene and Momare, the verb root shows ablaut in all forms except that of the first person singular. Wamorâ, Parec and Mâgobineng, on the other hand, show the basic vowel in the second person singular. Parec also shows the basic vowel in the third person singular and Mâgobineng in the second and third person dual and plural. The inconsistent absence of

ablaut in one Kâte-Mape dialect only may be due to an error in elicitation. But the consistent absence of ablaut in the second person form of all three Kâte-Mape dialects that show ablaut must go back to Proto-Kâte-Mape. Beside this discrepancy in the second person singular, there is general agreement for ablaut in all dual and plural forms and for the absence of ablaut in the first person singular form. One may wonder if the initial *i^{o} in the endings of the present imperative is etymologically related to the suffix *-*i* found in the endings of the far past tense (cf. Table 3-5) and the past irrealis mood (cf. Table 3-8). If there is a connection, the function of the suffix *-*i* in all these sets of endings is obscure.

There is perfect agreement for the reconstruction of the first person singular ending *-*mbë*. In the second person singular, we have seen that there is conflicting evidence of ablaut. The ending *-*ʔ* 2SG of the Kâte-Mape dialects has a match in Migabac -*ʔ*. But the reconstruction of Proto-Huon Tip *-*ʔ* 2SG is somewhat weak given the disagreement of Sene and Momare, which not only show ablaut in this form but also have different endings. The variant ending -*noŋ* 2SG of Migabac is a loan from Ono -*nom* (cf. Table 3-3 in 3.2.1). For the third person singular, two endings can be reconstructed. The ending *-*(i)na* 3SG of the Sopâc languages agrees with *-*ino* 3SG found in Wamorâ, Parec and Mape. There is a second match between Sene *te-jɔ* and Naga *lo-jo*, which can be combined under Proto Huon Tip *-*tâ-ijâ* 3SG. There is no external evidence that would allow us to decide which of these forms is older. According to the sound laws, the dual and plural forms of Sene would have become homonymous. This was prevented by the introduction of a dual marker -*kəʔ* in -*nəkəʔ* 1DU and -*nikəʔ* 2/3DU. In the first person plural, Naga and Mape introduced an ending -*kiʔ*, which was then adopted by Wamorâ and Parec. Intervocalic -*k*- in Naga and Mape corresponds to -*h*- in Wamorâ, which excludes the possibility that -*kiʔ* was commonly inherited by these languages. The original ending Proto-Huon Tip *-*inâŋ* 1PL is preserved in Mâgobineng and Wemo.

The near future tense is made up of the present imperative endings plus the final suffix *-*mü*, which derives etymologically from the verb *-*mü* 'say'. This formation is only preserved in Sene and the Kâte-Mape dialects. Migabac and Momare have divergent near future forms that do not even agree with each other (cf. Appendix C). Naga and Mape have added a final velar nasal to the endings, whose origin is unclear. In the third person singular, Naga and Mape have replaced the original composite ending with the suffix -*iŋ(go)*, which is otherwise used to derive gerunds with a final meaning from verbs (Pilhofer 1928:218). In the second and third person dual and plural of the near future tense, Mâgobineng shows ablaut, in contradistinction to the corresponding forms of the present imperative. This is apt to reinforce the suspicion that the present imperative forms have not been correctly elicited.

Table 3-8: Proto-Huon Tip past irrealis mood

		1SG	2SG	3SG
pHuon Tip	past irrealis	*tâ-i-nâ-mbâ	*tâ-i-nzë-ŋ	*tâ-i-nzë-ʔ, *tâ-i-jâ-ʔ
Sene	past irrealis	[te-aba]	[te-jemi]	te-je
pSopâc	past irrealis	*ba(-i)-na-mba	*ba(-i)-nze-ŋ	*ba(-i)-nze-ʔ
Migabac	past irrealis	ba-naba	ba-deŋ	ba-deʔ
Momare	past irrealis	bi-naba	bi-nteŋ	bi-nteʔ
pKâte-Mape	past irrealis	*to-i-no-mbo	*to-i-nzä-ŋ	*to-i-nzä-ʔ
Wamorâ	past irrealis	ti-nobo	[ti-noŋ]	[ti-naʔ]
Mâgobineng	past irrealis	[ti-zaboŋ]	[ti-zamaŋ]	ti-zaʔ
Wemo	past irrealis	[lo-tsapo]	lo-ndzaŋ	lo-tsaʔ
Naga	past irrealis	[lo-joboʔ]	[lo-joŋ]	lo-joʔ
Mape	past irrealis	lo-nobo	[lo-noŋ]	[lo-naʔ]

	1DU	2/3DU	1PL	2/3PL
pHuon Tip	*tâ-i-nâ-mbëʔ, *tâ-i-jâ-mbëʔ	*tâ-i-nâ-mbüʔ, *tâ-i-jâ-mbüʔ	*tâ-i-nâ-mbëŋ, *tâ-i-jâ-mbëŋ	*tâ-i-nâ-mbüŋ, *tâ-i-jâ-mbüŋ
Sene	te-jehe	te-jehi	te-jebe	te-jebi
pSopâc	*ba(-i)-na-mbeʔ	*ba(-i)-na-mboʔ	*ba(-i)-na-mbeŋ	*ba(-i)-na-mboŋ
Migabac	ba-nabeʔ	ba-naboʔ	ba-nabeŋ	ba-naboŋ
Momare	bi-nabeʔ	bi-naboʔ	bi-nabeŋ	bi-naboŋ
pKâte-Mape	*to-i-no-mbäʔ	*to-i-no-mbɯʔ	*to-i-no-mbäŋ	*to-i-no-mbɯŋ
Wamorâ	ti-nobaʔ	ti-nobɯʔ	ti-nombaŋ	ti-nombɯŋ
Mâgobineng	[ti-zabaʔ]	[ti-zabiʔ]	[ti-zabaŋ]	[ti-zabiŋ]
Wemo	[lo-tsapeʔ]	[lo-tsapiʔ]	[lo-ndzapeŋ]	[lo-ndzapiŋ]
Naga	lo-jobeʔ	lo-jobɔʔ	lo-jobeŋ	lo-jobɔŋ
Mape	lo-nobeʔ	lo-nobɯʔ	lo-nobeŋ	lo-nobɯŋ

The past irrealis mood (Table 3-8) has not been recorded for Parec. The remaining Kâte-Mape dialects are divided in three groups. Wamorâ and Mape have a mood marker *-no*, in Mâgobineng and Wemo the mood marker is *-za*, and in Naga it is *-jo*. The person-number formatives of all languages are mostly identical with the far past tense endings (cf. Table 3-5). In the Sopâc languages, we also find two mood markers, but here they occur in the same paradigm. The mood marker **-na* is found in the first person singular as well as all dual and plural forms; the mood marker **-nze* is found in the second and third person singular. The Sopâc mood marker **-na* is evidently cognate with the Wamorâ and Mape mood marker *-no* and **-nze* is cognate with Mâgobineng and Wemo *-za*. If we assume that the Sopâc languages reflect the original state of affairs, the two mood markers *-no* and *-za* of the Kâte-Mape dialects can be brought together. In Proto-Kâte-Mape, **-no* occured in the first person singular and all dual and plural forms. In Wamorâ and Mape this marker was generalized, spreading to

the second and third person singular. The mood marker *-*nzä*, which occurred in the second and third person singular in Proto-Kâte-Mape, was thereby ousted from the paradigm. In Mâgobineng and Wemo, the opposite development took place. Here the mood marker *-*nzä* was generalized, ousting *-*no* from the paradigm. The comparison with the Sopâc languages thus allows us to combine the Wamorâ and Mape mood marker -*no* and the Mâgobineng and Wemo mood marker -*za* in one original paradigm.

The Naga mood marker -*jo* is not covered by the reconstructions discussed above. It is possible, though not certain, that it links up with the mood marker -*je* of Sene. A problem for such a combination are the divergent vowels; Naga *o* and Sene *e* do not match. This problem could be overcome by postulating that the palatal glide *j* exerted an assimilatory influence on the following vowel in Sene. We could then reconstruct **tâ-i-jâ-mbëŋ* 1PL > Sene *te-jebe*, Naga *lo-jobeŋ* etc. An additional problem is the aberrant first person singular form in Sene, where we have a mood marker -*a* instead of -*je*. I have no solution for this problem. The reconstruction of a second set of Proto-Huon Tip past irrealis forms for the third person singular and the whole dual and plural, meant to account for Sene and Naga, is therefore highly tentative. The first reconstructions given in Table 3-8, by contrast, based on the match between the Sopâc languages and the four other Kâte-Mape dialects, are well-supported by the data.

As in the far past tense (Table 3-5), we find the suffix *-*i* as the first component of the endings of the past irrealis mood. It is, however, not reflected in the same languages as in the far past tense. Migabac reflects *-*i* in the endings of the far past tense, but not in those of the past irrealis. Sene, on the other hand, reflects *-*i* in the past irrealis, but not in the far past tense. Furthermore, Wamorâ and Mâgobineng show ablaut in the second and third person singular of the past irrealis whereas they show no ablaut in the same forms of the far past tense. Accordingly, the suffix *-*i* can be safely reconstructed to all endings of the past irrealis while there was conflicting or no evidence for it in the second and third person singular of the far past tense.

In the dual and plural of the past irrealis, the person-number formatives are exactly the same as in the far past tense (cf. Table 3-5). The same holds for the first person singular. In the second person singular, however, we find the person-number formative *-*ŋ* in the past irrealis whereas it is *-*mVŋ* in the far past tense. It is not surprising to see that Mâgobineng has extended *-*mVŋ* 2SG to the past irrealis, but the appearance of *-*ŋ* 2SG in the far past tense in Migabac comes as a surprise, as the far past tense is the more basic category. But a transfer of *-*ŋ* 2SG from the past irrealis is not the only possible explanation of the Migabac far past tense ending. We also find *-*ŋ* 2SG in the sequential different subject medial verb (cf. Table 3-9), and this is a more likely source, unless Migabac *-*ŋ* 2SG in the far past tense is a retention from Proto-Trans Vitiaz (cf. Table 3-10 in 3.2.3). In the third person singular, there are also different person-number formatives in the past irrealis and in the far past tense. There is unanimous evidence for *-*ʔ* 3SG in the past irrealis, whereas the third person singular form of the far past tense is difficult to reconstruct, but different from *-*ʔ*.

Table 3-9: Proto-Huon Tip different subject sequential and different subject simultaneous medial verb

		1SG	2SG	3SG
pHuon Tip	DS sequential	*tâ-mbë	*tâ-ŋ	*tâ-më
Sene	DS sequential	ta-be	[ta-bu]	ta-me
pSopâc	DS sequential	*ba-mbe	*ba-ŋ	*ba-me
Migabac	DS sequential	ba-be	ba-ŋ	ba-me
Momare	DS sequential	ba-mpe	ba-ŋ	ba-me
pKâte-Mape	DS sequential	*to-mbä	*to-ŋ[-täʔ]	*to-mä
Wamorâ	DS sequential	to-bɔ	to-ndɔʔ	to-mɔ
Parec	DS sequential	to-pɔ	to-tɔʔ	to-mɔ
Mâgobineng	DS sequential	to-bɔ	[to-teʔ]	to-mɔ
Wemo	DS sequential	lo-pe	lo-teʔ	lo-me
Naga	DS sequential	lo-be	lo-ŋteʔ	lo-me
Mape	DS sequential	lo-be	lo-ndeʔ	lo-me

	1DU	2/3DU	1PL	2/3PL
pHuon Tip			*tâ-mbënë	*tâ-mbi
Sene	ta-ale	ta-alie	ta-bene	ta-bi[e]
pSopâc	*ba-mbeʔ	*ba-mboʔ	[*ba-mbeŋ]	[*ba-mboŋ]
Migabac	ba-beʔ	ba-boʔ	ba-beŋ	ba-boŋ
Momare	ba-mpeʔ	ba-mpoʔ	ba-mpeŋ	ba-mpoŋ
pKâte-Mape	*to-mbälä	*to-mbilä	*to-mbänä	*to-mbi
Wamorâ	to-bɯlɔ	to-bilɔ	to-bɯnɔ	to-bi
Parec	to-pale	to-pila	to-pane	to-pi
Mâgobineng	to-bale	to-bile	to-bane[(ŋ)]	to-bi[ne(ŋ)]
Wemo	lo-pele	lo-pile	lo-pene	lo-pi[e]
Naga	lo-bele	lo-bɔle	lo-bene[ŋ]	lo-bi
Mape	lo-bele	lo-bile	lo-bene	lo-bi[(e)]

		1SG	2SG	3SG
pHuon Tip	DS simultan.	*tâ-ka-mbë	*tâ-ka-ŋ	*tâ-ka-më
Sene	DS simultan.	ta-kabe	[ta-kabu]	ta-kame
pSopâc	DS simultan.	*ba-hä-mbe	*ba-hä-ŋ	*ba-hä-me
Migabac	DS simultan.	ba-hebe	ba-heŋ	ba-heme
Momare	DS simultan.	ba-habe	ba-haŋ	ba-hame
pKâte-Mape	DS simultan.	*to-ka-mbä	*to-ka-ŋ[-täʔ]	*to-ka-me
Wamorâ	DS simultan.	to-hɔbɔ	to-handɯʔ	to-hame
Mâgobineng	DS simultan.	to-ɔbɔ	[to-aŋteʔ]	to-ame
Wemo	DS simultan.	lo-hape	lo-ha(ŋ)teʔ	lo-hame
Naga	DS simultan.	lo-kabe	lo-kaŋteʔ	lo-kame
Mape	DS simultan.	lo-kabe	lo-kandeʔ	lo-kame

	1DU	2/3DU	1PL	2/3PL
pHuon Tip			*tâ-ka-mbënë	*tâ-ka-mbi
Sene	ta-kale	ta-kalie	ta-ka-bene	ta-kabi[e]
pSopâc	*ba-hä-mbeʔ	*ba-hä-mboʔ	[*ba-hä-mbeŋ]	[*ba-hä-mboŋ]
Migabac	ba-hebeʔ	ba-heboʔ	ba-hebeŋ	ba-heboŋ
Momare	ba-habeʔ	ba-haboʔ	ba-habeŋ	ba-haboŋ
pKâte-Mape	*to-ka-mbälä	*to-ka-mbilä	*to-ka-mbänä	*to-ka-mbi
Wamorâ	to-habuılɔ	to-habilɔ	to-habunɔ	to-habi[(e)]
Mâgobineng	to-abale	to-abile	to-abane[ŋ]	to-abi[neŋ]
Wemo	lo-hapele	lo-hapile	lo-hapene	lo-hapi[e]
Naga	lo-kabele	lo-kabɔle, [lo-kaiʔ]	lo-kabene[(ŋ)]	[lo-kai(ŋ)]
Mape	lo-kabele	lo-kabile, [lo-kabuʔ]	lo-kabene[(ŋ)]	lo-kabi[(e)], [lo-kabuŋ]

The Huon Tip languages have two sets of different subject medial verb forms that lend themselves to reconstruction (Table 3-9). The sequential forms have no tense marker, the simultaneous endings start with the tense marker *-*ka* followed by the same person-number formatives as in the sequential forms. The first person singular formative *-*mbë* and the third person singular formative *-*më* are reflected by all daughter languages in both sets of medial verb forms. The second person singular formative *-*ŋ* is retained as such in Migabac and Momare. In the Kâte-Mape dialects, a particle *-*täʔ* fused with it. In the resulting composite endings, the original formative *-*ŋ* 2SG is better visible in the simultaneous than in the sequential medial verb forms, where it was lost in Parec and Wemo. The Mâgobineng formative -*teʔ* 2SG, which has an unexpected vowel, may be a loan from Wemo. In Sene, where word-final *-*ŋ* is regularly lost, we find the innovative formative -*bu* 2SG. In the plural, the Kâte-Mape dialects agree with Sene, allowing the reconstruction of *-*mbënë* 1PL and *-*mbi* 2/3PL. The second and third person plural formative *-*mbi* is preserved in the sequential paradigm of Wamorâ, Parec and Naga. Sene, Wemo and Mape have added a final -*e*, in line with the other dual and plural forms. In Mape, there is variation between -*bi* 2/3PL and -*bie* 2/3PL, showing that the addition of -*e* is an independent analogical development. Migabac and Momare have replaced the original medial verb person-number formatives with the far past tense formatives in the plural and in the dual number (cf. Table 3-5). The only thing that distinguishes the dual and plural sequential medial verb forms from the far past tense forms in these two languages is the suffix *-*i*, which only occurs in the far past tense. In the simultaneous medial verb, Mape is about to replace the inherited endings -*kabile* 2/3DU and -*kabi(e)* 2/3PL with the innovative endings -*kabuʔ* 2/3DU and -*kabuŋ* 2/3PL, whose person-number formatives have been taken from the far past tense. The innovative simultaneous forms -*kaiʔ* 2/3DU and -*kai(ŋ)* 2/3PL of Naga are harder to explain, and I abstain from any attempt here. As in the near past tense, Sene has introduced new dual forms in the different subject medial verb. Since the Sopâc languages, too, have replaced the dual forms, there is nothing the dual forms of the Kâte-Mape dialects could be compared to, hence no bottom-up reconstruction is possible.

As we have seen above, eight sets of subject-tense endings of the verb can be reconstructed to Proto-Huon Tip. The contemporary languages have more paradigms than that and it is likely that Proto-Huon Tip, too, had further paradigms. For instance, all Huon Tip languages have a far future tense and most of them have a future imperative and a future irrealis mood. These categories cannot be reconstructed to Proto-Huon Tip because there is no agreement across the three subgroups. There is also no external evidence that would allow us to identify the inherited forms from among the multitude of contemporary forms. The nearest relative of the Huon Tip languages, Kovai, has not only lost a lot of the ancient vocabulary, but also a considerable part of the verbal morphology. These losses are compounded by phonological attrition so that most often the Huon Tip languages shed light on Kovai, but seldom *vice versa*. The remaining Eastern Huon languages, Sialum and Ono, are no great help, either, as they are not closely enough related to the Huon Tip languages to support the reconstruction of diachronically less stable morphological categories.

3.2.3 Trans-Vitiaz

Kovai, spoken on Umboi Island across the Vitiaz Strait, combines with the Huon Tip languages to form the Trans-Vitiaz family. Kovai only has four sets of subject-tense endings of the verb as opposed to more than a dozen of the Huon Tip languages. This limits the amount of reconstruction that is possible. A glaring omission from the verb forms of Kovai is the imperative mood, which is otherwise attested in all other Huon Peninsula languages. The preservation of the irrealis mood may have been fostered by the presence of a realis-irrealis distinction in the surrounding Oceanic Austronesian languages. In the following tables with Proto-Trans-Vitiaz reconstructions, the Huon Tip reflexes are summarized with reconstructions for the three subgroups, i.e. Sene, Sopâc and Kâte-Mape. The detailed reflexes must be looked up in Section 3.2.2.

Table 3-10: Proto-Trans-Vitiaz far past tense

		1SG	2SG	3SG
pTrans-Vitiaz	far past	*-i-mba	*-i-m	
Kovai	non-past	an-ip	an-im	an-o
Kovai	non-past	nag-ep	nag-em	nag-o
pHuon Tip	far past	*tâ-i-mbâ	[*tâ(-i)-mVŋ], *tâ-i-ŋ	*tâ-wëʔ, *tâ-V
Sene	far past	ta-ba	ta-ma	ta-i
pSopâc	far past	*ba-i-mba	*ba-i-moŋ, *ba-i-ŋ	*ba-weʔ, *ba-e
pKâte-Mape	far past	*to-i-mbo	*to-mäŋ	*to-wäʔ

	1DU	2/3DU	1PL	2/3PL
pTrans-Vitiaz	*-i-mbät	*-i-mbut	*-i-mbän	*-i-mbu
Kovai	an-bet, an-bot	an-bit	an-ben, an-bon	an-ip
Kovai	nag-bet, nag-bot	nag-bit	nag-ben, nag-bon	nag-ep
pHuon Tip	*tâ-i-mbëʔ	*tâ-i-mbüʔ	*tâ-i-mbëŋ	*tâ-i-mbüŋ
Sene	ta-he	ta-hi	ta-be	ta-bi
pSopâc	*ba-i-mbeʔ	*ba-i-mboʔ	*ba-i-mbeŋ	*ba-i-mboŋ
pKâte-Mape	*to-i-mbäʔ	*to-i-mbɯʔ	*to-i-mbäŋ	*to-i-mbɯŋ

The non-past tense of Kovai, which is used for present situations or, usually in combination with a particle, for future situations (Brown 1992:6), corresponds to the far past tense of the Huon Tip languages. As these forms correspond to the far past tense forms of the Western Huon languages (cf. Table 3-52 in 3.2.12), it is clear that they were originally far past tense forms. The Proto-Trans-Vitiaz first person singular ending **-imba* > *-ip, -ep* lost its final vowel in Kovai. The sound law behind this development seems to be that the vowel of the final syllable of the ending was lost if that syllable was open (CV), but was retained if the syllable was closed (CVC). This explains the retention of the vowel in the dual forms and in the form of the first person plural (**-imbän* > *-ben, -bon*). The reflexes of the second and third person plural ending in Kovai are homonymous with those of the first person singular, suggesting that the former ending also ended in a CV syllable in Proto-Trans-Vitiaz. The CVC-shape of the Proto-Huon Tip ending **-imbüŋ* 2/3PL is readily accounted for by analogy. The final **-ŋ* of this form was adopted from the first person plural ending **-imbëŋ*. For Proto-Trans-Vitiaz, we must reconstruct **-imbu* 2/3PL, which loses its final vowel in Kovai and yields the same reflex as **-imba* 1SG.

In the second person singular, the Kovai endings *-im, -em* correspond straightforwardly to Migabac *-iŋ* (cf. Table 3-5 in 3.2.2). The Migabac far past tense ending is isolated within the Huon Tip family, the other languages reflecting an ending **(-i)-mVŋ*, but it recurs in the past irrealis mood (cf. Table 3-8 in 3.2.2). For the irrealis mood of Proto-Trans-Vitiaz we can reconstruct a second person singular person-number formative **-m* > Kovai *-m*, Proto-Huon Tip **-ŋ* (cf. Table 3-11). As the person-number formatives of the far past tense and the irrealis mood are generally identical, the inference is warranted that Migabac *-iŋ* 2SG is a retention and **(-i)-mVŋ* 2SG an innovation. In Section 3.2.2 it was mooted that the Proto-Huon Tip near past tense ending **-mëʔ* 2SG might be composed of the elements **-m* 2SG and **-ëʔ*. Likewise, the innovative far past tense formative **-mVŋ* 2SG might be composed of **-m* 2SG and **-Vŋ*. The enlargement **-Vŋ* could conceivably go back to **-m* 2SG as well and the variable vowel might be due to the fact that the reinforcing compound **-m-Vŋ* arose several times independently. Such an analysis remains, however, a conjecture.

The non-past ending of the third person singular in Kovai varies according to the transitivity of the verb stem. Transitive verbs, such as *an* 'see' and *nag* 'hear' in Table 3-10, take *-o* 3SG whereas most intransitive verbs take *-u* 3SG (Brown 1992:14). Two Huon Tip languages have a far past tense ending that also consists only of a vowel (cf. Table 3-5 in 3.2.2). However, as we have seen, Momare *-e* 3SG and Sene *-i* 3SG do not match, and it is

similarly difficult to combine them with Kovai *-o, -u* 3SG. As I do not have a solution for these problems of phonological correspondence, I refrain from reconstructing a Proto-Trans-Vitiaz third person singular far past tense ending. In the first person dual and plural, there is variation across the Kovai language area. In the east, the endings *-bet* 1DU and *-ben* 1PL are found; in the west, the endings are *-bot* 1DU and *-bon* 1PL (Brown 1992:6). The Huon Tip reflexes suggest reconstructing Proto-Trans-Vitiaz **-i-mbät* 1DU and **-i-mbän* 1PL, with the same person-number formatives as in the irrealis mood (cf. Table 3-11). While the western Kovai variants *-bot* 1DU and *-bon* 1PL can be derived from these proto-forms, the eastern variants *-bet* 1DU and *-ben* 1PL have an aberrant vowel.

The non-past endings of the first and the second person singular and that of the second and third person plural in Kovai begin with a vowel. In some verbs, like *an* 'see', the vowel is *i*, in others, such as *nag* 'hear', it is *e*. It is not known whether there is a synchronic rule for the distribution of these two vowels across verb roots. The vowel *i* or *e* cannot be the original root-final vowel of these verb etyma. The Huon Tip languages preserve the final vowel: Proto-Huon Tip **kânë* 'see' > Mâgobineng *ona*, Momare *ŋane*; Proto-Huon Tip **nâŋgë* 'hear' > Mâgobineng *noga*, Momare *naŋke*. According to the testimony of these Huon Tip cognates, we would expect *a* or *o* as the root-final vowel of Kovai *an* 'see' and *nag* 'hear'. But this vowel has disappeared. The vowel we find in the Kovai endings *-ip, -ep* 1SG, *-im, -em* 2SG and *-ip, -ep* 2/3PL must have another origin. It is most likely a reflex of the suffix **-i* preceding the person-number formatives, for which there is clear evidence in the Huon Tip languages. The suffix **-i* remained as a vowel in the endings originally ending in a CV syllable (where the final vowel was lost), but it was syncopated in the endings ending in a CVC syllable (where the vowel was retained). Its disappearance led to the creation of unusual consonant clusters such as *-nb-* (for *an* 'see') and *-gb-* (for *nag* 'hear') in the dual and the first person plural forms of Kovai.

Table 3-11: Proto-Trans-Vitiaz irrealis mood

		1SG	2SG	3SG
Sialum	future irrealis	are-zaja	are-zana	are-zan
pTrans-Vitiaz	irrealis	*ta(-i)-na-mba	*ta(-i)-zä-m	
Kovai	irrealis	ta-nap	[ta-nam]	ta-nam
pHuon Tip	past irrealis	*tâ-i-nâ-mbâ	*tâ-i-nzë-ŋ	*tâ-i-nzë-ʔ
pSopâc	past irrealis	*ba(-i)-na-mba	*ba(-i)-nze-ŋ	*ba(-i)-nze-ʔ
pKâte-Mape	past irrealis	*to-i-no-mbo	*to-i-nzä-ŋ	*to-i-nzä-ʔ

	1DU	2/3DU	1PL	2/3PL
Sialum	are-zanta	are-zanet	are-zaŋam	are-zane
pTrans-Vitiaz	*ta(-i)-na-mbät	*ta(-i)-na-mbut	*ta(-i)-na-mbän	*ta(-i)-na-mbu
Kovai	ta-nabat	ta-nabit	ta-naban	ta-nup
pHuon Tip	*tâ-i-nâ-mbëʔ	*tâ-i-nâ-mbüʔ	*tâ-i-nâ-mbëŋ	*tâ-i-nâ-mbüŋ
pSopâc	*ba(-i)-na-mbeʔ	*ba(-i)-na-mboʔ	*ba(-i)-na-mbeŋ	*ba(-i)-na-mboŋ
pKâte-Mape	*to-i-no-mbäʔ	*to-i-no-mbɯʔ	*to-i-no-mbäŋ	*to-i-no-mbɯŋ

The irrealis mood endings of Kovai all contain the mood marker *-na*, which is cognate with the past irrealis marker **-nâ* of the Huon Tip languages (Table 3-11). As we saw in the discussion of Table 3-8 in Section 3.2.2, Proto-Huon Tip **-nâ* only occurred in the first person singular and all forms of the dual and plural; in the second and the third person singular, the suffix **-nzë* took its place. However, in Wamorâ and Mape **-nâ* spread to the second and the third person singular, thereby ousting **-nzë* from the paradigm. The same development has taken place in Kovai. The reason why I assume that Proto-Huon Tip **-nzë* is old is its match with the Sialum future irrealis marker *-za* (see Table 3-11). This match suggests that Proto-Eastern Huon had an irrealis marker **-za*. The Proto-Huon Tip past irrealis marker **-nzë* must therefore be inherited from Proto-Trans Vitiaz and we must reconstruct the ending of the second person singular as **(-i)-zä-m*. The ending of the third person singular, where this mood marker also occurred, is not reconstructible because of a mismatch of the person-number formatives of Kovai and the Huon Tip languages. It is conceivable that Proto-Eastern Huon **-za* only occured in the second and the third person singular and that Sialum extended it to the other person-number categories, much like Mâgobineng and Wemo did. But this cannot be proven and it cannot be excluded that **-za* occurred in all forms of the paradigm in Proto-Eastern Huon and that the mixed paradigm with the mood marker **-na* is an innovation of Proto-Trans Vitiaz. Although the Sialum future irrealis is probably related to the Trans-Vitiaz irrealis mood, a reconstruction of the endings is not possible because the Sialum person-number formatives diverge too strongly from those of the Trans-Vitiaz languages.

The Proto-Huon Tip past irrealis endings start with the suffix **-i*, but in Kovai there is no trace of such a suffix. The person-number formatives of the first person singular and of the second and third person plural, **-mba* and **-mbu*, lose their final vowel in Kovai, as in the non-past tense (cf. Table 3-10). Also as in the non-past tense, the dual and plural person-number formatives *-bat* 1DU, *-bit* 2/3DU and *-ban* 1PL retain their vowel. However, the vowel preceding these formatives is not syncopated. The full form of the mood marker *-na* in these endings may be analogical. In the ending of the second and third person plural, where the vowel *a* of the suffix *-na* should be preserved, we find the vowel *u* instead. Synchronically, the person-number formative is evidently *-up* 2/3PL, as in the serializing paradigm (cf. Table 3-12). A possible explanation of this is that the vowel of the person-number formative was anticipated before it dropped: **-nambu* 2/3PL > **-numbu* > **-numb* > *-nup*. The Kovai third person singular ending *-nam* is homonymous with the ending of the second person singular and its person-number formative *-m* 2/3SG recurs in the serializing paradigm (Table 3-12). In the serializing paradigm, the third person singular person-number formative is inherited from Proto-Trans-Vitiaz **-mä*. The Huon Tip languages have a different person-number formative **-ʔ* 3SG in the past irrealis mood, which is presumably ancient. This suggests that the Kovai third person singular ending of the irrealis mood has been reformed in analogy with the serializing paradigm.

Table 3-12: Proto-Trans-Vitiaz different subject medial verb forms

		1SG	2SG	3SG
pTrans-Vitiaz	different subject	*ta-mbä	*ta-m	*ta-mä
Kovai	serializing	t-op	t-om	t-om
Kovai	serializing	nag-ap	nag-am	nag-am
pHuon Tip	DS sequential	*tâ-mbë	*tâ-ŋ	*tâ-më
Sene	DS sequential	ta-be	[ta-bu]	ta-me
pSopâc	DS sequential	*ba-mbe	*ba-ŋ	*ba-me
pKâte-Mape	DS sequential	*to-mbä	*to-ŋ[-täʔ]	*to-mä

	1DU	2/3DU	1PL	2/3PL
pTrans-Vitiaz	*ta-mbät(ä)	*ta-mbit(ä)	*ta-mbän(ä)	*ta-mbi
Kovai	ta-bat	ta-bit	ta-ban	to-up
Kovai	nag-bat	[nag-bait]	nag-ban	nag-up
pHuon Tip	*tâ-mbëtë	*tâ-mbitë	*tâ-mbënë	*tâ-mbi
Sene	[ta-ale]	[ta-alie]	ta-bene	ta-bi[e]
pSopâc	[*ba-mbeʔ]	[*ba-mboʔ]	[*ba-mbeŋ]	[*ba-mboŋ]
pKâte-Mape	*to-mbälä	*to-mbilä	*to-mbänä	*to-mbi

Kovai does not have same subject and different subject medial verb forms, but it has a paradigm of serializing verb forms that occur in a serial unit together with a following verb of motion (cf. examples (48) and (49) in 3.1.3). These serializing verb forms correspond to the sequential different subject medial verb forms of the Huon Tip languages. A complete paradigm of different subject medial verb forms can be reconstructed to Proto-Trans-Vitiaz (Table 3-12).

The singular endings of the Huon Tip languages all start with a consonant. In Kovai, the endings are *-op* 1SG and *-om* 2/3SG for most verbs, such as *ta* 'take, give' in Table 3-12, but some verbs, such as *nag* 'hear', take *-ap* 1SG and *-am* 2/3SG. The initial vowel of these endings seems to have its origin in a generalization of the original root-final vowel of disyllabic verb roots. The vowel surfacing as *o* or *a* in Kovai was the most frequent root-final vowel in such verbs. The endings of the first and the third person singular, which had a CV syllable structure in Proto-Trans-Vitiaz, lost their final vowel in Kovai. The loss of the vowel in **-mä* 3SG led to homonymy of the endings of the second and the third person singular. The original final vowel was also lost in the second and third person plural. The Kovai reflex *-up* 2/3PL suggests that the ending was **-mbu*, but the reflexes of the Huon Tip languages point to **-mbi*. As there is external evidence for **-mbi* 2/3PL in the Kalasa languages (cf. Table 3-4 in 3.2.1), I reconstruct **-mbi* to Proto-Trans-Vitiaz. The ending **-mbu*, which we find in the far past tense and in the irrealis mood, was presumably generalized in Pre-Kovai before the deletion of the final vowel. The endings of the dual and the first person plural forms end in a vowel in the Kâte-Mape dialects, but this vowel is missing from the Kovai reflexes. It may have been regularly deleted in Kovai, but this cannot be proven. The external cognate **-mbit* 2/3DU of the Kalasa languages lacks it (cf. Table 3-4 in 3.2.1).

3.2.4 Eastern Huon

The languages discussed so far, i.e. the Kalasa languages (3.2.1), the Huon Tip languages (3.2.2) and Kovai (3.2.3), combine to form the Eastern Huon family. It has already been mentioned that Kovai has lost a lot of its original morphology, limiting the amount of reconstruction that is possible for Proto-Trans-Vitiaz. Furthermore, there is a considerable genealogical distance separating the Huon Tip languages from the Kalasa languages. As a consequence, only fragmentary reconstruction of the Eastern Huon subject-tense endings of the verb is possible. For no tense or mood can the whole paradigm be reconstructed. The person-number formatives fare better. There is a good match between the person-number formatives incorporated in the past tense endings of Kovai and those of the far past tense of the Kalasa languages (Table 3-13).

Table 3-13: Proto-Eastern Huon final verb person-number formatives

		1SG	2SG	3SG
pEH		*-TNS-la	*-TNS-na	*-i-ka
pKalasa	far past	*[(-ï)-ku]-lä	*[(-ï)-ku]-nä	*-ï-kä
Sialum	far past	-ikaja	-ikana	-ika
Ono	far past	-kole	-kone	-ke
pTrans-Vitiaz				
Kovai	past	[-p]ai	[-p]in	-e, -i

	1DU	2/3DU	1PL	2/3PL
pEH	*-TNS-ta	*-TNS-it	*-TNS-na	*-TNS-i
pKalasa	*[(-ï)-ku]-tä	*[(-ï)-ku]-it	*[(-ï)-ku]-nä	*[(-ï)-ku]-i
Sialum	-ikata	-ika[n]et	-ikana	-ika[n]e
Ono	-kote	-koit	-kone	-koi
pTrans-Vitiaz				
Kovai	[-p]ot	[-p]it	[-p]on	[-p]e

The Kalasa languages basically have two sets of person-number formatives. With some variation, particularly in the third person singular, the first set is used in the formation of the final verb tenses and the second set in the formation of the imperative mood and the different subject medial verb forms (cf. Appendix C). Table 3-13 shows the first set as encountered in the far past tense. It can be seen to match the final part, varying for person and number, of the past tense endings of Kovai. The initial part of the Kovai endings, the consonant *-p°*, must have been a tense marker that fused with the person-number formatives. It is not cognate with the Kalasa far past tense marker **-ku*. Therefore the endings compared in Table 3-13 cannot be reconstructed as a whole, but only their person-number component. To judge by the Kalasa languages, the set of person-number formatives reconstructed combined with different tense markers to form final verb tenses in Proto-Eastern Huon. The tense marker that could precede them is noted as TNS in the table.

All person-number formatives that had the syllable structure CV in Proto-Eastern Huon lost their vowel in Kovai. The homonymous formatives of the second person singular and the first person plural were secondarily differentiated in Kovai. It is not clear what the origin of the different vowels in *°in* 2SG and *°on* 1PL might have been. If the *o* in the first person plural form reflects the original vowel of the tense marker **-pV*, one wonders how it was replaced with *i* in the second person singular form. The opposition between *°ot* 1DU and *°it* 2/3DU is more readily understandable. The latter form goes back to **-it*, i.e. the vowel was originally part of the person-number formative. In *°ot* 1DU, the vowel seems to have belonged to the tense marker. In the first person singular form *-pai* < **-pV-ja* the expected final consonant *j* was vocalized. In the third person singular, not only the vowel of the person-number formative **-ka* regularly disappeared, but also the consonant *k*. There is nothing left of this formative in Kovai. The ending *-e* 3SG (with transitive verbs) or *-i* 3SG (with intransitive verbs) must have another origin. The third person singular endings of the far past tense in the Kalasa languages and of the past tense in Kovai lack the tense marker found in the other forms. Under the hypothesis that these endings are cognate as a whole, we can equate Kovai *-e, -i* 3SG with the suffix *-i* present in Sialum *-i-ka* 3SG. We can then reconstruct a single final verb tense ending **-i-ka* 3SG. As we will see below in Table 3-14, this ending belonged to the near past tense in Proto-Eastern Huon. In Proto-Kalasa, it must have done double duty as the third person singular form of the near past and the far past tense.

Table 3-14: Proto-Eastern Huon near past tense

		1SG	2SG	3SG
pEH	near past			*-i-ka
pKalasa	near past	*-ï-lä	*-ï-nä	*-ï-kä
Sialum	near past	-ija	-ina	[-iŋe]
Ono	near past	-ile	-ine	-ike
pTrans-Vitiaz				
Kovai	non-past	t-ap	t-em	[t-o]
pHuon Tip	near past	*-mbaʔ	*-mëʔ	*-ikë
Sene	near past	-be[ke]	-me	-ike
pSopâc	near past	*-mbaʔ	*-meʔ	*-hä
Migabac	near past	-baʔ	-meʔ	[-jeʔ]
Momare	near past	-mpaʔ	[-monaŋ]	-ha
pMape-Kâte	near past	*-mbaʔ	*-mäʔ	[*-(j)eʔ]

	1DU	2/3DU	1PL	2/3PL
pEH	*-i-ta	*-i-it	*-i-na	
pKalasa	*-ï-tä	*-ï-it	*-ï-nä	*-ï-i
Sialum	-ita	-i[n]et	-ina	-i[n]e
Ono	-ite	-i[m]it	-ine	-i[m]i
pTrans-Vitiaz				
Kovai	[t]-et	[t]-it	[t]-en	t-ep
pHuon Tip	[*-mbëtëʔ]		[*-mbënëŋ]	*-mbiëŋ
Sene	[-aleke]	[-alike]	-bene	-bie
pSopâc		[*-mbiäʔ]		*-mbiäŋ
pKâte-Mape	*-mbäläʔ	[*-mbiläʔ]	*-mbänäŋ	*-mbiäŋ

In Kovai, there is allomorphy in the endings of the dual and the first person plural in the non-past tense. We have seen in the reconstruction of the Proto-Trans-Vitiaz far past tense (Table 3-10 in 3.2.3) that some Kovai verbs, such as *an* 'see' and *nag* 'hear', have non-past tense endings with initial *bᵊ* in these categories. Other verbs, like *ta* 'take, give', lack this *bᵊ* (cf. Appendix C). I take it that the *bᵊ*-less endings of the dual and the first person plural reflect original near past tense forms whereas the endings with *bᵊ* go back to far past tense forms. Diachronically, the non-past tense paradigm of *ta* 'take, give' is a mixture of near past and far past tense forms. The endings of the first and the second person singular and that of the second and third person plural are former far past tense forms. Both dual endings and the ending of the first person plural are former near past tense forms. They align with the near past tense endings of the Kalasa languages (Table 3-14). The first person dual ending *-et* < **-i-ta* and the first person plural ending *-en* < **-i-na* have lost the final vowel and reflect the suffix **-i* in their vowel. The second person dual ending *-it* < **-i-it* remained unaltered, except for the contraction of the suffix **-i* with the vowel of the person-number formative **-it*. There is one other near past tense ending that can be reconstructed to Proto-Eastern Huon. Ono *-ike* 3SG matches Sene *-ike* 3SG < **-i-ka*. The Momare ending *-ha* 3SG is also cognate, but it lacks the suffix **-i* like all other forms of the near past tense in that language. The Kovai ending *-o* 3SG (with transitive verbs) or *-u* 3SG (with intransitive verbs) is not related and its origin is obscure.

The person-number formatives of the Proto-Eastern Huon near past tense endings (Table 3-14) are identical with the final verb person-number formatives reconstructed above (Table 3-13). Although only a part of the near past tense paradigm can be reconstructed from internal evidence, this identity suggests that the near past tense endings of the Kalasa languages, including the ones that are not reconstructible, are old. In Kovai, the near past tense and the far paste tense were conflated, with endings from both paradigms surviving as allomorphs. The resulting mixed paradigm shifted its function to a non-past tense (present tense that is also used in contexts with a future denotation). The Huon Tip languages have created new near past tense forms deriving them from the far past tense forms by suffixation (Table 3-6 in 3.2.2). The third person singular forms of Sene and Momare are relics of the former near past tense paradigm still extant in Sialum and Ono.

Table 3-15: Proto-Eastern Huon imperative mood

		1SG	2SG	3SG
pEH	imperative	*-mba	*-i	
pKalasa	imperative	*-mbä		*-käp
Sialum	imperative	-ba	-i	-kap
Ono	imperative	-we	[-nom]	-kep
pHuon Tip	pres. imperative	*-mbë	[*-ʔ], *-i	*-inâ, *-ijâ
Sene	pres. imperative	-be	[e-jo]	e-jɔ
pSopâc	pres. imperative	*-mbe		*-(i)na
Momare	pres. imperative	-mpe	i-Ø	i-na
pKâte-Mape	pres. imperative	*-mbä	[*-ʔ]	*-ino
Wamorâ	pres. imperative	-bɔ	-ʔ	i-no

	1DU	2/3DU	1PL	2/3PL
pEH				
pKalasa	*-tä	*-mbit	*-ŋäm	*-mbi
Sialum	-ta	-wet	-ŋam	-we
Ono	-te	-ut	-ŋem	-u
pHuon Tip	*-inâʔ	*-iniʔ	*-inâŋ	*-iniŋ
Sene	e-nɔ[kɔʔ]	e-ni[kɔʔ]	e-nɔ	e-ni
pSopâc	*-(i)naʔ	*-(i)niʔ	*-(i)naŋ	*-(i)niŋ
Momare	i-naʔ	i-niʔ	i-naŋ	i-niŋ
pKâte-Mape	*-inoʔ	*-iniʔ	*-inoŋ	*-iniŋ
Wamorâ	i-noʔ	i-niʔ	[-kiʔ]	i-niŋ

As Kovai lacks an imperative mood, the forms of the Kalasa languages can only be compared to the Huon Tip forms (Table 3-15). The two paradigms are divergent, only two singular forms match, the dual and plural forms are entirely different. The first person singular endings Proto-Kalasa *-*mbä* and Proto-Huon Tip *-*mbë* derive straighforwardly from Proto-Eastern Huon *-*mba*. This form, which has been retained in every single Kalasa and Huon Tip language, stands in odd contrast to the rest of the paradigm. There is only one other ending for which a tentative reconstruction can be proposed. The second person singular form of the present imperative has a zero ending in Momare. In ablauting verbs the vowel changes, thus the present imperative of *ba* 'take' is *bi* 2SG 'take!'. The ablaut vowel *i* must go back to a suffix *-*i* which can be combined with Sialum -*i* 2SG. However, the suffix *-*i* of Momare seems to recur at the beginning of all dual and plural endings and the ending of the third person singular, though not in the ancient first person singular ending. One wonders if this suffix has a connection with the suffix *-*i* that is in evidence in most far past tense forms (cf. Table 3-5 in 3.2.2). If not, a plausible assumption would be that the initial *i* in most Proto-Huon Tip present imperative forms has been generalized starting from the second person singular form *-*i.* But his remains a conjecture.

Table 3-16: Proto-Eastern Huon different subject medial verb

		1SG	2SG	3SG
pEH	different subject	*-mba		
pKalasa	different subject	*-mbä		*-kï
Sialum	different subject	-ba	-i	-ki
Ono	different subject	-we	-nom	-ki
pTrans-Vitiaz	different subject	*-mbä	*-m	*-mä
Kovai	serializing	[t]-op	[t]-om	[t]-om
pHuon Tip	DS sequential	*-mbë	*-ŋ	*-më
Sene	DS sequential	-be	[-bu]	-me
pSopâc	DS sequential	*-mbe	*-ŋ	*-me
pKâte-Mape	DS sequential	*-mbä	*-ŋ[-täʔ]	*-mä

	1DU	2/3DU	1PL	2/3PL
pEH		*-mbit		*-mbi
pKalasa	*-tä	*-mbit	*-ŋäm	*-mbi
Sialum	-ta	V-wet	-ŋam	V-we
Ono	-te	V-ut, N-bit, T-pit	-ŋem	V-u, N-bi, T-pi
pTrans-Vitiaz	*-mbät(ä)	*-mbit(ä)	*-mbän(ä)	*-mbi
Kovai	[ta]-bat	[ta]-bit	[ta]-ban	[to]-up
pHuon Tip	*-mbëtë	*-mbitë	*-mbënë	*-mbi
Sene	[-ale]	[-alie]	-bene	-bi[e]
pSopâc	[*-mbeʔ]	[*-mboʔ]	[*-mbeŋ]	[*-mboŋ]
pKâte-Mape	*-mbälä	*-mbilä	*-mbänä	*-mbi

A comparison of the different subject medial verb forms of Proto-Kalasa and Proto-Trans-Vitiaz results in three matches (Table 3-16). For the first person singular, the same ending **-mba* as in the imperative mood can be reconstructed to Proto-Eastern Huon. In addition, the endings of the second and third person dual and plural are reconstructible. We have seen in the reconstruction of the Proto-Trans-Vitiaz different subject medial verb forms (Table 3-12 in 3.2.3) that it is uncertain whether there was a final vowel in **-mbit(ä)* 2/3DU. The Kalasa languages reflect **-mbit* 2/3DU, without a final vowel, pointing to the absence of such a vowel in Proto-Eastern Huon. The ending **-mbi* 2/3PL is a straighforward match between Proto-Kalasa and Proto-Trans-Vitiaz. The four other endings of the paradigm are incongruent.

3.2.5 Pindiu

The five member languages of the Pindiu family are spoken in a contiguous area in the interior of the Huon Peninsula. Somba-Siawari has probably split off first and is in several respects the most conservative language. For a Proto-Pindiu reconstruction, a reflex from Somba-Siawari and at least one of the other four languages is needed. There is a description

of the verb morphology written by a translation team for all five languages. Pilhofer's (1928) and McElhanon's surveys supplement this data. They occasionally recorded older forms than the translation teams.

Table 3-17: Proto-Pindiu past and present tenses

		1SG	2SG	3SG
pPindiu	past	*me-al		
Dedua	far past	me-ai	me-neʔ	me-eʔ
Mongi	past	me-ji	me-neʔ	me-jeʔ
Tobo	far past	[mi-e]	me-nek	me-jep
Borong	past emphatic	[me-weta]	me-naa	me-rota
Somba	past	me-al	me-nəŋ	me-jək

	1DU	2/3DU	1PL	2/3PL
pPindiu	*me-it	*me-oɣot	*me-in	
Dedua	me-iʔ	me-oʔ	me-iŋ	me-i
Mongi	me-jiʔ	me-joʔ	me-jiŋ	me-giʔ
Tobo	mi-it	me-jot	mi-in	mi-ɣit
Borong	me-rit[-a]	[me-rita]	me-niŋ[-a]	me-gita
Somba	me-it	me-joɣot	me-in	me-ŋget

		1SG	2SG	3SG
pPindiu	present	*me-zal	*me-zan	*me-zap
Dedua	near past	[me-dua]	me-daŋ	me-daʔ
Mongi	present	[me-tsua]	me-tsaŋ	me-tsaʔ
Tobo	near past	[mi-tsua]	me-tsan	me-tsap
Borong	pres. emphatic	me-dzeŋ[-a]	me-dzaŋ[-a]	me-dza[-a]
Somba	present	me-tsal	me-tsan	me-tsap

	1DU	2/3DU	1PL	2/3PL
pPindiu	*me-zit	*me-zaɣot	*me-zin	
Dedua	me-diʔ	me-daoʔ	me-diŋ	me-dau
Mongi	me-tsiʔ	me-tsaoʔ	me-tsiŋ	me-tsou
Tobo	mi-tsit	me-tsot	me-tsin	mi-ts(o)u
Borong	me-dzot[-a]	me-dzaot[-a]	me-dzoŋ[-a]	me-dzua
Somba	me-tsit	me-tsaɣot	me-tsin	me-tse

Dedua is the only Pindiu language with two past tenses beside a present tense. The other languages only have two non-future tenses, called past and present tense in all languages except Tobo, where Mankins (2012) chose the labels far past and near past. The functions behind these labels are no doubt the same as in the other languages (cf. the discussion of tenses in 3.1.1). The Dedua far past and near past tenses align etymologically

with the past and the present tenses of the other languages. Dedua has an extra tense, the present tense, which is made up of the near past tense plus a suffix **-pe* (cf. Appendix C). The creation of a third non-future tense brought Dedua in line with the neighboring Huon Tip languages, all of which differentiate between a far past, a near past and a present tense.

The past tense and the present tense endings of the Pindiu languages share most of their person-number formatives (Table 3-17). A comparison of the first person forms of the past tense (**-al* 1SG, **-it* 1DU, **-in* 1PL) with those of the present tense (**-zal* 1SG, **-zit* 1DU, **-zin* 1PL) shows that the present tense was built from a tense marker **-zV* and the endings of the past tense. The near past tense endings of Dedua actually display a phonological irregularity. As their initial consonant we would have expected †*z°* rather than *d°*. The same irregularity is found in the verb 'say', cf. Dedua *de* 'say' with Proto-Pindiu **zə* 'say' > Mongi *dzə*, Tobo *dzə*, Borong *dze*, Somba *dzi*. The overall similarity of the Dedua near past tense endings with the present tense endings of Mongi and Tobo, in particular, is so great that one would hardly put them aside as unrelated despite the phonological irregularity. The best explanation of these facts is to assume that the present tense marker **-zV* derives from the verb **zə* 'say' and that the sporadic sound change of the latter in Dedua also affected the former. Accordingly, an etymological connection must still have been felt between the verb 'say' and the present or near past tense endings at the time of the sporadic sound change.

In the singular, all three forms of the present tense can be reconstructed, but there is only enough agreement for the reconstruction of the first person singular form in the past tense. There is a match between Dedua *-ai* 1SG and Somba *-al* 1SG < **-al* in the past tense. Borong has an innovative first person singular form that comes from the different subject medial verb paradigm (cf. Table 3-20). In the present tense, there is a near match between Borong *-dzeŋ* 1SG and Somba *-tsal* 1SG < **-zal*. The aberrant vowel of Borong *-dzeŋ* 1SG may have arisen in response to the homonymy with *-dzaŋ* 2SG. Following the sound laws, the first and the second person singular forms of the present tense should have become homonymous in Borong. The second and the third person singular endings match across all five languages in the present tense, but there is disagreement between Dedua, Mongi and Tobo, on the one hand, and Somba, on the other hand, in the past tense, with Borong showing yet another form. No bottom-up reconstruction is possible, but see Table 3-28 in 3.2.7 for a wider comparison.

In the dual and the first person plural, Dedua, Mongi, Tobo and Somba show matching reflexes both in the past tense and in the present tense. In the second and third person dual of the past tense, the ending **-oɣot* begins with an epenthetic *j* after vowel-final verb roots such as **me* 'take' in Mongi, Tobo and Somba. An epenthetic *j* is found in the same languages in the third person singular and in Mongi in the first person singular, dual, and plural as well. It is doubtful whether *j*-insertion before vowel-initial endings dates back to Proto-Pindiu—note its absence in Dedua—and I refrain from reconstructing it. In Borong, the endings of the first person dual and plural of the past tense were transformed. The syllable-final consonant of the endings was repeated in the onset of the syllable: **-it* 1DU ⇒ **-tit* > *-rit-*, **-in* 1PL ⇒ **-nin* > *-niŋ-*. The Borong endings given in Table 3-17 are emphatic forms. The emphatic suffix *-a* preserves the final stop of the endings, which drops in the non-emphatic forms (cf. Appendix C). For the second and third person plural of the past tense, a reconstruction **-ŋget* 2/3PL would be possible, but the old Dedua ending *-i* 2/3PL, reported by Pilhofer (1928), is a retention (cf. Table 3-46 in 3.2.11), suggesting that the endings pointing to **-ŋget* 2/3PL of the

other languages are independent innovations. Just as Dedua *-i* 2/3PL has recently been replaced by *-geʔ* 2/3PL (Ceder and Ceder 1990), the second and third person plural endings of the other languages are presumably intrusions from the different subject medial verb paradigm (cf. Table 3-20). In the present tense, the second and third person plural ending of Somba disagrees with the shared ending of the other languages, hence no reconstruction is possible.

Table 3-18: Proto-Pindiu future tense

		1SG	2SG	3SG
pPindiu	future	*me-mam	*me-man	*me-map
Mongi	future	me-maŋ	me-[wəsə]maŋ	me-maʔ
Tobo	future	me-mam	me-man	me-map
Borong	future emphatic	me-maŋ[-a]	[me-waga]	[me-waga]
Somba	future	me-mam	me-man	me-map

	1DU	2/3DU	1PL	2/3PL
pPindiu	*me-mbit	*me-mayot	*me-mbin	
Mongi	me-wiʔ	me-maoʔ	me-wiŋ	me-mu
Tobo	mi-wit	me-mot	me-win	mi-m(o)u
Borong	me-wot[-a]	[me-waota]	me-woŋ[-a]	me-wia, me-wuja
Somba	me-mbit	me-mayot	me-mbin	me-me

The Proto-Pindiu future tense is well preserved in Mongi, Tobo and Somba (Table 3-18) but has been replaced with a different formation in Dedua. The Dedua future tense is made up of the imperative endings plus the verb root *de* 'say': *me-ba-de* 'I will take', *me-na-de* 'you will take' etc. (cf. Appendix C). This formation is an obvious calque on the near future tense of the neighboring Huon Tip languages (cf. Table 3-7 in 3.2.2).

The endings of the Pindiu future tense contain a tense marker **-mV*, except for the first person dual and plural forms, which are identical with the corresponding forms of the irrealis I (cf. Table 3-19). In Borong, the initial *m* of the endings with the tense marker **-mV* has been changed to *w* in analogy with the first person dual and plural, where *w* is a regular development, with the exception of the first person singular, which retains *m* (e.g. *-waot-* 2/3DU ⇐ **-maot-*). In Mongi, the first and the second person singular endings should have become homonymous. They were secondarily differentiated by the introduction of an unidentified morpheme *-wəsə* into the form of the second person singular. In the second and third person plural, the Somba ending again does not match the endings of the other languages. This is the only form of the paradigm that cannot be reconstructed.

Table 3-19: Proto-Pindiu irrealis I and irrealis II

		1SG	2SG	3SG
pPindiu	irrealis I	*me-mbël	*me-mban	*me-mbap
Dedua	irrealis I	me-bai	me-baŋ	me-baʔ
Mongi	irrealis	me-wi	me-waŋ	me-waʔ
Tobo	irrealis I	me-wal	me-wan	me-wap
Somba	irrealis I	me-mbil[eŋ-buk]	me-mban[-buk]	me-mbap[-puk]

	1DU	2/3DU	1PL	2/3PL
pPindiu	*me-mbit	*me-mbaɣot	*me-mbin	
Dedua	me-biʔ	me-baoʔ	me-biŋ	me-bau
Mongi	me-wiʔ	me-waoʔ	me-wiŋ	me-wu
Tobo	me-wet	me-wot	me-wen	me-w(o)u
Somba	me-mbit[-puk]	me-mbaɣot[-puk]	me-mbin[-buk]	me-mbe-buk

		1SG	2SG	3SG
pPindiu	irrealis II	*me-mbël-ak	*me-mban-ak, *me-nak	*me-nak, *me-mbap-ak
Dedua	irrealis II	me-baʟaʔ	me-baŋnaʔ	me-naʔ
Tobo	irrealis II	me-walək	me-wanək	me-wawək
Borong	irrealis	me-wenag[-a]	me-nag[-a]	me-nag[-a]
Somba	irrealis II	me-mbil[(eŋ)]ak	me-(mba)nak	me-nak, me-mbawak

	1DU	2/3DU	1PL	2/3PL
pPindiu	*me-mbit-ak	*me-mb(aɣ)ot-ak	*me-mbin-ak	*me-mbe-ak
Dedua	me-biʟaʔ	me-boʟaʔ	me-binaʔ	me-biaʔ
Tobo	me-werək	me-worok	me-wenək	[me-w(o)uɣok]
Borong	me-worag[-a]	me-waorag[-a]	me-wonag[-a]	[me-wujaga]
Somba	me-mbirak	me-mbaɣorak	me-mbinak	me-mbeak

There are two irrealis moods in Dedua, Tobo and Somba (Table 3-19). Mongi only retains the irrealis I and Borong only the irrealis II. The reconstructions show that the irrealis II is made up of the irrealis I and a final suffix *-*ak*. However, there are some differences between the corresponding forms of the two irrealis moods. The most striking difference is found in the second and third person plural. In the irrealis I, we find the same discrepancy between the Somba form and the common form of the other languages as in the present and the future tense. But in the irrealis II, the Dedua ending -*biac* 2/3PL matches the Somba ending -*mbeak* 2/3PL, permitting the reconstruction of *-*mbe-ak* 2/3PL. This suggests that the Dedua irrealis I ending -*bau* 2/3PL and the related endings of Mongi and Tobo are innovations. The Dedua irrealis II ending of the second and third person dual -*boʟaʔ* also

differs from the irrealis I ending *-baoʔ* 2/3DU. In the latter we find a vowel sequence *°ao°*, but the former contains the simple vowel *°o°*. In contradistinction to Tobo, where the vowel sequence **°ao°* has been contracted to *°o°* in both irrealis moods as well as in the near past tense and the future tense (cf. Tables 3-17 and 3-18), Dedua never contracts this vowel sequence. Consequently, the ending *-boʟaʔ* 2/3DU must be an ancient form and we must reconstruct a variant ending **-mbot-ak* 2/3DU to account for the Dedua reflex. The other languages reflect **-mbaɣot-ak* 2/3DU.

The first person forms are all straightforward matches in both the irrealis I and II. In Somba, the first person singular form can be extended with the unidentified suffix *-eŋ* in the irrealis II, i.e. there are the variants *-mbil-ak* 1SG and *-mbileŋ-ak* 1SG. In the irrealis I, which always carries the comitative suffix *-buk*, this extension seems to be obligatory. The final stop of the first person dual form **-mbit* is lenited in the daughter languages when it is followed by the irrealis II suffix **-ak*. In the second and the third person singular, two forms can be reconstructed for the irrealis II. One form corresponds to the irrealis I ending **-mban* 2SG or **-mbap* 3SG plus the suffix **-ak*; the other form is the ending **-nak*, occurring both in the second and in the third person singular. Presumably, these two different endings were variants in Proto-Pindiu, as they still are in Somba. As to the functions of the two irrealis moods, the descriptions in the grammars are too brief to allow safe conclusions (cf. examples (35) and (36) in 3.1.2).

Table 3-20: Proto-Pindiu imperative mood and different subject medial verb

		1SG	2SG	3SG
pPindiu	imperative	*me-mbë		
Dedua	pres. imperative	me-ba	me-na	me-u
Mongi	imperative	me-wa	me-na	me-ju
Tobo	imperative	me-wa	me-na	mi-u
Somba	imperative	me-mbi	me, me-nəŋ	me-jək

	1DU	2/3DU	1PL	2/3PL
pPindiu	*me-zi	*me-it		*me-ŋget
Dedua	[me-de]	me-eʔ	me-ni	me-geʔ
Mongi	me-tsi	me-jiʔ	me-ni	me-giʔ
Tobo	mi-tsi	mi-it	mi-ni	mi-ɣit
Somba	me-tsi, [me-it]	me-it, [me-joɣot]	me-in	me-ŋget

		1SG	2SG	3SG
pPindiu	different subject	*me-mbë	*me-në(ŋ)	
Dedua	DS sequential	me-ba	me-na	me-u
Mongi	DS sequential	me-wa	me-na	me-ju
Tobo	different subject	me-wa	me-na	mi-u
Borong	different subject	me-we	me-na	me-ro
Somba	different subject	me-mbi, [me-al]	me-nəŋ	me-i

	1DU	2/3DU	1PL	2/3PL
pPindiu	*me-zi			*me-ŋget
Dedua	[me-de]	me-eʔ	me-ni	me-geʔ
Mongi	me-tsi	me-jiʔ	me-ni	me-giʔ
Tobo	mi-tsi	mi-it	mi-ni	mi-ɣit
Borong	me-dzi, [me-ri]	me-ri	me-niŋ	me-gi
Somba	me-tsi	me-joɣot	me-in	me-ŋget

Most of the reconstructible forms of the imperative mood are identical with the different subject medial verb forms in Proto-Pindiu (Table 3-20). All Pindiu languages have verb forms that serve the function of an imperative and of a different subject medial verb, but in Borong these forms merged with other paradigms. Olkkonen and Olkkonen (2000:7) state: "For the imperative commandments the future tense forms are used, except that the singular 2nd and 3rd person suffixes are short *-wa, -ba* while the future tense suffixes are long *-waa, -baa*." Separate different subject medial verb forms have also disappeared from the language. Olkkonen and Olkkonen (2000:7) record the same forms for the different subject medial verb as for the past tense of the final verb. But McElhanon still recorded the distinctive medial verb ending *-dzi* 1DU (⇒ *-ri* 1DU) in 1967. In Somba, both the imperative and the different subject paradigm are gradually being assimilated to the past tense. Olkkonen and Olkkonen (1983:23) only record a single separate imperative ending, the first person singular form *-bi*; the rest of the paradigm they give is identical with the past tense. But Pilhofer (1928:207) noted the distinctive imperative endings *-tsi* 1DU and *-it* 2/3DU and only gave the corresponding past tense forms *-it* 1DU and *-oɣot* 2/3DU as variants in parentheses. Furthermore, he noted that the bare verb stem was used as second person singular imperative form. Evidently, the old imperative endings had begun to be replaced by past tense forms in the 1920s, and by the 1980s only the first person singular form was left of the old paradigm. In the different subject paradigm, both Pilhofer and the Olkkonens give the separate forms *-i* 3SG and *-tsi* 1DU. The remaining forms are identical with the past tense forms in the Olkkonens' data, but Pilhofer recorded in addition *-bi* 1SG (⇒ *-al* 1SG).

The first person singular ending **-mbë* is consistently reflected in the Pindiu languages in the imperative mood as well as the different subject medial verb (Table 3-20). In the second person singular, Somba originally had an endingless form in the imperative mood; later the ending *-nəŋ* 2SG was introduced from the different subject or the past tense

paradigm. The endingless form of Somba disagrees with the ending *-*na* 2SG of the other languages, hence no reconstruction is possible. In the different subject medial verb, Somba -*nəŋ* 2SG partially matches *-*na* 2SG of the other languages and I tentatively reconstruct *-*në(ŋ)* 2SG. However, the final velar nasal of the Somba past tense and different subject ending -*nəŋ* 2SG is a problem for which I have not yet found an explanation. In the third person singular, there is disagreement between Somba and the other languages both in the imperative mood and in the different subject medial verb so that no bottom-up reconstruction is possible. In the dual and plural, the gradual replacement of the original imperative mood and different subject medial verb forms by past tense forms in Somba precludes a reconstruction of all Proto-Pindiu forms. There is unanimous agreement for a second and third person plural ending *-*ŋget*. Pilhofer's early data for Somba further permits the reconstruction of *-*zi* 1DU and *-*it* 2/3DU in the imperative mood. In the different subject medial verb, the old ending *-*zi* 1DU is still retained in contemporary Somba, but the second and third person dual and the first person plural forms are identical with the corresponding past tense forms and disagree with the endings of the other languages.

3.2.6 Sankwep

The two Sankwep languages, Mesem and Nabak, are lexically and morphologically innovatory and not seldom do they go separate ways in spite of being closely related. Both languages have intricate morphophonological rules, but for neither of them is a comprehensive description available of their effects in the make-up of the verb. Both the Mesem grammar (Vanaria and Vanaria 1995) and the Nabak grammar (Fabian, Fabian and Waters 1998) give allomorphs of the subject-tense endings of the verb. In the following tables, the endings preceded by C occur after an underlying consonant, the endings preceded by V after an underlying vowel. The Sankwep languages have no less than three past tenses in addition to a present tense. The adjacent Erap languages only have two past tenses and the immdiately related Pindiu languages only one. It seems, therefore, that the proliferation of past tenses is a self-contained development of the Sankwep languages.

Table 3-21: Proto-Sankwep far past and intermediate past tenses

		1SG	2SG	3SG
pSankwep	far past	*-ban		*-gü(ŋ)
Mesem	far past	C-baŋ, V-paŋ	C-bin, V-pin	C-gəŋ, V-kəŋ
Nabak	far past	C-ban, V-wan	C-banan, V-wanan	C-ge, V-je

	1DU	2/3DU	1PL	2/3PL
pSankwep	*-bïtin		*-bïnin	*-bien
Mesem	C-bitn̩, C-biliŋ, V-piliŋ	C-biiŋ, C-bin, V-pin	C-bin, V-pin	C-bieŋ, V-pieŋ
Nabak	C-belin, V-welin	C-bun, V-wun	C-benn, V-wenn	C-bien, V-wien

		1SG	2SG	3SG
pSankwep	intermed. past			*-zan
Mesem	intermed. past	C-zima, V-sima	C-zim, V-sim	C-zã, V-sã
Nabak	intermed. past	-man	-manan	C-zan, V-jan

	1DU	2/3DU	1PL	2/3PL
pSankwep				
Mesem	C-zim, V-sim	C-zim, V-sim	C-zime, V-sime	C-zime, V-sime
Nabak	-melin	-mun	-menn	-mien

The far past tense endings of Mesem and Nabak begin with *-b°* except for the third person singular form (Table 3-21). The intermediate past tense endings of Nabak start with *-m°* but are otherwise identical with the far past tense endings beginning with *-b°*. In all likelihood the Nabak intermediate past tense endings orginated as morphophonological alternants of the far past tense endings and were then morphologized. The third person singular ending of the intermediate past tense is again an exception. It does not begin with *-m°* in Nabak and it is the only form of the paradigm that lends itself to reconstruction. The other forms are completely different in Mesem and Nabak. The Mesem endings start with *-zi°* and end with a component *°m(V)* that is reminiscent of the different subject medial verb endings (cf. Table 3-27).

In Mesem, word-final *n* is disappearing, inducing nasalization of the preceding vowel. This change seems to have been in progress when the Vanarias recorded their data and various stages can be found in it. In the first person singular ending *-baŋ* < **-ban* and in the second and third person plural ending *-bieŋ* < **-bien* of the far past tense we find the intermediate stage **-n* > *-ŋ*. In the third person singular ending of the intermediate past tense *-zã* < **-zan* the change has run its full course. In the first person plural ending of the far past tense *-bin* < **-bïnin* the final *-n* is preserved, presumably because it merged with the preceding intervocalic *-n-* after the loss of the intervening vowel. It is possible and even likely that the endings just discussed had variants of which only one happened to be recorded.

In the dual of the far past tense, McElhanon recorded slightly different forms in 1968 than the Vanarias in the 1990s (given in the top line in Table 3-21, the Vanarias' forms below). The first person dual form can be reconstructed as **-bïtin*, in the second and third person dual the Mesem and the Nabak forms diverge. In the third person singular ending of the far past tense there is conflicting evidence for a final nasal consonant in Mesem and Nabak.

Table 3-22: Proto-Sankwep irrealis mood

		1SG	2SG	3SG
pSankwep	irrealis	*-bak	*-bek	*C-dak
Mesem	irrealis	C-bak, V-pak	C-bek, V-pek	C-dak, [V-tak]
Nabak	irrealis	C-bak, V-wak	C-bek, V-wek	C-dak, [V-nak]

	1DU	2/3DU	1PL	2/3PL
pSankwep	*-bïtïk		*-bïnïk	*-biek
Mesem	C-bidik, V-pidik, C-bilik, V-pilik	C-biik, V-piik, C-bik, V-pik	C-binik, V-pinik [C-blaik, V-plaik]	C-biek, V-piek [C-biele, V-piele]
Nabak	C-belek, V-welek	C-buk, V-wuk	C-benek, V-wenek	C-biek, V-wiek

The Proto-Sankwep irrealis mood endings all end in the consonant *k* (Table 3-22). A comparison of the dual and plural forms of the irrealis mood with the corresponding forms of the far past tense shows that the latter have a final component **-Vn* where the former show **-Vk*. The initial parts of these endings are identical: **-bït°* 1DU, **-bïn°* 1PL, **-bi°* 2/3PL. As in the far past tense, the second and third person dual form of the irrealis mood is not reconstructible. For the reconstruction of the plural forms I relied on the Mesem forms collected by McElhanon in 1968 (given in the top line in Table 3-22). The forms given by the Vanarias (in the line below) are surprisingly different and I have no explanation for them. In the third person singular, the allomorphs following vowels in Mesem and Nabak disagree and I only reconstruct the allomorph following consonants.

Table 3-23: Proto-Sankwep near past tense

		1SG	2SG	3SG
pSankwep	near past	*-ü(ŋ)	*C-dük, *V-nük	*C-üp
Mesem	near past	C-[l]əŋ, V-jəŋ	C-dək, V-nək	C-[l]əp, V-jəp
Nabak	near past	C-a, V-ja	C-dak, V-nak	C-ep, V-p

	1DU	2/3DU	1PL	2/3PL
pSankwep	*-(l)ut	*-(l)ut		*C-o(ŋ)
Mesem	C-[l]u, V-ju	C-[l]u, V-ju	C-luŋ, V-juŋ	C-[l]oŋ, V-joŋ
Nabak	-lut	-lut	C-ŋ, V-nn	C-o, V-jo

The near past tense endings are all monosyllabic (Table 3-23). For Mesem, the Vanarias give endings that all begin with a consonant. This seems to be due to a wrong segmentation of the verb root and the endings. In Nabak, the third person singular ending *-ep* begins with a vowel after consonants, and so do the cognate endings of the Pindiu languages (cf. Table 3-28 in 3.2.7). It is therefore clear that the initial *l* of the Mesem ending *-ləp* 3SG, as given by the Vanarias, belongs to the preceding verb root. The *j* in the postvocalic allomorph *-jəp* 3SG is a hiatus filler. I assume that the initial *l* of the postconsonantal allomorphs of the other Mesem endings also belongs to the verb root rather than the ending and should be excluded from consideration in a comparison. This is only problematic in the dual number, where the Nabak endings do begin with *l*. However, we do not have a good morphophonological description that justifies the segmentation of the Nabak ending *-lut* 1/2/3DU, either.

In the first person singular and in the second and third person plural there is the same phonological discrepancy as we have already observed in the third person singular ending of the far past tense (cf. Table 3-21): the Mesem endings have a final *-ŋ* that is lacking in Nabak.

I cannot explain this recurring irregularity. In the second person singular, the postconsonantal and the postvocalic allomorphs of Mesem and Nabak match and we can posit an alternation **C-dük ~ V-nük* for Proto-Sankwep. In the dual number, there is only a single ending in both languages. The absence of a distinction between a postconsonantal and a postvocalic allomorph in Nabak according to Fabian, Fabian and Waters (1998) is suspect. Perhaps the initial *l* of Nabak *-lut* 1/2/3DU belongs to the verb root and we must reconstruct **-ut* 1/2/3DU to Proto-Sankwep.

Table 3-24: Proto-Sankwep present and near future tenses

		1SG	2SG	3SG
pSankwep	present	*-ap	*C-dik, *V-nik	*-zi(n)
Mesem	present	C-ap, V-jap	C-dik, V-nik	C-zi, V-si
Nabak	present	C-ap, V-jap	C-dik, V-nik	C-zin, V-(i)n

	1DU	2/3DU	1PL	2/3PL
pSankwep				*-ip
Mesem	C-zu, V-u	C-zu, V-u	C-zuŋ, V-suŋ	C-[l]ip, V-jip
Nabak	-lup	-lup	-nup	-(i)p

		1SG	2SG	3SG
pSankwep	near future	*-sap	*-sünik	
Mesem	near future	-sap	-sanik	-sanzi
Nabak	near future	-sap	-senik	-sem

	1DU	2/3DU	1PL	2/3PL
pSankwep				*-süip
Mesem	-sanzu	-sanzu	-sanzuŋ	-saip
Nabak	-selup	-selup	-senup	-seip

The present tense and the near future tense endings have the same person-number formatives (Table 3-24). Not the whole paradigm can be reconstructed. The person-number formatives of the first person dual and plural and of the second and third person dual in Mesem and Nabak diverge from each other. In the near future tense, the third person singular ending cannot be reconstructed, either, because Nabak has an aberrant ending *-sem* 3SG (instead of expected †*-sein* 3SG). In addition to the person-number formatives, the near future tense endings contain a tense marker **-sü*, as is apparent from the reconstructible endings of the second person singular and the second and third person plural. The Mesem reflex *-sa* (instead of expected †*-sə*) in these forms may be due to analogy with the first person singular form *-sap* (< **-sü-ap*), where the vowel of the tense marker gave way to the vowel of the person-number formative. In the third person singular of the present tense we would expect a nasalized vowel in Mesem, but the attested form is *-zi* 3SG, with an oral vowel.

Table 3-25: Proto-Sankwep far future tense

		1SG	2SG	3SG
pSankwep	far future		*-banik	
Mesem	far future	C-bəŋ, V-pəŋ	C-banik, V-panik	C-bap, V-pap
Nabak	far future	C-bap, V-wap	C-banik, V-wanik	C-be, V-we

	1DU	2/3DU	1PL	2/3PL
pSankwep				*-baip
Mesem	C-buk, V-puk	C-basuk, V-pasuk	C-buŋ, V-puŋ	C-baip, V-paip
Nabak	C-balup, V-walup	C-balup, V-walup	C-banup, V-wanup	C-bep, V-wep

The far future tense contains a tense marker **-ba* and person-number formatives that are similar to those of the present tense (Table 3-25). As in the present tense, the Mesem and the Nabak endings of the first person dual and plural and of the second and third person dual do not match. Only the endings of the second person singular and the second and third person plural can be safely reconstructed. It is, however, possible that the endings of the first person singular and the third person singular have been accidentally switched in the Mesem grammar. If this is the case, we could in addition reconstruct **-bap* 1SG and **-bü(ŋ)* 3SG.

Table 3-26: Proto-Sankwep imperative mood

		1SG	2SG	3SG
pSankwep	imperative	*-bi	*-Ø	*-ük
Mesem	imperative	C-bi, V-pi	-Ø	C-[d]ə, V-jə
Nabak	imperative	C-bi, V-wi	-Ø	C-ak, V-k

	1DU	2/3DU	1PL	2/3PL
pSankwep		*-it	*-nï	
Mesem	C-zi, V-si	-i, [C-zi]	C-[d]n, V-n	-ip
Nabak	C-di, V-mdi	-it	-ne	-it

The imperative mood endings are monosyllabic and differ from all sets of person-number formatives we have seen so far (Table 3-26). In the second person singular, both languages use the bare verb root so that we can reconstruct a zero ending. The Mesem third person singular ending *C-də* reported by the Vanarias seems to contain the final stop of the verb root. The postvocalic allomorph *V-jə* 3SG suggests that this ending really starts with a vowel and can be combined with Nabak *C-ak* 3SG (< **-ük*). The Mesem first person plural ending *C-dn* likewise appears to be wrongly segmented to judge by the postvocalic allomorph *V-n* (< **-nï*). For the second and third person dual, McElhanon recorded the Mesem ending *-i* in 1968, which can be combined with Nabak *-it* (< **-it*). In contemporary Mesem, this ending has been replaced by *-zi* (Vanaria and Vanaria 1995), which was originally found in the first person dual only.

Table 3-27: Proto-Sankwep different subject medial verb

		1SG	2SG	3SG
pSankwep	different subject	*-ma	*V-nü	*-mï
Mesem	different subject	-ma	C-də, V-nə	-m
Nabak	different subject	-ma	-[ma]ne	-me

	1DU	2/3DU	1PL	2/3PL
pSankwep				*-mï
Mesem	-m	-m	-m	-m
Nabak	-malu	-malu	-mann	-me

In contrast to the situation in the Pindiu languages (Table 3-20), in the Sankwep languages the different subject medial verb forms are totally different from the imperative mood forms. In Nabak, the different subject endings begin with a marker *-maᵊ* except for the third person singular and plural forms which are both *-me* (Table 3-27). Mesem has the same ending *-m* throughout the dual and the plural, which may be related to Nabak *-maᵊ.* But in Mesem no person-number formatives follow this suffix as they do in Nabak. In the first person singular, a person-number formative is seemingly missing in the Nabak form *-ma*. Surprisingly, Mesem has an identical ending, permitting the reconstruction of **-ma* 1SG. The third person singular ending, which is homonymous with the ending of the second and third person plural in both languages, can be reconstructed as **-mï.* For the second person singular, it is possible to reconstruct an ending **V-nü* under the assumption that the marker *-maᵊ* in Nabak *-mane* 2SG is a later addition to this ending (cf. Table 3-31 in 3.2.7).

3.2.7 Rawlinson

The Pindiu family and the Sankwep family combine to form the Rawlinson family. There is a cleavage between the two subfamilies both in lexical and in morphological matters. The reason for this divergence is mostly to be sought in the proclivity to innovate of the Sankwep languages. As there is no common verb root for which the inflectional forms are known in all languages, in the following tables only the verb endings are presented.

Table 3-28: Proto-Rawlinson near past tense

		1SG	2SG	3SG
pRawlinson	near past		*-nek	*-{e,u}p
pPindiu	past	*-al	*-nek	*-ep
Dedua	far past	-ai	-neʔ	-eʔ
Mongi	past	C-i, V-ji	-neʔ	C-eʔ, V-jeʔ
Tobo	far past	[-e]	-nek	C-ep, V-jep
Borong	past emphatic	[-weta]	[-naa]	[-rota]
Somba	past	-al	[-nəŋ]	[C-ək, V-jək]
pSankwep	near past	*-ü(ŋ)	[*C-dük, *V-nük]	*C-üp
Mesem	near past	C-[l]əŋ, V-jəŋ	C-dək, V-nək	C-[l]əp, V-jəp
Nabak	near past	C-a, V-ja	C-dak, V-nak	C-ep, V-p
pSankwep	present	*-ap	*C-dik, *V-nik	[*-zi(n)]
Mesem	present	C-ap, V-jap	C-dik, V-nik	C-zi, V-si
Nabak	present	C-ap, V-jap	C-dik, V-nik	C-zin, V-(i)n

	1DU	2/3DU	1PL	2/3PL
pRawlinson		*-uɣut	*-in	
pPindiu	*-it	*-oɣot	*-in	
Dedua	-iʔ	-oʔ	-iŋ	-i
Mongi	C-iʔ, V-jiʔ	C-oʔ, V-joʔ	C-iŋ, V-jiŋ	-giʔ
Tobo	-it	C-ot, V-jot	-in	-ɣit
Borong	-rit[-a]	[-rita]	-niŋ[-a]	-gita
Somba	-it	C-oɣot, V-joɣot	-in	-ŋget
pSankwep	*-(l)ut	*-(l)ut	*-in	*C-o(ŋ)
Mesem	C-[l]u, V-ju	C-[l]u, V-ju	[C-luŋ, V-juŋ]	C-[l]oŋ, V-joŋ
Nabak	-lut	-lut	C-ŋ, V-nn	C-o, V-jo
pSankwep				*-ip
Mesem	C-zu, V-u	[C-zu, V-u]	[C-zuŋ, V-suŋ]	C-[l]ip, V-jip
Nabak	-lup	[-lup]	[-nup]	-(i)p

It is clear from on overall comparison that the past tense paradigm of the Pindiu languages and the near past tense paradigm of the Sankwep languages have a common origin. In the second person singular, however, a match is to be found in the present tense paradigm of the Sankwep languages rather than the near past tense. Proto-Pindiu **-nek* 2SG, retained in Dedua, Mongi and Tobo, perfectly matches the postvocalic present tense allomorph **V-nik* 2SG of Mesem and Nabak. The Proto-Sankwep near past tense form **V-nük* 2SG resembles this ending but has an aberrant vowel. All three singular endings of the near past tense contain the vowel **ü* in Proto-Sankwep. The best explanation for these facts is that the ending **V-nik* 2SG originally belonged to the near past tense paradigm and was then extended to the present

tense.[9] After the extension, the near past tense ending became **V-nük*, changing its vowel following the other singular forms of the paradigm, to distinguish it from the present tense ending **V-nik*. There is no other Sankwep present tense ending apart from **V-nik* 2SG that has a match among the past tense endings of the Pindiu languages.

The Proto-Pindiu past tense ending of the first person singular and the corresponding Proto-Sankwep near past tense ending disagree, ruling out a reconstruction. In the third person singular, there is an obvious correspondence between Proto-Pindiu **-ep*, reflected in Dedua, Mongi and Tobo, and Proto-Sankwep **C-üp*. However, the vowels of these endings do not match, making it necessary to reconstruct **-{e,u}p* 3SG. In the dual number, the Sankwep languages have a single ending. I assume that it was originally the ending of the second and third person dual, which was extended to the first person dual. Owing to the replacement of the original first person dual ending in the Sankwep family, no Proto-Rawlinson reconstruction of this category is possible. The Proto-Sankwep second and third person dual ending **-(l)ut* can be combined with Proto-Pindiu **-oɣot* 2/3DU under the assumption that the initial *l* of this form properly belongs to the verb root (cf. Table 3-23 in 3.2.6). The first person plural ending *C-ŋ* of Nabak matches Proto-Pindiu **-in* 1PL; Mesem has innovated another ending. Finally, for the second and third person plural again no Proto-Rawlinson reconstruction is possible.

Table 3-29: Proto-Rawlinson far past tense and irrealis mood

		1SG	2SG	3SG
pRawlinson	far past	*-mbal	*-mban	
pPindiu	irrealis I	*-mbël	*-mban	*-mbap
Dedua	irrealis I	-bai	-baŋ	-baʔ
Mongi	irrealis	-wi	-waŋ	-waʔ
Tobo	irrealis I	-wal	-wan	-wap
Somba	irrealis I	-bil[eŋ-buk]	-ban[-buk]	-bap[-puk]
pSankwep	far past	*-ban	*-ban	*-gü(ŋ)
Mesem	far past	C-baŋ, V-paŋ	[C-bin, V-pin]	C-gəŋ, V-kəŋ
Nabak	far past	C-ban, V-wan	C-ban[an], V-wan[an]	C-ge, V-je

[9] Remarkably, a similar extension occurred in Dedua. The original present tense ending *-dambe* 2SG (Pilhofer 1928) was replaced by the far past tense ending *-neʔ* 2SG (Ceder and Ceder 1990).

	1DU	2/3DU	1PL	2/3PL
pRawlinson	*-mbet		*-mben	*-mbi
pPindiu	*-mbit	*-mbaɣot	*-mbin	*-mbi
Dedua	-biʔ	-baoʔ	-biŋ	[-bau]
Mongi	-wiʔ	-waoʔ	-wiŋ	[-wu]
Tobo	-wet	-wot	-wen	[-w(o)u]
Somba	-bit[-puk]	-baɣot[-puk]	-bin[-buk]	-be[-buk]
pSankwep	*-bït[in]		*-bïn[in]	*-bi[en]
Mesem	C-bitn̩, C-biliŋ, V-piliŋ	C-biiŋ, C-bin, V-pin	C-bin, V-pin	C-bieŋ, V-pieŋ
Nabak	C-belin, V-welin	C-bun, V-wun	C-benn, V-wenn	C-bien, V-wien

		1SG	2SG	3SG
pRawlinson	irrealis			*-nak
pPindiu	irrealis II	*-mbël-ak	*-mban-ak, *-nak	*-nak, [*-mbap-ak]
Dedua	irrealis II	-baʟaʔ	-baŋnaʔ	-naʔ
Tobo	irrealis II	-walək	-wanək	[-wawək]
Borong	irrealis	-wenag[-a]	-nag[-a]	-nag[-a]
Somba	irrealis II	-bil[(eŋ)]ak	-(ba)nak	-nak, [-bawak]
pSankwep	irrealis	*-bak	*-bek	*C-dak, V-nak
Mesem	irrealis	C-bak, V-pak	C-bek, V-pek	C-dak, [V-tak]
Nabak	irrealis	C-bak, V-wak	C-bek, V-wek	C-dak, V-nak

	1DU	2/3DU	1PL	2/3PL
pRawlinson	*-mbet-ak		*-mben-ak	*-mbi-ak
pPindiu	*-mbit-ak	*-mb(aɣ)ot-ak	*-mbin-ak	*-mbi-ak
Dedua	-biʟaʔ	-boʟaʔ	-binaʔ	-biaʔ
Tobo	-werək	-worok	-wenək	[-w(o)uɣok]
Borong	-worag[-a]	-waorag[-a]	-wonag[-a]	[-wujaga]
Somba	-birak	-baɣorak	-binak	-beak
pSankwep	*-bïtïk		*-bïnïk	*-biek
Mesem	C-bidik, V-pidik	C-biik, V-piik	C-binik, V-pinik	C-biek, V-piek
Nabak	C-belek, V-welek	C-buk, V-wuk	C-benek, V-wenek	C-biek, V-wiek

The Proto-Rawlinson far past tense and irrealis mood have related endings (Table 3-29). This is apparent in the dual and plural number, where the irrealis mood endings can be seen to be made up of the far past tense endings plus the final suffix **-ak*. In the singular, the reconstructions do not overlap. For the far past tense the first and the second person singular can be reconstructed, for the irrealis mood only the third person singular. In the irrealis mood, the composite nature of the endings is still visible in Proto-Pindiu **-mbël-ak* 1SG and **-mban-*

ak 2SG, but in the Sankwep languages contraction has obliterated the picture. We can surmise that Proto-Sankwep **-bak* 1SG and **-bek* 2SG descend from the same composite endings, but the phonological irregularity of the contraction makes it impossible to prove the hypothesis. As it is, caution demands that we admit that the first and the second person singular endings of the irrealis mood in Proto-Pindiu and in Proto-Sankwep diverge so strongly that no common proto-forms are reconstructible.

The far past tense paradigm of the Sankwep languages and the irrealis I paradigm of the Pindiu languages have a common origin. External evidence suggests that the common proto-forms were far past tense forms, which shifted their function in Proto-Pindiu. The first person singular ending **-mbal* of the Proto-Rawlinson far past tense has straightforward reflexes in all daughter languages. The evidence for the second person singular ending **-mban* in the Sankwep family requires some explanation. Following the sound laws, this ending should have become homonymous with the ending of the first person singular **-ban* in Proto-Sankwep. Both Sankwep languages have subsequently transformed the second person singular form to make it different from the first person singular form. In Nabak, **-ban* 2SG was reinforced by reduplicating the final VC part of the ending characteristic of person and number, yielding *C-banan* 2SG. In Mesem, the vowel of **-ban* 2SG was changed for reasons of dissimilation, yielding *C-bin* 2SG. In the third person singular, Proto-Pindiu and Proto-Sankwep have incompatible endings.

In the dual and the plural of the far past tense, the Sankwep languages have added a suffix **-in ~ -en* to the original endings. This suffix contrasts with the suffix **-ik ~ -ek* of the irrealis mood. But whereas the irrealis suffix is inherited from Proto-Rawlinson, the non-singular suffix in the far past tense is an innovation of the Sankwep languages. If we subtract it, the remaining far past tense endings of the Sankwep languages match the irrealis I endings of the Pindiu languages with the exception of the second and third person dual, which defies reconstruction. The irrealis mood shows the same picture. We can reconstruct the composite endings **-mbet-ak* 1DU, **-mben-ak* 1PL and **-mbi-ak* 2/3PL, but the ending of the second and third person dual is unreconstructible. In the third person singular of the irrealis mood, there is agreement between the ending **-nak* of Dedua, Borong and Somba, on the one hand, and the postvocalic ending *V-nak* of Nabak, on the other. Mesem has replaced the postvocalic alternant of this ending with *V-tak*, but the postconsonantal alternant *C-dak* descends from Proto-Rawlinson **-nak* 3SG as does its Nabak equivalent. The irrealis ending **-nak* 3SG resembles neither the Proto-Pindiu nor the Proto-Sankwep third person singular ending of the far past tense. It is a distinctive ending of the irrealis mood that lacks the initial **-mbᵊ* of the other person-number categories.

Table 3-30: Proto-Rawlinson imperative mood

		1SG	2SG	3SG
pRawlinson	imperative	*-mbe	*-Ø	*-uk
pPindiu	imperative	*-mbë		
Dedua	pres. imperative	-ba	[-na]	[-u]
Mongi	imperative	-wa	[-na]	[C-u, V-ju]
Tobo	imperative	-wa	[-na]	[-u]
Somba	imperative	-bi	-Ø, [-nəŋ]	C-ək, V-jək
pSankwep	imperative	*-bi	*-Ø	*-ük
Mesem	imperative	C-bi, V-pi	-Ø	C-[d]ə, V-jə
Nabak	imperative	C-bi, V-wi	-Ø	C-ak, V-k

	1DU	2/3DU	1PL	2/3PL
pRawlinson	*-zi	*-it	*-ne	*-ŋget
pPindiu	*-zi	*-it	*-ni	*-ŋget
Dedua	[-de]	-eʔ	-ni	-geʔ
Mongi	-tsi	C-iʔ, V-jiʔ	-ni	-giʔ
Tobo	-tsi	-it	-ni	-ɣit
Somba	-tsi	-it	[-in]	-get
pSankwep	*-zi	*-it	*-nï	*-git
Mesem	C-zi, V-si	-i	C-[d]n, V-n	[-ip]
Nabak	[C-di, V-mdi]	-it	-ne	-it

The imperative mood has been well preserved in both Rawlinson subfamilies so that the whole paradigm can be reconstructed (Table 3-30). The first person singular ending **-mbe* is reflected in all daughter languages except Borong, which lacks a distinct imperative mood. In the second person singular, the Somba zero ending reported by Pilhofer (1928) links up with the zero endings of the Sankwep languages so that we can reconstruct **-Ø* 2SG to Proto-Rawlinson. The endings of the other Pindiu languages have been taken from the different subject medial verb (cf. Table 3-20 in 3.2.5). In the third person singular, Somba is again the only Pindiu language that preserves the Proto-Rawlinson ending **-uk*, as do both Sankwep languages. The other Pindiu languages have replaced it with the ending of the different subject medial verb. In the first person dual, the Mesem ending *C-zi* matches Proto-Pindiu **-zi.* The Nabak ending *C-di ~ V-mdi* 1DU may historically be a composite form, but its origin is obscure and it does not appear to be related to Mesem *C-zi ~ V-si* 1DU. The second and third person dual ending **-it* is reflected in all daughter languages. The first person plural ending **-ne* has been preserved in all languages except Somba, which has replaced it with the past tense ending. In the second and third person plural, Proto-Pindiu **-ŋget* matches Proto-Sankwep **-git*. The intervocalic **-g-* of the Proto-Sankwep ending regularly disappeared in Nabak, making this form homonymous with the second and third person dual form *-it*.

Table 3-31: Proto-Rawlinson durative different subject medial verb

		1SG	2SG	3SG
pRawlinson	DS durative		*-man{e,u}	
Dedua	DS simultaneous	-baʟe	-mana	-manu
pSankwep	different subject	*-ma		*-mï
Mesem	different subject	-ma	[C-dɘ, V-nɘ]	-m
Nabak	different subject	-ma	-mane	-me

	1DU	2/3DU	1PL	2/3PL
pRawlinson			*-mani(n)	
Dedua	-miʟa	-maeʔ	-mina	-mageʔ
pSankwep				*-mï
Mesem	-m	-m	[-m]	-m
Nabak	-malu	-malu	-mann	-me

The Sankwep different subject medial verb paradigm (Table 3-27 in 3.2.6) diverges strongly from the Pindiu different subject medial verb paradigm (Table 3-20 in 3.2.5). To judge by the better preserved Nabak forms, the Sankwep endings are composite. They begin with a suffix *-ma*, which must earlier have had an aspectual function and probably derives from the verb *ma* 'be, live'. The Pindiu different subject medial verb forms lack this suffix and only consist of person-number formatives. However, there is a medial verb paradigm in Dedua that is similar to the Sankwep formation, namely the simultaneous different subject medial verb (Table 3-31). The third person singular ending *-man-u* suggests that this paradigm, too, was originally made up of the verb **mal* 'be, live' and the basic different subject medial verb endings. The simultaneous function of the Dedua paradigm is presumably due to areal influence from the neighboring Huon Tip languages, which distinguish between sequential and simultaneous medial verb forms (cf. Table 3-9 in 3.2.2). For Proto-Rawlinson, we must reconstruct an aspectual function, such as durativity. In the Sankwep languages this aspectual function was lost and the paradigm became the basic different subject medial verb. Because Dedua is the only Pindiu language in which this formation is attested, the appearance of its Proto-Pindiu predecessor remains hazy and a Proto-Rawlinson reconstruction is difficult.

The Dedua first person singular ending *-baʟe* looks alien to the paradigm and does not match **-ma* 1SG of the Sankwep languages. In the second person singular there is a near match between Dedua *-mana* and Nabak *-mane*, though the final vowels of these endings diverge. The Mesem ending *V-nɘ* 2SG is an intrusion from the basic different subject medial verb paradigm that must have existed in Proto-Rawlinson beside the durative different subject medial verb paradigm. It corresponds to the basic different subject medial verb ending **-në(ŋ)* 2SG of the Pindiu languages (cf. Table 3-20 in 3.2.5), though the vowels are again divergent (Dedua *-na* 2SG and Mesem *V-nɘ* 2SG < **-n{e,u}*). The third person singular form is not reconstructible. Throughout the dual and the plural number we find the invariable ending *-m* in Mesem. Presumably this ending had the same origin as the Nabak equivalents, which consist of the suffix *-ma* plus a person-number formative. But in Mesem the person-number

component was lost so that only an invariable ending was left. If this account is correct, Mesem *-m* 1/2/3DU/PL is the outcome of a phonologically irregular shortening process. In the Dedua first person dual and plural endings we find *-miᵊ* instead of the expected simultaneity marker *-maᵊ*. The unexpected vowel *i* can only come from the original final syllable of the ending. The lack of cognates in the other Pindiu languages thwarts any attempt to reconstruct what happened. It is possible that the vowels of the two syllables of *-miʟa* 1DU and *-mina* 1PL were metathesized, or else the first vowel was umlauted and then the *i* of the second syllable was replaced with *a*. At any rate, Nabak *-mann* 1PL reflects the original first vowel. It points to **-manin* as the Proto-Rawlinson ending, whereas Dedua *-mina* 1PL suggests Proto-Rawlinson **-mani* according to the account just given. The Dedua and Nabak first person dual endings look similar, too, but Nabak *-malu* 1/2/3DU is most likely an earlier second and third person dual form that was extended to the first person dual, as in the near past tense (Table 3-28), and is therefore not cognate with Dedua *-miʟa* 1DU.

There is little doubt that the Dedua simultaneous different subject medial verb paradigm and the Nabak different subject medial verb paradigm have a common origin. But reconstruction proved to be difficult. There are only two apparent correspondences between the paradigms, the endings of the second person singular and of the first person plural. But in both cases the match is not perfect and the reconstructions remain tentative.

3.2.8 Dallman

The Dallman languages have only been documented in surveys. McElhanon collected verb forms in all three languages, I recorded some Nomu verb forms. Some paradigms have not been satisfactorily elicited and are therefore omitted here (cf. Appendix C). For Kinalaknga and Kumukio only five paradigms are reliably known, which limits the number of verb forms that can be reconstructed to Proto-Dallman. Kinalaknga and Kumukio are more closely related to each other than to Nomu. For a Proto-Dallman reconstruction we therefore need agreement between Nomu and at least one of Kinalaknga and Kumukio.

Table 3-32: Proto-Dallman past tense

		1SG	2SG	3SG
pDallman	past	*ari-an	*ari-on	*ari-op
Nomu	past	ari-an	ari-on	ari-op
Kinalaknga	past	[ari-mban]	ari-on	ari-op
Kumukio	past	ari-an	[ari-en]	[ari-ep]

	1DU	2/3DU	1PL	2/3PL
pDallman		*ari-{o,e}t		
Nomu	ari-et	ari-ot	ari-en	ari-e
Kinalaknga	ari-wet	ari-et	ari-wen	ari-weŋ
Kumukio	ari-wet	ari-et	ari-wen	ari-weŋ

The Dallman languages have only one past tense beside a present tense (Table 3-32). The singular of the Proto-Dallman past tense can be reconstructed, but in the dual and the plural Nomu, on the one hand, and Kinalaknga and Kumukio, on the other, show different formations. Only for the second and third person dual is a tentative reconstruction possible as in this form the ending-initial *w* of the other dual and plural forms is missing in Kinalaknga and Kumukio. As we will see in 3.2.10, this initial *w* is characteristic of the Proto-Cromwell far past tense. The Nomu dual and plual endings, which lack this initial *w*, go back to the Proto-Cromwell near past tense. The first person dual and both plural endings of Nomu are therefore not cognate with the endings of Kinalaknga and Kumukio.

Table 3-33: Proto-Dallman present and present habitual tenses

		1SG	2SG	3SG
pDallman	present	*ari-wan	*ari-zan	*ari-zap
Nomu	present	ari-wan	ari-zan	ari-zap
Kinalaknga	present	ari-wan	ari-zan	ari-zap
Kumukio	present	ari-wan	[ari-an]	[ari-ap]

	1DU	2/3DU	1PL	2/3PL
pDallman				
Nomu	ari-weret	ari-worot	ari-wenen	ari-wene
Kinalaknga	ari-mbonet	ari-mbonet	ari-mbonen	ari-mboneŋ
Kumukio	ari-wonet	ari-wonet	ari-wonen	ari-woneŋ

		1SG	2SG	3SG
pDallman	present habitual	*ari-man-wan	*ari-mal-an	*ari-mal-ap
Nomu	present habitual	ari-mawan	ari-malan	ari-malap
Kinalaknga	present habitual	ari-manan	ari-majan	ari-majap
Kumukio	present habitual	ari-mawan	ari-majan	ari-majap

	1DU	2/3DU	1PL	2/3PL
pDallman	*ari-man-w(et)et		*ari-man-w(en)en	
Nomu	ari-maweret	ari-maworot	ari-mawenen	ari-mawene
Kinalaknga	ari-manet	ari-manet	ari-manen	ari-maneŋ
Kumukio				ari-mawoneŋ

For the present tense, not only the basic forms but also the habitual forms are attested in all three Dallman languages (Table 3-33). The habitual forms contain the aspectual marker **-mal ~ -man* (from the verb **mal* 'be, live') and there are differences in the person-number formatives as compared to the basic forms. The person-number formative of the first person singular is **-wan* in both paradigms. But in the second and the third person singular we find the formatives **-zan* 2SG and **-zap* 3SG in the basic paradigms of Nomu and Kinalaknga whereas all three languages show **-an* 2SG and **-ap* 3SG in the habitual paradigm. Note that

Kumukio has the latter rather than the former formatives in the basic paradigm. In the dual and the plural of the basic paradigm Nomu shows a different formation than Kinalaknga and Kumukio. In the latter languages, the endings begin with a suffix *-mbon* or *-won* followed by person-number formatives. These suffixes were originally morphophonological alternants, *-mbon* occurring after consonants and *-won* after vowels; then one or the other of these forms was generalized in Kinalaknga and Kumukio. The only form of the habitual paradigm that is attested for Kumukio, the second and third person plural form, shows the same formation. But the Kinalaknga dual and plural endings of the habitual paradigm are built differently. They can be combined with the endings of Nomu under the assumption that Nomu has reduplicated the final VC part of the original endings: **-man-wet* 1DU ⇒ Nomu *-ma-weret*, Kinalaknga *-man-et*, **-man-wen* 1PL ⇒ Nomu *-ma-wenen,* Kinalaknga *-man-en*. The consonant cluster **nw* in these forms has been simplified to *w* in Nomu and to *n* in Kinalaknga, as in the ending of the first person singular. The endings of the second and third person dual and plural cannot be reconstructed because the person-number formatives of Nomu and Kinalaknga do not match.

Table 3-34: Proto-Dallman imperative mood

		1SG	2SG	3SG
pDallman	imperative	*ari-mb{e,o}	*ari-no(n)	*ari-ok
Nomu	imperative	ari-be	ari-no	ari-ok
Kinalaknga	imperative	ari-mbo	ari-non	ari-ok
Kumukio	imperative	ari-mbo	ari-non	ari-ok

	1DU	2/3DU	1PL	2/3PL
pDallman	*ari-nd{e,o}	*ari-ot	*ari-n{e,o}	*ari-ŋe{t,k}
Nomu	ari-de	ari-ot	ari-ne	ari-ŋet
Kinalaknga	ari-ndo	[ari-et]	ari-no	ari-ŋek
Kumukio	ari-ndo	ari-ot	ari-no	ari-ŋek

The imperative mood endings of Nomu clearly correspond to the endings of Kinalaknga and Kumukio, though there are frequent differences in detail (Table 3-34). In all three first person forms Nomu shows the vowel *e* while Kinalaknga and Kumukio have the non-matching vowel *o*. Apart from this discrepancy, the endings match. In the second person singular, Nomu has the ending *-no* whereas Kinalaknga and Kumukio show *-non*. Note that without the appended *n* the second person singular form of Kinalaknga and Kumukio would be homonymous with the first person plural form, a confusing homonymy in an imperative paradigm. It stands to reason that this final *n* was introduced into the second person singular ending when the vowel of the first person plural ending changed from *e* to *o*. In other words, in all likelihood the first person forms of all numbers with final *e* of Nomu are original and Kinalaknga and Kumukio changed them to *o*. In the second and third person plural, the final consonant of Nomu *-ŋet* mismatches the final consonant of Kinalaknga and Kumukio *-ŋek*. In this case, too, external comparison shows that Nomu preserves the original form (cf. Table 3-44 in 3.2.10).

Table 3-35: Proto-Dallman sequential different subject medial verb

		1SG	2SG	3SG
pDallman	DS sequential		*ari-no	*ari-{e,o}
Nomu	DS sequential	ari-be	ari-no	ari-e
Kinalaknga	DS sequential	ari-ala	ari-no	ari-o
Kumukio	DS sequential	ari-ala	ari-no	ari-o

	1DU	2/3DU	1PL	2/3PL
pDallman		*ari-{o,e}to		
Nomu	ari-ere	ari-oro	ari-ene	ari-e
Kinalaknga	ari-wero	[ari-woro]	ari-weno	ari-ŋego
Kumukio	ari-wero	ari-ero	ari-weno	ari-ŋego

The sequential different subject medial verb forms of Nomu diverge more strongly from those of Kinalaknga and Kumukio than the imperative mood forms (Table 3-35). In the first person dual and plural we find the same difference of formation as in the past tense (cf. Table 3-32): Kinalaknga and Kumukio have endings with initial *w* whereas the endings of Nomu begin with a vowel. As compared with the past tense endings, the dual and plural medial verb endings of Kinalaknga and Kumukio show a final *o* and those of Nomu a final vowel that is a copy of the preceding vowel. The ending of the second and third person plural in Kinalaknga and Kumukio diverges from the remaining forms in that it does not contain the past tense ending but rather the ending of the imperative mood. The only one of these forms that lends itself to a reconstruction is the ending of the second and third person dual. In the singular, we find divergent forms in the first person and a perfect match in the second person. In the third person singular, Nomu has the ending *-e*, but Kinalakgna and Kumukio show *-o*. One suspects that the latter ending is diachronically complex, consisting of an original ending **-e* and the same appended final vowel **-o* that is found throughout the dual and plural number. Kinalaknga and Kumukio **-eo* would then have become *-o* through vowel coalescence.

3.2.9 Kabwum

The Kabwum languages are far better documented than the Dallman languages. For all three languages we have a grammar containing all inflectional forms of the verb: Southwell (1979) for Komba, McElhanon (1972) for Selepet, and Foster (1972) for Timbe. The subgrouping of the Kabwum family is not self-evident, all three languages occasionally diverge from the other two. The most likely split is between Komba, on the one hand, and Selepet and Timbe, on the other. In view of the tenuous nature of this split, I treat the three languages as independent witnesses. A match between any two of them may be sufficient for a reconstruction, particularly if it is supported by external evidence.

Table 3-36: Proto-Kabwum far past tense

		1SG	2SG	3SG
pKabwum	far past	*ari-wan	*ari-{e,o}n	*ari-{e,o}p
Komba	far past	ʌi-wan	ar-in	ar-ip
Selepet	far past	ari-wan	ari-on	ari-op
Timbe	far past	[ari-ɔn]	ari-en	ari-ep

	1DU	2/3DU	1PL	2/3PL
pKabwum	*ari-wet	*ari-(o)w{e,o}t	*ari-wen	*ari-we
Komba	ʌi-wet	ʌi-wet	ʌi-wen	ʌi-we
Selepet	ari-wit	ari-owot	ari-win	ari-wi
Timbe	[ari-jeot]	[ari-jeat]	[ari-jeon]	[ari-jei]

The reconstruction of the far past tense endings is based on Komba and Selepet, except for the forms of the second and the third person singular, where all three languages agree (Table 3-36). The dual and plural endings of Timbe are a different formation than those of Komba and Selepet. While the latter two languages have a characteristic consonant *-w°* at the beginning of the endings, Timbe shows the syllable *-je°*. Conceivably, *-je°* comes from the verb *je* 'lie, sleep' and the present-day far past tense endings were originally near past tense forms of this verb. This is a plausible derivation of the second and third person dual and plural endings. Note, however, that the final parts of the first person dual and plural endings of the far past tense are *°ot* 1DU and *°on* 1PL whereas the near past tense endings are *-et* 1DU and *-en* 1PL (Table 3-37). Perhaps these first person forms come from original far past tense forms of the verb *je* 'lie, sleep' and the second syllable was contracted: **-jewet* 1DU > *-jeot*, **-jewen* 1PL > *-jeon*. Komba and Selepet show the characteristic consonant *-w°* also in the first person singular form. The Timbe ending *-ɔn* 1SG is again divergent. It is homonymous with the near past tense form (cf. Table 3-37). In the endings of the second and the third person singular, the characteristic *-w°* is missing in Komba and Selepet. These forms go back to a different paradigm than the rest of the Proto-Kabwum far past tense paradigm (cf. Tables 3-46 and 3-48 in 3.2.11). Komba and Timbe have a front vowel in these two endings whereas Selepet has a back vowel. I cannot resolve this contradiction and reconstruct *{e,o}* in both cases. In the second and third person dual, there is also conflicting evidence between the form of Komba, which is identical with the form of the first person dual, and the distinctive Selepet form.

Table 3-37: Proto-Kabwum near past and present habitual tenses

		1SG	2SG	3SG
pKabwum	near past	*V-an, *C-zan	*V-at, *C-zat	*V-ap, *C-zap
Komba	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap
Selepet	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap
Timbe	near past	V-ɔn, T-tɔn	V-ɔt, T-tɔt	V-ɔp, T-tɔp

	1DU	2/3DU	1PL	2/3PL
pKabwum	*V-et, C-zet	*V-(a)ot, C-z(a)ot	*V-en, C-zen	*V-(a)e, C-z(a)e
Komba	V-et, C-set	V-et, C-set	V-en, C-sen	V-e, C-se
Selepet	V-[(a)]it, C-sit	V-awot, C-sawot	V-[(a)]in, C-sin	V-ai, C-sai
Timbe	V-et, T-tet	V-at, T-tat	V-en, T-ten	V-ɔe, T-tɔe

		1SG	2SG	3SG
pKabwum	present habitual	*ari-man	*ari-mat	*ari-map
Komba	present habitual	ari-man	ari-mat	ari-map
Selepet	present habitual	ari-man	ari-mat	ari-map
Timbe	present habitual	ari-man	ari-mat	ari-map

	1DU	2/3DU	1PL	2/3PL
pKabwum	*ari-maet	*ari-mawot	*ari-maen	*ari-ma{e,i}
Komba	ari-met	ari-maβot	ari-men	ari-me
Selepet	ari-mait	ari-mawot	ari-main	ari-mai
Timbe	ari-maet	(ari-mandat)	ari-maen	ari-mai

The near past tense endings have two allomorphs; after a verb with a final consonant the ending begins with *-*z*°, after a vowel-final verb this consonant is missing. Apart from this difference, the endings are identical. The endings of the present habitual tense have the same person-number formatives as the near past tense endings, and they contain in addition the habitual marker *-*ma*. The singular forms are perfect matches in the present habitual paradigm. In the near past tense, the Timbe singular forms show the vowel *ɔ* instead of the expected *a*. The reason for this deviation is unknown, but it is no doubt an innovation of Timbe. We also find the vowel *ɔ* in the Timbe ending of the second and third person plural -*(t)ɔe* where Selepet has *a* in -*(s)ai*. Evidently, the vowel *a* was replaced with *ɔ* in this form, too. However, in the second and third person dual we find Timbe -*(t)at* against Selepet -*(s)awot*. If these forms descend from *-*(z)aot*, Timbe must have contracted the vowels before the replacement of *a* with *ɔ* occured in the paradigm. In the ending -*(t)at* 2/3DU the vowel *a* became morphologically distinctive, distinguishing it from -*(t)et* 1DU and -*(t)ɔt* 2SG. The imminent danger of homonymy with the ending of the second person singular was presumably the reason why the ending -*(t)at* 2/3DU escaped the replacement of *a* with *ɔ*. In Selepet -*(s)awot* 2/3DU < *-*(z)aot* a hiatus filling -*w*- was introduced, inspired by the far past tense ending -*owot* 2/3DU.

In the first person dual and plural of the near past tense, Komba -*(s)et* 1DU and -*(s)en* 1PL match Timbe -*(t)et* 1DU and -*(t)en* 1PL. It is therefore clear that these endings did not contain **a* in Proto-Kabwum. In Selepet, we do find an initial *a* in the variants -*ait* 1DU and -*ain* 1PL. Obviously, Selepet is in the process of generalizing **a* throughout the paradigm. It is not clear whether the Proto-Kabwum endings of the second and third person dual and plural contained **a* or if the presence of this vowel in Selepet and Timbe had better be considered the beginning of the generalization of **a* from the singular number. The crucial evidence from Komba is ambiguous. As can be seen in the present habitual paradigm, the vowel sequence *-*ae*- contracted to -*e*- in the Komba first person dual and plural endings -*met* 1DU < *-*maet* and

-men 1PL < **-maen*. The same may have happened in the Komba near past tense ending of the second and third person plural *-(s)e* < **-(z)ae*. Alternatively, this ending never contained **a*, like the first person endings *-(s)et* 1DU < **-(z)et* and *-(s)en* 1PL < **-(z)en*. In the present habitual tense, the Komba and Selepet endings *-me* 2/3PL and *-mai* 2/3PL are compatible with a reconstruction **-mae*, with the same person-number formative **-e* as in the near past tense, but Timbe *-mai* 2/3PL points toward **-mai*.

In the dual number, Komba only has a single ending for all persons in the near past tense whereas Selepet and Timbe differentiate between the first person and the second and third person. As Komba does distinguish the first person from the second and third person dual in the present habitual tense, I assume that this was the original pattern to be found in Proto-Kabwum. According to this hypothesis, the original second and third person dual form **-(z)(a)ot* was replaced by the first person dual form *-(s)et* in Komba. In the present habitual tense, Komba has the distinctive ending *-maβot* 2/3DU matching Selepet *-mawot* 2/3DU. This agreement suggests that the hiatus filling *-w-* was already introduced into this form in Proto-Kabwum. Unfortunately, Timbe lacks a confirming cognate form. In Timbe *-mandat* 2/3DU the person-number formative **-wot* has been replaced with *-ndat*, the near past tense allomorph occurring after monosyllabic verbs ending in a vowel.

Table 3-38: Proto-Kabwum counterfactual mood

		1SG	2SG	3SG
pKabwum	counterfactual	*ari-mb{a,ɔ}m	*ari-mb{a,ɔ}t	*ari-mb{a,ɔ}p
Komba	counterfactual	ʌi-βam	ʌi-βat	ʌi-βap
Selepet	counterfactual	ari-mbɔm	ari-mbɔt	ari-mbɔp
Timbe	counterfactual	ari-wom	ari-wɔt	ari-wop

	1DU	2/3DU	1PL	2/3PL
pKabwum	*ari-mbet	*ari-mb{a,ɔ}(w)ot	*ari-mben	*ari-mb({a,ɔ})e
Komba	ʌi-βet	ʌi-βaβot	[ʌi-βem]	ʌi-βe
Selepet	ari-mbɔit	ari-mbɔwot	ari-mbɔin	ari-mbɔi
Timbe	ari-wet	ari-wat	ari-wen	ari-wɔe

The endings of the counterfactual mood begin with *-β°* in Komba, with *-mb°* in Selepet, and with *-w°* in Timbe (Table 3-38). I assume that there was morphophonological alternation between endings with **-mb°* after consonant final verbs and endings with **-w°* after vowel final verbs in Proto-Kabwum. The latter allomorphs were lenited variants of the former. None of the daughter languages has preserved the alternation, but each of them has generalized one of the alternants throughout the paradigm. For reasons of space, I only reconstruct the allomorphs beginning with **-mb°* in Table 3-38.

In the singular, there is a perfect match between the final consonants of the endings, but the vowel showing up in Komba does not match the vowel seen in Selepet and Timbe. If the *a* of the Komba endings is an imprecise notation of ʌ, the endings would match and we could reconstruct them with the vowel **ɔ*. In the first person dual, the endings of Komba and Timbe match, suggesting the reconstruction of **-mbet*. Selepet has introduced the vowel *ɔ* into

this ending, in analogy with the second and third person dual and plural forms. All counterfactual mood endings of Selepet now begin with *-mbɔ°*. The first person plural endings undoubtedly go back to **-mben* and had a parallel fate. The final consonant of Komba *-βem* 1PL is surprising. I have no other explanation for it than that this may be a typographical error in the grammar (Southwell 1979:96). The Proto-Kabwum counterfactual mood endings of the first person dual and plural were identical with the corresponding far past tense endings (cf. Table 3-36). The whole paradigm seems to have branched off from the far past tense in Pre-Kabwum times.

The second and third person dual ending *-wat* of Timbe may derive from **-mbɔot*. The expected outcome †*-wɔt* was replaced with *-wat* in analogy with the near past tense to avoid homonymy with the ending of the second person singular. Komba and Selepet reflect an intrusive *-w-* in this ending as in the present habitual tense (Table 3-37). In the second and third person plural, it is again hard to tell whether or not the vowel *{a,ɔ}* was present in the ending.

Table 3-39: Proto-Kabwum imperative mood

		1SG	2SG	3SG
pKabwum	imperative	*ari-we	*ari	*ari-ɔk
Komba	imperative	ʌi-βʌ	[ʌi-nan]	ar-ik
Selepet	imperative	ari-we	ari	ari-ɔk
Timbe	imperative	ari-we	ari	ari-ɔk

	1DU	2/3DU	1PL	2/3PL
pKabwum	*ari-re	*ari-et	*ari-ne	*ari-ŋet
Komba	ʌi-rʌ	ar-it	ʌi-nʌ	[ʌi-nek]
Selepet	ari-re	ari-jet	ari-ne	ari-ŋet
Timbe	ari-re	ari-et	ari-ne	ari-ŋet

The imperative endings differ from all the preceding sets of endings (Table 3-39). They are well preserved in the daughter languages so that the whole paradigm can be reconstructed. The two Komba endings marked as non-cognate in Table 3-39 may both have been borrowed from Kumukio: Komba *-nan* 2SG resembles Kumukio *-non* 2SG, and Komba *-nek* 2/3PL has the same aberrant final consonant *k* as Kumukio *-ŋek* 2/3PL (cf. Table 3-34).

Table 3-40: Proto-Kabwum different subject medial verb

		1SG	2SG	3SG
pKabwum	different subject			
Komba	different subject	ari-a(ndʌ)	ʌi-na(ndʌ)	ar-i
Selepet	different subject	ari-mune	ari-rɔ	ari-mu
Timbe	different subject	V-re, T-tere	-menɔ	V-mbo, T-to

	1DU	2/3DU	1PL	2/3PL
pKabwum	*ari-et		*ari-en	
Komba	ar-it[ʌ]	ar-itʌ	ar-in[dʌ]	ʌi-ne(tʌ)
Selepet	[ari-mutŋe]	ari-mutɔ	[ari-munŋe]	ari-ŋetɔ
Timbe	V-et[ŋe], [T-tetŋe]	-mbela	V-en[ŋe], [T-tenŋe]	-mbi

The different subject medial verb endings of the three Kabwum languages are very dissimilar and must have undergone major transformations since the languages separated from each other (Table 3-40). Most of the Selepet endings contain an initial element *-muᵉ* that recurs in neither of the other languages and whose origin is obscure. The Komba endings, apart from the third person singular, contain a final element *-ndʌ* that is still only an optional addition to the forms of the first and the second person singular. If we subtract it, the Komba endings of the first person dual and plural match the initial part of the Timbe endings. The final part of these Timbe endings, *-ŋe*, is homonymous with the rhematic ergative enclitic. In Ono the particle *ŋo* 'but, and' that is cognate with the rhematic ergative enclitic became a medial verb suffix expressing sequentiality (cf. 3.2.13). The same seems to have happened in Timbe. The postconsonantal allomorphs *T-tet-ŋe* 1DU and *T-ten-ŋe* 1PL have intruded into the different subject medial verb from the near past tense paradigm (Table 3-37). It is noteworthy that the two different subject medial verb endings that can be reconstructed to Proto-Kabwum, **-et* 1DU and **-en* 1PL, differ from the corresponding imperative endings **-re* 1DU and **-ne* 1PL (Table 3-39).

3.2.10 Cromwell

The Dallman languages and the Kabwum languages are each other's nearest relatives and form the Cromwell family. Contact between the two subfamilies mostly involves Kumukio and Komba. The Dallman languages, most of all Nomu, have heavily borrowed lexical material from Ono, but the verb morphology remained unaffected by this influence. As we will see in this section, Dallman verb morphology closely matches Kabwum verb morphology. The incomplete data for the Dallman languages limits the number of paradigms that can be reconstructed to Proto-Cromwell.

Table 3-41: Proto-Cromwell far past and far past habitual tenses

		1SG	2SG	3SG
pCromwell	far past	*ari-mban	*-on, -en	*-op, -ep
pDallman	past	[*ari-an]	*ari-{o,e}n	*ari-{o,e}p
Nomu	past	[ari-an]	ari-on	ari-op
Kinalaknga	past	ari-mban	ari-on	ari-op
Kumukio	past	[ari-an]	ari-en	ari-ep
pKabwum	far past	*ari-wan	*ari-{e,o}n	*ari-{e,o}p
Komba	far past	ʌi-wan	ar-in	ar-ip
Selepet	far past	ari-wan	ari-on	ari-op
Timbe	far past	[ari-ɔn]	ari-en	ari-ep

	1DU	2/3DU	1PL	2/3PL
pCromwell	*ari-mbet		*ari-mben	*ari-mbe
pDallman	*ari-wet	*ari-{o,e}t	*ari-wen	
Nomu	[ari-et]	ari-ot	[ari-en]	[ari-e]
Kinalaknga	ari-wet	ari-et	ari-wen	ari-we[ŋ]
Kumukio	ari-wet	ari-et	ari-wen	ari-we[ŋ]
pKabwum	*ari-wet	*ari-(o)w{e,o}t	*ari-wen	*ari-we
Komba	ʌi-wet	ʌi-wet	ʌi-wen	ʌi-we
Selepet	ari-wit	ari-owot	ari-win	ari-wi
Timbe	[ari-jeot]	[ari-jeat]	[ari-jeon]	[ari-jei]

		1SG	2SG	3SG
pCromwell	far past habitual	*ari-mal-mban		
pDallman	present habitual	*ari-man-wan	*ari-mal-an	*ari-mal-ap
Nomu	present habitual	ari-mawan	ari-malan	ari-malap
Kinalaknga	present habitual	ari-manan	ari-majan	ari-majap
Kumukio	present habitual	ari-mawan	ari-majan	ari-majap
pKabwum				
Komba	past habitual	ari-marʌβan	ari-mʌin	ari-mʌip

	1DU	2/3DU	1PL	2/3PL
pCromwell	*ari-mal-mbet	*ari-mal-mb{o,e}t	*ari-mal-mben	*ari-mal-mbe
pDallman	*ari-man-wet	*ari-man-w{o,e}t	*ari-man-wen	*ari-man-we
Nomu	ari-maw[er]et	ari-maw[or]ot	ari-maw[en]en	ari-maw[en]e
Kinalaknga	ari-manet	ari-manet	ari-manen	ari-mane[ŋ]
Kumukio				[ari-mawoneŋ]
pKabwum				
Komba	ari-marʌβet	ari-marʌβet	ari-marʌβen	ari-marʌβe

The past tense paradigm of Kinalaknga and Kumukio corresponds to the far past tense paradigm of Komba and Selepet (Table 3-41). Nomu and Timbe mostly shows endings that go back to the Proto-Cromwell near past tense paradigm (cf. Table 3-42). The matching forms of Kinalaknga, Kumukio, Komba, and Selepet must have been far past tense forms in Proto-Cromwell, as they still are in contemporary Komba and Selepet. The present habitual endings of the Dallman languages largely show the same person-number formatives as the past tense of Kinalaknga and Kumukio. Formerly, these endings must have been past habitual forms. The present habitual endings of the Dallman languages match the past habitual endings of Komba, with the exception of the second and the third person singular forms. Selepet and Timbe have past habitual forms that are built differently (cf. Appendix C).

In the first person singular of the past tense, Kinalaknga shows the original far past tense ending *-mban* while Kumukio has substituted the original near past tense ending *-an*. The ending **-mban* 1SG, with initial prenasalized stop, presumably alternated with **-wan* 1SG

in Proto-Cromwell. Kinalaknga, Komba and Selepet have generalized one or the other of the alternants. The preservation of *-mbᵒ* in one form of the paradigm in Kinalaknga makes it necessary to reconstruct an alternation between **-mbᵒ* and **-wᵒ* throughout the Proto-Cromwell far past tense paradigm. For reasons of space, only the alternant beginning with **-mbᵒ* is given in Table 3-41. Only the endings of the second and the third person singular do not begin with **-mbᵒ ~ *-wᵒ*. In these two endings, we find the vowel **o* in some languages and in others the vowel **e*, both in the Dallman and in the Kabwum subfamily. We must therefore reconstruct endings with both vowels, **-on* 2SG and **-op* 3SG as well as **-en* 2SG and **-ep* 3SG. Presumably these pairs of endings were alternants in Proto-Cromwell, but the factor conditioning the alternation cannot be retrieved.

The first person dual and plural endings of the Kinalaknga and Kumukio past tense and the Komba and Selepet far past tense are perfect matches. In the habitual paradigm, there is a match between Nomu and Kinalakgna, on the one hand, and Komba, on the other. In the second and third person plural of the habitual paradigm, the Nomu ending has been extended with the syllable *en* in analogy to the first person plural form: *-mawene* 2/3PL ⇐ **-manwe*, *-mawenen* 1PL ⇐ **-manwen*. In the latter form, the addition of *en* is a reduplication of the final syllable. The absence of a final velar nasal *ŋ* in Nomu *-mawene* 2/3PL, in line with the Komba reflex *-marʌβe* 2/3PL, suggests that the introduction of such a final consonant into the person-number formative *-weŋ* 2/3PL of Kinalaknga and Kumukio is a post-Proto-Dallman innovation. In the second and third person dual, the Dallman languages show former near past tense endings in the past tense which cannot be combined with the far past tense endings of Komba and Selepet. In the habitual paradigm, both Kinalaknga and Komba have a single dual form for all persons. External evidence shows that this conflation is innovative and that the distinctive second and third person dual form of Nomu reflects the original pattern.

Table 3-42: Proto-Cromwell near past tense

		1SG	2SG	3SG
pCromwell	near past	*ari-an		
pDallman	past	*ari-an	*ari-on	*ari-op
Nomu	past	ari-an	ari-on	ari-op
Kinalaknga	past	[ari-mban]	ari-on	ari-op
Kumukio	past	ari-an	ari-en	ari-ep
pKabwum	near past	*V-an, [C-zan]	*V-at, C-zat	*V-ap, [C-zap]
Komba	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap
Selepet	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap
Timbe	near past	V-ɔn, T-tɔn	V-ɔt, T-tɔt	V-ɔp, T-tɔp

	1DU	2/3DU	1PL	2/3PL
pCromwell	*ari-et	*ari-{o,e}t	*ari-en	*ari-e
pDallman	*ari-et	*ari-{o,e}t	*ari-en	*ari-e
Nomu	ari-et	ari-ot	ari-en	ari-e
Kinalaknga	[ari-wet]	ari-et	[ari-wen]	[ari-weŋ]
Kumukio	[ari-wet]	ari-et	[ari-wen]	[ari-weŋ]
pKabwum	*-et, [-zet]	*-(a){e,o}t, [-z(a){e,o}t]	*-en, [-zen]	*-(a)e, [-z(a)e]
Komba	V-et, C-set	V-et, [C-set]	V-en, C-sen	V-e, C-se
Selepet	V-[(a)]it, C-sit	V-a[w]ot, [C-sawot]	V-[(a)]in, C-sin	V-ai, C-sai
Timbe	V-et, T-tet	V-at, [T-tat]	V-en, T-ten	V-ɔe, T-tɔe

The past tense forms of Nomu can be brought together with the near past tense forms of the Kabwum languages (Table 3-42). Only the endings of the second and the third person singular do not correspond. The near past tense forms of the Kabwum languages have two allomorphs, one beginning with *z following consonant-final verb roots, the other occuring after vowel-final verb roots and lacking this consonant. The allomorphs without *z are etymologically ambiguous. They can be explained phonologically, the absence of *z being due to lenition. In that case they would be former present tense forms like the allomorphs with *z (cf. Table 3-43). Alternatively, the initial *z may never have been present in them, in which case they would be former near past tense forms. The conflation of most or all former present tense and near past tense forms after verb roots ending in a vowel was presumably the reason why the two tenses collapsed into one in Proto-Kabwum. In Table 3-42 the allomorphs without *z are treated as if they were former near past tense forms.

In the first person singular, the past tense ending of Nomu matches the near past tense ending of Proto-Kabwum. Kumukio also reflects the Proto-Cromwell near past tense ending *-*an* rather than a far past tense ending as in most of the rest of the paradigm. The second and the third person singular past tense endings of the Dallman languages are former far past tense endings (cf. Table 3-41) and cannot be combined with the near past tense endings of the Kabwum languages. In the first person dual and plural, the endings of Nomu again perfectly match the endings of Proto-Kabwum. In the second and third person plural, the Nomu ending -*e* suggests that the possibly secondary *-*a* in Proto-Kabwum *-*(a)e* was not present in Proto-Cromwell. In the second and third person dual, exceptionally all three Dallman languages show a former near past tense ending. Unfortunately, there is conflicting evidence for the quality of the vowel of this ending in both subfamilies. Nomu and Selepet point toward *-*ot* 2/3DU whereas Kinalaknga, Kumukio, and Komba point toward *-*et* 2/3DU.

Table 3-43: Proto-Cromwell present tense singular

		1SG	2SG	3SG
pCromwell	present			*V-ap, C-zap
pDallman	present	*ari-wan	*ari-(z)an	*ari-(z)ap
Nomu	present	ari-wan	ari-zan	ari-zap
Kinalaknga	present	ari-wan	ari-zan	ari-zap
Kumukio	present	ari-wan	ari-an	ari-ap
pKabwum	near past	*V-an, *C-zan	*V-at, *C-zat	*V-ap, *C-zap
Komba	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap
Selepet	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap
Timbe	near past	V-ɔn, T-tɔn	V-ɔt, T-tɔt	V-ɔp, T-tɔp

There is one matching form between the present tense paradigm of the Dallman languages and the near past tense paradigm of the Kabwum languages (Table 3-43). The allomorphs **C-zap* and **V-ap* 3SG of Proto-Kabwum correspond to the ending *-zap* 3SG of Nomu and Kinalaknga respectively to the ending *-ap* 3SG of Kumukio. The double agreement suggests that the morphophonological alternation between **C-zap* and **V-ap* already existed in Proto-Cromwell. The remaining forms of these paradigms do not match. The dual and plural forms of the Dallman present tense and of the Kabwum near past tense are different formations and are therefore omitted from Table 3-43 (cf. Appendix C).

Table 3-44: Proto-Cromwell imperative mood

		1SG	2SG	3SG
pCromwell	imperative	*ari-mbe		*ari-ok
pDallman	imperative	*ari-mb{e,o}	*ari-no(n)	*ari-ok
Nomu	imperative	ari-be	ari-no	ari-ok
Kinalaknga	imperative	ari-mbo	ari-non	ari-ok
Kumukio	imperative	ari-mbo	ari-non	ari-ok
pKabwum	imperative	*ari-we	*ari	*ari-ɔk
Komba	imperative	ʌi-βʌ	ʌi[-nan]	ar-ik
Selepet	imperative	ari-we	ari	ari-ɔk
Timbe	imperative	ari-we	ari	ari-ɔk

	1DU	2/3DU	1PL	2/3PL
pCromwell	*ari-nde	*ari-et	*ari-ne	*ari-ŋet
pDallman	*ari-nd{e,o}	*ari-{o,e}t	*ari-n{e,o}	*ari-ŋet
Nomu	ari-de	ari-ot	ari-ne	ari-ŋet
Kinalaknga	ari-ndo	ari-et	ari-no	[ari-ŋek]
Kumukio	ari-ndo	ari-ot	ari-no	[ari-ŋek]
pKabwum	*ari-re	*ari-et	*ari-ne	*ari-ŋet
Komba	ʌi-rʌ	ar-it	ʌi-nʌ	[ʌi-nek]
Selepet	ari-re	ari-jet	ari-ne	ari-ŋet
Timbe	ari-re	ari-et	ari-ne	ari-ŋet

The imperative mood endings are well preserved both in the Dallman and in the Kabwum subfamily and all six languages closely agree (Table 3-44). The indeterminacy between the vowels **e* and **o* in the first person endings of all three numbers in Proto-Dallman is resolved by the clear evidence for **e* in the Kabwum languages. We must conclude that in the Dallman family Nomu preserves the original endings and Kinalaknga and Kumukio have introduced the vowel **o*, perhaps under the influence of the different subject medial verb endings, which all end in the vowel **o*, with the sole exception of the first person singular form (cf. Table 3-45). In the endings of the first person singular and dual, the Dallman languages have prenasalized stops whereas the Kabwum languages show lenited variants of them. Presumably both variants alternated with each other in Proto-Cromwell. The third person singular endings of Proto-Dallman and Proto-Kabwum are perfect matches, but there is disagreement in the second person singular, where Proto-Dallman has a material ending while Proto-Kabwum has a zero ending. In the second and third person dual, the Kabwum languages unanimously reflect an ending **-et*. I tentatively interpret the matching form *-et* 2/3DU in Kinalaknga as support for the reconstruction of Proto-Cromwell **-et* 2/3DU. However, the Kumukio ending *-ot* 2/3DU poses a problem for such a reconstruction. While the Nomu ending *-ot* 2/3DU may have been taken from the past tense paradigm, Kumukio shows *-et* 2/3DU in that paradigm (cf. Table 3-42). It is therefore a mystery where the Kumukio imperative mood ending *-ot* 2/3DU might have come from. In the second and third person plural, the case is clear. The match between the ending of Nomu and those of Selepet and Timbe requires the reconstruction of **-ŋet* 2/3PL.

Table 3-45: Proto-Cromwell different subject medial verb

		1SG	2SG	3SG
pCromwell	different subject		*ari-no	*ari-e
pDallman	DS sequential		*ari-no	*ari-e
Nomu	DS sequential	ari-ɓe	ari-no	ari-e
Kinalaknga	DS sequential	ari-ala	ari-no	[ari-o]
Kumukio	DS sequential	ari-ala	ari-no	[ari-o]
pKabwum	different subject		*ari-nɔ	*ari-e
Komba	different subject	ari-a(ndʌ)	ʌi-na[(ndʌ)]	ar-i
Selepet	different subject	ari-mune	[ari-rɔ]	[ari-mu]
Timbe	different subject	V-re, T-tere	-[me]nɔ	[V-mbo, T-to]

	1DU	2/3DU	1PL	2/3PL
pCromwell	*ari-et(e)	*ari-{o,e}t(o)	*ari-en(e)	
pDallman	*ari-ete	*ari-{o,e}to	*ari-ene	
Nomu	ari-ere	ari-oro	ari-ene	ari-e
Kinalaknga	[ari-wero]	[ari-woro]	[ari-weno]	ari-ŋego
Kumukio	[ari-wero]	ari-ero	[ari-weno]	ari-ŋego
pKabwum	*ari-et		*ari-en	
Komba	ar-it[ʌ]	ar-it[ʌ]	ar-in[dʌ]	ʌi-ne(tʌ)
Selepet	[ari-mutŋe]	[ari-mutɔ]	[ari-munŋe]	ari-ŋetɔ
Timbe	V-et[ŋe], [T-tetŋe]	[-mbela]	V-en[ŋe]), [T-tenŋe]	-mbi

The different subject medial verb forms of the Cromwell languages diverge more strongly than the imperative mood forms (Table 3-45). Nomu and Komba have the most conservative forms and my reconstructions are mostly based on these two languages. In the first person singular, the Kabwum languages all have innovative forms, precluding a bottom-up Proto-Cromwell reconstruction. The second person singular ending *-*no* of the Dallman languages has possible correspondents in Komba and Timbe. The match with Komba -*na* 2SG is, however, not perfect; we would expect †-*nʌ* for this ending. The final syllable of Timbe -*menɔ* 2SG has the right vowel quality, but as I cannot account for the extra first syllable this identification is uncertain. Together, the possible correspondents in Komba and Timbe permit the tentative reconstruction of Proto-Cromwell *-*nɔ* 2SG. In the third person singular, there is a match between Nomu and Komba suggesting the reconstruction of *-*e*.

In the dual and the plural of the different subject medial verb, the Dallman languages show endings that consist of the past tense endings plus an appended vowel. The Nomu past tense endings are former near past tense forms, Kinalaknga and Kumukio mostly have former far past tense forms (cf. Tables 3-41 and 3-42). The first person dual and plural endings of Nomu match the inherited part of the endings of Komba and Timbe, with the exception of the appended vowel, which is missing in Komba and Timbe. In the second and third person dual, the Komba and Kumukio endings match, again with the exception of the appended vowel of

Kumukio. However, Nomu *-oro* 2/3DU shows a different vowel from Kumukio *-ero* 2/3DU, and it is not clear which might be innovative. I tentatively reconstruct the ending **-{o,e}t(o)* 2/3DU to Proto-Cromwell. In the second and third person plural, the ending *-ŋego* of Kinalaknga and Kumukio and the ending *-ŋetɔ* of Selepet can be brought together under a reconstruction **-ŋeto*. These endings are made up of the imperative ending plus the final vowel **-o* (see Table 3-44). Like the imperative ending *-ŋek* 2/3PL, the sequential different subject ending *-ŋego* 2/3PL of Kinalaknga and Kumukio contains an irregular velar stop instead of an alveolar stop. This makes it likely that the different subject ending is a recent extension of the imperative ending. That Komba and Selepet also have second and third person plural endings that derive from the imperative mood paradigm I take to be a case of independent parallel development.

3.2.11 Western Huon

The Western Huon family comprises thirteen languages and consists of two subfamilies which in turn consist of two subfamilies: the Pindiu family and the Sankwep family form the Rawlinson family, the Dallman family and the Kabwum family form the Cromwell family. For a Proto-Western Huon reconstruction, agreement between at least one Rawlinson language and at least one Cromwell language is needed. The subfamilies up to Proto-Rawlinson and Proto-Cromwell have been reconstructed in detail above (3.2.5 through 3.2.10). In this section, these reconstructions are compared to each other. As a rule, only the most conservative language from each of the four second-order subfamilies is cited in the tables. The forms attested in the other languages can be looked up in the preceding sections if necessary.

Table 3-46: Proto-Western Huon near past tense

		1SG	2SG	3SG
pWH	near past	*-al		*-ep, -up
pRawlinson	near past	*-al	*-nek	*-{e,u}p
pPindiu	past	*-al	*-nek	*-ep
Dedua	far past	-ai	-neʔ	-eʔ
pSankwep	near past	[*-ü(ŋ)]	[*C-dük, *V-nük]	*C-üp
Nabak	near past	C-a, V-ja	C-dak, V-nak	C-ep, V-p
pCromwell	near past	*-an		
pDallman	past	*-an	*-{o,e}n	*-{o,e}p
Nomu	past	-an	-on	-op
pKabwum	near past	*V-an, [C-zan]	*V-at, C-zat	[*V-ap, C-zap]
Komba	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap

	1DU	2/3DU	1PL	2/3PL
pWH	*-et	*-ut	*-en	*-e
pRawlinson	*-it	*-(uɣ)ut	*-in	
pPindiu	*-it	*-oɣot	*-in	
Dedua	-iʔ	-oʔ	-iŋ	-i
pSankwep	[*-(l)ut]	*-(l)ut	*-in	[*C-o(ŋ)]
Nabak	-lut	-lut	C-n̩, V-nn	C-o, V-jo
pCromwell	*-et	*-{o,e}t	*-en	*-e
pDallman	*-et	*-{o,e}t	*-en	*-e
Nomu	-et	-ot	-en	-e
pKabwum	*-et, [-zet]	*-(a){e,o}t, [-z(a){e,o}t]	*-en, [-zen]	*-(a)e, [-z(a)e]
Komba	V-et, C-set	V-et, C-set	V-en, C-sen	V-e, C-se

The near past tense endings of Proto-Rawlinson and Proto-Cromwell compare well to each other. With the exception of the second person singular, all near past tense endings can be reconstructed to Proto-Western Huon. For the second person singular, neither a Proto-Cromwell nor a Proto-Western Huon form is reconstructible owing to the divergence of the endings. The first person singular ending pWH **-al* is reflected in the Pindiu, the Dallman and the Kabwum families, only the Sankwep family has lost it. In the third person singular, the Proto-Rawlinson ending matches the Proto-Dallman ending. In both subfamilies there is evidence for **-ep* 3SG as well as **-up* 3SG so that both endings must be reconstructed. In the dual and plural, Dedua has an archaic set of endings, all of them perfectly matching the endings of Nomu. The first person plural ending **-en* is reflected in all four second-order subfamilies, the first person dual ending **-et* in all subfamilies except Sankwep. In the second and third person dual, the Cromwell languages show the ending **-et* as well as **-ot*, but the Rawlinson languages all have a back rounded vowel suggesting the reconstruction of pWH **-ut* 2/3DU. One may wonder whether the reconstruction of Proto-Pindiu **-oɣot* 2/3DU, based on Somba (cf. Table 3-17 in 3.2.5), is correct. Dedua *-oʔ* 2/3DU may just as well go back to **-ot* as to **-oɣot* and the addition of **-oɣ°* to this ending may be an innovation of Somba. The archaic Dedua ending *-i* 2/3PL, recorded by Pilhofer (1928), stands alone in the Pindiu family but can be seen to be old when compared to the matching ending **-e* 2/3PL of Proto-Cromwell.

Table 3-47: Proto-Western Huon present tense

		1SG	2SG	3SG
pWH	present	*-zal	*-zan	*-zap
pPindiu	present	*-zal	*-zan	*-zap
Somba	present	-tsal	-tsan	-tsap
pCromwell	present	[*V-an,] C-zan	[*V-an,] C-zan	[*V-ap,] C-zap
pDallman	present	[*-wan]	*-(z)an	*-(z)ap
Nomu	present	-wan	-zan	-zap
pKabwum	near past	[*V-an,] C-zan	[*V-at, C-zat]	[*V-ap,] C-zap
Selepet	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap

	1DU	2/3DU	1PL	2/3PL
pWH	*-zet	*-zaut	*-zen	*-z(a)e
pPindiu	*-zit	*-za(ɣ)ot	*-zin	
Somba	-tsit	-tsaɣot	-tsin	-tse
pCromwell				
pDallman				
Nomu	[-weret]	[-worot]	[-wenen]	[-wene]
pKabwum	[*V-et,] C-zet	[*V-(a)ot,] C-z(a)ot	[*V-en,] C-zen	[*V-(a)e,] C-z(a)e
Selepet	V-[(a)]it, C-sit	V-awot, C-sawot	V-[(a)]in, C-sin	V-ai, C-sai

The Proto-Western Huon present tense has been well preserved in the Pindiu family and in the Kabwum family, is partially represented in the Dallman family but has no certain reflex in the Sankwep family, although this family does have a present tense (cf. Table 3-24 in 3.2.6). All forms of the paradigm can be reconstructed. The first person singular ending **-zal* is reflected in the Pindiu and the Kabwum families, in the Dallman family it has been replaced by the former far past tense ending. The second person singular ending **-zan* is attested in the Pindiu and the Dallman families. The Kabwum languages have introduced a novel form **C-zat* 2SG, presumably in reaction to the conflation of the first and the second person singular forms after the sound change **-l* > *-n*. The third person singular ending **-zap* is reflected in all three families.

In the dual and plural, there is only agreement between the Pindiu languages and the Kabwum languages. The Dallman languages have replaced these endings with different formations (cf. Table 3-33 in 3.2.8). In the first person dual and plural there is perfect agreement between Proto-Pindiu and Proto-Kabwum, leading to the reconstruction of **-zet* 1DU and **-zen* 1PL. In the second and third person dual, the medial consonant in Somba *-tsaɣot* and Selepet *C-sawot* does not match. A possible solution of this discrepancy is the reconstruction of pWH **-zaut*, assuming that the medial consonant is of secondary origin in both languages. The reflexes of the other Pindiu languages, such as Mongi *-tsaoʔ* 2/3DU, as well as Timbe *T-tat* 2/3DU can be derived from **-zaut* without problems. The intervocalic *-ɣ-* of Somba *-tsaɣot* 2/3DU may have been inserted into the ending owing to the influence of the phonologically similar numeral *jaɣot* 'two'. The intervocalic *-w-* in Selepet *C-sawot* 2/3DU was probably inserted in analogy with the far past tense ending *-owot* 2/3DU. In the second and

third person plural, the Somba ending *-tse* can be combined with Proto-Kabwum **C-z(a)e* under a reconstruction pWH **-z(a)e*. That the vowel *a*, present in Selepet *C-sai* 2/3PL, is missing in Somba *-tse* 2/3PL may be due to an analogical influence of the near past tense ending pWH **-e* 2/3PL on the corresponding present tense ending in Proto-Pindiu.

A comparison of the near past tense (Table 3-46) and the present tense (Table 3-47) shows that the endings of the present tense are made up of the near past tense endings plus a tense marker. For the third person singular I have reconstructed the near past tense ending **-ep ~ -up* and the present tense ending **-zap*. This suggests that the original present tense marker was **-za*, whose vowel supplanted the vowel of the near past tense ending. It preserved its vowel in the second and third person dual and plural forms **-zaut* and **-z(a)e* but lost it through elision in the first person dual and plural forms. The second person singular present tense ending **-zan* must contain the near past tense ending that surfaces as **-{o,e}*n in Proto-Dallman. The same ending can be found in the Kabwum languages, but in that family it has changed its membership from the near past tense to the far past tense (cf. Table 3-41 in 3.2.10). Because the Rawlinson languages have introduced an innovative ending **-nek* 2SG in the near past tense, no bottom-up reconstruction of the Proto-Western Huon second person singular ending is possible. It is possible, however, to infer this ending through internal reconstruction. The Proto-Western Huon near past tense ending of the second person singular must have been **-en ~ un.*

Table 3-48: Proto-Western Huon far past tense and irrealis mood

		1SG	2SG	3SG
pWH	far past	*-mbal		
pRawlinson	far past	*-mbal	*-mban	
pPindiu	irrealis I	*-mbël	*-mban	*-mbap
Somba	irrealis I	-bil[eŋ-buk]	-ban[-buk]	-bap[-puk]
pSankwep	far past	*-ban	*-ban	*-gü(ŋ)
Nabak	far past	C-ban, V-wan	C-ban[an], V-wan[an]	C-ge, V-je
pCromwell	far past	*-mban	*-on, -en	*-op, -ep
pDallman	past		*-{o,e}n	*-{o,e}p
Kinalaknga	past	-mban	-on	-op
pKabwum	far past	*-wan	*-{e,o}n	*-{e,o}p
Selepet	far past	-wan	-on	-op

	1DU	2/3DU	1PL	2/3PL
pWH	*-mbet	*-mb(a)ut	*-mben	*-mbe
pRawlinson	*-mbet		*-mben	*-mbi
pPindiu	*-mbit	*-mba(ɣ)ot	*-mbin	*-mbi
Somba	-bit[-puk]	-baɣot[-puk]	-bin[-buk]	-be[-buk]
pSankwep	*-bït[in]		*-bïn[in]	*-bi[en]
Nabak	C-belin, V-welin	C-bu[n], V-wu[n]	C-benn, V-wenn	C-bien, V-wien
pCromwell	*-mbet		*-mben	*-mbe
pDallman	*-wet	[*-{o,e}t]	*-wen	
Kinalaknga	-wet	-et	-wen	-we[ŋ]
pKabwum	*-wet	*-(o)w{e,o}t	*-wen	*-we
Selepet	-wit	-owot	-win	-wi

		1SG	2SG	3SG
pWH	irrealis	*mbal-ak	*-mb{a,u}n-ak	*-nak
pRawlinson	irrealis			*-nak
pPindiu	irrealis II	*-mbël-ak	*-mban-ak, [*-nak]	*-nak, [*-mbap-ak]
Dedua	irrealis II	-baʟaʔ	-baŋnaʔ	-naʔ
pSankwep	irrealis	[*-bak]	[*-bek]	*C-dak, V-nak
Nabak	irrealis	C-bak, V-wak	C-bek, V-wek	C-dak, V-nak
pCromwell				
Nomu	irrealis	-balak	-b[on]onak	-nak

	1DU	2/3DU	1PL	2/3PL
pWH	*-mbet-ak	*-mbut-ak	*-mben-ak	*-mbe-ak
pRawlinson	*-mbet-ak		*-mben-ak	*-mbi-ak
pPindiu	*-mbit-ak	*-mb(aɣ)ot-ak	*-mbin-ak	*-mbi-ak
Dedua	-biʟaʔ	-boʟaʔ	-binaʔ	-biaʔ
pSankwep	*-bïtïk		*-bïnïk	*-biek
Nabak	C-belek, V-welek	C-buk, V-wuk	C-benek, V-wenek	C-biek, V-wiek
pCromwell				
Nomu	-b[er]erak	-b[or]orak	-b[en]enak	-beak

Most of the far past tense endings of Proto-Rawlinson and Proto-Cromwell have a common origin. The exception is the forms of the second and the third person singular (Table 3-48). As we have seen in the preceding discussion of the near past and the present tense, the Proto-Cromwell far past tense endings **-on ~ *-en* 2SG and **-op ~ *ep* 3SG go back to the Proto-Western Huon near past tense. The original far past tense endings of these two categories have been lost in the Cromwell languages. There is, however, a second set of endings which contain the far past tense endings as a component, to wit the Proto-Western Huon irrealis mood. The irrealis mood is composed of the endings of the far past tense plus

the final suffix *-*ak*. While the irrealis mood is well attested in both Rawlinson subfamilies, it is reflected only in a single Cromwell language, namely Nomu. The comparative evidence for the far past tense and for the irrealis mood allows us to cast two different glances at the endings of the Proto-Western Huon far past tense.

The first person singular ending of the far past tense pWH *-*mbal* is reflected in all four second-order subfamilies. In the irrealis mood, there is a striking match between Dedua -*baʟaʔ* 1SG and Nomu -*balak* 1SG < pWH *-*mbal-ak* confirming this reconstruction. In the second person singular, Proto-Pindiu has the ending *-*mban* in the irrealis I (< far past tense) and *-*mban-ak* in the irrealis II (< irrealis mood). The Nomu irrealis ending -*bononak* 2SG does not fully match the Proto-Pindiu form. First, the final VC part of the original far past component has been reduplicated (*-*bonᵒ* ⇒ -*bononᵒ*). Second, the vowel of this component is *o* rather than *a*. The Nomu reflex therefore points to pWH *-*mbun-ak* 2SG whereas the Pindiu reflexes point to pWH *-*mban-ak* 2SG. The two variants imply different analyses. The form *-*mbun* 2SG projected from Nomu seems be made up of a far past tense marker *-*mb* and the variant *-*un* of the near past tense ending pWH *-*en* ~ -*un* 2SG. The form *-*mban* projected from the Pindiu languages is best analyzed as containing a far past tense marker *-*mba* and the variant *-*en* of the near past tense ending *-*en* ~ -*un* 2SG. Unfortunately, a comparative reconstruction of the third person singular ending of the far past tense is not possible as the Cromwell languages lack any reflex of it. What is more, in the irrealis mood a unique third person singular form pWH *-*nak* is attested in the Rawlinson languages and in Nomu. This form evidently does not contain the corresponding far past ending. We are therefore thrown back on internal reconstruction. The Proto-Pindiu irrealis I forms *-*mban* 2SG and *-*mbap* 3SG must be old as their final part matches the near past endings pWH *-*en* ~ -*un* 2SG and *-*ep* ~ -*up* 3SG even though the former of these endings has been replaced in Proto-Rawlinson. As the Nomu irrealis ending -*bononak* 2SG shows, however, we cannot be sure that the Proto-Pindiu forms reflect the original vowel of these far past endings. The internal reconstruction of the far past endings pWH *-*mbVn* 2SG and *-*mbVp* 3SG must therefore leave the quality of the vowel open.

In the dual and plural, the first person endings *-*mbet* 1DU and *-*mben* 1PL of the far past tense are well preserved in all four second-order subfamilies of the Western Huon family. The ending *-*mbe* 2/3PL is almost as well attested. The evidence for *-*mbet-ak* 1DU, *-*mben-ak* 1PL, and *-*mbe-ak* 2/3PL in the irrealis mood is equally unambiguous, albeit less ample. The Nomu irrealis endings of the dual and the first person plural show the same reduplication of the final VC part of the first component as the second person singular form (*-*bet-ak* 1DU ⇒ -*berer-ak* etc.). This reduplication is no doubt an innovation. If one eliminates it, Nomu -*bororak* 2/3DU perfectly matches Dedua -*boʟaʔ* 2/3DU. I take the Dedua form to be archaic, justifying the reconstruction of pWH *-*mbut-ak* 2/3DU. The Dedua irrealis I form -*baoʔ* 2/3DU, in contrast, has undergone a change common to the whole Pindiu family, to wit the extension of the ending with the vowel *a* (cf. Table 3-19 in 3.2.5). The Pindiu irrealis I forms seem to point to pWH *-*mbaut* 2/3DU. The analogical motivation for the insertion of the vowel *a* into this ending came from the present tense ending Proto-Pindiu *-*za(ɣ)ot* 2/3DU > Dedua -*daoʔ* (cf. Table 3-47). It is not clear whether the Nabak endings *C-bun* 2/3DU of the far past tense and *C-buk* 2/3DU of the irrealis mood support the reconstruction of pWH *-*mbut* and *-*mbut-ak*. The Nabak forms seem to be cognate, but they have undergone truncations that

make it difficult to reduce them to a proto-form. The Selepet far past ending *-owot* 2/3DU, however, clearly supports the reconstruction of pWH **-mbut* 2/3DU.

Like the Proto-Pindiu ending **-mba(ɣ)ot* 2/3DU ⇐ pWH **-mbut*, it is possible that the Proto-Pindiu singular forms **-mban* 2SG and **-mbap* 3SG have been analogically influenced by the present tense endings and changed their vowel to *a*. If so, the Nomu irrealis ending *-bononak* 2SG is the only unaltered reflex we have of the far past tense endings of the second and the third person singular.

Table 3-49: Proto-Western Huon imperative mood

		1SG	2SG	3SG
pWH	imperative	*-mbe	*-Ø	*-uk
pRawlinson	imperative	*-mbe	*-Ø	*-uk
pPindiu	imperative	*-mbë	*-Ø	*-ək
Somba	imperative	-bi	-Ø, [-nəŋ]	C-ək, V-jək
pSankwep	imperative	*-bi	*-Ø	*-ük
Nabak	imperative	C-bi, V-wi	-Ø	C-ak, V-k
pCromwell	imperative	*-mbe	*-Ø	*-ok
pDallman	imperative	*-mbe	[*-no(n)]	*-ok
Nomu	imperative	-be	-no	-ok
pKabwum	imperative	*-we	*-Ø	*-ɔk
Timbe	imperative	-we	-Ø	-ɔk

	1DU	2/3DU	1PL	2/3PL
pWH		*-et	*-ne	*-ŋ(g)et
pRawlinson	*-zi	*-it	*-ne	*-ŋget
pPindiu	*-zi	*-it	*-ni	*-ŋget
Somba	-tsi	-it	[-in]	-get
pSankwep	*-zi	*-it	*-nï	*-git
Nabak	[C-di, V-mdi]	-it	-ne	-it
pCromwell	*-nde	*-et	*-ne	*-ŋet
pDallman	*-nde	*-{o,e}t	*-ne	*-ŋet
Nomu	-de	-ot	-ne	-ŋet
pKabwum	*-re	*-et	*-ne	*-ŋet
Timbe	-re	-et	-ne	-ŋet

The imperative endings of Proto-Rawlinson and Proto-Cromwell are obvious matches, with the exception of the first person dual form (Table 3-49). The first person singular ending pWH **-mbe* and the third person singular ending pWH **-uk* have been retained in all four second-order subfamilies. For the second person singular a zero ending that is reflected in Somba, the Sankwep languages, Selepet, and Timbe must be reconstructed. The material endings that have taken its place in the Pindiu languages, the Dallman languages, and Komba come from the different subject medial verb (cf. Table 3-50). In the first person dual, Proto-

Rawlinson and Proto-Cromwell have the incompatible endings *-*zi* and *-*nde*, respectively. In the second and third person dual there is widepread agreement for the ending pWH *-*et*. Only Nomu and Kumukio show the aberrant ending -*ot* 2/3DU that must have been taken over from the near past tense (cf. Table 3-46). The first person plural ending pWH *-*ne* has again been retained in all four second-order subfamilies. In the second and third person plural, there is a close mismatch of the initial consonant of Proto-Rawlinson *-*ŋget* and Proto-Cromwell *-*ŋet*. It is not clear which of these forms is original and which has undergone an irregular phonological change.

Table 3-50: Proto-Western Huon different subject medial verb

		1SG	2SG	3SG
pWH	different subject	*-mbe	*-nu	*-e
pRawlinson	different subject		*-nu	
pPindiu	different subject	*-mbë		
Dedua	DS sequential	-ba	[-na]	[-u]
Somba	different subject	-mbi, [-al]	-nə[ŋ]	-i
pSankwep	different subject	[*-ma]	*V-nü	[*-mï]
Mesem	different subject	-ma	C-də, V-nə	-m
pCromwell	different subject		*-no	*-e
pDallman	DS sequential	*-mbe	*-no	*-e
Nomu	DS sequential	-be	-no	-e
Kumukio	DS sequential	[-ala]	-no	[-o]
pKabwum	different subject		*-nɔ	*-e
Komba	different subject	[-a(ndʌ)]	-na[(ndʌ)]	-i

	1DU	2/3DU	1PL	2/3PL
pWH				
pRawlinson				
pPindiu	*-zi	*-it	*-ni	*-ŋget
Dedua	[-de]	-eʔ	-ni	-geʔ
Somba	-tsi	[-joɣot]	[-in]	-ŋget
pSankwep				*-mï
Mesem	-m	-m	-m	-m
pCromwell	*-et(e)	*-{o,e}t(o)	*-en(e)	
pDallman	*-ete	*-{o,e}to	*-ene	
Nomu	-ere	-oro	-ene	-e
Kumukio	[-wero]	-ero	[-weno]	-ŋego
pKabwum	*-et		*-en	
Komba	-it[ʌ]	-it[ʌ]	-in[dʌ]	-ne(tʌ)

The different subject medial verb endings of the Western Huon languages are highly diverse, testifying to a large amount of change (Table 3-50). While a convincing

reconstruction of the singular number is nevertheless possible, the same cannot be said for the dual and the plural number. The dual and plural forms are mostly identical with the corresponding imperative mood or near past tense forms and it is not clear which of them have been secondarily transferred to the different subject medial verb.

In the first person singular there is a match between Proto-Pindiu *-*mbë* and Nomu -*be*. Note that pWH *-*mbe* 1SG is at the same time the imperative mood ending (cf. Table 3-49). The second person singular ending pWH *-*nu* is clearly reflected in the Sankwep and the Dallman families. Less certain is the Somba reflex -*nəŋ* 2SG, with an unaccounted final nasal, and the Komba reflex -*na* 2SG, with an unexpected vowel. In the third person singular, Somba -*i*, Nomu -*e*, and Komba -*i* can be united under a reconstruction pWH *-*e* 3SG. The different subject endings pWH *-*nu* 2SG and pWH *-*e* 3SG are unique to the medial verb and do not recur in any final verb tense or mood.

In the dual and plural, there are no straightforward matches across both first order subfamilies. For this reason I abstain from proposing any reconstructions. Proto-Pindiu probably had the same endings in the dual and plural of the different subject medial verb as in the imperative mood. The aberrant second and third person dual and first person plural endings of Somba were taken from the past tense (cf. Tables 3-17 and 3-20 in 3.2.5). The two endings *-*et* 1DU and *-*en* 1PL that can be reconstructed to Proto-Kabwum, on the other hand, are identical with the near past tense forms (cf. Tables 3-37 and 3-40 in 3.2.9). The Nomu dual and plural endings can be analyzed as being composed of the past tense endings plus a final vowel that is a copy of the preceding vowel (cf. Table 3-32 in 3.2.8). Combining the Pindiu and the Cromwell endings just mentioned would be like comparing apples and oranges. There is apparent agreement in the second and third person plural. Here, Kinalaknga, Kumukio, Komba, and Selepet show a different subject ending that is derived from the imperative ending and can hence be compared to the Proto-Pindiu ending. However, the Kinalaknga, Kumukio, and Komba different subject endings are phonologically irregular like the imperative endings, which makes it likely that they were secondarily taken over from the imperative mood. Therefore this apparent agreement is most likely a case of parallel development.

3.2.12 Huon Peninsula

We are now ready to attempt a synthesis of all preceding reconstructions of subject-tense endings. For a Proto-Huon Peninsula reconstruction agreement between reflexes in the two first-order subfamilies, Eastern Huon and Western Huon, is needed. As a comparative lecture of the sections on the Eastern Huon family (3.2.4) and the Western Huon family (3.2.11) reveals, the amount of reconstruction that can be achieved for these two subfamilies is not even. Western Huon is a more tight-knit family than Eastern Huon. The two Kalasa languages Sialum and Ono are genealogically rather distant from the remaining Eastern Huon languages and they are even further removed from the Western Huon languages. At the same time they appear to be conservative. Their person-number formatives have undergone less fusion with the tense formatives than those of the other Huon Peninsula languages. This is likely to be an archaism. The Western Huon languages have largely moved in step and there is no subfamily that lags behind, preserving an earlier state of affairs. As in the reconstruction of Proto-

Eastern Huon and Proto-Western Huon, in the following tables only a selection of reflexes will be given, usually limited to the most conservative language of a subfamily.

Table 3-51: Proto-Huon Peninsula near past tense

		1SG	2SG	3SG
pHP	near past	*-(â)la	*-({a,u})na	
pEH	near past			*-i-ka
pKalasa	near past	*[-ï]-lä	*[-ï]-nä	*-ï-kä
Sialum	near past	-ija	-ina	[-iŋe]
Ono	near past	-ile	-ine	-ike
pTrans-Vitiaz				
Kovai	non-past	[-ap]	[-em]	[-o]
pHuon Tip	near past	[*-mbaʔ]	[*-mëʔ]	*-ikë
Sene	near past	-be[ke]	-me	-ike
pWH	near past	*-al		*-ep, -up
pRawlinson	near past	*-al	[*-nek]	*-{e,u}p
pPindiu	past	*-al	*-nek	*-ep
Dedua	far past	-ai	-neʔ	-eʔ
Somba	past	-al	[-nəŋ]	[-ək]
pSankwep	near past	[*-ü(ŋ)]	[*C-dük, *V-nük]	*C-üp
Nabak	near past	C-a, V-ja	C-dak, V-nak	C-ep, V-p
pCromwell	near past	*-an		*-ep, -op
pDallman	past	*-an	*-{o,e}n	*-{o,e}p
Nomu	past	-an	-on	-op
pKabwum	near past	*V-an, [C-zan]	[*V-at, C-zat]	[*V-ap, C-zap]
Selepet	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap

	1DU	2/3DU	1PL	2/3PL
pHP	*-(a)ta	*-ut	*-(a)na	*-i
pEH	*[-i]-ta	*[-i]-it	*[-i]-na	
pKalasa	*-ï-tä	*-ï-it	*-ï-nä	*[-ï]-i
Sialum	-ita	-i[n]et	-ina	-i[n]e
Ono	-ite	-i[m]it	-ine	-i[m]i
pTrans-Vitiaz	*-tV	*-ut	*-nV	
Kovai	-et	-it	-en	[-ep]
pHuon Tip	[*-mbëtëʔ]		[*-mbënëŋ]	[*-mbiëŋ]
Sene	[-aleke]	[-alike]	-bene	-bie
pWH	*-et	*-ut	*-en	*-e
pRawlinson	*-it	*-(uɣ)ut	*-in	
pPindiu	*-it	*-(oɣ)ot	*-in	
Dedua	-iʔ	-oʔ	-iŋ	-i
Somba	-it	-oɣot	-in	[-ŋget]
pSankwep	[*-(l)ut]	*-(l)ut	*-in	[*C-o(ŋ)]
Nabak	-lut	-lut	C-ṇ, V-nn	C-o, V-jo
pCromwell	*-et	*-{o,e}t	*-en	*-e
pDallman	*-et	*-{o,e}t	*-en	*-e
Nomu	-et	-ot	-en	-e
pKabwum	*-et, [-zet]	*-(a){e,o}t, [-z(a){e,o}t]	*-en, [-zen]	*-(a)e, [-z(a)e]
Selepet	V-[(a)]it, C-sit	V-awot, C-sawot	V-[(a)]in, C-sin	V-ai, C-sai

The near past tense endings of the Kalasa languages and the Western Huon languages clearly have a common origin (Table 3-51). However, the endings are not exact matches of each other and comparing them piece by piece yields no satisfactory results. The following reconstructions are based on inferences taking the whole paradigm into consideration as well as related tense paradigms (Tables 3-52 and 3-53). Reconstructions are possible for all person-number categories with the exception of the third person singular. The Eastern Huon ending **-i-ka* 3SG and the Western Huon ending **-ep ~ -up* 3SG disagree.

The near past tense endings of the Kalasa languages differ in two respects from those of the Western Huon languages. First, they contain an initial suffix **-ï* that can be analyzed as a near past tense marker. No Western Huon language shows any reflex of such a suffix. I assume that it is an innovation and must not be reconstructed to Proto-Huon Peninsula. Second, the Proto-Kalasa endings of the whole singular and the first person dual and plural end in the vowel **ä*. Such a vowel is missing from the corresponding Proto-Western Huon endings, which end in the preceding consonant. Of the two options that the Kalasa languages have added a vowel or that the Western Huon languages have abolished it, the latter is preferable. For if the Kalasa languages had added a vowel to the near past tense endings, one wonders why this did not happen in the second and third person dual and plural. For this

reason, I reconstruct a final vowel to the Proto-Huon Peninsula endings as reflected in the Kalasa languages.

The characteristic consonant in the ending of the first person singular is **l*, retained as such only in Ono and Somba. In the Cromwell languages final **l* regularly turned into **n*. In the second person singular, the characteristic consonant is **n*, as reflected by the Kalasa and the Dallman languages. The second person singular near past tense ending has also been preserved in the Kabwum languages, but there it changed its function to the far past tense (cf. Table 3-14 in 3.2.10). There is a discrepancy between pWH **-al* 1SG and Proto-Dallman **-{o,e}n* 2SG, on the one hand, and Proto-Kalasa **[-i]-lä* 1SG and **[-i]-nä* 2SG, on the other. Apart from the final vowel missing in the Western Huon languages, which has been discussed above, these forms also differ in that the Western Huon languages show a pre-consonantal vowel that is absent from the endings of the Eastern Huon languages. The discrepancy recurs in the forms of the first person dual and plural, where pWH **-et* 1DU and **-en* 1PL stand beside pEH **[-i]-ta* 1DU and **[-i]-na* 1PL. It is not altogether clear whether the pre-consonantal vowel is an innovation of the Western Huon languages. If it is a generalization of an erstwhile stem-final vowel, it is surprising that we find three different vowels in four reconstructible forms. I consider this Western Huon pre-consonantal vowel of varying quality an unsolved problem that remains to be dealt with. To highlight the existence of this problem, I include the Western Huon pre-consonantal vowel as a variable part in the Proto-Huon Peninsula reconstructions.

In the second and third person dual and plural, the Eastern Huon and the Western Huon languages agree in showing endings of the shape **-Vt* 2/3DU and **-V* 2/3PL. However, the qualities of the vowels mismatch. For Proto-Western Huon we must reconstruct **-ut* 2/3 DU and **-e* 2/3PL whereas the Eastern Huon endings are **-it* 2/3DU and **-i* 2/3PL. These endings can only be reconciled under the assumption of analogical changes. The identical vowels in the Eastern Huon endings may be the result of harmonization. Similarly, the vowel quality *e* in the Western Huon ending of the second and third person plural may be the result of a harmonization with the endings of the first person dual and plural. Under these two hypotheses, pEH **-i* 2/3PL and pWH **-ut* 2/3DU reflect the original vowel quality. pEH **-it* 2/3DU (⇐ pHP **-ut*) has taken over the vowel of pEH **-i* 2/3PL and pWH **-e* 2/3PL (⇐ pHP **-i*) has adapted to pWH **-et* 1DU and **-en* 1PL.

Table 3-52: Proto-Huon Peninsula far past tense

		1SG	2SG	3SG
pHP	far past	*-mbâla		
pEH				
pTrans-Vitiaz	far past	*[-i]-mba	*-i-m	
Kovai	non-past	-ip, -ep	-im, -em	-o
pHuon Tip	far past	*-i-mbâ	[*(-i)-mVŋ], *-i-ŋ	*-wëʔ, *-V
Sene	far past	-ba	-ma	-i
pSopâc	far past	*-i-mba		
Migabac	far past	-iba	-iŋ	-weʔ
pKâte-Mape	far past	*-i-mbo	*-mäŋ	*-wäʔ
Wamorâ	far past	i-bo	-maŋ	[-jaʔ]
pWH	far past	*-mbal		
pRawlinson	far past	*-mbal	*-mban	
pPindiu	irrealis I	*-mbël	*-mban	*-mbap
Somba	irrealis I	-bil[eŋ-buk]	-ban[-buk]	-bap[-puk]
pSankwep	far past	*-ban	*-ban	*-gü(ŋ)
Nabak	far past	C-ban, V-wan	C-ban[an], V-wan[an]	C-ge, V-je
pCromwell	far past	*-mban	*-on, -en	*-op, -ep
pDallman	past		*-{o,e}n	*-{o,e}p
Kinalaknga	past	-mban	-on	-op
pDallman	present	*-wan	[*-zan]	[*-zap]
Nomu	present	-wan	-zan	-zap
pKabwum	far past	*-wan	*-{e,o}n	*-{e,o}p
Selepet	far past	-wan	-on	-op

	1DU	2/3DU	1PL	2/3PL
pHP	*-mbata	*-mbut	*-mbana	*-mbi
pEH				
pTrans-Vitiaz	*[-i]-mbät	*[-i]-mbut	*[-i]-mbän	*[-i]-mbu
Kovai	-bet, -bot	-bit	-ben, -bon	-ip, -ep
pHuon Tip	*-i-mbëʔ	*-i-mbüʔ	*-i-mbëŋ	*-i-mbüŋ
Sene	-he	-hi	-be	-bi
pSopâc	*-i-mbeʔ	*-i-mboʔ	*-i-mbeŋ	*-i-mboŋ
Migabac	-ibeʔ	-iboʔ	-ibeŋ	-iboŋ
pKâte-Mape	*-i-mbäʔ	*-i-mbɯʔ	*-i-mbäŋ	*-i-mbɯŋ
Wamorâ	i-baʔ	i-bɯʔ	i-mbaŋ	i-mbɯŋ
pWH	*-mbet	*-mb(a)ut	*-mben	*-mbe
pRawlinson	*-mbet		*-mben	*-mbi
pPindiu	*-mbit	*-mba(ɣ)ot	*-mbin	*-mbi
Somba	-bit[-puk]	-baɣot[-puk]	-bin[-buk]	-be[-buk]
pSankwep	*-bït[in]		*-bïn[in]	*-bi[en]
Nabak	C-belin, V-welin	C-bu[n], V-wu[n]	C-benn, V-wenn	C-bien, V-wien
pCromwell	*-mbet	*-mbot	*-mben	*-mbe
pDallman	*-wet	[*-{o,e}t]	*-wen	
Kinalaknga	-wet	-et	-wen	-we[ŋ]
pDallman				
Nomu	-w[er]et	-w[or]ot	-w[en]en	-w[en]e
pKabwum	*-wet	*-(o)w{e,o}t	*-wen	*-we
Selepet	-wit	-owot	-win	-wi

The Proto-Huon Peninsula far past tense is reflected in the Trans-Vitiaz and the Western Huon languages, but has been lost in the Kalasa family (Table 3-52). The dual and plural forms are well preserved throughout, but in the singular only the first person form can be tentatively reconstructed. I reconstruct **-mbâla* 1SG even though the final vowel of this ending is not reflected in any of the languages that retain it. The vowel would have been retained in the Kalasa languages, which happen to have lost the paradigm. Word final **l* regularly drops in the Huon Tip languages, but it is not clear why it seemingly also disappeared in Kovai. This uncertainty makes the reconstruction questionable. In the second person singular, and even more in the third person singular, there is a great variety of forms in the daughter languages and no match between Eastern Huon and Western Huon can be identified.

A comparison of the dual and plural forms of the far past tense with those of the near past tense (Table 3-51) shows that the far past tense forms contain the near past tense endings as person-number formatives supplemented with a tense marker **-mb(a)*. In the first person, I reconstruct **-mbata* 1DU and **-mbana* 1PL though the final vowel was lost in all Trans-Vitiaz and Western Huon languages. It would have been retained in the Kalasa languages. In the second and third person dual, the Trans-Vitiaz and the Western Huon languages agree in

reflecting **-mbut*. In the second and third person plural, we again find a discrepancy, the Trans-Vitiaz languages reflecting **-mbu* while the Western Huon languages reflect **-mbe*. To reconcile these forms, analogy must be invoked. The Western Huon ending **-mbe* 2/3PL has adapted its vowel to that of the first person endings **-mbet* 1DU and **-mben* 1PL, much as in the near past tense. In the Trans-Vitiaz languages, the original plural ending pHP **-mbi* 2/3PL has been assimilated to the dual ending pHP **-mbut* 2/3DU, yielding Proto-Trans Vitiaz **-mbu.*

Table 3-53: Proto-Huon Peninsula present tense

		1SG	2SG	3SG
pHP	present	*-zâla	*-zâna	
pEH				
Sialum	future irrealis	-zaja	-zana	-zan
pTrans-Vitiaz	irrealis	[*(-i)-na-mba]	[*(-i)-zä-m]	
Kovai	irrealis	-nap	[-nam]	-nam
pHuon Tip	past irrealis	*-i-nâ-mbâ	*-i-nzë-ŋ	*-i-nzë-ʔ
Momare	past irrealis	i-naba	i-nteŋ	i-nteʔ
pWH	present	*-zal	*-zan	*-zap
pPindiu	present	*-zal	*-zan	*-zap
Somba	present	-tsal	-tsan	-tsap
pCromwell	present	[*V-an,] C-zan	[*V-an,] C-zan	[*V-ap,] C-zap
pDallman	present	[*-wan]	*-(z)an	*-(z)ap
Nomu	present	-wan	-zan	-zap
pKabwum	near past	*V-an, C-zan	[*V-at, C-zat]	*V-ap, C-zap
Selepet	near past	V-an, C-san	V-at, C-sat	V-ap, C-sap

	1DU	2/3DU	1PL	2/3PL
pHP		*-zâut		*zâi
Sialum	-zanta	-za[n]et	-zaŋam	-za[n]e
pTrans-Vitiaz	*(-i)-na-mbät	[*(-i)-na-mbut]	*(-i)-na-mbän	[*(-i)-na-mbu]
Kovai	-nabat	-nabit	-naban	-nup
pHuon Tip	*-i-nâ-mbëʔ	*-i-nâ-mbüʔ	*-i-nâ-mbëŋ	*-i-nâ-mbüŋ
Momare	i-nabeʔ	i-naboʔ	i-nabeŋ	i-naboŋ
pWH	*-zet	*-zaut	*-zen	*-z(a)e
pPindiu	*-zit	*-za(ɣ)ot	*-zin	
Somba	-tsit	-tsaɣot	-tsin	-tse
pCromwell				
pDallman				
Nomu	[-weret]	[-worot]	[-wenen]	[-wene]
pKabwum	[*V-et,] C-zet	[*V-(a)ot,] C-z(a)ot	[*V-en,] C-zen	[*V-(a)e,] C-z(a)e
Selepet	V-[(a)]it, C-sit	V-awot, C-sawot	V-[(a)]in, C-sin	V-ai, C-sai

The reconstruction of a Proto-Huon Peninsula present tense is somewhat tentative (Table 3-53). It is based on a comparison of the Sialum future irrealis paradigm with the present tense paradigm of the Western Huon languages. The semantic divergence between these paradigms makes the comparison less than certain. If they can be reconciled, the original paradigm must have had present tense function. The Huon Tip languages have a mood marker *-*nzë* in the second and the third person singular of the past irrealis mood, which may be related to the Sialum future irrealis marker -*za*. However, the person-number formatives of these two Huon Tip irrealis forms do not match those of Sialum and are therefore excluded from further consideration. The Sialum future irrealis endings of the first and the second person singular match the corresponding present tense endings of the Western Huon languages and we can reconstruct pHP *-*zâla* 1SG and *-*zâna* 2SG. In the third person singular we find a person-number formative -*n* in Sialum, but *-*p* in Proto-Western Huon, hence no reconstruction is possible.

In the dual and plural, Sialum shows the first person person-number formatives -*ta* 1DU and -*ŋam* 1PL, which recur in the imperative mood and the different subject medial verb (cf. Tables 3-54 and 3-55), while the person-number formatives of the second and third person -*net* 2/3DU and -*ne* 2/3PL are identical with the corresponding near past tense forms (cf. Table 3-51). The Proto-Western Huon present tense endings all contain the near past tense endings as person-number formatives. Consequently, only the second and third person dual and plural forms of Sialum and Proto-Western Huon can be properly compared to each other. The first person dual endings Sialum -*zanta* and pWH *-*zet* further differ from each other in that the Sialum form seems to contain a mood marker -*zan* rather than -*za* as in the rest of the paradigm. It is not clear whether the additional *n* in this ending has the same origin as the intrusive *n* in the endings of the second and third person dual and plural (cf. Table 3-2 in 3.2.1). This *n* must be subtracted from the Sialum endings of the second and third person dual and plural as it is a recent increment. As in the near past tense, I assume that the second vowel of Sialum -*za[n]et* 2/3DU was analogically changed and Proto-Western Huon *-*zaut* 2/3DU reflects the proto-form pHP *-*zâut* 2/3DU. In the second and third person plural, Sialum -*za[n]e* reflects pHP *-zâi while Proto-Western Huon has analogically changed the final vowel to *e*. The comparison with Sialum suggests that we must reconstruct *-*zae* 2/3PL to Proto-Western Huon, a form reflected by Selepet *c*-*sai* 2/3PL.

Table 3-54: Proto-Huon Peninsula imperative mood

		1SG	2SG	3SG
pHP	imperative	*-mba		
pEH	imperative	*-mba	*-i	
pKalasa	imperative	*-mbä		*-käp
Sialum	imperative	-ba	-i	-kap
pHuon Tip	pres. imperative	*-mbë	[*-ʔ,] *-i	*-inâ, *-ijâ
Sene	pres. imperative	-be	[e-jo]	e-jɔ
pSopâc	pres. imperative	*-mbe		*-(i)na
Momare	pres. imperative	-mpe	i-Ø	i-na
pKâte-Mape	pres. imperative	*-mbä	*-ʔ	*-ino
Wamorâ	pres. imperative	-bɔ	-ʔ	i-no
pWH	imperative	*-mbe	*-Ø	*-uk
pRawlinson	imperative	*-mbe	*-Ø	*-uk
pPindiu	imperative	*-mbë	*-Ø	*-ək
Somba	imperative	-bi	-Ø, [-nəŋ]	C-ək, V-jək
pSankwep	imperative	*-bi	*-Ø	*-ük
Nabak	imperative	C-bi, V-wi	-Ø	C-ak, V-k
pCromwell	imperative	*-mbe	*-Ø	*-ok
pDallman	imperative	*-mbe	[*-no(n)]	*-ok
Nomu	imperative	-be	-no	-ok
pKabwum	imperative	*-we	*-Ø	*-ɔk
Timbe	imperative	-we	-Ø	-ɔk

	1DU	2/3DU	1PL	2/3PL
pHP				
pEH				
pKalasa	*-tä	*-mbit	*-ŋäm	*-mbi
Sialum	-ta	-wet	-ŋam	-we
pHuon Tip	*-inâʔ	*-iniʔ	*-inâŋ	*-iniŋ
Sene	e-nɔ[kɔʔ]	e-ni[kɔʔ]	e-nɔ	e-ni
pSopâc	*-(i)naʔ	*-(i)niʔ	*-(i)naŋ	*-(i)niŋ
Momare	i-naʔ	i-niʔ	i-naŋ	i-niŋ
pKâte-Mape	*-inoʔ	*-iniʔ	*-inoŋ	*-iniŋ
Wamorâ	i-noʔ	i-niʔ	[-kiʔ]	i-niŋ
pWH		*-et	*-ne	*-ŋ(g)et
pRawlinson	*-zi	*-it	*-ne	*-ŋget
pPindiu	*-zi	*-it	*-ni	*-ŋget
Somba	-tsi	-it	[-in]	-get
pSankwep	*-zi	*-it	*-nï	*-git
Nabak	[C-di, V-mdi]	-it	-ne	-it
pCromwell	*-nde	*-et	*-ne	*-ŋet
pDallman	*-nde	*-{o,e}t	*-ne	*-ŋet
Nomu	-de	-ot	-ne	-ŋet
pKabwum	*-re	*-et	*-ne	*-ŋet
Timbe	-re	-et	-ne	-ŋet

In the imperative mood we face the strange situation that there is excellent evidence for one form of the paradigm, but none of the other forms is reconstructible from internal evidence (Table 3-54). The first person singular ending pHP **-mba* has been retained in all Huon Peninsula languages with the exception of Kovai and Borong, which lost the imperative mood. In the second person singular, the tentatively reconstructed Eastern Huon ending **-i* stands beside a zero ending in the Western Huon languages. For the third person singular and the whole dual and plural, no Proto-Eastern Huon reconstruction is possible because the Proto-Kalasa and the Proto-Huon Tip endings mismatch. Surprisingly, the solidly reconstructed Proto-Western Huon endings have correspondents neither among the Proto-Kalasa nor among the Proto-Huon Tip endings. Hence, no Proto-Huon Peninsula reconstruction can be proposed, either, for these person-number categories.

Taking external evidence into consideration, we are able to identify two further inherited imperative mood endings in the Huon Peninsula data given in Table 3-54. The four easternmost Finisterre subfamilies Uruwa, Erap, Wantoat, and Yupna share all three first person forms of the imperative mood, which can be reconstructed as **-ba* 1SG, **-ta* 1DU, and **-na* 1PL (Suter 2012:26). The eastern Finisterre first person dual ending **-ta* has a match in Proto-Kalasa *-tä*, and the first person plural ending **-na* corresponds to pWH **-ne*.

Table 3-55: Proto-Huon Peninsula different subject medial verb

		1SG	2SG	3SG
pHP	different subject	*-mba	*-nu(m)	
pEH	different subject	*-mba		
pKalasa	different subject	*-mbä		*-kï
Ono	different subject	-we	-nom	-ki
pTrans-Vitiaz	different subject	*-mbä	[*-m]	*-mä
Kovai	serializing	-op	-om	-om
pHuon Tip	DS sequential	*-mbë	*-ŋ	*-më
Sene	DS sequential	-be	[-bu]	-me
pSopâc	DS sequential	*-mbe	*-ŋ	*-me
Momare	DS sequential	-mpe	-ŋ	-me
pKâte-Mape	DS sequential	*-mbä	*-ŋ[-täʔ]	*-mä
Wamorâ	DS sequential	-bɔ	-ndɔʔ	-mɔ
pWH	different subject	*-mbe	*-nu	*-e
pRawlinson	different subject		*-nu	
pPindiu	different subject	*-mbë		
Somba	different subject	-mbi, [-al]	-nə[ŋ]	-i
pSankwep	different subject	[*-ma]	*V-nü	[*-mï]
Mesem	different subject	-ma	C-dɘ, V-nɘ	-m
pCromwell	different subject		*-no	*-e
pDallman	DS sequential	*-mbe	*-no	*-e
Nomu	DS sequential	-be	-no	-e
pKabwum	different subject		*-nɔ	*-e
Timbe	different subject	[V-re, T-tere]	-[me]nɔ	[V-mbo, T-to]

	1DU	2/3DU	1PL	2/3PL
pHP		*-mbVt(V)		*-mbi
pEH		*-mbit(a)		*-mbi
pKalasa	*-tä	*-mbit	*-ŋäm	*-mbi
Ono	-te	V-ut, N-bit, T-pit	-ŋem	V-u, N-bi, T-pi
pTrans-Vitiaz	*-mbät(ä)	*-mbit(ä)	*-mbän(ä)	*-mbi
Kovai	-bat	-bit	-ban	-up
pHuon Tip	*-mbëtë	*-mbitë	*-mbënë	*-mbi
Sene	[-ale]	[-alie]	-bene	-bi[e]
pSopâc	[*-mbeʔ]	[*-mboʔ]	[*-mbeŋ]	[*-mboŋ]
Momare	-mpeʔ	-mpoʔ	-mpeŋ	-mpoŋ
pKâte-Mape	*-mbälä	*-mbilä	*-mbänä	*-mbi
Wamorâ	-bɯlɔ	-bilɔ	-bɯnɔ	-bi
pWH				
pRawlinson				
pPindiu	*-zi	[*-it]	*-ni	[*-ŋget]
Somba	-tsi	[-joɣot]	[-in]	-ŋget
pSankwep				[*-mï]
Mesem	-m	[-m]	-m	-m
pCromwell	*-et(e)		*-en(e)	
pDallman	*-ete	[*-{o,e}to]	*-ene	
Nomu	-ere	-oro	-ene	[-e]
pKabwum	*-et		*-en	
Timbe	V-et[ŋe], [T-tetŋe]	-mbela	V-en[ŋe], [T-tenŋe]	-mbi

The evidence for the Proto-Huon Peninsula different subject medial verb is rather fragile; for three out of four reconstructible forms it is limited to one language in either of the two first-order subgroups (Table 3-55). Nevertheless, the correspondences are hardly random. The first person singular ending pHP **-mba* is identical with the corresponding ending of the imperative mood (cf. Table 3-54). It is less widely attested as a different subject ending than as an imperative ending, having been lost in two Western Huon subfamilies, viz. Sankwep and Kabwum. However, there is a perfect match between Proto-Eastern Huon, on the one hand, and Proto-Pindiu and Proto-Dallman, on the other. The second person singular ending pWH **-nu* is unambiguously attested in Mesem *V-nə* 2SG and Proto-Dallman **no* 2SG, hence in both first-order subgroups of the Western Huon family. Ono is the only Eastern Huon language with a corresponding ending. However, Ono *-nom* 2SG contains an additional final bilabial nasal that we do not find in the Western Huon languages. It is not known whether this extra *-m* has anything to do with the Proto-Trans-Vitiaz ending **-m* 2SG. There is, therefore, only a partial match between Ono and Proto-Western Huon and I reconstruct pHP **-nu(m)* 2SG with an optional final nasal. In the third person singular, Proto-Kalasa, Proto-Trans-Vitiaz, and Proto-Western Huon show three different, irreconcilable forms.

In the first person dual and plural, there is such a variety of different forms in the low-level subfamilies of the Huon Peninsula family that no reconstruction is possible. The Proto-Huon Tip dual and plural endings of the different subject medial verb resemble the endings of the far past tense but show an additional final vowel in all but the second and third person plural form (cf. Table 3-52). Kovai has the same set of endings, but it is unclear whether a final vowel has dropped from the endings of the dual and the first person plural or was never present. The Kalasa languages have cognate endings in the second and third person dual and plural while the endings of the first person dual and plural are identical with the imperative mood endings (cf. Table 3-54). Proto-Kalasa *-*mbit* 2/3DU lacks a final vowel. In contradistinction to the far past tense, the Proto-Trans-Vitiaz reflexes of the different subject endings of the second and third person dual and plural point to the vowel *i* rather than *u* in *-*mbit(ä)* 2/3DU and *-*mbi* 2/3PL (cf. far past *-*i-mbut* 2/3DU and *-*i-mbu* 2/3PL). Proto-Kalasa agrees in showing *-*mbit* 2/3DU and *-*mbi* 2/3PL. However, the parallel presence of the vowel *i* in the second and third person dual and plural endings of both subfamilies may be a result of analogy.

In the Western Huon family we find cognate forms only in a single language. The Timbe endings -*mbela* 2/3DU and -*mbi* 2/3PL clearly correspond to the aforementioned Eastern Huon endings. They are isolated even within the Kabwum family. From internal evidence only the first person dual and plural endings *-*et* and *-*en*, which are identical with the near past tense endings, can be reconstructed to Proto-Kabwum. Timbe -*mbi* 2/3PL perfectly matches pEH *-*mbi* 2/3PL, but Timbe -*mbela* 2/3DU differs in its vowels from pEH *-*mbit(a)* 2/3DU. It is striking that both Timbe -*mbela* 2/3DU and Proto-Huon Tip *-*mbitë* 2/3DU have a final vowel, as opposed to the far past tense ending pHP *-*mbut* 2/3DU to which these medial verb endings are doubtless etymologically related. However, the quality of the final vowels in Timbe and Proto-Huon Tip does not match and the presence of such a vowel is not confirmed by the reflexes in the Kalasa languages, which lack it. A further complication is the vowel *e* in Timbe -*mbela* 2/3DU. A rounded back vowel would have been expected in this form if it derives from the far past tense ending pHP *-*mbut* 2/3DU. But that is not the case and I can only note that the first vowels of Timbe -*mbela* 2/3DU and pEH *-*mbit(a)* 2/3DU disagree. The best that can be done is capturing the partial correspondence between these forms with the underspecified reconstruction pHP *-*mbVt(V)* 2/3DU.

3.2.13 Same subject medial verb

The verb endings that were discussed in 3.2.1 to 3.2.12 are inflected for person and number of the subject and accordingly occur in paradigms of seven forms. There is still another set of verb forms to be discussed, the same subject medial verb, which does not vary for person and number (Table 3-56). In addition to switch-reference, same subject medial verbs may also express relative tense and aspect. The Huon Tip languages have the richest system, distinguishing between sequential and simultaneous tense as well as durative aspect, much like the different subject medial verb. Some other languages, like Borong and Kumukio, appear to have only one same subject medial verb suffix. Such a basic same subject suffix is entered in the column for sequential medial verbs in Table 3-56, even though it does not express any particular relative tense or aspect.

Table 3-56: Huon Peninsula same subject medial verb suffixes

	SS sequential	SS simultaneous	SS durative
pHP	*-mu SEQ		
pEH			
pKalasa	*-mu SEQ		
Sialum	[-(ja)ko SEQ], -ma SEQ		
Ono	[V-Ø ~ C-e], [-so SEQ], -mo SEQ		
pTrans-Vitiaz		*-ka SIM	
Kovai		-a SER	
pHuon Tip	[*-tü]	*-ka- DS	*-gu
Sene	-te	[-kuʔ], -ka- DS	[-ka]
Migabac	-lu	[-la], -he- DS	-ʔgu
Momare	-lu	-ha- DS	-ŋku
Wamorâ	-lɯ	[-hɯʔ], -ha- DS	-gu
Mâgobineng	-le	[-kuʔ], -a- DS	-gu
Wemo	-lɔ	[-huʔ], -ha- DS	-ku
Naga	-la	[-kɔʔ], -ka- DS	-gu
Mape	-lu, -lɯ	[-kuʔ, -kɯʔ], -ka- DS	-gu
pWH	*V-m ~ C-mu		
pRawlinson			
Dedua	-ma		-kec-ma
Mongi	-ma		-kec-ma
Tobo	-ma		
Borong	V-ŋ ~ C-ma		
Somba	[V-ba, C-a, N-da]		V-ba mal-a
Mesem	[V-pi ~ C-bi]		
Nabak	[V-mti ~ C-ti]	-mambe	
pCromwell	*V-m ~ C-mo		
Nomu			
Kinalaknga	-m ~ -mom		
Kumukio	-m ~ -mo		
Komba	V-m ~ C-Ø		-ma-ko
Selepet	V-m ~ C-mɔ		-ma
Timbe	V-m ~ C-mɔ	-eine	

The Huon Tip languages share the sequential same subject suffix *-*tü* and the durative same subject suffix *-*gu*. A simultaneous same subject suffix cannot be reconstructed as Sene -*kuʔ* is a loan from an earlier stage of Kâte and Migabac and Momare have no cognate suffix. However, a set of simultaneous different subject medial verb forms containing the

simultaneity marker *-*ka*- was reconstructed in 3.2.2 (cf. Table 3-9). As it turns out, Kovai has a cognate verbal suffix, to be seen in the context of a sentence in (61).

Kovai (Brown 1992:62)

61	*Asoj-a*	*u-pit.*
	shoot-SER	come-PST:3d
	'They came [up the river] shooting.'	

Brown (1992:62) calls the construction in (61) a "concomitant verb phrase". It is characterized by the "serial" suffix -*a* on the first of two conjoined verbs; the second verb is a tense-inflected motion verb. The Kovai suffix -*a* obviously expresses simultaneity of actions and it perfectly matches the Huon Tip simultaneity marker *-*ka*- occurring in different subject medial verbs. Proto-Trans-Vitiaz *-*ka* was a simultaneity marker which may have occurred in same subject as well as different subject medial verbs.

The Cromwell languages share a basic same subject suffix with the allomorphs *V-*m* and *C-*mo*. Both allomorphs are preserved in Kumukio -*m* ~ -*mo* and Selepet and Timbe V-*m* ~ C-*mɔ*. Kinalaknga has extended the postconsonantal allomorph *-*mo* with the postvocalic allomorph *-*m*. Komba has lost the postconsonantal allomorph and uses the bare verb stem instead. For Nomu, no same subject suffix has been recorded. In the Pindiu family, with the exception of Somba, we find a cognate same subject suffix. Significantly, Borong V-*ŋ* ~ C-*ma* shows the same allomorphy as the Cromwell languages. Dedua, Mongi, and Tobo only retain the originally postconsonantal allomorph -*ma*. The reflexes in the Cromwell and the Pindiu languages just discussed permit the reconstruction of a Proto-Western Huon same subject suffix *V-*m* ~ C-*mu*.

The basic same subject suffix of Ono is V-*Ø* ~ C-*e*, i.e. Ono uses the bare verb stem for verbs ending in a vowel as same subject medial verb and the suffix -*e* for verbs ending in a consonant. Both same subject and different subject medial verbs frequently carry the suffixes -*so* or -*mo*. Wacke (1931:171f) states that these suffixes express temporal sequence, whereas medial verbs without them must be interpreted as being closely connected to the action of the following verb. He explicitly denies the existence of simultaneous medial verb forms in Ono. Instead of the suffixes -*so* or -*mo*, in mythological narratives the suffix -*ŋo* can be found (Wacke 1931:173). All three of these suffixes derive from particles. *So* 'and' and *ŋo* 'but, and' serve the functions of coordinating noun phrases and of connecting clauses and sentences (P. Phinnemore 1988). *Mo* 'already' is a frequently used temporal particle that signals the end of an action when appended to a medial verb. The Sialum suffixes -*(ja)ko* and -*ma* appear to have the same functions as Ono -*so* and -*mo*. Like their Ono equivalents, they can be attached to same subject as well as different subject medial verbs. Proto-Kalasa *-*mu*, which can be reconstructed from Sialum -*ma* and Ono -*mo*, was a particle with the meaning 'already' and a medial verb suffix signaling sequentiality or completeness of action. It is hardly a coincidence that Proto-Kalasa *-*mu* matches the postconsonantal allomorph *-*mu* of the Proto-Western Huon same subject suffix. In all likelihood, pWH *V-*m* ~ C-*mu* and Proto-Kalasa *-*mu* go back to a Proto-Huon Peninsula temporal particle that had a well-established use as a marker of sequentiality when suffixed to medial verbs. In Proto-Western Huon, the co-occurrence of this

marker was restricted to same subject medial verbs and it became the basic same subject suffix.

3.3 Conclusion

The different categories of subject-tense endings differ in their diachronic stability. The past tenses turn out to be the most stable, followed by the imperative mood and the different subject medial verb. For these categories it is possible to propose Proto-Huon Peninsula reconstructions, though in no case are all forms of the paradigm recoverable. The majority of near past tense and far past tense endings are well preserved both in the Eastern Huon and in the Western Huon family so that it is possible to safely reconstruct them. For the imperative mood, an almost full set of endings can be reconstructed to Proto-Western Huon, but only two singular endings are reconstructible for Proto-Eastern Huon. Of these, only the first person singular form matches across the two subfamilies. In the different subject medial verb, a full set of endings can be reconstructed to Proto-Trans-Vitiaz, but in the Western Huon family only the three singular forms are reconstructible. Nevertheless, isolated forms that match between Eastern-Huon and Western Huon can be identified so that four out of seven forms of the different subject paradigm turn out to be reconstructible at the highest level.

The reconstruction of a Proto-Huon Peninsula present tense is somewhat speculative as it rests on the equation of the Sialum future irrealis mood with the present tense of Proto-Western Huon. While the present tense is an old formation in the Western Huon languages, it is a young formation both in the Kalasa and in the Huon Tip family, where it can be seen to have arisen from aspectually marked near past tense forms. The future tenses are diachronically far less stable than the past tenses. A near future tense can be reconstructed to Proto-Huon Tip, a future tense to Proto-Pindiu, and partial paradigms of both a near future and a far future tense to Proto-Sankwep. All these future tense paradigms in low-level families are different formations and no higher-level reconstruction is possible. Irrealis mood paradigms can be reconstructed to Proto-Kalasa, Proto-Trans-Vitiaz and Proto-Western Huon, but they do not correspond to each other. The Western Huon irrealis mood is made up of the far past tense endings plus a final suffix. This morphological composition may have enhanced its time stability.

There are several mechanisms that lead to the creation of new subject-tense paradigms. A well-trodden path is the grammaticalization of a verb into an aspectual marker that precedes the subject-tense endings. In a next step, the aspectual paradigm can become a new tense. This happened in the Kalasa family, where former habitual near past tense forms turned into an aspectually neutral present tense. The same development can be inferred for the Huon Tip family. The Proto-Huon Tip present tense marker *-*ŋgâ* is cognate with the Ono verb *ge* 'be, live', which is used to form continuative aspect verb forms. Another frequent mechanism is the addition of a final suffix to the endings of another paradigm. Thus, Dedua created a new present tense by appending the suffix *-*pe* to the endings of the former present tense, which then became a near past tense. The Proto-Kalasa counterfactual mood is made up of the endings of the different subject medial verb and the final suffix *-*darap*. In the case of the Huon Tip near future tense, which is made up of the endings of the present imperative mood and the suffix *-*mü*, the etymology of the final suffix is known. Proto-Huon Tip *-*mü*

comes from the verb **mü* 'say', which suggests that the near future tense paradigm goes back to a syntactic construction involving reported speech. Instead of the addition of a final suffix, end-reduplication can be used to derive new subject-tense endings. This probably happened to the dual and plural endings of the near past tense in Proto-Huon Tip (derived from the far past tense) and to the dual and plural endings of the present tense in Nomu (derived from the Proto-Cromwell far past tense). Finally, an instance of morphologization of a morphophonological alternation has been observed in Nabak. In Pre-Nabak, the endings of the far past tense had two alternants, beginning with a voiced stop after consonant-final verbs and with a nasal after vowel-final verbs (e.g. **C-ban ~ V-man* 1SG). Then the postvocalic alternant was replaced (current far past tense *C-ban ~ V-wan* 1SG) but lingered on in a new tense paradigm (intermediate past tense *-man* 1SG).

Functional shifts and extensions of subject-tense endings frequently occurred in the history of the Huon Peninsula languages. It is more often single person-number endings or subsets of endings that change their function than whole paradigms. A case of a functional shift of a whole paradigm is the irrealis I mood of the Pindiu languages. All endings of this mood go back to the Proto-Rawlinson far past tense; Proto-Pindiu has no far past tense. In the Kabwum family, the far past tense endings of the second and the third person singular descend from the Proto-Western Huon near past tense whereas all other forms of the paradigm continue the Proto-Western Huon far past tense. In Nomu, only the second and the third person singular endings of the present tense continue the Proto-Western Huon present tense whereas the remaining forms of the paradigm come from the Proto-Western Huon far past tense.

Functional extensions can often be seen to apply to the same categories, though they are independent changes. Thus, in Migabac and Momare the dual and plural endings of the far past tense were extended to the different subject medial verb. In Somba, the different subject medial verb paradigm is being assimilated to the past tense paradigm; the endings of the second and third person dual and of the first person plural had already been replaced by past tense forms when Pilhofer (1928) recorded his data, the ending of the first person singular followed later. Extensions in the opposite direction are also attested. The Pindiu languages replaced the past tense ending of the second and third person plural with the corresponding different subject ending and Borong in addition replaced the ending of the first person singular. Another functional extension that has been observed more than once connects the different subject medial verb with the imperative mood. Thus, in Dedua, Mongi, and Tobo the second and the third person singular endings of the imperative mood were replaced by the corresponding different subject endings and in the Dallman languages the different subject ending of the second person singular was extended to the imperative mood.

The Huon Peninsula languages are fertile ground for the study of homonym clashes in inflectional morphology. There are numerous cases in which I found it necessary to invoke the danger of homonymy to explain irregular changes. For instance, Sene regularly lost word-final velar nasals and glottal stops. As a result, the dual and the plural endings of the far past tense should have become homonymous. However, the expected common endings only have plural function in contemporary Sene (*-be* 1PL < **-i-mbëŋ*, *-bi* 2/3PL < **-i-mbüŋ*) and new dual forms have arisen (*-he* 1DU < **-peʔ* ⇐ **-i-mbëʔ*, *-hi* 2/3DU < **-piʔ* ⇐ **-i-mbüʔ*). In the proto-language from which Kumukio and Kinalaknga descend, the second person singular and the

first person plural of the imperative mood became homonymous after the latter ending had changed its vowel (Proto-Dallman *-*ne* 1PL ⇒ Kumukio and Kinalaknga -*no*). This triggered a change in the second person singular where the final consonant -*n*, characteristic of the second person singular in the past and present tenses, was appended to the ending (Proto-Dallman *-*no* 2SG ⇒ Kumukio and Kinalaknga -*non*). The phonological change *-*l* > -*n* rendered the first person singular and the second person singular of the present and far past tenses homonymous in several Western Huon languages. In all cases, the vexing homonymy was abolished. Thus, the present tense endings pWH *-*zal* 1SG and *-*zan* 2SG both became *-*zan* in Proto-Cromwell. The Dallman languages kept this form in the second person singular (Nomu -*zan* 2SG) and replaced it with the original far past tense ending in the first person singular (Nomu -*wan* 1SG). The Kabwum languages kept *-*zan* in the first person singular (Selepet *c*-*san* 1SG) and introduced a novel ending in the second person singular (Selepet *c*-*sat* 2SG). The Proto-Rawlinson far past tense endings *-*mbal* 1SG and *-*mban* 2SG both became *-*ban* in Proto-Sankwep. Both Sankwep languages kept this form in the first person singular (Mesem *c*-*baŋ* 1SG, Nabak *c*-*ban* 1SG) and transformed the ending of the second person singular (Mesem *c*-*bin* 2SG, Nabak *c*-*banan* 2SG).

Both matter borrowing and pattern borrowing can be observed in the history of the subject-tense endings. Matter borrowing is a rare phenomenon; only four clear cases have been witnessed. The Migabac second person singular present imperative ending -*noŋ*, reported by McEvoy (2008) but not by Pilhofer (1928), is a loan from Ono -*nom*. Wamorâ borrowed the first person plural present imperative ending -*kiʔ* from Mape (we would expect †-*hiʔ* in Wamorâ if the ending were inherited). The Sene same subject simultaneous suffix -*kuʔ* was borrowed from an earlier stage of Kâte (there is no final glottal stop in native words in Sene) and later passed on to Mâgobineng (*k* regularly disappears in Mâgobineng). Finally, the Komba second and third person plural imperative ending -*nek* was probably borrowed from Kumukio -*ŋek*. It is unlikely that the irregular change of the final consonant of this ending happened twice independently. It came about in the common ancestor of Kumukio and Kinalaknga (Proto-Dallman *-*ŋet* ⇒ Kumukio-Kinalaknga *-*ŋek*) and then reached Komba through borrowing (note that the place of articulation of the initial nasal in Komba -*nek* has irregularly shifted).

Pattern borrowing can be best observed in Dedua. Dedua replaced the Proto-Pindiu future tense with a new formation that is a calque on the Huon Tip near future tense. No morphemes were borrowed but the pattern of forming the future tense from the present imperative mood endings and the verb root 'say' (cf. Kâte *lo-oʔ-mu* take-PRS.IMP:3s-say 'he will take ' and Dedua *me-u-de* take-PRS.IMP:3s-say 'he will take'). Furthermore, Dedua assimilated its system of tenses and moods to that of the Huon Tip languages. Proto-Pindiu only had a past and a present tense and a single imperative mood. Dedua created a new present tense and now has a tripartite system of far past tense, near past tense, and present tense, just like the Huon Tip languages. It also introduced a future imperative mood and now has two imperative moods, like the Huon Tip languages. Areal diffusion that affected the verb morphology can also be presumed to have taken place within the Cromwell family. The Komba second person singular imperative ending -*nan* (made up of the different subject ending -*na* 2SG and -*n* 2SG from the far past tense) is calqued on Kumukio and Kinalaknga -*non* (see above). It is also hardly a coincidence that Komba, Kumukio and Kinalaknga are the

only Huon Peninsula languages in which the two dual endings of the first and of the second and third person have been conflated. In Komba this happened in the near past, the far past and the past habitual paradigms, in Kumukio and Kinalaknga in the present and the present habitual paradigms. In all cases it is etymologically the first person dual form that was extended to the second and third person dual. Finally, Kovai verb morphology has been strongly influenced by neighboring Oceanic Austronesian languages. An investigation of these contact-induced changes is, however, beyond the scope of this chapter.

4 Case enclitics

4.1 Introduction

The Huon Peninsula languages have a set of phrasal enclitics that mark the relationship of the noun phrase to which they are attached to the predicate of their clause or to another noun phrase. The composition of this set of enclitics is remarkably uniform. All Huon Peninsula languages, with the exception of Kovai, have enclitics for the same moderate number of functions. There is a rhematic ergative enclitic which doubles as an instrumental case. One and the same enclitic has the function of a purposive case if relating to the verbal predicate and of a genitive case if relating to another noun phrase. There is a comitative enclitic expressing accompaniment ('with') and often another enclitic with the opposite meaning ('without'). The locative enclitic encompasses locative as well as allative functions. For the ablative there is a separate enclitic that is added to the locative. The directional enclitic, expressing movement in a certain direction, is also usually attached to the locative enclitic. Some languages have one or two additional case enclitics that are unique or recur only in a limited number of languages. The six types of case enclitic just mentioned, however, are represented in all peninsular Huon Peninsula languages. The one exception is Kovai, which is discussed at the end of this introduction in 4.1.3. The syntax and semantics of the case enclitics of the peninsular languages is described in two sections: In 4.1.1 I discuss the first three of the enclitics mentioned above under the heading "grammatical cases" and in 4.1.2 the remaining three enclitics, called "local cases". In the subsequent section 4.2, a reconstruction of both kinds of case enclitics will be presented.

4.1.1 Grammatical cases

The case enclitic which I generally gloss here as "rhematic ergative" has been given a wide variety of names in the grammars of Huon Peninsula languages, reflecting the fact that it is not a canonical ergative case occurring on all transitive subjects and no intransitive subjects but rather an optional ergative case that can mark transitive subjects as well as, more rarely, intransitive subjects. The label "ergative" is only found in the grammar of Somba (Olkkonen and Olkkonen 1983) and some papers on Ono (P. Phinnemore 1983, 1990). The authors of the grammars of Migabac (McEvoy 2008), Komba (Southwell 1979), Selepet (McElhanon 1972), and Timbe (Foster 1972) call it a "subject" marker, those of the grammars of Ono (Phinnemore and Phinnemore 1985), Kâte (Pilhofer 1933), and Dedua (Ceder and Ceder 1990) an "agent" marker and in the Mongi grammar (Lee and Lee 1993) it is called an "affector" marker. The fact that this case marker interacts with the information structure of the clause is reflected in the labels "topic" in the Borong grammar (Olkkonen and Olkkonen 2000), "actor-topic" in the Mesem grammar (Vanaria and Vanaria 1995), and "focus" in the Nabak grammar (Fabian, Fabian and Waters 1998). The following examples show the use of the rhematic ergative in a simple sentence with a transitive verbal predicate in Ono (1), Somba (3), and Migabac (5).

Ono (Phinnemore and Phinnemore 1985:59)

1	*Maga-ine-ŋo*	*gbe-maike.*
	father-3s:POSS-RH.ERG	3s:OBJ.hit-PRS:3s
	'His father hit him.'	

Ono (Phinnemore and Phinnemore 1985:50)

2	*Pilaŋ-ŋo*	*kitat-nagu-maile.*
	knife-INS	cut-REFL-PRS:1s
	'I cut myself with a knife.'	

Somba (Olkkonen and Olkkonen 1983:69)

3	*Kiam-nəŋ*	*səmbup*	*wataŋgə-jək.*
	dog-RH.ERG	game	hunt-PST:3s
	'The dog was hunting for game.'		

Somba (Olkkonen and Olkkonen 1983:70)

4	*Bim-nəŋ*	*nuŋgu-jək.*
	stick-INS	1s:OBJ.hit-PST:3s
	'He hit me with a stick.'	

Migabac (McEvoy 2008:286)

5	*Howeʔ=koʔni*	*ŋiʔ*	*suguʔne*	*moniʔ=ti*	*hoʔ=ti*	*hole-weʔ.*
	(place.name)=ABL	man	big	one=RH.ERG	stone=INS	hit-F.PST:3s
	'One big man from Howec hit him with a stone.'					

In all Huon Peninsula languages the rhematic ergative enclitic is homonymous with the instrumental enclitic (cf. the examples (2), (4), and (5) for the three languages adduced). This is one of the facts that give me the confidence to subsume markers with such different labels as those quoted above under the umbrella of a rhematic ergative case in spite of the often rudimentary state of the description of their uses. The Migabac example in (5) shows that the rhematic ergative and the instrumental enclitic can co-occur in the same clause. The example further shows that the rhematic ergative marker *=di ~ =ti* is a phrasal enclitic that attaches to the last word of a noun phrase, in this instance *Howeʔ=koʔni ŋiʔ suguʔne moniʔ* 'one big man from Howec'. This property the rhematic ergative enclitic shares with all other case enclitics. The rhematic ergative case appears to be optional in all Huon Peninsula languages, though not all grammars state this explicitly. There are clear examples demonstrating this for Ono and Kâte.

Ono (P. Phinnemore 1982:19)

6	*ŋerep-pae*	*gifo-le*	*gbe-maike.*
	woman-this	son-3s:POSS	3s:OBJ.hit-PRS:3s
	'This woman is hitting her son.'		

Ono (P. Phinnemore 1982:20)

7	*Medep-pae*	*naga-ine-ŋo*	*gbe-maike.*
	boy-this	mother-3s:POSS-RH.ERG	3s:OBJ.hit-PRS:3s
	'This boy, his mother is hitting him.'		

Kâte (Suter 2010:423)

8	*E-me*	*bia?*	*no-le*	*mama?*	*mu-we?:...*
	do-SEQ:DS	soon	1s-GEN	father	say-F.PST:3s
	'Then my father said: ...'				

Kâte (Suter 2010:423)

9	*E-me*	*mama?-nane-tsi*	*mu-we?:...*
	do-SEQ:DS	father-1s:POSS-RH.ERG	say-F.PST:3s
	'Then my father said: ...'		

The pairs of examples in (6) and (7) and in (8) and (9) are near-synonymous sentences that differ in the use of the rhematic ergative. In the Ono sentence in (6) the rhematic ergative is missing from the subject of a transitive clause, showing that the use of this case enclitic is optional. The rhematic ergative is, however, present in the near-synonymous sentence (7). In this sentence, the object noun phrase has been moved to the front of the sentence thereby becoming the topic and the order of the constituents is OAV. In Kâte, the use of the rhematic ergative in a clause with this word order is obligatory (Suter 2010:426). Unfortunately, Phinnemore does not tell us if this is also the case in Ono. Discourse analysis in Kâte showed that the rhematic ergative is preferentially present in clauses with an ellipsed O and with a nominal A while it tends to be absent in clauses with an overt O and with a pronominal A (Suter 2010). This distribution shows that the rhematic ergative is sensitive to the information structure of the clause. The more rhematic a subject is the higher is the likelihood that it is case-marked.

The rhematic ergative occasionally occurs on intransitive subjects, though much more rarely than on transitive subjects. It is here that its information value becomes most conspicuous. Consider the examples in (10) through (13).

Migabac (McEvoy 2008:285)

10	*Ja*	*bowe=di*	*fa-ga?*	*me*	*ŋi?=ti*	*fa-ga??*
	here	devil=RH.ERG	lie-PRS:3s	or	man=RH.ERG	lie-PRS:3s
	'Is this a devil or a man lying here?'					

Mongi (Lee and Lee 1993:75)

11	*Ene-ŋ*	*jo-u*	*ta?-mu.*	*Nene-ŋ*	*wai-wiŋ.*
	2p-RH.ERG	this-LOC	sit-FUT:2p	1p-RH.ERG	leave-FUT:1p
	'You will sit here. We will leave.'				

Ono (P. Phinnemore 1983:15)

12	*Ma-ŋo*	*ari-ke?*	–	*Awasi-ŋo*	*ari-ke.*
	who-RH.ERG	go-F.PST:3s		(name)-RH.ERG	go-F.PST:3s
	'Who went? – Awasi went.'				

Nabak (Fabian, Fabian and Waters 1998:80)

13	*Tam-aŋ*	*gaki-je.*
	dog-RH.ERG	die-F.PST:3s
	'The dog died.'	

Intransitive subjects that stand in contrast with each other need to be marked with the rhematic ergative. This can be seen in the Migabac example in (10) and the Mongi example in (11). In (10) the two nouns *bowe=di* 'devil' and *ŋi?=ti* 'man' are contrasted with each other, in (11) the pronouns *ene-ŋ* 'you all' and *nene-ŋ* 'we all' stand in contrast. These nouns and pronouns all carry the rhematic ergative enclitic even though they are the subjects of intransitive clauses. Their high rhematicity overrides the transitivity. P. Phinnemore (1983:13) noticed that there is often an element of contrastiveness involved in the use of the rhematic ergative in Ono. Suter (2010:433) found that the use of the rhematic ergative on transitive subjects in Kâte is obligatory if they are bound by a focus particle. Another striking example of a highly rhematic context is the question-answer pair in Ono in (12). The interrogative pronoun in the question as well as the personal name in the answer are in focus. This is no doubt the reason why they are marked with the rhematic ergative case.

P. Phinnemore (1983:5) suggested that in Ono the rhematic ergative occurs on intransitive verbs that are controllable by the subject. However, she herself found counterexamples to this claim and I do not think that they can be explained away. In no Huon Peninsula language have I found evidence that agentivity or control plays a role in the use of the rhematic ergative. To the contrary, example (13) from Nabak shows that such a prototypically uncontrollable verb as 'die' can have its subject marked with the rhematic ergative. A similar example has been reported from Kâte (Suter 2010:427). The fragmentary evidence from several Huon Peninsula languages we have seen in (1) through (13) is consonant with my findings for Kâte. The use of the optional ergative in Huon Peninsula languages in general is triggered by high rhematicity of the subject.

There is a second case enclitic that has been given a variety of different names. Seizing one of its functions, the case has been called a "genitive" in the grammars of Migabac (McEvoy 2008) and Dedua (Ceder and Ceder 1990) and a "possessive" case in the grammars of Borong (Olkkonen and Olkkonen 2000) and Somba (Olkkonen and Olkkonen 1983). Stressing other functions, the case was named "Destinativ" in the Kâte grammar (Pilhofer 1933) and "benefactive" in the grammars of Mongi (Lee and Lee 1993), Mesem (Vanaria and Vanaria 1995) and Nabak (Fabian, Fabian and Waters 1998). The remaining grammars give this case more than one label, each capturing a particular function. Thus, in the Ono grammar (Phinnemore and Phinnemore 1985) it is called a "possessive" and "purposive", in the Timbe grammar (Foster 1972) "possessive" and "adverbial" and in the Komba (Southwell 1979) and Selepet (McElhanon 1972) grammars the three labels "possessive", "benefactive" and "causal" are used. The case under discussion has two clearly separable functions that can be

observed in all Huon Peninsula languages with sufficient documentation. They are illustrated in the following pairs of examples from Migabac and Timbe.

Migabac (McEvoy 2008:282)

14	*Na*	*ŋeŋe=le*	*ŋiʔ*	*ago.*
	1s	2p=GEN	man	friend
	'I'm your friend.'			

Migabac (McEvoy 2008:310)

15	*Ai-me*	*gba-ine*	*je*	*haseŋ=ka*	*muʔ=te*
	do-SEQ:3s:DS	younger.brother-3s:POSS	3s	jungle=LOC	vine=PURP
	hike-weʔ.				
	go-F.PST:3s				
	'Then his younger brother went to the jungle for a vine.'				

Timbe (Foster 1972:65)

16	*Toɣo*	*ɔmbɔ*	*sɔmbɔ*	*are-ɣɔt*	*emet*	*gin-ŋ-ɔn*	*kin*
	come	woman	old	that-GEN	house	outside-3s:POSS-LOC	stand
	man-ndo …						
	stay-SEQ:3s:DS						
	'He stood by the side of the old woman's house.'						

Timbe (Foster 1972:37)

17	*Sot-ɣɔt*	*indi-ɔp.*
	food-PURP	cry-N.PST:3s
	'He is crying for food.'	

The same case enclitic has an attributive function in combination with another noun phrase and a purposive function if it depends on the verbal predicate. I glossed the attributive function as "genitive" in the Migabac example (14) and in the Timbe example (16). Pilhofer (1933:44) translates the Kâte attributive construction *mamaʔ-te zoʔzu* (father-GEN tobacco) as 'the tobacco destined for the father' rather than 'father's tobacco', thereby showing that he considers the purposive function basic. While this analysis may be correct, I think that the attributive function is sufficiently distinct to warrant a separate gloss. The attributive construction can be in a paraphrase relationship with a construction involving a pronominal possessive suffix (cf. *mamaʔ-nane* 'my father' and *no-le mamaʔ* 'my father' in the Kâte examples (8) and (9) above). For this reason, I choose the label "genitive" for the case enclitic in attributive function.

The same enclitic has a purposive function if it depends on the verbal predicate. This can be seen in the Migabac example (15) and the Timbe example (17). The purposive phrases *muʔ-te* 'for a vine' (15) and *sot-ɣɔt* 'for food' (17) denote the object desired by the subject referent of the clause, which is the reason of the going and the crying, respectively. A case with such a function is best called a "purposive" case. From a comparative perspective, it is the coincidence of the genitive and the purposive functions that allows us to equate certain case enclitics in different Huon Peninsula languages with each other. In all peninsular languages there is a case enclitic combining these two functions, whether or not it has other

functions in addition. The two functions can also be seen in the following examples from Ono and Nabak.

Ono (P. Phinnemore 1982:4)

18	*Eu*	*menam*	*ea-wane*	*wela-tk-ine*	*ŋei*	*ŋerep*	*sele*
	garden	ripe	that-GEN	owner-DU-3s:POSS	man	woman	old

etke	*ge-koit.*
two	be-F.PST:3d

'The owners of that garden were an old man and woman.'

Ono (P. Phinnemore 1982:2)

19	*ŋei*	*natne*	*edo*	*bilau*	*wane*	*ari-koi.*
	boy	some	3p:RH.ERG	prawn	PURP	go-F.PST:3p

'Some boys went for prawns.'

Ono (Phinnemore and Phinnemore 1985:62)

20	*ŋara*	*mes-iak-ane*	*eu-wo*	*ari-ke.*	
	taro	plant-FUT:3s-PURP	garden-LOC	go-F.PST:3s	

'He went to the garden to plant taro.'

Nabak (Fabian, Fabian and Waters 1998:83)

21	*An*	*temaŋ-gat*	*mka*	*gɔ-gɔt*	*kwiti-ja.*
	man	big-GEN	house	2s-BEN	buy-N.PST:1s

'I bought the important man's house for you.'

Nabak (Fabian, Fabian and Waters 1998:82)

22	*Tep-gat*	*met-a.*
	wood-PURP	go-N.PST:1s

'I went for firewood'

Nabak (Fabian, Fabian and Waters 1998:103)

23	*Ek*	*an*	*bekanaŋ-gat*	*in*	*kunzuŋ-it!*
	3s	man	bad-PURP	2p	run.away-IMP:2p

'Because he is a bad man, you run away!'

In Ono and Nabak, too, we find the genitive function (examples (18) and (21)) and the purposive function (examples (19) and (22)) expressed by the same case enclitic. The enclitic has the additional function of a benefactive case in Nabak, as can be seen from (21). Benefaction is a natural functional extension of a purposive case and is met with in several Huon Peninsula languages, though not in all of them. In particular, this function has not been encountered in any Eastern Huon language. The use of the purposive enclitic with a nominal complement as in (19) and (22) is rarer in discourse than its use with a clausal or sentential complement as in (20) and (23). The complement clause of the purposive enclitic in the Ono sentence (20) has a final interpretation, i.e. the meaning is the same as in the case of a nominal complement as in (19). In many Huon Peninsula languages, however, subordinate

clauses in the purposive case more often have a causal than a final interpretation. The Nabak example (23) illustrates this common meaning.

All peninsular languages have a comitative enclitic, shown in the following examples from Ono, Nabak, and Dedua.

Ono (Phinnemore and Phinnemore 1985:62)

24	*ŋau-ne-rop*	*ge-mamit.*
	husband-3s:POSS-COM	live-PRS:3d
	'She lives with her husband.'	

Nabak (Fabian, Fabian and Waters 1998:83)

25	*Mam-di-mak*	*ke*	*tat.*
	mother-2s:POSS-COM	that	stay[IMP:2s]
	'Stay there with your mother.'		

Dedua (Ceder and Ceder 1990:236)

26	*Mari-a*	*tegi-a*	*wa-ja-goc.*
	leaf-3s:POSS	edge-3s:POSS	thorn-3s:POSS-COM
	'The sides of the leaves have thorns.'		

The comitative phrases in (24) and (25) denote the person together with whom the subject referent performs the action described by the verbal predicate of the clause. The subject inflection of the verb usually agrees with the total number of actors, as in the Ono example in (24). It is, however, also possible for the subject inflection only to register the subject referent without companion, as in the Nabak example (25). The Dedua example in (26) shows the predicative use of a comitative phrase. Huon Peninsula languages use this construction to form adjective-like concepts, such as *waja-goc* 'thorny' in (26). Some languages have a negative counterpart of the comitative enclitic, for instance Kâte *-təmiliʔ* 'without' and Selepet *-bia* 'without'. The origin of the Selepet enclitic in the negation *bia* 'no' is still apparent.

4.1.2 Local cases

So far we have seen three types of case enclitics: ergative-instrumental, genitive-purposive and comitative. The remaining three types of case enclitics generally found in Huon Peninsula languages all have a localizing function. The basic case in this group is the locative case, illustrated in examples (27) through (30) from Kâte and Mongi.

Kâte (Pilhofer 1933:46)

27	*Jəʔ-ko*	*ŋe-kaʔ.*
	tree-LOC	sit-PRS:3s
	'He is sitting on the tree.'	

Kâte (Pilhofer 1933:46)

28 *Hae-o* *la-kaʔ.*
place-LOC go-PRS:3s
'He is going to the village.'

Mongi (Lee and Lee 1993:113)

29 *Hafi* *ama-u* *he-tsaʔ.*
sickness house-LOC sleep-PRS:3s
'He is at the clinic.'

Mongi (Lee and Lee 1993:114)

30 *Iʔ* *imi* *ama-n-u* *keŋ-maʔ.*
man that house-1s:POSS-LOC go-FUT:3s
'The man is going to my house.'

The locative enclitics of all Huon Peninsula languages unite the functions of a locative and an allative case, as can be seen in the pairs of examples above. In (27) and (29) the locative phrase has a locative function in the narrow sense of the term, i.e. it denotes a place where something happens. In (28) and (30) the locative phrase has an allative function denoting the goal toward which the subject referent moves. Whereas locative and allative functions are conflated into the locative case in Huon Peninsula languages, there is a separate ablative case, (31) through (33).

Ono (Phinnemore and Phinnemore 1985:55)

31 *Papia* *urum-go* *ŋino* *sari-mami.*
book house-LOC ABL come-PRS:3p
'They are coming from school.'

Dedua (Ceder and Ceder 1990:213)

32 *Keŋ-geʔ* *nam-ma* *jaka* *hie-a-u-naʔ*
go-3p:DS stand-SS food stringbag-3s:POSS-LOC-ABL

widiʔ-de.
take.out-PRS:3s
'Then standing there he takes food from his stringbag.'

Komba (Southwell 1979:180)

33 *Zʌk* *kamʌn-ʌn* *gʌwʌ* *gʌ-ip.*
3s village-LOC ABL come-F.PST:3s
'He came from the village.'

The ablative case indicates the origin of a movement. It occurs far less frequently in discourse than the locative. Accordingly, it is no surprise that the ablative is morphologically complex. In all three languages in (31) through (33) an ablative enclitic is added to the locative enclitic, which is attached to the last word of the noun phrase. In the grammars of some languages, such as Ono (31) and Komba (33), the ablative enclitic is separated from the

locative enclitic by a word space. Presumably this means that the ablative enclitic carries a word stress. But nothing can intervene between the two enclitics. They combine into one complex grammatical form.

The locative case can also be morphologically complex. This is the case when the referent of the locative phrase is human. Compare the pairs of examples in (34) through (39).

Ono (Phinnemore and Phinnemore 1985:54)
34 *Ge* *mat-ko* *mes-ikene.*
2s village-LOC sit-FUT:2s
'You stay in the village.'

Ono (P. Phinnemore 1990:83)
35 *Mo* *ŋen-an-o* *sari-maike.*
already 1p-GEN-LOC come-PRS:3s
'He is already coming to us.'

Dedua (Ceder and Ceder 1990:83)
36 *Ni* *jaguʔ* *bedzo-u* *kem-bade.*
1s now bush.house-LOC go-FUT:1s
'I am going to the bush house now.'

Dedua (Ceder and Ceder 1990:96)
37 *Ni* *Tieoʔ-ar-u* *kem-bade.*
1SG (personal.name)-GEN-LOC go-FUT:1s
'I will go to Tieoc.'

Komba (Southwell 1979:213)
38 *Zor-en* *tʌk* *nam-in* *t-e.*
that-LOC vine house-LOC sit-N.PST:3p
'They are in prison there.'

Komba (Southwell 1979:173)
39 *Neŋ-gʌr-en* *be* *buŋʌ.*
1p-GEN-LOC taro not
'Our village is without taro.'

In (27) to (30) we saw locative phrases carrying the simple locative enclitic. This is the rule when the locative phrase has an inanimate referent. In the case of a human referent, however, the locative takes a complex form. In the three languages represented in (34) to (39) a locative phrase with an inanimate referent is opposed to a locative phrase with a human referent. It can be seen that the locative enclitic is stacked onto the genitive enclitic in all three languages (Ono (35), Dedua (37), and Komba (39)) when the locative phrase has a human referent. Personal pronouns such as *ŋen-an-o* 'to us' (35) and *neŋ-gʌr-en* 'with us, at our place' (39) do not accept the simple locative enclitic since they always have a human referent. Nouns take the simple or the composite locative enclitic depending on whether they have an inanimate or a human referent. A personal name such as *Tieoʔ* in (37) must of course be provided with the composite locative enclitic. Remarkably, all well documented Huon Peninsula languages

draw the same distinction between inanimate and human locatives. The simple locative enclitic can only be used for inanimate referents whereas human referents require the use of a complex enclitic made up of the genitive and the locative enclitics. The composite locative enclitics of Ono (35), Dedua (37), and Komba (39) are structurally identical, even though neither the genitive nor the locative enclitics of these three languages are cognate with each other.

Ono (Phinnemore and Phinnemore 1985:55)
40 *Mat-ko-ken* *sari-mami.*
village-LOC-DIR come-PRS:3p
'They are coming towards the village.'

Mongi (Lee and Lee 1993:115)
41 *Pindiu-geŋ* *kem-maŋ.*
(place.name)-DIR go-FUT:1s
'I am going toward Pindiu.'

Timbe (Foster 1972:61)
42 *Gimbɔŋe* *kiɔ-n-gen* *ari-ep.*
mountain other-LOC-DIR go-F.PST:3s
'She went towards another mountain.'

The directional enclitic is also usually added to the locative enclitic. This is not always apparent from the data since some descriptions only list the simple directional enclitic and give no example sentences from which it could be seen whether the locative enclitic must precede it. But if there are example sentences, the directional enclitic can usually be seen to co-occur with the locative, as in Ono (40) and Timbe (42). That there is no locative enclitic in the Mongi example in (41) is entirely expected as place names are by themselves locatives and do not take the locative enclitic in locative or allative function, either. In contradistinction to the locative case in its allative function, the directional case denotes movement in a direction, but the place indicated is not necessarily the goal and there is no implication that it is reached. Most languages allow the directional enclitic to be combined with the ablative enclitic. The resultant complex enclitic denotes the direction in which the origin of a movement is to be sought.

4.1.3 Kovai

The one language that does not fit into the picture given above is Kovai, spoken on Umboi island. Kovai has lost all case enclitics. It uses other constructions to express meanings that involve the use of case enclitics in the peninsular Huon Peninsula languages. For instance, there is no trace of a locative or ablative enclitic. Instead, word order is used to express locative relations.

Kovai (Brown 1992:18)

43	*na-g*	*g-imal-o*	*pai?*
	mother-2s:POSS	ASP-stay-NON.PST:3s	house
	'Is your mother at home?'		

Kovai (Brown 1992:18)

44	*Namle*	*pal-e*	*totor*	*pon-on.*
	(personal.name)	get.on.top-PST:3s	car	top-3s:POSS
	'Namle got onto the car.'			

In (43) the locative phrase *pai* 'at home' is a bare noun. It is the position right after the verbal predicate that signals its locative function. Basic locative and allative relations are expressed in this manner by unmarked noun phrases. If the locative relation is of a more specific nature, postposed relational nouns are used as in (44). The locative phrase *totor ponon* 'onto the car' contains the relational noun *pon-* 'top' suffixed with the third person singular possessive marker *-on*. Kovai has a number of relational nouns, often body part terms, that express specific locative relations, among them *pon-on* 'on' (lit. 'its top'), *biz-on* 'next to' (lit. 'its skin'), *rol-on* 'under', *long-on* 'in' (lit. 'its intestines') and *bog-on* 'behind' (lit. 'its back') (Brown 1992:31). Relational nouns of this sort are no innovation of Kovai. They also exist in the peninsular languages (see 4.2.2). However, it is my distinct impression that in Kovai their range of use is wider and they are used much more frequently.

As we have seen in 4.1.2, the peninsular languages differentiate between human and inanimate locatives. Remarkably, we find the same distinction in Kovai.

Kovai (Brown 1992:33)

45	*Itinum*	*ne*	*te-g-em*	*bul.*
	taro.shoot	this	take-go-NON.PST:2s	garden
	'Take this taro shoot to the garden.'			

Kovai (Brown 1992:33)

46	*Itinum*	*ne*	*te-g-em*	*Amariŋ*	*gig-on.*
	taro.shoot	this	take-go-NON.PST:2s	(personal.name)	place-3s:POSS
	'Take this taro shoot to Amaring.'				

Kovai uses different constructions for human and inanimate locatives. In (45) we see the construction we have already met in (43). The inanimate locative phrase *bul* 'to the garden' follows the verbal predicate and is unmarked. In (46), on the other hand, the locative goal is a person. The personal name Amaring cannot form a locative phrase on its own but needs to be followed by the locative noun *gig-* 'place', which only occurs in this construction. Thus, Kovai distinguishes between human and inanimate locatives like the peninsular languages even though the means used are entirely different.

All peninsular languages have a genitive and a comitative enclitic. Kovai has lost both of them. Instead it uses special pronoun forms, as can be seen in (47) and (48).

Kovai (Brown 1992:41)

47	*Ine*	*ge*	*menaŋ*	*joŋ-oŋ.*
	this	pig	food	3p-POSS
	'This is the pigs' food.'			

Kovai (Brown 1992:42)

48	*Jat-aŋ*	*Gima*	*ga-pit.*
	3d-COM	(personal.name)	go-PST:3d
	'He went with Gima.'		

In a phrase meaning 'the pigs' food' the peninsular languages would attach the genitive enclitic to the noun 'pigs'. Kovai uses a special possessive pronoun *joŋoŋ* 'their' instead which follows the unmarked nouns *ge* 'pig' (possessor) and *menaŋ* 'food' (possessed) (47). To express accompaniment, Kovai has a set of comitative pronouns. Rather than attaching a comitative enclitic to the personal name in (48), Kovai uses the comitative pronoun *jataŋ* 'with the two of them' which encodes the total number of people involved just like the subject inflection of the verb.

Kovai has not just lost individual case enclitics that we must assume existed in Proto-Huon Peninsula or in Proto-Eastern Huon but the whole set of them. As we have seen in (43) through (48), other constructions have taken their place. The exception is the rhematic ergative enclitic, which was lost without any replacement. The subject as well as the object noun phrases of Kovai are always unmarked. However, a trace of the former existence of a rhematic ergative case is contained in the personal pronouns *non* 'I' and *gog* 'you'. These pronominal forms go back to Proto-Trans Vitiaz pronouns (cf. Table 2-5 in 2.2.3) which, to judge by the Proto-Huon Tip reflexes **nâni* 'I-RH.ERG' and **gâgi* 'you-RH.ERG', had a rhematic ergative function. After the demise of the rhematic ergative case in Kovai the pronouns *non* and *gog* became unanalyzable basic pronouns replacing Proto-Trans Vitiaz **na* and **ga*.

4.2 Reconstruction

In the preceding section we have seen that the Huon Peninsula languages have six case enclitics with comparable functions. In this section I try to reconstruct common proto-forms (4.2.1) and explore their origin (4.2.2). The results of this comparative study will be discussed in section 4.3.

4.2.1 Huon Peninsula and subfamilies

The case enclitics of the Huon Peninsula languages are presented here in two tables. In Table 4-1 the three grammatical enclitics are compiled, and in Table 4-2 the three local enclitics. At the top of a column the function that these enclitics have is given. As usual, the reconstructions that can be made are given at the top of a column or at the top of a subsection of a column together with the name of the proto-language. Reflexes and lower level reconstructions that are put in square brackets do not derive from the superordinate

reconstruction. Variable parts of a form are enclosed in parentheses. If a case enclitic is deemed to descend from a proto-form with a different function, it is listed both in the column headed by the function it has synchronically and in the column to which it belongs etymologically. In the latter case, a gloss indicating the aberrant function follows the enclitic.

Table 4-1: Huon Peninsula grammatical case enclitics

	ergative-instrumental	genitive-purposive	comitative
pHP	*-ŋu		*kundup
pEH		*-ta	
pKalasa	*-ŋu	*-tä	
Sialum	-ŋa	[-ŋono], -ta COM	[-ta]
Ono	-ŋo	[wane]	-(ko)rop (sg), [-arek (du, pl)]
pHuon Tip	[*-i, *-zi]	*-të	
Sene	-i	-te	[-kɔteʔ]
Migabac	-di ~ -ti	-le ~ -te	[-holeʔ ~ -koleʔ]
Momare	-di ~ -ti	-le ~ -te	[-holeʔ ~ -koleʔ]
Wamorâ	-di ~ -ti	-lɔ ~ -tɔ	[-heʔ]
Mâgobineng	-zi	-lɔ ~ -tɔ	[-heʔ]
Wemo	-tsi	-le ~ -te	[-heʔ]
Naga	-zi	-te	[-keʔ]
Mape	-zi	-le ~ -de	[-keʔ]
pWH	*-ŋu	*-gut	
pRawlinson	*-ŋu	*-gut	[*-buk]
Dedua	-ŋo, -ŋa	[-aʔ], -goʔ COM	[-goʔ]
Mongi	-ŋə, -ŋəŋ, [-nəŋ]	[-aʔ], -guʔ COM	[-guʔ]
Tobo	-ŋən, [-niŋ][10]	[-wat], -gu COM	[-gu]
Borong	[-noŋ]	[-waa(noŋ)]	-wo
Somba-Siawari	-ŋən, [-nəŋ]	-gə(t)	-buk
Mesem	-ŋa, [-ga, -ja]	-gə(t)	-bə(k)
Nabak	-aŋ	-gat ~ -jet	-mak
pCromwell	*-ŋu	*-gut	*undup
Nomu	-ŋo	-got	-dop, -zop
Kinalaknga	-ŋo	-got	-ndup
Kumukio	-ŋo	-got	[-gut]
Komba	-ŋʌ, [-andʌ]	-ɣʌt	[sot, -ot]
Selepet	-ŋe	-ɣɔt	orop, [-ŋɔit]
Timbe	-ŋe, [-ande]	-ɣɔt ~ [-aet]	olop

[10] The Tobo ergative-instrumental enclitic *-niŋ* appears in the data McElhanon collected in Lalan village in 1968, the form *-ŋən* is given by Mankins (2012).

The ergative-instrumental case pHP *-ŋu is well attested in the Western Huon family and is also reflected in Sialum and Ono of the Eastern Huon family (Table 4-1). The Huon Tip languages stand apart. They have introduced a new ergative-instrumental enclitic *-zi which is reflected by all languages except Sene. The Sene enclitic -i may have been abstracted from the ergative forms of the personal pronouns which all ended in °i (cf. Table 2-5 in 2.2.3), or it may be a relic form. Most of the reflexes of *-ŋu point to the high back rounded vowel *u in this enclitic. But the vowel in Selepet and Timbe -ŋe is aberrant. If the hypothesis is correct that the vowel of the first and the second person singular pronouns in these languages was assimilated to the ergative enclitic (Selepet and Timbe nə 'I' < *nu(-ŋu) < *ne(-ŋu), cf. 2.2.2), then the introduction of a front vowel in this enclitic must be a recent sporadic sound change. It is therefore unlikely that there is a connection between the Dedua variant -ŋa (said to be preferred in some villages whereas others prefer -ŋo (Ceder and Ceder 1990:107)) and Timbe and Selepet -ŋe. Both language groups have unrounded the vowel of the enclitic *-ŋu independently. The Nabak reflex -aŋ has lost the final vowel like the personal pronoun neŋ 'I' < *nu-ŋu (cf. 2.2.2).

In the Pindiu languages different ergative enclitics can be found in different morphological contexts or in different dialects. For Mongi, Lee and Lee (1993:101) state that the ergative enclitic has the dialectal variants -ŋə, -ŋəŋ and -nəŋ. The first variant, -ŋə, agrees with Dedua -ŋo and goes back to pHP *-ŋu. The last variant, -nəŋ, has cognates in Tobo -niŋ, Borong -noŋ and Somba-Siawari -nəŋ. Homonymous enclitics serve as locative case in Borong and Somba-Siawari (cf. Table 4-2 below). The Mongi variant -ŋəŋ corresponds to Tobo -ŋən and Somba-Siawari -ŋən < Proto-Pindiu *-ŋən. In the last mentioned language, the ergative enclitic -ŋən occurs on the personal pronouns whereas nouns are followed by -nəŋ. Proto Pindiu *-ŋən can be analyzed diachronically as a composite of two morphemes. The first is the old ergative enclitic *ŋu, the second recurs in the ergative forms of the personal pronouns of Dedua, Mongi and Tobo, cf. the ergative form of the first person plural pronoun Dedua nen-eŋ (basic pronoun neni), Mongi nen-eŋ (nini) and Tobo nen-ən (nini). This pronominal ergative marker ultimately goes back to the pWH locative enclitic *-un (see Table 4-2 below). In the Pindiu family *-un shifted its function to the ergative case and was used to reinforce the old ergative enclitic *-ŋu. Proto Pindiu *-ŋən can thus be analyzed historically as a composite of the pWH ergative-instrumental enclitic *-ŋu and the pWH locative enclitic *-un.

In several cases the comitative enclitic of one language matches the genitive-purposive enclitic of others. The historical connection behind this correspondence is most likely an extension of the function of the genitive-purposive enclitic to the comitative case. Such an extension can be seen in Kumukio, where the genitive-purposive enclitic is -got and the comitative enclitic is -gut. It is not clear whether the different notation of the vowel in these forms is real or only a notational inaccuracy. At any rate, the two case enclitics are etymologically identical. In the closely related languages Nomu and Kinalaknga, no functional extension of the cognate genitive-purposive enclitic -got has taken place, rather these languages preserve the old comitative enclitic Proto-Cromwell *undup. In the Pindiu languages Dedua, Mongi, and Tobo the orginal genitive-purposive enclitic, reconstructible as Proto-Rawlinson *-gut, has shifted its function to become a comitative case, thereby replacing the old comitative enclitic Proto-Rawlinson *-buk. Another form *-wat took the place of the

genitive-purposive enclitic after the shift. The same happened in Sialum. The Sialum comitative enclitic *-ta* perfectly matches the genitive-purposive enclitic **-të* that can be reconstructed for the Huon Tip family, allowing us to reconstruct a genitive-purposive enclitic **-ta* for the Eastern Huon family. The enclitic **-të* has developed different postvocalic and postconsonantal allomorphs in most Huon Tip languages after the sound change **VtV > VlV*.

No genitive-purposive enclitic can be reconstructed to the top level of Proto-Huon Peninsula as the two first-order subfamilies reflect irreconcilable forms: pEH **-ta* stands opposite pWH **-gut*. The latter etymon has been retained by almost all Western Huon languages, only Borong lacks a reflex. In the Pindiu family, Somba-Siawari is the only language that keeps **-gut* in its orignal function as a genitive-purposive case marker; Dedua, Mongi and Tobo have shifted the function to the comitative case. In Somba-Siawari and in Mesem there is a tendency to drop the final *-t* in speech. The same irregular phonological development has affected Tobo *-gu*.

The comitative marker pHP **kundup* is reflected in the Eastern Huon language Ono and the Western Huon languages Nomu, Kinalaknga, Selepet, and Timbe. In Ono, the enclitic has the form *-korop* after voiceless stops and *-rop* after vowels, both coming from **-korop*. The initial *k-* of this enclitic lacks a counterpart in the Western Huon languages, which reflect **undup* instead. This is an unsolved phonological problem. We can be sure that **kundup*, based on Ono *-(ko)rop*, is the correct reconstruction as this etymon has cognates in two Finisterre languages: Kutong (Uruwa family) *kundup* 'all, every, altogether' and Tuma (Wantoat family) *kundup* 'everybody, all, everything' (for the meaning cf. example (60) in 4.2.2). Ono *-(ko)rop* is used with nouns and singular personal pronouns; dual and plural personal pronouns take the comitative enclitic *-arek* (Phinnemore and Phinnemore 1985:38). The Nomu and Kinalaknga reflexes *-dop* and *-ndup* show that this word must be reconstructed with intervocalic **-nd-*. The cognate is an independent word rather than an enclitic in Selepet and Timbe. In Selepet, it can change its position from after to before a noun phrase as in *orop jeŋi-ɔk* 'only with them' (McElhanon 1970d:33). This positional variability speaks for the reconstruction of an independent word rather than a bound enclitic.

The Huon Tip languages have lost pHP **kundup* and no common comitative enclitic is reconstructible for them. In the Western Huon family, **kundup* is only reflected in the Cromwell subfamily whereas the Rawlinson subfamily has replaced it with **-buk*. Borong *-wo* and Somba-Siawari *-buk* (Pindiu family) agree with Mesem *-bɘ(k)* (Sankwep family), permitting the reconstruction of Proto-Rawlinson **-buk*. The Nabak cognate *-mak* seems to have irregularly changed the initial *b-* to *m-*. This is no doubt the outcome of a former morphophonological alternation between **-bak* after consonants and **-mak* after vowels, which has parallels in the verb morphology. The postconsonantal allomorph **-bak* was then given up in favor of **-mak*.

In Table 4-2 the local case enclitics of the Huon Peninsula languages are shown. The locative enclitic shows an unusual allomorphy in the Eastern Huon languages. Of the two allomorphs Ono *-wo ~ -ko* and Migabac *-wa ~ -ka* the first occurs after vowels, the second after stops. There is no regular morphophonological relationship between *V-wV* and *C-kV* in either language and it is unclear how such an alternation might have arisen. That it can be found in the Kalasa family as well as the Huon Tip family is a strong indication for a common origin

of this case enclitic despite the discrepancy of the quality of the vowel reflected in the two subfamilies.

Table 4-2: Huon Peninsula local case enclitics

	locative	ablative	directional
pHP			*-LOC-ken
pEH	*-w{a,u} ~ -k{a,u}		
pKalasa	*-wu ~ -ku	*-wu ŋinu ~ -ku ŋinu	*-wu-ken ~ -ku-ken
Sialum	-wa	-wa-ŋina	-wa-ken
Ono	-wo ~ -ko	-wo ŋino ~ -ko ŋino	-wo-ken ~ -ko-ken
pHuon Tip	*wâ ~ -kâ		[*-wâ-bëʔ ~ -kâ-bëʔ]
Sene	-wɔ ~ -kɔʔ	-wɔ-ni ~ -kɔ-ni	[-beʔ[11]]
Migabac	-wa ~ -ka	-wa-ʔni ~ -ka-ʔni	[-haiʔ]
Momare	-wa ~ -ka	-wa-ʔni ~ -ka-ʔni	-beʔte[12]
Wamorâ	-o ~ -ko	-o-nɔʔ ~ -ko-nɔʔ	[-peʔ]
Mâgobineng	-o	-o-nɔʔ	[-peʔ]
Wemo	-o ~ -ko	-o-neʔ ~ -ko-neʔ	-peʔ
Naga	-o ~ -ko	-o-neʔ ~ -ko-neʔ	-beʔ
Mape	-o ~ -go	-o-neʔ ~ -go-neʔ	-beʔ
pWH	*-un		*-un-ken
Dedua	[-u ~ -fu], -eŋ ERG	-u-naʔ ~ -fu-naʔ	[-u-bi]-geŋ
Mongi	[-u, -iguʔ], -eŋ ERG, [-ŋ]əŋ ERG	-u-neʔ, -iguʔ-neʔ	[-iguʔ]-geŋ
Tobo	[-u, -igu], -ən ERG, [-ŋ]ən ERG	-u-nek[13], -igu-gok	-gen
Borong	[-noŋ]	-ga	[-waa]-geŋ
Somba-Siawari	[-e, -nəŋ, -gər-eŋ], -an ERG, [-ŋ]ən ERG	-e-jək, -nəɣ-ək, -gər-eŋ-(n)ək	[-nəŋ gərə]-ken
Mesem	[-e]	-a-gət-n	[-ne]
Nabak	-en, -an	-gat-naŋ(-en)	[-(e)set]
Nomu	[-a]	-a-got	[-a]-ken
Kinalaknga	[-a]	-a-ken-got	[-a]-ken
Kumukio	[-a]	-a-ken-got	[-a]-ken
Komba	-(j)ʌn, -in	-ʌn gʌwʌ	-ʌn-gen
Selepet	-ɔn ~ -en	-ɔm-bɔ, -ɔn-gem-bɔ	-ɔn-gen ~ -en-gen
Timbe	-ɔn	-ɔn-ba, -ɔn-gen-ba	-ɔn-gen

11 The directional forms of the Huon Tip languages are made up of the locative enclitic followed by the directional enclitic, e.g. Kâte *-o-peʔ ~ -ko-peʔ.* In his survey data, Pilhofer (1928:299) omits the locative enclitic and only cites the directional enclitic.

12 This form was recorded by McElhanon. The form *-beteʔ* given by Pilhofer (1928:299) seems to be a typographical error.

13 Locative *-u* and ablative *-u-nek* appear in the data collected by McElhanon in Lalan village in 1968. Mankins (2012) has locative *-igu* and ablative *-igu-gok*.

The Huon Tip languages point to the vowel *a*, the Kalasa languages to the vowel *u* in Proto-Eastern Huon. I unite these reflexes under the reconstruction pEH *-w{a,u} ~ -k{a,u}*. Sialum seems to have given up the allomorphy. In the data there is only evidence for the allomorph *-wa* and for a locative enclitic *-o* whose distribution is unclear. In the Huon Tip family, the allomorph *-wâ* is reflected with initial *-w- in Migabac, Momare and Sene; in the other languages this sound has disappeared.

In the Western Huon family there is a wide variety of locative enclitics none of which matches the Eastern Huon reconstruction. Closely related languages have introduced new locative enclitics that have no wider connections. The enclitic *-u* is common to Dedua, Mongi, and Tobo; the Dallman languages Nomu, Kinalaknga, and Kumukio share an enclitic *-a*. The origin of both these innovative locative markers is obscure. Borong *-noŋ* only has a counterpart in Somba-Siawari *-nəŋ*. As we have seen above (Table 4-1), these enclitics double as ergative-instrumental markers. An origin of this cognate is suggested in (56) of 4.2.2. The locative case variant Mongi *-igu?*, Tobo *-igu* is a recent innovation. It derives from the comitative enclitic Mongi *-gu?*, Tobo *-gu, w*hich has absorbed the third person singular pronoun *i* 'he, she' to which it was often attached.

The Western Huon locative enclitic that must be old is only retained in Nabak *-en* (Rawlinson family) and in Komba *-ʌn*, Selepet *-ən*, Timbe *-ən* (Cromwell family). The forms just given can be united under a proto-form pWH *-un*. Exactly the same form occurs as an ergative marker on the personal pronouns of the Pindiu languages Dedua, Mongi and Tobo, cf. the first person plural forms Dedua *nen-eŋ*, Mongi *nen-eŋ* and Tobo *nen-ən*. The Somba-Siawari ergative allomorph *-an* occurring after possessive suffixes looks like another cognate. The same enclitic *-un* is probably also contained in the diachronically complex ergative enclitic *-ŋən < *-ŋu-un* found in Mongi, Tobo, and Somba-Siawari (cf. Table 4-1). In the Pindiu languages, *-un* has thus assumed an ergative function. Since we can reconstruct a Proto-Western Huon ergative-instrumental enclitic *-ŋu, it is likely that pWH *-un* was originally a locative enclitic that shifted its function to the ergative case in the Pindiu languages.

The ablative is generally expressed by a complex enclitic made up of the locative enclitic followed by the ablative enclitic proper. As for the ablative enclitic, we note a possible match between Wamorâ and Mâgobineng *-nə?* and Wemo, Naga, and Mape *-ne?*, on the one hand, and Dedua *-na?*, Mongi *-ne?*, and Tobo *-nek*, on the other hand. However, the three aforementioned Pindiu languages are known to have borrowed a significant amount of vocabulary from the Huon Tip languages. We may therefore suspect that the ablative enclitic, too, has been borrowed. In fact, the discrepancy between the vowel of the ablative enclitic of Dedua and that of Mongi and Tobo is best explained by borrowing. While Dedua *-na?* has been borrowed from Wamorâ *-nə?*, Mongi *-ne?* and Tobo *-nek* are copies of Mape *-ne?*.

There are tantalizing bits of evidence in Somba-Siawari that call the borrowing explanation just given into question. Olkkonen (1990:10) gives the ablative enclitics *-nəɣək* and *-ejək*. He analyzes them as being composed of the locative enclitics *-nəŋ* (occurring after nouns) or *-e* (occurring after possessive suffixes) and a limiter enclitic *-ək*[14]. While this is a

[14] Olkkonen identifies the ablative enclitic *-ək* with the enclitic focus particle *-ək* 'only' which is probably etymologically unrelated.

plausible analysis of *-ejək*, the enclitic *-nəɣək* seems to contain an initial part *-nək* rather than *-nəŋ* as *-ɣ-* morphophonemically alternates with *-k* rather than *-ŋ*. Confirmation for an enclitic *-nək* comes from the data McElhanon collected in 1968. The pronominal form *neŋ-gər-eŋ-nək* 'from us' he recorded consists of the pronominal root *nen*, the genitive suffix *-gət*, the locative allomorph *-eŋ* which only occurs in the context of the genitive suffix, and an ablative enclitic *-nək*. However, the complex human ablative enclitic of this pronominal form appears in Olkkonen's descriptive work as *-gər-eŋ-ək*, with the same ablative enclitic *-ək* as in *-ejək*. Pilhofer (1928:299) agrees with Olkkonen in giving *-ək* as the general ablative enclitic. The form *-nək* McElhanon recorded must therefore be considered uncertain. It may be an archaism, or it may be a transcription error. McElhanon's ablative enclitic *-nək* bears an uncanny resemblance to Tobo *-nek*, though the vowels do not match. If we consider these forms cognate, we would have to give up the idea that Tobo *-nek* is a loan from Mape, for Somba-Siawari does not take part in the borrowing relationship with the Huon Tip languages. But the status of Somba-Siawari *-nək* is dubious. Furthermore, reconciling a presumed archaic form *-nək* with the ablative enclitic *-ək* attested by Olkkonen and Pilhofer would require considerable ingenuity. Weighing all the difficulties, I consider it likely that the resemblance between Somba-Siawari *-nək* and Tobo *-nek* is either due to chance or illusory.

As the only correspondence across the first-order divide between the Eastern Huon and the Western Huon family is due to borrowing, no ablative enclitic can be reconstructed to Proto-Huon Peninsula. Apparently, the ablative enclitic was subject to frequent replacement so that there is now a plethora of unrelated forms across the family. The Kalasa languages Sialum and Ono share an ablative form **ŋinu* which was a phonological word if the word space in Ono orthography can be so interpreted. The Huon Tip languages show the two forms **-ʔni* and **-nëʔ* which do not lend themselves to a common reconstruction. The Pindiu languages have been discussed in detail above. The Sankwep languages Mesem and Nabak show the enclitic **-güt* in their complex ablative enclitics, followed by the third person singular possessive suffix. The enclitic **-güt* is homonymous with the genitive-purposive enclitic (cf. Table 4-1). Unusually, in Nabak *-gat-naŋ(-en)* the locative enclitic *-en* occurs optionally at the end rather than at the beginning of the complex enclitic. In the Dallman languages, too, the ablative enclitic contains a component that is homonymous with the genitive-purposive enclitic *-gɔt*. There even seems to be a match between the locative component of Mesem *-a-gɔt-n* and Nomu *-a-gɔt*, suggesting a common proto-form pWH **-a-gut*. However, the locative enclitic *-a* of Nomu *-a-gɔt* is in all likelihood an innovation replacing pWH **-un*. The match of Nomu *-a* with the etymologically obscure *-a* of Mesem appears therefore to be fortuitous. The Komba form *-ʌn gʌwʌ* contains the locative enclitic *-ʌn* < pWH **-un*. The second component *gʌwʌ* can perhaps be analyzed as being made up of the genitive-purposive enclitic *-ɣʌt* plus an ablative enclitic *-wʌ* that has cognates in Selepet *-bɔ* and Timbe *-ba*. If this analysis is correct, the Komba ablative form may descend from pWH **un-gut,* which is the best candidate for a Western Huon proto-form. Unfortunately, it lacks confirmation from any other Western Huon language. The Selepet and Timbe complex ablative enclitics can contain the directional enclitic *-gen* in addition to the ablative enclitic *-bɔ* or *-ba.* It is not clear whether the complex enclitics with and without directional marker are synonymous or differ in their meaning. In the survey data, the complex ablative enclitic *-a-ken-gɔt* of the Dallman languages Kinalaknga and Kumukio also contains the directional

enclitic *-ken*. It is not known whether an ablative enclitic without the directional marker corresponding to the simpler Nomu form *-a-got* also exists in these languages.

The directional case, too, is composed of the locative enclitic in addition to the directional enclitic proper. No Proto-Huon Peninsula locative enclitic is reconstructible, but for the directional enclitic there is good evidence that it was **-ken*. There is a straightforward match between *-ken* in Sialum and Ono (Eastern Huon), on the one hand, and *-ken* in Nomu, Kinalaknga and Kumukio (Western Huon), on the other. The five languages just referred to retain intervocalic pHP **-k-* as *-k-*. The Kabwum languages Komba, Selepet, and Timbe lenite **-k-* to *-ɣ-*. In these languages, the expected reflex *-ɣen* of the directional enclitic regularly surfaces as *-gen* after the nasal consonant of the preceding locative enclitic. The reflexes in Dedua, Mongi, Tobo, and Borong point to **-gen*. The complex directional enclitic *nəŋ gərə-ken* of Somba-Siawari must come from an earlier form **nəŋ gərəT-gen*, hence it also points to Proto-Pindiu **-gen*. The expected form would have been †*-ɣen*. We may suspect that morphophonological processes similar to those in the Kabwum languages are responsible for the aberrant reflex of the initial consonant in the Pindiu languages. The Huon Tip languages have replaced **-ken* with **-bëʔ*, reflected in Momare, Wemo, Naga, and Mape. Wamorâ and Mâgobineng *-peʔ* are borrowings from Wemo, the expected inherited form would have been †*-bəʔ*. Sene *-beʔ*, too, with unexpected final glottal stop, is probably borrowed.

4.2.2 Origin of case enclitics

In 4.2.1 I reconstructed some case enclitics of Proto-Huon Peninsula and its daughter families. The reconstructions were arrived at by comparing the case enclitics of all daughter languages. Now I want to cast the net wider and look for etymologically related forms that are not case enclitics.

For Proto-Huon Peninsula I reconstructed the ergative-instrumental enclitic **-ŋu* (Table 4-1) which is reflected in Ono as *-ŋo*. Now Ono also has a particle *ŋo* that is used in clause and sentence combining (49) and to coordinate noun phrases (50).

Ono (Phinnemore and Phinnemore 1985:87)

49	*Nege*	*eŋe*	*mat-ko*	*mer-e*	*bulamakau*	*urata*	*ma-ki*	*na*
	Nege	3s	village-LOC	stay-SS	cattle	work	make-DS:3s	1s

papia urum-go	*ge-kole,*	*mo*	*gboe-maike.*	*ŋo*
school-LOC	live-F.PST:1s	already	finish-PRS:3s	but

ŋon-se	*eŋe*	*wesi*	*urata*	*gi-ke-o*	*ŋino*
younger.brother-1d:POSS	3s	money	work	live-N.PST:3s-LOC	ABL

mo	*gboe-ki*	*mo*	*berek mama*	*ge-maike*	*jale.*
already	finish-DS:3s	already	driver	live-PRS:3s	like.this

'While Nege stayed in the village doing cattle work, I went to school and it is already finished. But our younger brother, when he had finished doing money work, he was already a driver like this.'

Ono (P. Phinnemore 1982:2)

50	*Akolak*	*ŋo*	*biaŋa*	*er-ane*	*don*	*kisi*
	cockatoo	and	flying.fox	3d-GEN	speech	story

'A Story about Cockatoo and Flying Fox'

In (49) the particle *ŋo* 'but' stands at the beginning of the second sentence. In this extract from a story, three brothers are reported on. In the first sentence the speaker talks about himself and his brother Nege, in the second sentence he turns to their younger brother. The particle *ŋo* 'but' establishes a contrast between the younger brother and his two elder brothers. This is very similar to the use of the rhematic ergative in consecutive intransitive clauses whose subjects are contrasted with each other (cf. examples (10) and (11) in 4.1.1). Given this overlap in functions, there can be little doubt that the adversative particle *ŋo* is etymologically identical with the rhematic ergative *-ŋo*. Besides the adversative function we see in (49), the particle *ŋo* also has a coordinating function. In (50) it is used to conjoin two noun phrases. The same two functions are found for the cognate particle *ŋə* in Mongi, as can be seen in the following examples.

Mongi (Lee and Lee 1993:138)

51	*Məŋ*	*zakoŋ-ŋə*	*wiriʔ-giʔ*	*i-mi*	*hia-ŋə*	*məŋ*
	one	spear-INS	3s:OBJ.shoot-PST:3p	that-SPEC	good-but	another

	kua-ja	*muzuʔ muzuʔ*	*kpe-giʔ*	*i-mi*
	mouth-3s:POSS	together	3s:OBJ.beat-PST:3p	that-SPEC

	wagiʔ-ma	*hafi-ama*	*janda-iguʔ*	*keŋ-giʔ*
	3s:OBJ.take-SS	sickness-house	big-LOC	go-PST:3p

	heriʔ-ma	*gboto-giʔ*	*hia-ru-jeʔ.*
	3s:OBJ.cut-SS	sew-PST:3p	good-VZR-PST:3s

'The one who was pierced by the spear became well, but the other one who had his two lips shot together, he was carried by the people to a big hospital and they cut and sewed it, and then it became good.'

Mongi (Lee and Lee 1993:102)

52	*Məra-ja-ŋə*	*kuneŋ*	*zətsə-ŋə*	*həna-ja*	*i-mi*
	hand-3s:POSS-ERG	big	a.little-and	leg-3s:POSS	that-SPEC

	gəŋgəŋ-a.
	middle-3s:POSS

'Its forelegs are a little big and its hind legs are middle-sized.'

In (51) the particle *-ŋə* 'but' is attached to the last word of the first sentence, in which the fate of a wounded man is recounted. The ensuing sequence of clauses focuses on another wounded man. Again, the function of the adversative particle is to contrast two protagonists and their

fate. In example (52) we see the particle *ŋə* in its coordinating function. It is attached to the last word of the first of two conjoined clauses.

Ono *ŋo* 'but, and' and Mongi *ŋə* 'but, and' descend from pHP **ŋu* 'but, and'. So far, reflexes of this particle have only been found in languages of the Kalasa and the Pindiu subfamilies. They are summarized in (53).

53 pHP **ŋu* 'but, and' > Ono *ŋo* 'but, and', Dedua *ŋa* 'and', Mongi *ŋə* 'but, and', Tobo *ŋa* 'but, and'

In Table 4-1 it could be seen that the Pindiu languages Mongi, Tobo, Borong, and Siawari share an ergative-instrumental enclitic **-nəŋ*. For this case enclitic, too, a homonymous particle can be found in some languages. Consider the following examples from Mongi and Siawari.

Mongi (Lee and Lee 1993:137)

54 *Kezo nəŋ Atiu ama ai me-keʔ-tsao.*
(name) and (name) house work do-DUR-PRS:3d
'Kejo and Atiu are working (on a) house.'

Siawari (Olkkonen 1990:8)

55 *Mewə kpaɣəp-nəŋ, denike aɣə-banak?*
thus no-but where sleep-IRR:2s
'Not so, but where else would you sleep?'

Mongi *nəŋ* 'and' conjoins two personal names in (54). In (55) the Siawari adversative particle *nəŋ* 'but' is attached to the first of the two clauses it relates to each other. The scarce instances of this particle in the data seem to parallel what we have seen above for **ŋu* 'but, and'. This is summarized in (56).

56 Proto-Pindiu **nəŋ* 'but, and' > Mongi *nəŋ* 'and', Siawari *nəŋ* 'but'

In Table 4-2 we saw that Borong *-noŋ* and Somba-Siawari *-nəŋ* are not only ergative-instrumental markers but also serve as locative case. In Mongi and Tobo, on the other hand, the cognate case enclitic is only attested in ergative-instrumental function. The sequence of functional extensions connecting these items starts from the adversative particle Proto-Pindiu **nəŋ*, goes on to the ergative-instrumental enclitic Proto-Pindiu **-nəŋ*, and ends in the locative enclitics *-noŋ* and *-nəŋ* of Borong and Somba-Siawari. Note that here in all likelihood a functional extension took place from ergative-instrumental case to locative case. In the discussion of the locative enclitic pWH **-un* in 4.2.1 I drafted a different scenario: **-un* was originally a locative case enclitic and then shifted its function to the ergative-instrumental case in the Pindiu subfamily. Apparently, functional extensions between ergative-instrumental case and locative case can go in both directions. For this reason, the term "grammaticalization" had better be avoided in the discussion of such shifts of grammatical function.

Komba and Timbe have two ergative-instrumental enclitics. The enclitics Komba *-andʌ* and Timbe *-ande* occur after possessive suffixes, elsewhere the enclitics *-ŋʌ* and *-ŋe* (< pHP **-ŋu*) are used (Southwell 1979:158ff, Foster 1972:60). Interestingly, a homonymous particle cannot be found in the data for either of these languages but in an unrelated neighboring language. Sio adjoins Komba in the south. It is an Austronesian language and has been classified as a member of the Vitiaz Chain of the North New Guinea Cluster of Oceanic. The following examples illustrate the Sio adversative particle *(a)nde*.

Sio (Clark and Clark 1987:74)

57	*a-pai-no*	*ande*	*ku-loŋo*	*ŋgua*	*tia*
	1s-say.to-2s	but	2s-hear	talk	NEG

'I'm talking to you, but you're not listening.'

Sio (Clark and Clark 1987:75)

58	*pinde*	*si-mo*	*ku-nzi*	*si-pa-lulua;*	*pinde*	*nde*	*si-ruru*
	some	3p-be	with-3p	3p-REFL-trade	some	but	3p-shake

si-kâwa
3p-flee
'Some (people) stayed and exchanged gifts, but some were afraid and fled.'

Clark and Clark (1987:74) call *(a)nde* an "adversative/contrastive conjunction" and this is borne out by the data. In (57) *(a)nde* 'but' establishes an adversative relation between two clauses and in (58) it has the effect of contrasting subject referents and their actions. These functions are very similar to the adversative function of pHP **ŋu* 'but, and' (53) and Proto-Pindiu **nəŋ* 'but, and' (56). There is no doubt that the Komba and Timbe ergative-instrumental enclitics *-andʌ* and *-ande* derive from this Sio particle. To sum up, we have found good evidence that an ergative-instrumental enclitic has developed from an adversative particle in three cases. In the case of pHP **-ŋu* ERG/INS and Proto-Pindiu **-nəŋ* ERG/INS the source particle was indigenous, in the case of Komba *-andʌ* and Timbe *-ande* it was borrowed.

For the genitive-purposive case, the evidence for an origin in a particle is more limited than for the ergative-instrumental case. I have only found a homonymous particle for one genitive-purposive enclitic, pWH **-gut*. Komba has a complex particle *gʌt ko* 'because of that, so then' (Southwell 1979:60) the first part of which matches the genitive-purposive enclitic *-gʌt ~ -ɣʌt*. We see this particle used in discourse in (59).

Komba (Southwell 1979:211)

59	*Zet*	*ko*	*zʌi-m-ŋʌ*	*ʌtʌ-ŋ-andʌ*
	2d	CONTRAST	ascend-SS-COMPL	elder.sister-3s:POSS-RH.ERG

gat-ŋʌ		*galem*	*u-pap.*	*ŋʌi*	*sot*
younger sister-3s:POSS		overseer	do-F.FUT:3s	who	with

ʌndi-βat?	*Gʌt ko*	*nʌ*	*kʌr-ʌn*	*ari-a*
live-F.FUT:1s	so then	I	stone-LOC	go-DS:1s

ni-ni-βap.
eat-1s:OBJ-F.FUT:3s
'The two of you go up to the village and the elder will take care of the younger. Because I have no one left to live with, I will go to the landslide and it will take me too.'

The complex particle *gʌt ko* follows the rhetorical question 'Who will I live with?' in (59). It evidently has a causal meaning. Its second part *ko* recurs at the beginning of (59) and is glossed there as "contrast". After medial verb forms, the particle *ko* serves as a completive action marker (Southwell 1979:111). It seems, therefore, that the particle *ko* reinforces the meaning of *gʌt* and that the causal meaning of *gʌt ko* 'because of that, so then' comes from its first part *gʌt*. A causal particle is a plausible origin for a genitive-purposive enclitic. We saw in example (23) in 4.1.1 that the genitive-purposive case often has a causal interpretation when it is used to combine clauses or sentences.

There is a particle in Ono that matches the comitative enclitic: *korop* 'all, everything, everyone' (McElhanon and Gambungtine 1976, s.v.). We see this particle used in a sentence in (60).

Ono (P. Phinnemore 1990:103)

60	...	*gerep-ŋo*	*gbatogbato*	*so*	*bilau*	*so*	*koma*	*korop*
		fire-INS	flying.fox	and	prawn	and	snake	all

ezo-ki	*zezineka*	*pa-koi.*
3p:OBJ.burn-DS:3s	burned	lie-F.PST:3p

'... the fire burned the flying fox and the prawns and the snake all (of them and) they lay burned.'

There is a list of animals that died in a fire in (60). The universal particle *korop* 'all' that follows the three coordinated nouns emphasizes that all of these animals burned. The position of *korop* after the nouns it has scope over in this example prefigures the comitative construction.

We have seen in the foregoing paragraphs that all three types of grammatical case enclitic in the Huon Peninsula languages can have their origin in a particle. I have found no evidence for a nominal origin of any grammatical case enclitic. Before we ponder why this is so, we must take a quick look at relational nouns (61-64).

Ono (Phinnemore and Phinnemore 1985:53)

61	*Eŋ-ane*	*ŋad-in-o*	*okora-ke.*
	3s-GEN	back-3s:POSS-LOC	stand-N.PST:3s

'He stood behind him.'

Kâte (Pilhofer 1933:123)

62	*Opɔ*	*maŋ-ko*	*sape*	*hone-kopaʔ.*
	water	inside-LOC	eel	see-PRS:1s
	'I see an eel in the water.'			

Somba (Olkkonen and Olkkonen 2007, s.v. *bapŋe*)

63	*Zoɣowindi*	*mi*	*Ərəgenaŋ*	*bap-ŋ-e*	*tat-tsa.*
	(place.name)	that	(place.name)	liver-3s:POSS-LOC	sit-PRS:3s
	'Johowindi is situated below Oregenang.'				

Selepet (Kenneth McElhanon, personal communication)

64	*Tembe*	*bet-ŋe-ɣen*	*taka-op.*
	battle	behind-3s:POSS-DIR	come-F.PST:3s
	'He came after the battle.'		

Most relational nouns are body part terms, such as Ono *ŋade* 'back' in (61) and Somba *bap* 'liver' in (63). They usually carry a possessive suffix and a local case enclitic. Typical spatial relations they specify are 'behind' (61), 'inside' (62), and 'under' (63). More rarely, they can indicate a temporal relation like 'after' in (64). What they cannot do is express an adversative or a causal relation like the particles in (53) and (59). The meanings of relational noun constructions are limited to spatial and temporal relations and I have observed no figurative uses that would lead them into other semantic domains. A semantic gulf separates relational nouns and grammatical case enclitics. If a relational noun developed into a case enclitic, it would become a local case enclitic, but not a grammatical case enclitic. Unfortunately, the origin of most of the local case enclitics in Table 4-2 is unknown. Only the Nabak directional enclitic *-(e)set* has a good etymology. It is a grammaticalization of the noun *set* 'foot, trail, road'.

4.3 Conclusion

In this chapter we have seen that the system of case enclitics shows considerable diachronic stability. It is a remarkable fact that enclitics with the same functions can be found in all Huon Peninsula languages except Kovai. Of the six types of case enclitics compared, a top-level reconstruction could be made for three: the ergative-instrumental, the comitative, and the directional case. For two further cases—the genitive-purposive and the locative—both a Proto-Eastern Huon and a Proto-Western Huon reconstruction was feasible. Only the ablative case defied reconstruction.

The number of reconstructions was enhanced by the recognition of functional extensions. In Kumukio, the function of the genitive-purposive enclitic **-gut* was extended to the comitative case. A similar extension must have taken place in the past in Sialum and in the three Pindiu languages Dedua, Mongi, and Tobo. However, in these languages the original function was lost and the case enclitic is now only attested in comitative function (Sialum *-ta* COM < pEH **-ta* GEN/PURP, Dedua *-goʔ* COM, Mongi *-guʔ* COM, Tobo *-gu* COM < pWH **-gut* GEN/PURP). The last-mentioned case enclitic was diachronically particularly versatile;

pWH *-*gut* GEN/PURP extended its function not only to the comitative case but also to the ablative case (in Mesem, Nabak, Nomu, Kinalaknga, and Kumukio), and in present-day Mongi and Tobo this etymon is extending its function from the comitative case to the locative case. Note that the two extensions just mentioned (GEN/PURP → ABL and COM → LOC) are functional shifts from a grammatical enclitic to a local enclitic. For one functional extension there is evidence that it can go in both directions. In the Pindiu languages, the locative enclitic pWH *-*un* became an ergative-instrumental marker while the Proto-Pindiu ergative-instrumental enclitic *-*nəŋ* extended its function to the locative case in Borong and Somba-Siawari.

Changes in function can lead to the replacement of one case enclitic by another. This happened with considerable frequency in the Huon Peninsula languages. Another source of innovation is the attraction of particles into the case system. This is attested for all three types of grammatical case enclitic. The development of an adversative particle ('but') into an ergative-instrumental case enclitic is particularly well documented, having happened three times independently. There is also evidence that a causal particle ('therefore') can turn into a genitive-purposive enclitic and a universal particle ('all') can become a comitative enclitic. It is highly unlikely that a relational noun could change into a grammatical case enclitic as relational noun constructions are semantically very different from grammatical cases. Relational nouns can only become local case enclitics.

Appendix A: Object verbs

Sialum

(McElhanon's fieldnotes, author's fieldnotes)[1]

		1SG	2SG	3SG	RECP	1DU	2DU	3DU	1PL	2PL	3PL
1a	see	no	go	ka	jo-nagu	ut	ŋot	jot	un	ŋo	jo
1b	OBJ	-no	-go	Ø, -ka	-nagu	-ut	-ŋot	-jot	-un	-ŋo	-jo
2a	give	na[2]	ga[2]	man	a-nagu	ipen	ŋepen	epen	imen	ŋemen	emen
2b	BEN[3]				-nagu	-ipen	-ŋepen	-epen	-iben	-ŋeben	-eben
3	hit	nuku	guku	kpe	jaku	nutku	ŋutku	jutku	nungu	ŋuku	juku
4	bite	nadet	gadet	ke	edet-nagu	itet	ŋetet	etet	idet	ŋedet	edet
5	tell[4]	nadan	galan	jat		itan	ŋetan	etan	idan	ŋedan	edan
6	burn	nize	gize	ze		itse	ŋitse	etse	ize	ŋize	eze
7	cut	nite	gite	kite		ite	ŋite	ete	ide	ŋide	ede
8	copulate[5]	nigit	gigit	gitka							
9	follow	nawan	gawan	maŋan		ipan	ŋepan	epan	iwan	ŋewan	ewan

1 McElhanon elicited these forms in 1967. I collected some Sialum object verb forms from Judy Adu Keleino in 1996. My forms were obtained in a single elicitation session and could not be checked. I rely on McElhanon's data, but report differences that do not seem to be mistakes on my part.
2 I elicited *namen* 1SG and *gamen* 2SG, which contain the same verb root as the third person singular form *man*. In the text published by Stolz (1911) we find *nam* 'give me'.
3 McElhanon recorded a paradigm of the benefactive construction. In it, forms of the object verb 'give' appear in the dual and plural, but in the singular we find forms of the object verb 'see': *mit-no-mageŋe* 'she cooks it for me' vs. *mir-iben-mageŋe* 'she cooks it for us'. We need confirmation that this mixed paradigm is not due to an elicitation error.
4 These are the forms I recorded. McElhanon lists the same paradigm under 'tell' and 'call', with a difference in the first and the second person singular. Under 'tell' he gives *nala* 1SG and *gala* 2SG, under 'call' he gives *nalan* 1SG and *galan* 2SG. For the second person non-singular he noted *ŋitan* 2DU and *ŋidan* 2PL in both places. The only form in his paradigm for 'call' that corresponds etymologically to the Ono object verb 'call' is *ara-nagu* 'call each other'.
5 The dual and plural forms of this object verb were not satisfactorily elicited. I was given regular forms for this verb in 1996.

Ono

(Wacke 1931:174ff, Phinnemore and Phinnemore 1985:96f)

		1SG	2SG	3SG	RECP[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	see	nan	gan	ka	aek(ke)	ŋot	ŋut	ot	ŋon	ŋun	on
1b	OBJ	-nan	-gan	Ø, -ka, -ke	-nagu	-ŋot	-ŋut	-ot	-ŋon	-ŋun	-on
2a	give	nin	gin	man		ŋepon	ŋipon	epon	ŋebon	ŋibon	ebon
2b	BEN	nin	gin	man	nagu	ŋepon	ŋipon	epon	ŋebon	ŋibon	ebon
3	hit	neku	geku	gbe	jaku	ŋetku	ŋitku	etku	ŋengu	ŋingu	engu
4	shoot	nato	gato	jato		ŋekotat	ŋikotat	ekotat	ŋegotat	ŋigotat	egotat
5	bite	nirot	girot	ki	airot	ŋetot	ŋitot	etot	ŋedot	ŋidot	edot
6	tell	nolat	golat	olat		ŋetan	ŋitan	etan	ŋedan	ŋidan	edan
7	call	nora	gora	ora		ŋetora	ŋitora	etora	ŋedora	ŋidora	edora
8	burn	nae	gae	ze		ŋeso	ŋiso	eso	ŋezo	ŋizo	ezo
9	cut	nito	gito	kito	aito	ŋeto	ŋito	eto	ŋedo	ŋido	edo
10	copulate	neit	geit	git	jai	ŋekit	ŋikit	ekit	ŋegit	ŋigit	egit
11	follow[2]	nebotat	gebotat	modat		ŋepotat	ŋipotat	epotat	ŋebotat	ŋibotat	ebotat
12	take	neu	geu	ma		ŋepu	ŋipu	epu	ŋebu	ŋibu	ebu
13	take from	neuma	geuma	omaka		ŋepuma	ŋipuma	epuma	ŋebuma	ŋibuma	ebuma
14	put down	newot	gewot	mot		ŋepot	ŋipot	epot	ŋebot	ŋibot	ebot

1 There is a further object verb that only exists in reciprocal form: *au* 'anoint oneself, discuss with each other'.

2 These are the forms given by Phinnemore and Phinnemore. Wacke has different singular forms: *nemotat* 1SG, *gemotat* 2SG, *motat* 3SG.

Sene

(Pilhofer 1928:218ff, McElhanon's fieldnotes)

		1SG	2SG	3SG[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	hit	nu	gu	kpɔ	nuhɔ	ŋɔhɔ	jɔhɔ	nuba	ŋaba	jaba
1b	OBJ	-nu	-gu	Ø, -ge	-nuhɔ	-ŋɔhɔ	-jɔhɔ	-nuba	-ŋaba	-jaba
2a	give	nɔte	gɔte	tene	nete	ŋɔte	jɔte	nete	ŋɔte	jɔte
2b	BEN	-nɔte	-gɔte	-tine	-nete	-ŋɔte	-jɔte	-nete	-ŋɔte	-jɔte
3	see	nɔŋɔnu	gɔŋɔnu	jɔŋɔne	nekɔnuhɔ	ŋɔkɔnuhɔ	jɔkɔnuhɔ	neŋɔnuba	ŋɔŋɔnuba	jɔŋɔnuba
4	tell[2]	nɔze	gɔze	eze	neze	ŋɔze	jɔze	neze	ŋɔze	jɔze
5	show	nɔlɔdu	gɔlɔdu	elɔdu	nelɔdu	ŋɔlɔdu	jɔlɔdu	nelɔdu-nuba	ŋɔlɔdu-ŋaba	elɔdu-jaba

1 Sene has no simple reciprocal forms but rather phrases: *nalaŋ galaŋ ake* 'give each other', *nazaŋ gazaŋ ake* 'tell each other', *elɔdu gbɔlɔdu ake* 'show each other'. Besides, there is a construction with what looks like a reciprocal auxiliary: *tene kiŋɔti* 'give each other', *jɔŋɔne ŋɔte* 'see each other', *elɔdu ŋɔti* 'show each other'.
2 In 1968 McElhanon recorded the following forms of the object verb 'tell': *nɔde* 1SG, *gɔde* 2SG, *ede* 3SG, *nese* 1DU, *ŋɔse* 2DU, *jɔse* 3DU. The plural forms are missing from the record.

Migabac

(Pilhofer 1928:218ff; McEvoy 2008:35f)

		1SG	2SG	3SG	RECP[1]	1DU	2DU	3DU	1PL	2PL	3PL
1	OBJ (DO)	-ʔnu	-ʔgu	Ø, -ʔke	-nagu	-ʔnopa	-ʔŋepa	-ʔjepa	-ʔnoba	-ʔŋeba	-ʔjeba
2a	give	nele	gele	laʔno		note	ŋete	jete	nole	ŋele	jele
2b	BEN, IO	-nele	-gele	-ʔno		-note	-ŋete	-jete	-nole	-ŋele	-jele
3	tell	nedo	gedo	edo		noto	ŋeto	jeto	nodo	ŋedo	jedo
4	show	nedali	gedali	edali		notali	ŋetali	jetali	nodali	ŋedali	jedali
5	take from	newala	gewala	ewala		ewala-ʔnopa	ewala-ʔŋepa	ewala-ʔjepa	ewala-ʔnoba	ewala-ʔŋeba	ewala-ʔjeba

1 Migabac has retained the old reciprocal form *ju* 'fight' as a lexical item. It has borrowed the Ono reciprocal suffix *-nagu,* which is used for most verbs including *la-nagu* 'give each other' and *ewaliʔ-nagu* 'take away from each other'. Besides, there are also phrases: *lanaʔ ganaʔ ai* 'give each other', *endaʔ gandaliʔ ai* 'show each other', *ewaʔ gawaliʔ ai* 'pass each other by'.

Momare

(Pilhofer 1928:218ff; McElhanon's fieldnotes)

		1SG	2SG	3SG[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	stab	nu	gu	hʷa	nopa	ŋapa	japa	noba	ŋaba	jaba
1b	OBJ (DO)	-ʔnu	-ʔgu	Ø, -ʔke	-ʔnopa	-ʔŋapa	-ʔjapa	-ʔnoba	-ʔŋaba	-ʔjaba
2a	give	nale	gale	loʔne	noʔte	ŋaʔte	jaʔte	nole	ŋale	jale
2b	BEN, IO	-nale	-gale	-ʔno	-noʔte	-ŋaʔte	-jaʔte	-nole	-ŋale	-jale
3	see	naŋane	gaŋane	ŋane	nokane	ŋakane	jakane	noŋane	ŋaŋane	jaŋane
4	show	naɖali	gaɖali	aɖali	noʔtali	ŋaʔtali	jaʔtali	noɖali	ŋaɖali	jaɖali
5	pass by	nawali	gawali	awali	noʔkpali	ŋaʔkpali	jaʔkpali	nowali	ŋawali	jawali
6	take from	nawala-ba	gawala-ba	awala-ba	noʔkpala-ba	ŋaʔkpala-ba	jaʔkpala-ba	nowala-ba	ŋawala-ba	jawala-ba
7	follow[2]	nampie	gampie	ampie						

1 Momare has retained a single prefixed reciprocal form: *ju* 'hit each other, fight' (originally a form of *nu* 'stab' < 'hit'). Otherwise it uses a reciprocal auxiliary: *loʔne aŋalali* 'give each other', *ŋane aŋalali* 'see each other', *mu aŋalali* 'tell each other', *awalaba aŋalali* 'take away from each other'. There are also some phrases: *aŋɖa gbaŋɖaliʔ aki* 'show each other', *awaliʔ gbawaliʔ aki* 'pass each other by'.
2 This object verb is from McElhanon's fieldnotes. Only the singular forms were recorded.

Wamorâ

(Pilhofer 1928:218ff)

		1SG	2SG	3SG[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	hit	nu	gu	kpa	nɔfe	ŋafe	jafe	nɔbe	ŋabe	jabe
1b	OBJ	-ʔnu	-ʔgu	Ø, -ʔka, -ʔkpa	-ʔnɔfe	-ʔŋafe	-ʔjafe	-ʔnɔbe	-ʔŋabe	-ʔjabe
2a	give	nala	gala	tɯna	nɯʔta	ŋaʔta	jaʔta	nɯla	ŋala	jala
2b	BEN	-nala	-gala	-ʔna	-nɯʔta	-ŋaʔta	-jaʔta	-nɯla	-ŋala	-jala
3	see	naŋona	gaŋona	ŋona	nɔhona	ŋahona	jahona	nɔŋona	ŋaŋona	jaŋona
4	tell	nazɯ	gazɯ	ɔzɯ	nɔsɯ	ŋasɯ	jasɯ	nɔzɯ	ŋazɯ	jazɯ
5	show	nandu	gandu	andu, jɔndu	nɔŋtu	ŋaŋtu	jaŋtu	nɔndu	ŋandu	jandu
6	pass by	nandolo	gandolo	ɔndolo	nɔndolo	ŋandolo	jandolo	nɔndolɯ[2]	ŋandolo	jandolo
7	take from	nawɯtɯʔ-to	gawɯtɯʔ-to	jɔwɯtɯʔ-to	nɔfɯtɯʔ-to	ŋafɯtɯʔ-to	jafɯtɯʔ-to	nɔwɯtɯʔ-to	ŋawɯtɯʔ-to	jawɯtɯʔ-to

1 Wamorâ has no simple reciprocal forms but rather phrases: *nalaŋ galaŋ e* 'give each other', *nazɯŋ gazɯŋ e* 'tell each other', *nanduʔ ganduʔ e* 'show each other', *nandoʔ gandoleŋ e* 'pass each other by', *nawɯʔ gawɯlɯŋ e* 'take away from each other'. The verb 'see' follows a reduplicatice structure, *ŋoŋonaʔ e* 'see each other', which is presumably the regular construction, as in Wemo.

2 There seems to be a typographical error in *nɔndolɯ* 1PL, which must presumably be emended to *nɔndolo*. If this emendation is correct, however, there is no difference between the dual and the plural forms, which is unusual. Emending the forms of the second and the third person plural instead seems to be even less plausible.

Parec

(McElhanon's fieldnotes)

		1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
1	hit	nu	gu	kpa	nɔfe	ŋafe	jafe	nɔpe	ŋape	jape
2	give	nala	gala	[1]	nɯʔta	ŋaʔta	jaʔta	nɯla	ŋala	jala
3	tell	natsi	gatsi	ɔtsina	nɔsi	ŋasi	jasi	nɔtsi	ŋatsi	jatsi
4	show[2]	nawɯndu	gawɯndu	jɔwɯndu						

5	take from	nawuʔto	gawuʔto	jəwuʔto	nəfuʔto	ŋafuʔto	jafuʔto	nəwuʔto	ŋawuʔto	jawuʔto

1 This form is missing from the data.
2 The dual and plural forms of this paradigm have not been reliably recorded.

Mâgobineng

(Pilhofer 1928:218ff)

		1SG	2SG	3SG[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	hit	nu	gu	kpa	nəfe	ŋafe	jafe	nəbe	ŋabe	jabe
1b	OBJ	-ʔnu	-ʔgu	Ø, -ʔa	-ʔnəfe	-ʔŋafe	-ʔjafe	-ʔnəbe	-ʔŋabe	-ʔjabe
2a	give	nala	gala	teʔna	neʔta	ŋaʔta	jaʔta	nela	ŋala	jala
2b	BEN	-nala	-gala	-ʔna	-neʔta	-ŋaʔta	-jaʔta	-nela	-ŋala	-jala
3	tell	naze	gaze	ɔzeʔna	nɔse	ŋase	jase	nɔze	ŋaze	jaze
4	show	naudu-ʔnu	gaudu-ʔgu	jəudu	nəudu-ʔnəfe	ŋaudu-ʔŋafe	jaudu-ʔjafe	nəudu-ʔnəbe	ŋaudu-ʔŋabe	jaudu-ʔjabe
5	pass by	naulu-ʔnu	gaulu-ʔgu	jəulu	nəulu-ʔnəfe	ŋaulu-ʔŋafe	jaulu-ʔjafe	nəulu-ʔnəbe	ŋaulu-ʔŋabe	jaulu-ʔjabe
6	take from	naoʔto	gaoʔto	jəoʔto	nəfoʔto	ŋafoʔto	jafoʔto	nəwoʔto	ŋawoʔto	jawoʔto

1 Mâgobineng has no simple reciprocal forms but rather phrases: *nalaŋ galaŋ i* 'give each other', *naze gazeŋ i* 'tell each other', *nau gauduŋ i* 'show each other', *nau gauleŋ i* 'pass each other by', *nau gauluŋ i* 'take away from each other'. The accuracy of the two last-mentioned forms is doubtful.

Wemo

(Pilhofer 1933:38ff)

		1SG	2SG	3SG[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	hit	nu	gu	kpa	nəfo	ŋofa	jofa	nəpo	ŋopa	jopa
1b	OBJ (DO)	-ʔnu	-ʔgu	Ø, -ʔke, -ʔne	-ʔnəfo	-ʔŋofa	-ʔjofa	-ʔnəpo	-ʔŋopa	-ʔjopa

2a	give	nale	gale	ləʔne	nɔʔte	ŋaʔte	jaʔte	nɔle	ŋale	jale
2b	BEN, IO	-nale	-gale	-ʔne	-nɔʔte	-ŋaʔte	-jaʔte	-nɔle	-ŋale	-jale
3	tell	natsa	gatsa	ɔtsɔʔne	nɔsɔ	ŋasa	jasa	nɔtsɔ	ŋatsa	jatsa
4	show	nowatu	gowatu	jɔutu	nɔfotu	ŋofatu	jofatu	nɔwotu	ŋowatu	jowatu
5	pass by	nowalu	gowalu	jɔulu	nɔfolu	ŋofalu	jofalu	nɔwolu	ŋowalu	jowalu
6	take from[2]	nowaʔlo	gowaʔlo	jɔoʔlo	nɔfoʔlo	ŋofaʔlo	jofaʔlo	nɔwoʔlo	ŋowaʔlo	jowaʔlo
7	follow	nape	gape	jɔpe	nɔfe	ŋafe	jafe	nɔpe	ŋape	jape

1 Kâte has retained a single prefixed reciprocal verb form: *jegi* 'copulate with each other' (Keysser 1925, s.v.). Otherwise there are phrases like in the other Huon Tip languages: *nareŋ gareŋ e* 'give each other', *natsaŋ gatsaŋ e* 'tell each other', *nowa(ruŋ) gowaruŋ e* 'pass each other by', *nowaʔ(roŋ) gowaʔroŋ e* 'take away from each other', *napeŋ gapeŋ e* 'follow each other'.
2 The object verb *nowaʔ-ro* 'take sth away from me' contains the regular verb *ro* 'take'. *Nɔ* 'eat' can take the place of *ro*, giving *nowaʔ-nɔ* 'eat my food away' etc.

Naga

(Pilhofer 1928:218ff, McElhanon's fieldnotes)

		1SG	2SG	3SG[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	hit	nu	gu	kpa	nɔpu	ŋapu	japu	nɔbu	ŋabu	jabu
1b	OBJ	-ʔnu	-ʔgu	Ø, -ʔka	-ʔnɔpu	-ʔŋapu	-ʔjapu	-ʔnɔbu	-ʔŋabu	-ʔjabu
2a	give	nale	gale	ɔte	nɔʔte	ŋaʔte	jaʔte	nɔle	ŋale	jale
2b	BEN	-nale	-gale	-te	-nɔʔte	-ŋaʔte	-jaʔte	-nɔle	-ŋale	-jale
3	see[2]	naŋone	gaŋone	ŋone						
4	tell	nazɔ	gazɔ	ɔzɔ	nɔsɔ	ŋasɔ	jasɔ	nɔzɔ	ŋazɔ	jazɔ
5	show	nalu	galu	ɔlu	nɔtu	ŋatu	jatu	nɔlu	ŋalu	jalu
6	pass by	nalule	galule	ɔlule	nɔtule	ŋatule	jatule	nɔlule	ŋalule	jalule
7	take from	naoʔlo	gaoʔlo	jɔoʔlo	nɔfoʔlo	ŋafoʔlo	jafoʔlo	nɔoʔlo	ŋaoʔlo	jaoʔlo

1 Naga has no simple reciprocal forms but rather phrases: *naleŋ galeŋ le* 'give each other', *nazɔŋ gazɔŋ le* 'tell each other', *naluŋ galuŋ le* 'show each other', *nalu galuleŋ le* 'pass each other by', *naʔloŋ gaʔloŋ le* 'take away from each other'.
2 This object verb was only recorded by McElhanon. The dual and plural forms are missing from the record.

Mape

(Pilhofer 1928:218ff, Sifuma 1997:39f, author's fieldnotes)

		1SG	2SG	3SG[1]	1DU	2DU	3DU	1PL	2PL	3PL
1a	hit	nu	gu	kpa	nɔpe	ŋape	jape	nɔbe	ŋabe	jabe
1b	OBJ (DO)	-ʔnu	-ʔgu	Ø, -ʔga	-ʔnɔpe	-ʔŋape	-ʔjape	-ʔnɔbe	-ʔŋabe	-ʔjabe
2a	give	nale	gale	ɔte	nɔte	ŋate	jate	nɔle	ŋale	jale
2b	BEN, IO	-nale	-gale	-te[2]	-nɔte	-ŋate	-jate	-nɔle	-ŋale	-jale
3	see[3]	naŋone	gaŋone	ŋone	nɔkone	ŋakone	jakone	nɔŋone	ŋaŋone	jaŋone
4	tell	nazɯ	gazɯ	ɔzɯ	nɔsɯ	ŋasɯ	jasɯ	nɔzɯ	ŋazɯ	jazɯ
5	show	nadu	gadu	ɔdu	nɔtu	ŋatu	jatu	nɔdu	ŋadu	jadu
6	pass by	nadule	gadule	ɔdule	nɔtule	ŋatule	jatule	nɔdule	ŋadule	jadule
7	take from	naac-nulo	gaac-gulo	jɔɔʔ-gɔlo	nɔɔʔ-nɔpelo	ŋaaʔ-ŋapelo	jaaʔ-japelo	nɔɔʔ-nɔbelo	ŋaaʔ-ŋabelo	jaaʔ-jabelo

1 Mape has no simple reciprocal forms but rather phrases: *naleŋ galeŋ e* 'give each other', *nazɯʔ gazɯŋ e* 'tell each other', *naduʔ gaduŋ e* 'show each other', *naduʔ gaduleŋ e* 'pass each other by'.
2 This is the benefactive third person singular form given by Pilhofer as well as my informant. Sifuma has *-ote*, identical with the form of the lexeme.
3 The object verb 'see' was given by my informant, Mr. Joka Oba from Suqang station. Pilhofer does not mention it and McElhanon only recorded the singular forms

Dedua

(Ceder and Ceder 1990:76ff, 93f; Pilhofer 1928:218ff, McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP	1DU	2DU	3DU	1PL	2PL	3PL
1a	hit	nu	gu	kpe	ewe[1]	nuru	ŋuru	juru	nunu	ŋunu	junu
1b	OBJ (DO)	-nu	-gu	Ø, -ke	-eme	-nuru	-ŋuru	-juru	-nunu	-ŋunu	-junu
2a	give	neŋ	geŋ	mi	eme	nemeʔ	ŋemeʔ	jemeʔ	nemme	ŋemme	jemme
2b	BEN, IO	-neŋ	-geŋ	-mi	-eme	-nemeʔ[2]	-ŋemeʔ[2]	-jemeʔ[2]	-nemme	-ŋemme	-jemme
3	see	neŋ	geŋ	heŋ	eŋeŋ[3]	nereŋ	ŋereŋ	jereŋ	neneŋ	ŋeneŋ	jeneŋ

4	tell[4]	nede	gede	ede		neʔde	ŋeʔde-ŋuru	jeʔde-juru	nende	ŋende	jende
5	show[5]	nezaʔ-nu	gezaʔ-gu	ezahe		nezaʔ-nuru	ŋezaʔ-ŋuru	jezaʔ-juru	nenzaʔ-nunu	ŋenzaʔ-ŋunu	jenzaʔ-junu
6	bite	ni	gi	ki		niri	ŋiri	jiri	nini	ŋini	jini
7	burn	noho	goho	ze		noroho	ŋoroho	joroho	nonoho	ŋonoho	jonoho
8	call[6]	nuru	guru	kpaʔ		nururu	ŋururu	jururu	nunuru	ŋunuru	junuru
9	hit, cut[7]	nere	gere	hei		nerere	ŋerere	jerere	nenere	ŋenere	jenere

1 This form is reported by McElhanon. It seems to mean 'fight'.
2 These are the dual forms of the Fanic dialect. The Dzeigoc dialect has 1DU *-neʔme,* 2DU *-ŋeʔme,* 3DU *-jeʔme*.
3 This reciprocal form was reported by Pilhofer.
4 An almost complete set of irregular forms of this object verb is reported by McElhanon. Pilhofer gives the regular forms *ede-nu* 1SG and *ede-nuru* 1DU as well as the mixed forms *ŋede-ŋuru* 2DU and *jede-juru* 3DU. His remaining forms agree with McElhanon's. The irregular forms had fallen out of use by the time Ceder and Ceder wrote their grammar.
5 This paradigm of mixed forms is reported by Pilhofer. McElhanon recorded regular forms in 1967.
6 This object verb has been reported by Pilhofer and McElhanon.
7 This is the meaning of *hei* given in the dictionary (Ceder and Ceder 1989). In the grammar, the Ceders gloss *nere* as 'soak'.

Mongi

(Lee and Lee 1993:34ff; Pilhofer 1928:218ff; author's fieldnotes[1])

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL	2/3PL
1a	give	nəŋ	gəŋ	mi	amu	nərəʔmi	ərəʔmi	nənəʔmi	ənəʔmi
1b	OBJ, BEN	-nəŋ	-gəŋ	-mi	-amu	-nərəʔmi	-ərəʔmi	-nənəʔmi	-ənəʔmi
2	see	nəŋ	gəŋ	həŋ	aŋaŋ	niriʔ	iriʔ	niniʔ	iniʔ
3	hit	nu	gu	kpe[2]	eu	nuru	uru	nunu	unu
4	tell	nətsə[3]	gətsə	ətsə	emi[4]	nərətsə	ərətsə	nənətsə	ənətsə
5	show[5]	nətsi	gətsi	ətsi		nərətsi	ərətsi	nənətsi	ənətsi
6	bite	ni	gi	ki	iŋi	niri	iri	nini	ini

7	burn	no	go	ze[6]		noro	oro	nono	ono
8	shoot[7]	noriʔ	goriʔ	wiriʔ		norориʔ	ororiʔ	nonoriʔ	onoriʔ
9	pass by	nogiʔ	gogiʔ	ogiʔ		norogiʔ	orogiʔ	nonogiʔ	onogiʔ
10	leave	nopoʔ	gopoʔ	opoʔ		noropoʔ	oropoʔ	nonopoʔ	onopoʔ
11	take[8]	noagiʔ	goagiʔ	wagiʔ	eagiʔ-amu	noroagiʔ	oroagiʔ	nonoagiʔ	onoagiʔ
12	call	nuru	guru	kpaʔ[9]	eŋuru[10]	nururu	ururu	nunuru	unuru
13	cut	nəri	gəri	həriʔ, kperiʔ[11]	aŋari	nərəri	ərəri	nənəri	ənəri

1 I obtained a full set of Mongi object verbs from Jerry Leusing from Gemaheng village in 1996.
2 Lee and Lee give *ku* 'hit it', a form not recognized by my informant. Pilhofer also has *kpe*.
3 Lee and Lee transcribe this verb with medial *-ʔdz-*, e.g. *nəʔdzə* 'tell me'. Pilhofer and I heard *-ts-*.
4 Lee and Lee translate *emi* as 'argue with each other'. My informant gave *eminiŋ wanzu* as the reciprocal form of *nətsə* 'tell me'. The second part of *eminiŋ* is *niŋ* 'hear'.
5 This object verb is only reported by Pilhofer.
6 Lee and Lee give *o* as the third person singular form of this paradigm. However, my informant translated *o* with Kâte *rike* 'cook' and suggested that *ze* (= Kâte *za* 'burn') belongs in this paradigm.
7 This object verb was given only by my informant.
8 This is the paradigm given by Pilhofer. More recently, the vowel clusters in the dual and plural have been reduced. Lee and Lee give *nuagiʔ* 1SG, *guagiʔ* 2SG, *wagiʔ* 3SG, *noragiʔ* 1DU, *oragiʔ* 2/3DU, *nonagiʔ* 1PL, *onagiʔ* 2/3PL.
9 Lee and Lee give *uru* 'call him/her', a form not recognized by my informant. Pilhofer has *kpaʔ-mi*.
10 My informant gave *eŋuru kpakpaʔ wanzu* as the reciprocal form of this object verb. Here the original reciprocal form *eŋuru* was reinforced with a reduplication of the third person singular form.
11 Lee and Lee give all of *həri, heri* and *kperi* as the third person singular form of this object verb. My informant suggested that *həriʔ* and *heriʔ* are synonymous, whereas *kperiʔ* means cutting more forcefully. It is not clear which is the third person singular form in the paradigm. Lee and Lee give the third person singular forms without a final glottal stop in the grammar, but they do write a glottal stop in the dictionary, which accords with the pronunciation of my informant.

Tobo

(Chad Mankins, personal communication, McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP[1]	1DU	2/3DU	1PL	2/3PL
1a	give	nəm	gəm	mi	am	nərəpə	ərəpə	nənəpə	ənəpə
1b	OBJ, BEN	-nəm	-gəm	-mi, Ø	-am	-nərəpə	-ərəpə	-nənəpə	-ənəpə
2	see	nən	gən	kən	aŋən(-am)	nirik	irik	ninik	inik

3	hit	nu	gu	kpi	iju(-am)	nuru	uru	nunu	unu
4	tell	nətsə	gətsə	ətsə	imu	nərətsə	ərətsə	nənətsə	ənətsə
5	bite	ni	gi	ki	iŋi(-am)	niri	iri	nini	ini
6	burn	noɣo	goɣo	zi	oɣo-am	noroɣo	oroɣo	nonoɣo	onoɣo
7	call	nuru	guru	kpat		nurru[2]	urru[2]	nununu	ununu
8	shoot	nurut	gurut	urut	iŋurut(-am)	nurrut[2]	urrut[2]	nunurut	unurut
9	pass by	nuɣit	guɣit	uɣit	[3]	nuruɣit	uruɣit	nunuɣit	unuɣit
10	leave	nəpət	gəpət	əpət	apər-am	nərəpət	ərəpət	nənəpət	ənəpət
11	bring	nuaɣit	guaɣit	waɣit	iŋurat-am	noroɣat[4]	oroɣat[4]	nonoɣat[4]	onoɣat[4]
12	cut[5]	nərət	gərət	kərət	aŋərət(-am)	nərərət	ərərət	nənərət	ənərət
13	show	nəmde	gəmde	əmde	emde-am	nərəmde	ərəmde	nənəmde	ənəmde
14	touch	nose	gose	ose	emse-am	norose	orose	nonose	onose
15	hold	nəpse	gəpse	kəsa		nərəpse[6]	ərəpse[6]	nənəpse[6]	ənəpse[6]

1 In Tobo, the reciprocal forms of most object verbs occur with a pleonastic reciprocal suffix *-am*. Where this suffix is optional, there sometimes seems to be differentiation between a reflexive and a reciprocal interpretation, with the form without the suffix favoring a reflexive interpretation.
2 For 'call' McElhanon recorded the dual forms *nururu* 1DU and *ururu* 2/3DU; for 'shoot' he recorded *nururut* 1DU and *ururut* 2/3DU.
3 This verb has a phrasal reciprocal: *uɣit kpuɣit wam* 'pass each other by'.
4 McElhanon recorded the following dual and plural forms: *noraɣit* 1DU, *oraɣit* 2/3 DU, *nonaɣit* 1PL, *onaɣit* 2/3PL.
5 In McElhanon's data, the vowel of the verb root is *i* rather than *ə*: *nərit* 1SG. *gərit* 2SG, *kərit* 3SG etc.
6 There are shortened variants of these forms: *nərse* 1DU, *ərse* 2/3DU, *nənse* 1PL, *ənse* 2/3PL.

Borong

(Olkkonen and Olkkonen 2000:8f, McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP[1]	1DU	2/3DU	1PL	2/3PL
1a	give	noŋ	goŋ	mu		noroŋ	oroŋ	nonoŋ	oŋoŋ
1b	OBJ, BEN	noŋ	goŋ	mu		noroŋ	oroŋ[2]	nonoŋ	oŋoŋ[2]
2	see	nii	gii	ii	ai	nirii	irii	ninii	iŋii

3	hit	nu	gu	kpe	ao[3]	nuru	uru	nunu	uŋu
4	tell	nize[4]	gize	ize		nirize	irize	ninize	iŋize
5	bite	ni	gi	ki		niri	iri	nini	iŋi
6	cut	niaŋ	giaŋ	kiaŋ		niriaŋ	iriaŋ	niniaŋ	iŋiaŋ
7	burn	noo	goo	oo		noroo	oroo	nonoo	oŋoo
8	call	nooŋ	gooŋ	ooŋ		noroonŋ	oroonŋ	nonooŋ	oŋooŋ
9	poke	nuu	guu	eu		nuruu	uruu	nunuu	uŋuu
10	pass by	nuugu	guugu	uugu		nuruugu	uruugu	nunuugu	uŋuugu
11	take	nuaŋ	guaŋ	waŋ		nuruaŋ	uruaŋ	nunuaŋ	uŋuaŋ
12	feed	nuagi	guagi	wagi		nuruagi	uruagi	nunuagi	uŋuagi
13	jump on	nualeeŋ	gualeeŋ	waleeŋ		norowaleeŋ	orowaleeŋ	nonowaleeŋ	oŋowaleeŋ
14	touch	noosiri	goosiri	oosiri		noroosiri	oroosiri	nonoosiri	oŋoosiri
15	whip	nooti	gooti	ooti		noroti	oroti	nonoti	oŋoti
16	chase	notaa	gotaa	otaa		norotaa	orotaa	nonotaa	oŋotaa
17	leave	nomesao	gomesao	mesao		noromesao	oromesao	nonomesao	oŋomesao
18	anoint	nomori	gomori	mori		noromori	oromori	nonomori	oŋomori
19	wake	nomindii	gomindii	mindii		noromindii	oromindii	nonomindii	oŋomindii
20	carry	nombosiŋ	gombosiŋ	bosiŋ		norobosiŋ	orobosiŋ	nonobosiŋ	oŋobosiŋ
21	reveal	nisaaŋ	gisaaŋ	isaaŋ		nirisaaŋ	irisaaŋ	ninisaaŋ	iŋisaaŋ
22	favor	nisisoroo	gisisoroo	isisoroo		nirisisoroo	irisisoroo	ninisisoroo	iŋisisoroo

1 Most object verbs do not have a simple reciprocal form. Rather, reciprocity is expressed through phrases: *nu-na gu-maŋa* 'you hit me and I hit you' or *gu-we nu-waa* 'I hit you and you hit me', *ni-na gi-maŋa* "you bite me and I bite you' or *gi-we ni-waa* 'I bite you and you bite me', *notaa-na gotaa-maŋa* 'you chase me and I chase you' or *gotaa-we notaa-waa* 'I chase you and you chase me' etc.

2 As benefactive marker, McElhanon recorded *ŋoroŋ* 2/3DU and *ŋoŋoŋ* 2/3PL.

3 This reciprocal verb form was recorded by McElhanon. The Olkkonens give the construction *ai-ŋ ao-zao* 'the two beat each other' which they analyze as being made up of the infinitive of the verb plus the auxiliary *ao-*. Note that this construction is homonymous with *ai-ŋ ao-zao* 'you two see each other'.

4 There are variant forms with final *o* rather than *e: nizo* 1SG, *gizo* 2SG, *izo* 3SG etc.

Somba

(Olkkonen and Olkkonen 1983:45f, Pilhofer 1928:218ff, McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP	1DU[1]	2/3DU[1]	1PL[1]	2/3PL[1]
1a	give	niŋgi	gi(ɣi)	waŋgi	aŋgu	neki netki	eki (j)etki	neŋgi nengi	eŋgi (j)engi
1b	OBJ, BEN	niŋgi	gi(ɣi)	waŋgi	aŋgu	neki	eki	neŋgi	eŋgi
2	see	nek	gek	ek	aŋgek[2]	nekek netkek	ekek (j)etkek	neŋgek nengek	eŋgek (j)engek
3	hit	nuŋgu	gu(ɣu)	k^{w}e	aŋguɣu[3]	neku netku	eku (j)etku	neŋgu nengu	eŋgu (j)engu
4	tell[4]	nətsə	gətsə	etsə	aigetsə	netketsə	etketsə	neŋgetsə	eŋgetsə
5	bite	nəɣə	gəɣə	jəɣə	aŋgəɣə	nekəɣə	ekəɣə	neŋgəɣə	eŋgəɣə
6	burn	noɣo	goɣo	oɣo	aŋgoɣo	nekoɣo	ekoɣo	neŋgoɣo	eŋgoɣo
7	call	noɣol	goɣol	oɣol	aŋgoɣol	nekoɣol netkoɣol	ekoɣol (j)etkoɣol	neŋgoɣol nengoɣol	eŋgoɣol (j)engoɣol
8	pass by	noŋgit	goŋgit	oŋgit	aŋgoŋgit	nekoŋgit netkoŋgit	ekoŋgit (j)etkoŋgit	neŋgoŋgit nengoŋgit	eŋgoŋgit (j)engoŋgit
9	take from	nuaŋgit	guaŋgit	waŋgit	aŋguaŋgit	nekuaŋgit netkuaŋgit	ekuaŋgit (j)etkuaŋgit	neŋguaŋgit nenguaŋgit	eŋguaŋgit (j)enguaŋgit
10	chase	nuataŋgə	guataŋgə	wuataŋgə	aŋguataŋgə	nekuataŋgə	ekuataŋgə	neŋguataŋgə	eŋguataŋgə
11	take	nəmi	gəmi	ami	aŋgəmi	nekəmi	ekəmi	neŋgəmi	eŋgəmi
12	shoot	neri	geri	eri	aŋgeri	nekeri	ekeri	neŋgeri	eŋgeri
13	accompany	nəmbul	gəmbul	ambul	aŋgəmbul	nekəmbul	ekəmbul	neŋgəmbul	eŋgəmbul
14	leave	nəmosot	gəmosot	mosot	aŋgəmosot	nekəmosot	ekəmosot	neŋgəmosot	eŋgəmosot
15	anoint	nəməri	gəməri	məri	aŋgəməri	nekəməri	ekəməri	neŋgəməri	eŋgəməri
16	touch[5]	nosei	gosei	osei	aŋgosei	netkosei	etkosei	neŋgosei	eŋgosei

17	spare[5]	neɣori	geɣori	eɣori	aŋgeɣori	netkeɣori	etkeɣori	neŋgeɣori	eŋgeɣori
18	jump over[5]	nualəŋ	gualəŋ	waləŋ	aŋgualəŋ	netkualəŋ	etkualəŋ	neŋgualəŋ	eŋgualəŋ
19	cause to do[5]	nuasət	guasət	wasət		netkuasət	etkuasət	neŋguasət	eŋguasət
20	ignore[5]	neɣərəŋ	geɣərəŋ	eɣərəŋ		netkeɣərəŋ	etkeɣərəŋ	neŋgeɣərəŋ	eŋgeɣərəŋ

1 In the dual and plural Pilhofer noted the clusters *-tk-* and *-ng-* which have in today's fast speech been simplified to *-k-* and *-ŋg-*. Pilhofer's forms are given underneath the modern forms reported by the Olkkonens. Pilhofer also sporadically noted down an initial *j* in the forms of the second and third person dual and plural. He wrote *j-* only in the dual for 'give', 'hit' and 'take from', only in the plural for 'see', in both dual and plural for 'call' and neither in the dual nor in the plural for 'pass by'. From this I conclude that there was free variation between forms with and without initial *j* in the dual as well as the plural. This is indicated with parenthesized *(j)* in the table.
2 McElhanon recorded *aek* 'see each other' and *aiɣek* 'see each other'. The latter form presumably belongs to the Siawari dialect.
3 McElhanon recorded *au* 'hit each other'. This form also occurs in the dictionary (Olkkonen and Olkkonen 2007) under the entry *au-m ərə-tsa* 'fight with one another'.
4 This object verb only exists in the Siawari dialect, note the different reciprocal prefix of Siawari (Soini Olkkonen, personal communication).
5 These object verbs are not in the grammar but were added by Soini Olkkonen (personal communication). There is another object verb that only has two forms: *iaŋ* 'wound him/her', *aŋgiaŋ* 'wound each other'.

Mesem

(Vanaria and Vanaria 1995:25ff)[1]

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL[2]	2/3PL[2]
1	OBJ	n(ə)-	g(ə)-	Ø		nig(i)-	lig(i)-	niŋg(i)-	liŋg(i)-
2a	leave	ne	ge	pe		nige	lige	niŋge	liŋge
2b	OBJ, BEN	-ne	-ge	-pe		-nige	-lige	-niŋge	-liŋge
3	give	nəga	gəga	pisi		nigiga	ligiga	niŋgiga	liŋgiga
4	hit	no	go	ku	ago[3]	nigo	ligo	niŋgo	liŋgo
5	see	ne	ge	i		nige	lige	niŋge	liŋge
6	bite	nə	gə	je		nigi	ligi	niŋgi	liŋgi

1 The grammar does not present all the forms, but gives only the third person singular stem and the stem for the other person-number combinations. The actual forms are not easy to derive from this. The dual and plural forms of the object prefixes seem to end in the vowel *i* before consonant initial stems, though the grammar indicates this only for the 2/3DU form. The verb 'bite' is said to have the two stems *je* and *Ø*; from this I conjecture that the non-3SG forms are homonymous with the object prefixes.
2 The source is inconsistent in spelling *ŋ* and *ŋg;* <ngg> is occasionally used for */ŋg/,* but most of the time <ng> is used for either sound. I take the occasional spelling <ngg> in the plural forms of 'leave, BEN' as an indication that the plural forms of object verbs in general contain */ŋg/.*

3 The verb *ago* 'fight' is diachronically the reciprocal form of *no* 'hit'.

Nabak

(Fabian, Fabian and Waters 1998:45ff, McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL	2/3PL
1a	give	na	ga	sa		nda	ida	nda	inda
1b	OBJ	n(a)-	g(a)-	ø		nd(a)-	id(a)-	nd(a)-[1]	ind(a)-
2a	leave	ne	ge	pe		nde	ide	nde	inde
2b	OBJ, BEN	-ne	-(ŋ)ge	-(m)pe		-nde	-ide	-nde[1]	-inde
3	hit	no	go	ku	au[2]	ndo	ido	ndo	indo
4	see	nik	gik	ek	ak[2]	ndik	idik	ndik	indik
5	bite	ni	gi	i[3]		ndi	idi	ndi	indi
6	burn[4]	nembu	gembu	bu		ndembu	idembu	ndembu	indembu
7	shoot[4]	nele	gele	ele		ndele	idele	ndele	indele
8	spear[5]	neo	geo	o		ndeo	ideo	ndeo	indeo

1 McElhanon sometimes differentiates between the first person dual and the first person plural form: *nda-* 1DU vs. *nnda-* 1PL, *-nde* 1DU vs. *-nnde* 1PL.
2 These reciprocal forms are reported by McElhanon.
3 In the grammar part of their monograph, Fabian, Fabian and Waters (1998:48) give a suppletive third person singular form *ni* for the object verb 'bite'. This must, however, be the root of the verb 'eat'. The real third person singular form *i* 'bite him/her' can be found in the dictionary part (Fabian, Fabian and Waters 1998:210).
4 These two object verbs were recorded by McElhanon.
5 The full gloss of this verb is 'spear, sew, comb, plant'.

Nomu

(author's fieldnotes[1], McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP[2]	1DU	2/3DU	1PL	2/3PL
1a	give	nogi	goi[3]	wagi	agi	netki	jetki	nengi	jegi

1b	OBJ, BEN	-nogi	-goi[3]	-wagi	-agi	-netki	-jetki	-nengi	-jegi
2	hit	noku	goku	kpe	aku	netku	jetku	nenku	jeku
3	call	nokun	gokun	kpen	akun-agi	netkun	jetkun	nenkun	jekun
4	tell	nozo	gozo	jozo	ago	netso	jetso	nenzo	jezo
5	burn	nozi	gozi	ze	wo-agi	netsi	jetsi	nenzi	jezi
6	bite	niko	giko	joko	aiko	neriko[4]	jeriko[4]	neniko[4]	jeiko
7	shoot	nito	gito	joto	aito	nerito	jerito	nenito	jeito
8	cut[5]	nuaŋ	guaŋ	jaŋ	auŋ	neraŋ	jeraŋ	nenaŋ	jeaŋ
9	take	nogo	gogo	mo	ago	netko	jetko	nengo	jego

1 I collected these verb forms from Mr. Kara Nim from Gitukia village in 1996.
2 Both McElhanon and I elicited regular forms for the verb 'see' (*ek-nogi* 'see me' etc.). But McElhanon recorded the irregular reciprocal form *aek* 'see each other'.
3 I elicited *gogi* 'give you' but *-goi* 'you' as object suffix. McElhanon recorded *goi* 'give you' and has both *-goi* 'you' and *-gogi* 'you'.
4 These forms were recorded both by McElhanon and myself. My informant in addition gave the variants *nitko* 1DU, *jeitko* 2/3DU, and *ninko* 1PL.
5 This is the paradigm recorded by McElhanon. I elicited the same singular and reciprocal forms but was given different dual and plural forms: *netnuaŋ* 1DU, *jetjuaŋ* 2/3DU, *nennuaŋ* 1PL, *jejuaŋ* 2/3PL.

Kinalaknga

(McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL	2/3PL
1a	give	noŋgo	goɣo	waŋga	aŋgo	netko	etko	nengo	eŋgo
1b	OBJ, BEN	-noŋgo	-goɣo	Ø, -waŋga	-aŋga[1]	-netko	-etko	-nengo	-eŋgo
2	see	[2]	[2]	ek	aek	nerik	erik	nenik	eik
3	hit	nuku	guku	kpo	aku	netku	etku	nenku	eku
4	call	nukun	gukun	kpon	akul-aŋga	netkun	etkun	nenkun	ekun
5	burn	nozi	gozi	ze		nesi	esi	nezi	ezi
6	bite	niko	giko	joko	aiko	neriko	eriko	neniko	eiko
7	shoot	nito	gito	ito		nerito	erito	nenito	eito

8	cut	niaŋ	giaŋ	jaŋ	ajaŋ-aŋga	neraŋ	eraŋ	nenaŋ	eaŋ

1 The reciprocal suffix is mostly spelled *-aŋga*, though the spelling *-aŋgo* also occurs in the data.
2 McElhanon noted *no-ek* 'see me' and *go-ek* 'see you', which looks like a combination of the free personal pronoun and the form of the third person singular. This seems to be a false start in elicitation.

Kumukio

(McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL	2/3PL
1a	give	noŋgo	goɣo	waŋga	aŋga	netko	etko	nengo	eŋgo
1b	OBJ, BEN[1]	-noŋgu	-ɣoɣu	Ø, -waŋga	-aŋga	-netku	-etku	-nengu	-eŋgu
2	see	nik	gik	ek		nirik	irik	ninik	inik
3	hit	nuku	guku	kpo	aku	netku	etku	nenku	eku
4	call	nukun	gukun	kpon		netkun	etkun	nenkun	ekun
5	burn	nuŋgi	guɣi	enzu		netki	etki	nengi	iŋgi
6	bite	niko	giko	joko	aiku-aŋga	niriko	iriko[2]	niniko	iŋko[2]
7	shoot	nito	gito	ito		nirito	irito	ninito	iɣito

1 Forms with final *u*, as given in the table, and forms with final *o* alternate with one another in the data.
2 McElhanon recorded variants for the second and third person non-singular: *iɣitku* 2/3DU and *iriko* 2/3DU, *iɣiko* 2/3PL and *iŋko* 2/3PL.

Komba

(Southwell 1979:65ff et passim, McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL	2/3PL
1a	give	niɣ[1]	giɣ	pindʌ	aŋgʌ[2]	nikʌ	zikʌ	niŋgʌ	ziŋgʌ
1b	OBJ.I, BEN	-niɣ	-ɣiɣ	Ø	-(j)aŋgʌ	-nikʌ	-zikʌ	-niŋgʌ	-ziŋgʌ
2a	hit	noɣ[1]	goɣ	ko ~ ku	aɣo-jaŋgʌ[2]	nʌko	zʌko	nʌŋgo	zʌŋgo

2b	OBJ.II	-noɣ	-ɣoɣ	-ko ~ -ku	-(j)aɣo	-nʌko	-zʌko	-nʌŋgo	-zʌŋgo
3	call	non(sʌ)	gon(sʌ)	kon(sʌ)		nʌkon(se)	zʌkon(se)	nʌŋgon(se)	zʌŋgon(se)
4	see	nek ~ nik	gek ~ gik	ek ~ ik	aŋak[2]	nikit	zikit	niŋgit	ziŋgit
5	bite	niɣ	giɣ	ziɣ[1]		nikʌ	zikʌ	niŋgʌ	ziŋgʌ
6	burn	nise	gise	se		nikʌse	zikʌse	niŋgʌse	ziŋgʌse
7	shoot[3]	nerʌ	gerʌ	zerʌ		nekʌrʌ	zekʌrʌ	neŋgʌrʌ	zeŋgʌrʌ
8	pierce	nose	gose	suɣ		nʌkose	zʌkose	nʌŋgose	zʌŋgose
9	leave	nʌβan	gʌβan	pa(n)		nʌpan	zʌpan	nʌmban	zʌmban

1 In the grammar, Southwell gives *ni* 'give me', *no* 'hit me', and *zi* 'bite him/her' whereas in the dialect paper Southwell and Southwell (1976:10) give the forms *niɣ* 'give me', *noɣ* 'hit me' and *ziɣ* 'bite him/her' for the Ândâ dialect on which the grammar is based. A look at examples in the grammar suggests that the forms with final ɣ occur before a vowel-initial suffix and the forms without before a consonant-initial suffix. The Gwamâ dialect A has the fuller forms *niɣi* 'give me', *noɣu* 'hit me' and *ziɣi* 'bite him/her'.
2 These reciprocal forms are reported by McElhanon.
3 This object verb is only reported by McElhanon.

Selepet

(McElhanon 1972:37ff)

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL	2/3PL
1a	see	nek	gek	ek	eɣ-ak	nelek	jelek	nenek	jek
1b	OBJ.I	-nek	-ŋgek ~ -ɣek	Ø	-ak	-nelek	-jelek	-nenek	-jek
2a	give	niɣi	giɣi	waŋ	aŋgi	nitki	jitki	ningi	jingi
2b	OBJ.II	-niɣi	ŋgiɣi ~ -ɣiɣi	Ø	-aŋgi	-nitki	-jitki	-ningi	-jingi
2c	BEN	-niɣi	ŋgiɣi ~ -ɣiɣi	-waŋgi	-aŋgi	-nitki	-jitki	-ningi	-jingi
3a	hit	noɣo	goɣo	ku	aɣo[1]	notko	jotko	nongo	jongo
3b	OBJ.III	-noɣo	-ŋgoɣo ~ -ɣoɣo	-ŋgu ~ -ɣu	-aɣo	-notko	-jotko	-nongo	-jongo
4	call	noɣon	goɣon	kun	aɣon-ak	notkon	jotkon	nongon	jongon
5	bite	niɣi	giɣi	iɣi	aŋgi	nitki	jitki	ningi	jingi

1 The simple form *aɣo* has reciprocal meaning, the suffixed form *aɣo-ak* has reflexive meaning.

Timbe

(Foster 1972:16ff, McElhanon's fieldnotes)

		1SG	2SG	3SG	RECP	1DU	2/3DU	1PL	2/3PL
1a	see	nek	gek	ek	eɣ-ak	nelek	jelek	nenek	jek
1b	OBJ.I	-nek	-ŋgek ~ -ɣek	ø	-ak	-nelek	-jelek	-nenek	-jek
2a	give	niŋ	giŋ	waŋ	aŋgi[1]	netki	jetki	nengi	jeŋi[2]
2b	OBJ.II, BEN	-niŋ	-ŋgiŋ	ø, -waŋ	-aŋ[1]	-netki	-jetki	-nengi	-jeŋi[2]
3	hit	nuɣu	guɣu	ko	aɣu[1]	netku	jetku	nengu	jeŋu[2]
4	call	noɣon	goɣon	kon	aɣon-ak[1]	netkun	jetkun	nengun	jeŋun[2]
5	bite	niɣi	giɣi	iɣi		netki	jetki	nengi	jeŋi[2]

1 These reciprocal forms are reported by McElhanon.
2 McElhanon recorded *jeŋgi* 'give you all/them', *jeŋgu* 'hit you all/them', *jeŋgi* 'bite you all/them', and *jeŋgun* 'call you all/them', which are presumably older forms.

Appendix B: Personal pronouns

Sialum
(McElhanon's fieldnotes, author's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	na	ga	jaŋa	ira	ŋera	era	ina	ŋeŋa	eŋa
ergative	naŋa	gaŋa	jaŋaŋa	iraŋa	ŋeraŋa	eraŋa	inaŋa	ŋeŋaŋa	eŋaŋa
genitive[1]	naŋano	gaŋano	jaŋano	iroro	ŋeroro	eroro	inono	ŋeŋono	eŋono
emphatic	naja	gena	jaŋina	irisa	ŋetna	etna	iniza	ŋena	ena
possessive	-na[2]	-na[2]	-ina	-isa	-ŋetna	-etna	-iza	-ŋena	-ena

1 These genitive forms are from McElhanon's survey of 1968. In 2012 an informant from Qambu village gave him different forms for the singular and dual: *nano* 1SG, *gano* 2SG, *jaŋono* 3SG, *irono* 1DU, *ŋerono* 2DU, *erono* 3DU. These forms appear to be more archaic than the ones given in the table. Stolz (1911), too, has *nano* 1SG and *gano* 2SG.
2 The possessive suffixes of the first and the second person singular are indeed homonymous. Both suffixes occur in the glossed text given in Stolz's (1911) article: *<ngasa-equap-na>* grandchild-PL-1s:POSS 'meine Enkel', *<topa-equap-na>* friend-PL-2s:POSS 'deine Freunde'.

Ono
(Wacke 1931:185ff, T. Phinnemore 1985a:197ff)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	na	ge	eŋe	ŋere	ŋire	ere	ŋene	ŋine	eŋe
ergative	noŋo	goŋo	oŋo	ŋeto	ŋito	eto	ŋedo	ŋido	edo
genitive	naŋane	geŋane	eŋane	ŋerane	ŋirane	erane	ŋenane	ŋinane	eŋane
emphatic	nae	geŋone	eŋine	ŋetse	ŋiritine[1]	eretne	ŋedze	ŋinŋine	enŋene
possessive	-ne	-ŋone	-ine	-se	-ŋitne	-etne	-ze	-ŋine	-ene

1 McElhanon recorded *ŋiritne* 2DU.

Kovai

(Brown 1992:10, 27f, 40ff, Johnstone 1998:21ff, 34)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
subject	non	gog	i	it	ŋot	jot	in	ŋon	joŋ
object	-n	-g	Ø, -j, -tin	-it	-ŋet, -ŋit	-jVt	-in	-ŋen, -ŋin	-jVŋ
accompanitive	–	–	–	itaŋ	eŋetaŋ	jataŋ	inaŋ	eŋenaŋ	jaŋaŋ
alienable poss.	noŋ	goŋ	joŋ	toŋ	ŋetoŋ	jotoŋ	inoŋ	ŋenoŋ	joŋoŋ
inalienable possession	-in, -ain	-og, -ag	-on, -an	-(V)bit	-(V)ŋot, -(V)ŋat	-(V)bot	-(V)bin	-(V)ŋon, -(V)ŋan	-(V)bon

Sene

(Pilhofer 1928:298ff, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	na	ga	ɔe	neke	nekɔ[1]	ŋɔke	jɔke	neŋe	niŋine[1]	ŋɔŋe	jɔŋe
ergative	nani	gagi	ɔi	neki	–	–	–	neŋi	–	–	–
genitive	nanite	gate	ɔete	nekete	nikite	ŋɔkete	jɔkete	neŋete	niŋine	ŋɔŋete	jɔŋete
emphatic	nɔkɔʔ	gɔkɔʔ	ekɔʔ	nekaʔ	–	ŋɔkɔʔ	jɔkɔʔ	neŋaʔ	–	ŋɔŋɔʔ	jɔŋɔʔ
emph-poss[2]	[3]	gɔŋine	ikite	nikite	–	ŋɔkite	jɔkite	niŋine	–	ŋɔŋine	jɔŋine
possessive	-nɔne	-ŋone	-tiʔne[4]	-neke, -nikite	–	-ŋɔkite	-jɔkite	-neŋe, -niŋine	–	-ŋɔŋine	-jɔŋine

1 The lack of parallelism between the inclusive forms of the first person dual and plural throws doubt on the accuracy of the data.
2 This set of emphatic pronouns has only been documented by McElhanon. The function is not clear, perhaps emphatic possessive.
3 The first person singular form of this paradigm has not been successfully recorded.
4 McElhanon recorded *-tine*.

Migabac
(Pilhofer 1928:298ff, McEvoy 2008:42)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	na	ga	je	noke	nokileʔ[1]	ŋeke	jeke	noŋe	noŋuŋ[1]	ŋeŋe	jeŋe
ergative	nani	gagi	jei, jedi	noki	nokileʔdi[1]	ŋeki	jeki	noŋi	noŋuŋdi[1]	ŋeŋi	jeŋi
genitive	nale	gale	jele	nokele	nokileʔ	ŋekele	jekele	noŋele	noŋineŋ	ŋeŋele	jeŋele
emphatic I	nehuʔ[2]	gehuʔ[2]	jehuʔ[2]	nokuʔ[2]	–	ŋekuʔ[2]	jekuʔ[2]	noŋuŋ[3]	–	ŋeŋuŋ[3]	jeŋuŋ[3]
emphatic II	neiʔne	geiʔne	jeiʔne	nokileʔ	–	ŋekileʔ	jekileʔ	noŋileŋ	–	ŋeŋileŋ	jeŋileŋ
possessive	-ne	-ŋone, -gone[4]	-ine	-noŋgeʔ	–	-ŋineʔ	-jekileʔ[5]	-noŋgeŋ	–	-ŋineŋ	-jeŋineŋ[5]

1 These inclusive first person dual and plural forms were given by Pilhofer. The lack of parallelism between them throws doubt on the accuracy of the data. McEvoy does not mention inclusive first person dual and plural forms in his grammar but suggests (personal communication) that there is a tendency to use the emphatic II forms in this sense.
2 The singular and dual forms of the emphatic I pronoun are from Pilhofer. McEvoy gives *naneuʔ* 1SG, *gageuʔ* 2SG, *jeuʔ* 3SG, *nokuuʔ* 1DU, *ŋekuuʔ* 2DU, *jekuuʔ* 3DU. The extra initial syllable in the first and the second person singular forms is the basic pronoun with which the emphatic pronouns co-occur. It is not clear why the vowel of the emphatic suffix is lengthened in the dual in McEvoy's data.
3 McElhanon noted the following plural forms of the emphatic I pronoun in 1968: *noŋe noŋuʔ* 1PL, *ŋeŋe ŋeŋuʔ* 2PL, *jeŋe jeŋuʔ* 3PL. In these forms the final glottal stop has not yet been replaced by a velar nasal. Presumably these older forms were taken from a different dialect than the one recorded by Pilhofer.
4 Pilhofer gives both forms as variants, McEvoy only lists *-gone*. The older form *-ŋone* must in the meantime have been lost.
5 These third person dual and plural forms were reported by Pilhofer. In contemporary Migabac these forms have disappeared and the second person forms are used for the third person as well (as in the neighboring language Dedua).

Momare
(Pilhofer 1928:298ff, McElhanon's fieldnotes, author's fieldnotes)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	nane	ga	e	noke	nokileʔ	ŋake	jake	noŋe	noŋineŋ	ŋaŋe	jaŋe
ergative	nani	gagi[1]	edi̱	noki	nokileʔdi̱	ŋaki	jaki	noŋi	noŋineŋdi̱	ŋaŋi	jaŋi
genitive	nanele	gale	ele	nokele	nokileʔ	ŋakele	jakele	noŋele	noŋineŋ	ŋaŋele	jaŋele
emphatic	nahaʔ	gahaʔ	jahaʔ	nohaʔ	–	ŋahaʔ	jahaʔ	noŋaʔ	–	ŋaŋaʔ	jaŋaʔ

emph-poss[2]	naiʔne	gaiʔne	jaiʔne	nokileʔ	–	ŋakileʔ	jakileʔ	noŋineŋ	–	ŋaŋineŋ	jaŋineŋ
possessive	-ne	-ŋone, -gone[3]	-ine	-noŋgeʔ	–	-ŋineʔ[4]	-jakileʔ	-noŋgeŋ	–	-ŋineŋ[4]	-jaŋineŋ

1 Pilhofer reports that an alternative form *gi* was used in the village Walinga.
2 This set of emphatic pronouns has only been documented by McElhanon. The function is not clear, perhaps emphatic possessive.
3 My informants called *-gone dâŋ maine* (usual, colloquial speech) and *-ŋone dâŋ râpene* (rare, elevated speech). Pilhofer only recorded *-ŋone.*
4 My informants gave *-ŋakileʔ* 2DU and *-ŋaŋineŋ* 2PL in 1998. The forms reported by Pilhofer must be older as they match the corresponding forms of Migabac. In one paradigm I elicited, *-nokilec* 1DU was given instead of *-noŋgeʔ* 1DU, indicating that the non-singular forms of this paradigm were in the process of being reorganized.

Wamorâ

(Pilhofer 1928:298ff)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	no	go	jɯŋɔ	nɯhɔ	nɔhɯŋ	ŋohɔ	jɔhɔ	nɯŋɔ	nɔŋɯŋ	ŋoŋɔ	jɔŋɔ
ergative	noni	goi	jɔŋi	nɔki	–	ŋaki	jaki	nɔŋi	–	ŋaŋi	jaŋi
genitive	nolɔ	golɔ	jɯŋɔlɔ	nɯhɔlɔ	nɔhɯŋnɔ	ŋohɔlɔ	jɔhɔlɔ	nɯŋɔlɔ	nɔŋɯŋnɔ	ŋoŋɔlɔ	jɔŋɔlɔ
emphatic	naheʔ	gaheʔ	jɔŋeʔ[1]	nɔheʔ	–	ŋaheʔ	jaheʔ	nɔŋeʔ	–	ŋaŋeʔ	jaŋeʔ
possessive	-ne	-ŋonɔ, -nɯŋɔ	-inɔ[1]	-nɯhaʔ	–	-ŋahɯŋ	-jahɯŋ	-nɯŋaʔ	–	-ŋaŋɯŋ	-jaŋɯŋ

1 In these forms the circumflex was accidentally left away in Pilhofer's article: *<jaŋec>* instead of *<jâŋec> and <-ina>* instead of *<-inâ>.*

Mâgobineng

(Pilhofer 1928:298ff)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	no	go	e	nehɔ	nɔheʔ	ŋohɔ	jɔhɔ	neŋɔ	nɔŋeʔ	ŋoŋɔ	jɔŋɔ
ergative	noni	gogi	egi	–	–	–	–	–	–	–	–
genitive	nolɔ	golɔ	elɔ	nehɔlɔ	nɔheʔnɔ	ŋohɔlɔ	jɔhɔlɔ	neŋɔlɔ	nɔŋeʔnɔ	ŋoŋɔlɔ	jɔŋɔlɔ

emphatic	nahe?	gahe?	jəhe?	nəhe?	–	ŋahe?	jahe?	nəŋe?	–	ŋaŋe?	jaŋe?
possessive	-ne	-ŋinɔ	-ti?nɔ	-neha?	–	-ŋaki?	-jaki?	-neŋa?	–	-ŋaŋi?	-jaŋi?

Wemo
(Pilhofer 1933:51ff)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	no	go	e	nəhe	nəhə?	ŋohe	jahe	nəŋe	nəŋə?	ŋoŋe	jaŋe
ergative	noni	goki	eki	–	–	–	–	–	–	–	–
genitive	nole	gole	ele	nəhele	nəhə?ne	ŋohele	jahele	nəŋele	nəŋə?ne	ŋoŋele	jaŋele
emphatic	naha?	gaha?	jaha?	nəhə?	–	ŋaha?	jaha?	nəŋə?	–	ŋaŋa?	jaŋa?
possessive	-nane	-ge	-ne, -ti?ne	-nəhe?	–	-ŋeki?	-jeki?	-nəŋe?	–	-ŋeŋi?	-jeŋi?

Naga
(Pilhofer 1928:298ff, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	noŋ	go	jəŋa	nəka	nəkəŋ	ŋoka	jaka	nəŋa	nəŋəŋ	ŋoŋa	jaŋa
ergative	noŋzi	goi	jəŋi	nəki	–	ŋaki	jaki	nəŋi	–	ŋaŋi	jaŋi
genitive	noŋte	gole	jəŋale	nəkale	nəkəŋne	ŋokale	jakale	nəŋale	nəŋəŋne	ŋoŋale	jaŋale
emphatic	nake?	gake?	jəŋe?	nəke?	–	ŋake?	jake?	nəŋe?	–	ŋaŋe?	jaŋe?
emph-poss[1]	nakəŋne	gakəŋne	[2]	nəkəŋne	–	ŋakəŋne	jakəŋne	nəŋəŋne	–	ŋaŋəŋne	jaŋəŋne
possessive	-je[3]	-ge	-ine	-nəkəŋ	–	-ŋakəŋ	-jakəŋ	-nəŋəŋ	–	-ŋaŋəŋ	-jaŋəŋ

1 This set of emphatic pronouns has only been documented by McElhanon. The function is not clear, perhaps emphatic possessive.
2 The third person singular form of this paradigm has not been successfully recorded.
3 McElhanon's fieldnotes confirm this form given by Pilhofer.

Mape
(Pilhofer 1928:298ff, author's fieldnotes)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	noŋ	go	iŋɔ	nɯkɔ	nɔkɯŋ	ŋokɔ	jɔkɔ	nɯŋɔ	nɔŋɯŋ	ŋoŋɔ	jɔŋɔ
ergative[1]	noi, nonzi	goi, gozi	iŋai, iŋazi	nɔki, nɯkazi	nɔkɯŋzi	ŋaki	jaki	nɔŋi, nɯŋazi	nɔŋɯŋzi	ŋaŋi	jaŋi
genitive	nondeʔ	goleʔ	iŋaleʔ	nɯkaleʔ	nɔkɯŋdeʔ	ŋokaleʔ	jakaleʔ	nɯŋaleʔ	nɔŋɯŋdeʔ	ŋoŋaleʔ	jaŋaleʔ
emphatic[2]	nakeʔ	gakeʔ	jɔŋeʔ	nɔkeʔ	–	ŋakeʔ	jakeʔ	nɔŋeʔ	–	ŋaŋeʔ	jaŋeʔ
possessive	-ne	-gɔ	-ine	-nɔkɯŋ	–	-ŋakɯŋ	-jakɯŋ	-nɔŋɯŋ[3]	–	-ŋaŋɯŋ[3]	-jaŋɯŋ[3]

1 My informant in 1998 consistently gave two variants of the ergative forms, one ending in *-i*, the other in *-zi*, with the exception of the inclusive first person dual and plural forms, which only have the variant with *-zi*. In the singular, Pilhofer gives only the forms with *-zi*. In the first person dual exclusive he gives *nɯkazi* with *-zi*, but in the first person plural exclusive he gives *nɔŋi* with *-i*, suggesting that in Pilhofer's time, too, there was variation between these two endings. I have supplied the implied other variants, *nɔki* and *nɯŋazi*. In the speech of my informant the vocalism of the forms with *-zi* is continued: *nikai, nikazi* 1DU.EX, *niŋai, niŋazi* 1PL.EX. In the second and the third person dual and plural Pilhofer gives forms in *-i* which match those of Naga and Wamorâ and must therefore be old. My informant gave *ŋokai* 2DU, *jakai* 3DU, *ŋoŋai* 2PL and *jaŋai* 3PL.
2 The emphatic pronominal forms in the Huon Tip languages are usually preceded by the basic pronouns, though Pilhofer left them away in his data. In the singular, my informant gave different forms: *noŋ nakiŋ* 1SG, *go gakiŋ* 2SG, *iŋɔ jakiŋ* 3SG. This may be a dialect difference. McElhanon elicited the same forms as Pilhofer.
3 The plural forms were pronounced *-nɔɔŋ* 1PL, *-ŋaaŋ* or *-ŋauŋ* 2PL, and *-jaaŋ* or *-jauŋ* 3PL by my informant. This is probably the result of a metathesis of quantity: *nɔŋɯŋ* > [nɔŋ:] > [nɔ:ŋ].

Dedua
(Ceder and Ceder 1990:101, 121ff, Pilhofer 1928:298ff)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	ni	ge	je	neri	neraŋ	ŋeri	jeri	neni	nenaŋ	ŋeni	jeni
ergative	neŋ	geŋ	jeŋ	nereŋ	nerao?	ŋereŋ	jereŋ	neneŋ	nenao?	ŋeneŋ	jeneŋ
genitive	nea?	gea?	jea?	nerea?	neraŋ	ŋerea?	jerea?	nenea?	nenaŋ	ŋenea?	jenea?
emph-poss	neanna	geaŋga	jeŋena	neraŋ	–	ŋeraŋ	jeraŋ	nenaŋ	–	ŋenaŋ	jenaŋ[1]
emphatic	neannao?[2]	geaŋgao?[2]	jeŋenao?	nerao?	–	ŋerao?	jerao?	nenao?	–	ŋenao?	jenao?[1]
possessive	-na	-ga	-a ~ -ja	-nira	–	-ŋira	-jira[3]	-nina	–	-ŋina	-jina[3]

1 For the emphatic pronoun with the suffix *-oʔ* Pilhofer gives the third person plural form *jeŋaoʔ* while the Ceders have *jenaoʔ*. McElhanon's fieldnotes concur with Pilhofer. The form given by the Ceders seems to be the result of recent leveling.
2 In Pilhofer's data the first part of these two complex pronouns is marked as optional: *aŋnaoʔ* 1SG and *aŋgaoʔ* 2SG are variants of the forms given.
3 These third person dual and plural forms were recorded by Pilhofer (1928) and by McElhanon in 1968. They have been replaced by the second person forms, which are now used for the second as well as the third person according to the Ceders.

Mongi

(Lee and Lee 1993:62, 72ff, Pilhofer 1928:298ff, author's fieldnotes)

	1SG	2SG	3SG	1DU.EX	1DU.IN	2DU	3DU	1PL.EX	1PL.IN	2PL	3PL
basic	ni	gi	i	niri	nekaŋ	iri	(i)iri	nini	neŋaŋ	ini	(i)ini
ergative	neŋ	geŋ	inəŋ, iŋəŋ	nereŋ	nekaoʔ[1]	ereŋ	(i)ereŋ	neneŋ	neŋaoʔ[1]	eneŋ	(i)eneŋ
genitive	nuaʔ	guaʔ	iwaʔ	noroaʔ[2]	nekaŋ[1]	oroaʔ[2]	(i)oroaʔ[2]	nonoaʔ[2]	neŋaŋ[1]	onoaʔ[2]	(i)onoaʔ[2]
emph-poss	nena	geŋga	nəŋəna, eŋena	nekaŋ	–	ekaŋ	ekaŋ	neŋaŋ	–	eŋaŋ	eŋaŋ
emphatic	nenaoʔ[3]	geŋgaoʔ[3]	nəŋənaoʔ, eŋenaoʔ	nekaoʔ	–	ekaoʔ	ekaoʔ	neŋaoʔ	–	eŋaoʔ	eŋaoʔ
possessive	-na	-ga	-a ~ -ja	-nira	–	-gira	-gira	-nina	–	-gina	-gina

1 These inclusive first person dual and plural forms were given by my informant. Pilhofer gives no ergative inclusive forms and has *nekaŋneʔ* 1DU.IN and *neŋaŋneʔ* 1PL.IN in the genitive, with the focusing clitic *-neʔ*. The Lees generally include no inclusive forms in their pronominal paradigms, but acknowledge the inclusive use of *nekaŋ* and *neŋaŋ*.
2 These are the forms given by Pilhofer. In contemporary Mongi the vowel sequence /oa/ has been contracted; Lee and Lee have *noraʔ* 1DU.EX, *oraʔ* 2DU etc.
3 Pilhofer has *naoʔ* 1SG and *gaoʔ* 2SG. The first syllable in *nenaoʔ* 1SG and *geŋgaoʔ* 2SG recorded both by the Lees and by McElhanon is the basic pronoun. It seems to be an integral part of this pronoun and Pilhofer may have erroneously removed it in the same manner as he removed the preposed basic pronoun from the emphatic pronouns in the Huon Tip languages.

Tobo

(Mankins 2012:1f, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	ni	gi	i	niri	iri	iri	nini	ini	ini

ergative	nen	gen	iŋən	nerən	erən	ijerən	nenən	enən	ijenən
genitive	nuat	guat	iwat	neruat	eruat	ijeruat	nenuat	enuat	ijenuat
emph-poss[1]	nena	geŋga	jəɣəna	nekan	ekan	ekan	neŋan	eŋan	eŋan
emphatic	nenok	geŋgok	nəɣənok[2]	nekok	ekok	ijekok	neŋok	eŋok	ijeŋok
possessive	-na	-ga ~ -ka	-a ~ -ja	-nira	-gira ~ -kira	-gira ~ -kira	-nina	-gina ~ -kina	-gina ~ -kina

1 This pronoun set is from McElhanon's fieldnotes.
2 In the third person singular of the emphatic pronoun, McElhanon recorded *joɣonok*.

Borong
(Olkkonen and Olkkonen 2000:13ff, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	nii	gii	ii	noro	oro	ijoro	nono	oŋo	ijoŋo
ergative	niinoŋ	giinoŋ	iinoŋ	noronoŋ	oronoŋ	ijoronoŋ	nononoŋ	oŋonoŋ	ijoŋonoŋ
comitative	niwo	giwo	iwo	norowo	orowo	ijorowo	nonowo	oŋowo	ijoŋowo
genitive	noo	goo	iwaa	noroo	oroo	ijoroo	nonoo	oŋoo	ijoŋoo
emphatic I	neena, niana	geeŋga, giaŋga	aŋa, ijaŋa	anara, noronara	oroaŋgara	oroaŋgara, ijaŋgara	anana, nononana	oŋoaŋgia	oŋoaŋgia, ijaŋgia
emphatic II[1]	neeno, niano	geeŋgo, giaŋgo	aŋo, ijaŋo	anaro, noronaro	oroaŋgaro	oroaŋgaro, ijaŋgaro	anano, nononano	oŋoaŋgio	oŋoaŋgio, ijaŋgio
possessive	-na	-ga	-a ~ -ja, -ia	-nara[2]	-gara[2]	-gara[2]	-nana[2]	-gia	-gia

1 The singular emphatic II pronouns recorded by McElhanon in 1968 agree with the forms given first in the above table. In the dual and plural he noted down the following forms: *anoro* 1DU, *aŋgoro* 2/3DU, *anono* 1PL, *aŋgio* 2/3PL. These forms seem to be older than the ones with a preposed basic pronoun given by the Olkkonens.
2 In the dual and the first person plural McElhanon recorded a different first vowel: *-nora* 1DU, *-gora* 2/3DU, *-nona* 1PL. These forms were recorded in Ebabang village in 1968.

Somba-Siawari

(Olkkonen and Olkkonen 1983:72ff, Pilhofer 1928:298ff, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	ni	gi	i	niri	iŋiri	iŋiri	nini	iŋini	iŋini
ergative	nəŋən	gəŋən	jaŋən	netŋən[1]	etŋən[1]	jetŋən[1]	nenŋən[1]	enŋən[1]	jenŋən[1]
comitative	nəmbuk	gəbuk	jambuk	nepuk	(j)epuk	(j)epuk	nembuk	(j)embuk	(j)embuk
genitive	nəŋgət	gəɣət	jaŋgət	netkət[1]	etkət[1]	jetkət[1]	nengət[1]	engət[1]	jengət[1]
emphatic I	nani	nangi	nanŋi	naniri	nanŋiri	nanŋiri	nanini	nanŋini	nanŋini
emphatic II[2]	nanak	nangak	nanŋak	nanirak	nanŋirak	nanŋirak	naninak	nanŋinak	nanŋinak
possessive	-ni	-gi	-ŋi	-niri	-ŋiri	-ŋiri	-nini	-ŋini	-ŋini

1 The ergative dual and plural forms with the consonant clusters *-tŋ-* and *-nŋ-* and the genitive forms with the clusters *-tk-* and *-ng-* were reported by Pilhofer. In the meantime these clusters have been simplified: *jetŋən > (j)ekŋən > (j)ekən, jenŋən > (j)eŋən, netkət > nekət, nengət > neŋgət* etc. In Pilhofer's data the third person dual and plural forms start with a /j/ while the second person forms lack this consonant. Later this difference between second and third person forms was confounded and initial /j/ can now be used optionally both in the second and in the third person dual and plural (as in the comitative forms given by the Olkkonens, not recorded by Pilhofer).

2 In the Yaknge dialect, McElhanon recorded these emphatic pronouns with a suffix *-ok* rather than *-ak*, e.g. *nanok* 1SG, *nanŋinok* 2/3PL.

Mesem

(Vanaria and Vanaria 1995:17, 41ff, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	nə	gə̃	lə	ni	li	lede	nĩ	lĩ	lene
genitive	nəgə	gə̃gə	ləgə	nigə	ligə	ledegə	niŋgə	liŋgə	lenegə
comitative	nəmbə	gəmbə	ləmbə	nibə	libə	ledebə	nimbə	limbə	lenebə
emphatic	nen	gigi	igŋ	nedn	ledn	ledn	nenn	len	len
possessive	-ŋ ~-n ~ -m[1]	-gi	-ŋ ~-n ~ -m[1]	-nedn[2]	-igŋ[3]	-igŋ[3]	-nen[2]	-iŋ[3]	-iŋ[3]

1 According to the Vanarias, the first and the third person singular possessive suffixes are homonymous, expressed by a nasal consonant whose place of articulation assimilates to the preceding consonant. McElhanon recorded *-n* 1SG and *-ŋ* 3SG in 1968.

2 The Vanarias list *-nedn* and *-nen* as variants both for the first person dual and plural. McElhanon recorded *-netn* 1The contemporary first and second person singular pronouns of The contemporary first and second person singular pronouns of DU and *-nen* 1PL.
3 These forms are found in the dictionary (Vanaria and Vanaria 1996). The grammar has *-ikŋ* 2DU and *-ik* 3DU, presumably a typographical error. McElhanon's fieldnotes from 1968 have the forms *-itn* 2/3DU and *-in* 2/3PL.

Nabak

(Fabian, Fabian and Waters 1998:23ff, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	neŋ[1]	geŋ[1]	ek	nit	it[2]	eget	nin	in[2]	ekŋen
genitive	nɔgɔt	gɔgɔt	egat	nigat	igat	igat, egegat	niŋgat	iŋgat	[3]
comitative	neŋmak	geŋmak	egmak	nidmak	idmak	egedmak	ninmak	inmak	ekŋenmak
emphatic	nen	giti	igŋaŋ	nilit	ilit	ilit[4]	nin	ilin	ilin[4]
possessive	-n	-ndi	-ŋaŋ	-nit ~ -it	-ŋit ~ -it	-ŋit ~ -it	-n	-ŋin ~ -in	-ŋin ~ -in

1 Fabian, Fabian and Waters give these forms as basic pronouns, i.e. they are used as intransitive subjects, transitive subjects and objects. McElhanon recorded separate ergative forms in 1967. In his data *neŋ* 1SG and *geŋ* 2SG are ergative forms and *ne* 1SG and *ge* 2SG are the basic pronouns.
2 In 1967 McElhanon recorded *ŋit* 2DU and *ŋin* 2PL.
3 The source lists *ekŋeŋalen* which is, however, a repetition of the preceding form in the table, apparently by mistake. We expect *iŋgat, ekŋeŋgat*.
4 McElhanon in addition noted the variants *egeraŋ* 3DU and *egenaŋ* 3PL.

Nomu

(McElhanon's fieldnotes, author's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	no	go	jok	net	jet	(jok)jet	nen	je	(jok)je
ergative	noŋo	goŋo	jokŋo	netŋo	jetŋo	jetŋo	nenŋo	jeŋo	jeŋo
genitive	nogot	gogot	jokot	netkot	jetkot	jetkot	nengot	jegot	jegot
emphatic	non	goi	jokŋe	netŋere	jeitŋe	jeitŋe	nenŋene	jeiŋe	jeiŋe
possessive	-n ~ -ne	-ge	-ŋe	-ŋere	-(j)etŋe[1]	-(j)etŋe[1]	-ŋene	-(j)eŋe[1]	-(j)eŋe[1]

1 Both McElhanon and I recorded *-etŋe* 2/3DU and *-eŋe* 2/3PL with vowel final nouns. McElhanon also recorded *-jetŋe* 2/3DU and *-jeŋe* 2/3PL with consonant final nouns.

Kinalaknga
(McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	no	go	jok	net	et	et	nen	ek	ek
ergative	noŋo	goŋo	joɣo	nero	ero	ero	neno	eɣo	eɣo
genitive	noŋgot	goɣot	jokot	netkot	etkot	etkot	nenkot[1]	ekot	ekot
emphatic[1]	nogotni	gogotgi	jokio						
possessive	-ni	-ŋgo	-o ~ -jo	-nero	-ero	-ero	-neno	-eɣo	-eɣo

1 It is not clear whether the emphatic forms of the first and the second person singular and that of the third person singular given here are part of the same paradigm. The remainder of the paradigm was not recorded.
2 This is probably a transcription error for *nengot*.

Kumukio
(McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	[1]	[1]	jok	net	et	et	nen	ek	ek
ergative	[2]	[2]	joɣo	nero	ero	ero	neno	eɣo	eɣo
genitive	noŋgot	goɣot	jokot	netkot	etkot	etkot	nengot	ekot	ekot
emphatic	noŋa	goŋa	joɣa	nera	era	era	nena	eɣa	eɣa
possessive	-ne	-ŋge	-o	-netŋe	-jere	-jere	-nenŋe	-jeŋe	-jeŋe

1 The record has *ni* 1SG and *gi* 2SG, but in the face of the genitive forms *no-ŋgot* 1SG and *go-ɣot* 2SG these forms do not appear to be right. An error may have occurred in copying the data.
2 These forms are missing from the record.

Komba
(Southwell 1979:18, 30ff)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	nʌ	gʌ	zʌk	net	zet	(zʌk)zet	nen	zen	(zʌk)zen
ergative	nʌŋʌ	gʌŋʌ	zʌkŋʌ	nikŋʌ	zikŋʌ	zikŋʌ	niŋʌ	ziŋʌ	ziŋʌ
genitive	nʌɣʌt	gʌɣʌt	zʌkkʌt	nekʌt	zekʌt	zekʌt	neŋgʌt	zeŋgʌt	zeŋgʌt
emphatic	ninʌ	gikʌ	zikŋʌ	niikŋʌ	ziikŋʌ	ziikŋʌ	niiŋʌ	ziiŋʌ	ziiŋʌ
possessive	-nʌ	-gʌ	-ŋʌ	-nikŋʌ	-zikŋʌ	-zikŋʌ	-niŋʌ	-ziŋʌ	-ziŋʌ

Selepet
(McElhanon 1970d)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	nɔ	gɔ	jɔk	net	jet	(jɔk)jet	nen	jen	(jɔk)jen
ergative	nɔŋe	gɔŋe	jɔkŋe	netŋe	jetŋe	(jɔk)jetŋe	nenŋe	jeŋe	(jɔk)jeŋe
genitive	nɔɣɔt	gɔɣɔt	jɔkɔt	netkɔt	jetkɔt	(jɔk)jetkɔt	nengɔt	jeŋgɔt	(jɔk) jeŋgɔt
emphatic I	nine	gike	ikŋe	–	–	–	–	–	–
emphatic II	nɔ niniɔk	gɔ gikiɔk	ikŋe ikŋiɔk	net netŋiɔk	jet jetŋiɔk	jɔk jetŋiɔk	nen nenŋiɔk	jen jeŋiɔk	jɔk jeŋiɔk
possessive	-ne	-ge	-ŋe	-netŋe	-jetŋe	-jetŋe	-nenŋe	-jeŋe	-jeŋe

Timbe
(Foster 1972:15, 47ff, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2DU	3DU	1PL	2PL	3PL
basic	nɔ	gɔ	jɔk	net	jet	(jɔk)jet	nen	je	(jɔk)je
ergative	nɔŋe	gɔŋe	jɔkŋe	netŋe	jetŋe	(jɔk)jetŋe	nenŋe	jeŋe	(jɔk)jeŋe
genitive	nɔŋgɔt	gɔŋgɔt	jɔkgɔt	netgɔt	jetgɔt	jetgɔt	nengɔt	jeŋgɔt	jeŋgɔt
emphatic I	nune	guɣe	ikiŋe	–	–	–	–	–	–

emphatic II	nɔ nuniɔk	gɔ guɣiɔk	jɔk ikiŋiɔk	net netŋiɔk	jet jetŋiɔk	jɔk jetŋiɔk	nen nenŋiɔk	je jeŋiɔk	jɔk jeŋiɔk
possessive	-ne	-ɣe	-ŋe	-netŋe	-jetŋe	-jetŋe	-nenŋe	-jeŋe	-jeŋe

Appendix C: Subject-tense endings of the verb

Sialum

(McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
near past[1]	ari-a[2]	ari-na	ari-ŋe	ari-ta	ari-net	ari-na	ari-ne
far past[1]	ari-kaja	ari-kana	ari-ka	ari-kata	ari-kanet	ari-kana	ari-kane
present	are-magia[2]	are-magina	are-mageŋe	are-magita	are-maginet	are-magina	are-magine
future	are-gia[2]	are-gina	are-gika	are-gita	are-ginet	are-gina	are-gine
imperative	are-ba	are-i	are-kap	are-ta	are-wet	are-ŋam	are-we
future irrealis	are-zaja	are-zana	are-zan	are-zanta	are-zanet	are-zaŋam	are-zane
past irrealis	are-wadarap	are-idarap	ari-kidarap[3]	are-tadarap	ari-netdarap[3]	are-ŋamdarap	are-nedarap
different subject	are-ba	are-i	are-ki	are-ta	are-wet	are-ŋam	are-we
DS sequential	are-bako	are-iko	are-kiko	are-tako	are-wetko	are-ŋamko	are-weko
DS SEQ DUR	are-magebako	are-mageiko	are-magekiko	are-magetako	are-magewetko	are-mageŋamko	are-mageweko

1 The final vowel of the verb *are* 'go' appears as *i* in the near past and far past tenses because the endings of these tenses begin with the vowel *i*, as can be seen in forms of verbs that end in a consonant, like the far past forms *jar-ika* 'he told him' and *man-ikane* 'they gave him' (Stolz 1911:282f).
2 A comparison of these first person singular forms with those of the far past and the future irrealis leaves little doubt that they must be interpreted phonologically as *-ija* (near past), *-magija* (present) and *-gija* (future), with a person-number formative *-ja* 1SG.
3 That the final vowel of the verb *are* 'go' is spelled with an *i* in two forms of this paradigm is probably a transcription error.

Ono

(Wacke 1931:164-73, P. Phinnemore 1990:10-60)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
near past[1]	ari-le	ari-ne	ari-ke	ari-te	ari-mit	ari-ne	ari-mi
far past	ari-kole	ari-kone	ari-ke	ari-kote	ari-koit	ari-kone	ari-koi

present	ari-maile	ari-maine	ari-maike	ari-maite	ari-mamit	ari-maine	ari-mami
future[2]	ari-kale	ari-kene	ari-ake	ari-kete	ari-keit	ari-kene	ari-kei
imperative	ari-we[3]	ari-nom	ari-kep	ari-te	ari-ut[3]	ari-ŋem	ari-u[3]
potential[4]	ari-kolo	ari-kono	ari-ko	ari-koto	ari-koitwo	ari-kono	ari-koiwo
counterfactual[4]	ari-werap[5]	ari-nomrap	ari-kirap	ari-terap	ari-utrap	ari-ŋemrap	ari-urap
past habitual[6]	ari-maŋkole	ari-maŋkone	ari-mageke[7]	ari-maŋkote	ari-maŋkoit	ari-maŋkone	ari-maŋkoi
future habitual[6]	ari-maŋkale	ari-maŋkene	ari-mageake	ari-maŋkete	ari-maŋkeit	ari-maŋkene	ari-maŋkei
imperative habitual[6]	ari-magewe	ari-magenom	ari-magekep	ari-maŋkete[8]	ari-mageut	ari-mageŋem	ari-mageu
near past iterative[9]	ari-okanile	ari-okanine	ari-okanike	ari-okanite	ari-okanimit	ari-okanine	ari-okanimi
far past iterative[9]	ari-okangole	ari-okangone	ari-okange	ari-okangote	ari-okangoit	ari-okangone	ari-okangoi
present iterative[9]	ari-okanmaile	ari-okanmaine	ari-okanmaike	ari-okanmaite	ari-okanmamit	ari-okanmaine	ari-okanmami
future iterative[9]	ari-okanikale	ari-okanikene	ari-okaniake	ari-okanikete	ari-okanikeit	ari-okanikene	ari-okanikei
hortative iterative[9]	ari-okanbe	ari-okannom	ari-okangep	ari-okante	ari-okanbit	ari-okanŋem	ari-okanbi
different subject	ari-we[3]	ari-nom	ari-ki	ari-te	ari-ut[3]	ari-ŋem	ari-u[3]
DS[10]	ari-weso	ari-nomso	ari-kiso	ari-teso	ari-utso	ari-ŋemso	ari-uso
DS habitual[6]	ari-magewe	ari-magenom	ari-mageki	ari-magete	ari-mageut	ari-mageŋem	ari-mageu

1 P. Phinnemore (1990:44f) states that the near past tense carries the tense marker *-i*, which coalesces with the final *i* of the exemplary verb *ari* 'go'. Thus, the endings of this paradigm are *-ile* 1SG, *-ine* 2SG, *-ike* 3SG etc. The ending-initial vowel *i* shows up after the consonant-final iterative marker *-okan* in the near past iterative (see below).
2 According to P. Phinnemore (1990:49), the future tense endings start with the vowel *i,* which coalesces with the final vowel of the exemplary verb *ari* 'go'. The endings of this paradigm are, therefore, *-ikale* 1SG, *-ikene* 2SG, *-iake* 3SG etc. The initial vowel *i* can be seen in the future iterative endings (see below).
3 The allomorphs *-we* 1SG, *-ut* 2/3DU and *-u* 2/3PL (the last two having the variants *-wit* 2/3DU and *-wi* 2/3PL) occur after vowel-final verbs, the allomorphs *-be* 1SG, *-bit* 2/3DU and *-bi* 2/3PL after verbs ending in a nasal consonant, and the allomorphs *-pe* 1SG, *-pit* 2/3DU and *-pi* 2/3PL after verbs ending in a voiceless stop (Wacke 1931:167).
4 Wacke (1931:166) calls the mood expressed by *ari-kolo* etc. *Imaginativ futuri*, and the mood expressed by *ari-werap* etc. *Imaginativ präteriti*. I doubt, however, that these are different tense forms of one and the same mood and prefer to give them labels that directly identify their modal function. P. Phinnemore (1990:55f) describes the function of *ari-werap* etc. as contrary-to-fact. She does not treat the forms of *ari-kolo* etc.
5 Besides *ari-werap* there was the variant *ari-wedarap* (Wacke 1931:166).
6 P. Phinnemore (1990:24f) describes the aspect expressed by *-mage ~ -maŋ* as habitual, Wacke (1931:167f) calls it frequentative.
7 Wacke (1931:168) gives the third person singular ending of the past habitual as *-mage-ke*; P. Phinnemore (1990:26) has an example sentence in which it is *-maŋ-ge*. It may well be that this reflects a historical change, the allomorph *-maŋ* ousting the allomorph *-mage* from the paradigm.
8 The form *ari-maŋkete* 1DU is given by Wacke (1931:168), rather than the expected *ari-magete*. This seems to be a typographical error.

9 Wacke (1931:169f) called the forms with the aspect marker *-okan* durative. P. Phinnemore (1990:28ff) shows that *-okan* marks repeated actions or events.
10 It is not clear from the examples in Wacke (1931:173) what the function of these medial verb forms is; they seem to have sequential as well as simultaneous uses.

Kovai

(Brown 1992:9-14)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
past	ta-pai	ta-pin	ta-e[1]	ta-pot	ta-pit	ta-pon	ta-pe
non-past[2]	tap	tem	to[1]	t-et[3]	t-it[3]	t-en[3]	t-ep
non-past[2]	an-ip	an-im	an-o[1]	an-bet[4]	an-bit	an-ben[4]	an-ip
non-past[2]	nag-ep	nag-em	nag-o[1]	nag-bet[4]	nag-bit	nag-ben[4]	nag-ep
irrealis	ta-nap	ta-nam	ta-nam	ta-nabat	ta-nabit	ta-naban	ta-nup
serializing[2]	top	tom	tom	ta-bat	ta-bit	ta-ban	to-up
serializing[2]	an-op	an-om	an-om	an-bat	an-bait	an-ban	an-up
serializing[2]	nag-ap	nag-am	nag-am	nag-bat	nag-bait	nag-ban	nag-up

1 Transitive verbs take the ending *-e* in the third person singular of the past tense and *-o* in the non-past tense, most intransitive verbs take *-i* in the past and *-u* in the non-past instead (Brown 1992:14).
2 There are only four different categories of person-number inflected verb forms in Kovai, the past tense, the non-past tense, the irrealis mood and the serializing form. In the non-past tense and the serializing form some allomorphy can be observed; for this reason paradigms are given of more than one verb. The vowel-final verb root *ta* 'take, give' fuses with the vowel-initial endings of the non-past tense and the serializing form in the singular, the consonant-final verbs *an* 'see' and *nag* 'hear' show different vowels in these endings.
3 The two dual endings and the first person plural ending of the non-past tense start with *b-* in most verbs, as in *an* 'see' and *nag* 'hear'. The verb *ta* 'take, give' lacks *b-* in these forms. It is not clear how many or which verbs side with *ta*. Brown (1992:10) mentions that he observed the variants *el-en* and *el-ben* 'we do' for the verb *el ~ il* 'make, do', one with *b-*, the other without.
4 The first person dual and plural endings of the non-past tense are *-bet* and *-ben* in the eastern part of the language area, as given in the table, whereas in the western part *-bot* and *-bon* are found (Brown 1992:6).

Sene

(Pilhofer 1928:200-17, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	ta-ba[1]	ta-ma	ta-i	ta-he	ta-hi	ta-be	ta-bi
near past	ta-beke	ta-me	ta-ike	ta-aleke[2]	ta-alike[2]	ta-bene	ta-bie
present	ta-gaeke	ta-game	ta-eke	ta-galeke	ta-galike	ta-gabene	ta-gabie
near future	ta-bemɔ	te-jomɔ	te-jɔmɔ[3]	te-nɔkɔʔmɔ[4]	te-nikɔʔmɔ	te-nɔmɔ	te-nimɔ
far future	te-akaeke	te-akame	te-aike	te-akaleke	te-akalike	te-akabene	te-akabie
present imperative	ta-be	te-jo	te-jɔ	te-nɔkɔʔ[5]	te-nikɔʔ	te-nɔ	te-ni
future imperative, future irrealis[6]	te-abeke	te-ame	te-ake	te-aleke	te-alike	te-abene	te-abie
past irrealis	te-aba	te-jemi	te-je	te-jehe	te-jehi	te-jebe	te-jebi
past continuative[7]	ta-kuʔ gaba	ta-kuʔ gama	ta-kuʔ gai	ta-kuʔ gahe	ta-kuʔ gahi	ta-kuʔ gabe	ta-kuʔ gabi
present continuative	ta-agaeke	ta-agame	ta-akike	ta-agaleke	ta-agalike	ta-agabene	ta-agabie
DS sequential	ta-be	ta-bu	ta-me	ta-ale[8]	ta-alie[8]	ta-bene	ta-bie
DS simultaneous	ta-kabe	ta-kabu	ta-kame	ta-kale[8]	ta-kalie[8]	ta-kabene	ta-kabie
DS SIM DUR[9]	ta-kuʔ gakabe	ta-kuʔ gakabu	ta-kuʔ gakame	ta-kuʔ gakale	ta-kuʔ gakalie	ta-kuʔ gakabene	ta-kuʔ gakabie

1 Pilhofer gives *ta-pa*, a transcription error for *ta-ba*, the form recorded by McElhanon. The exemplary verb is *ta* 'take'.
2 McElhanon heard a weak *h* in these dual forms: *ta-haleke* 1DU and *ta-halike* 2/3DU.
3 Pilhofer gives *te-ɔmɔ*, McElhanon has *te-jɔmɔ*. The latter is no doubt the accurate transcription, cf. the present imperative.
4 The final vowel in Pilhofer's *te-nɔkɔʔma* is a typographical error.
5 Pilhofer's *te-nɔkɔ* is probably a typographical error for *te-nɔkɔʔ*.
6 Pilhofer elicited the same set of forms as future imperative and future irrealis. He mentions in a footnote that the forms usually co-occur with a genitive or locative enclitic in their use as future irrealis.
7 These forms are made up of the simultaneous same subject medial verb form of *ta* and the far past tense forms of the verb *ga* 'be, live'. The forms given in the table are as recorded by McElhanon; Pilhofer erroneously transcribed them as *takuʔ kaba* 1SG, *takuʔ kama* 2SG etc.
8 For the dual forms McElhanon notes the variants *ta-aleke* 1DU and *ta-alike* 2/3DU (sequential), *ta-kaleke* 1DU and *ta-kalike* 2/3DU (simultaneous).
9 Pilhofer erroneously transcribed these forms as *takuʔ-kakabe* 1SG, *takuʔ-kakabu* 2SG etc.; see note 7. McElhanon did not record these composite forms.

Migabac

(Pilhofer 1928:200-17, McEvoy 2008:37-41, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	ba-iba	ba-iŋ	ba-weʔ	ba-ibeʔ	ba-iboʔ	ba-ibeŋ	ba-iboŋ
near past	ba-baʔ	ba-meʔ	ba-jeʔ	ba-beleʔ	ba-bieʔ	ba-beleŋ	ba-bieŋ
present	ba-gabaʔ	ba-gameʔ, ba-giʔ[1]	ba-gaʔ	ba-gabeleʔ	ba-gabieʔ, ba-gaiʔ[1]	ba-gabeleŋ	ba-gabieŋ, ba-gaiŋ[1]
near future[2]	ba-daʔte	ba-dameʔte[3]	ba-daiʔte	ba-dabeleʔte	ba-dabieʔte, ba-daiʔte[4]	ba-dabeleŋte[5]	ba-dabieŋte, ba-daiŋte[4]
far future	ba-noagabaʔ	ba-noagameʔ, ba-noagiʔ[7]	ba-noagaʔ	ba-noagabeleʔ	ba-noagabieʔ[6], ba-noagaiʔ[7]	ba-noagabeleŋ	ba-noagabieŋ, ba-noagaiŋ[7]
present imperative	ba-be	ba-ʔ, ba-noŋ[8]	ba-na	ba-naʔ	ba-niʔ	ba-naŋ	ba-niŋ
future imperative[2]	ba-daʔ	ba-dameʔ	ba-da(g)iʔ[9]	ba-dabeleʔ	ba-dabieʔ	ba-dabeleŋ	ba-dabieŋ, ba-daiŋ[10]
past irrealis[11]	ba-naba	ba-deŋ	ba-deʔ	ba-nabeʔ	ba-naboʔ	ba-nabeŋ	ba-naboŋ
future irrealis	ba-daʔka	ba-dameʔka	ba-daiʔka	ba-dabeleʔka	ba-dabieʔka	ba-dabeleŋka	ba-dabieŋka, ba-daiŋka[10]
past continuative[12]	ba higabaʔ	ba higameʔ	ba higaʔ	ba higabeleʔ	ba higabieʔ	ba higabeleŋ	ba higabieŋ
present continuative	baʔ-haigabaʔ	baʔ-haigameʔ	baʔ-haigaʔ	baʔ-haigabeleʔ	baʔ-haigabieʔ	baʔ-haigabeleŋ	baʔ-haigabieŋ
DS sequential	ba-be	ba-ŋ	ba-me	ba-beʔ	ba-boʔ	ba-beŋ	ba-boŋ
DS simultaneous	ba-hebe	ba-heŋ	ba-heme	ba-hebeʔ	ba-heboʔ	ba-hebeŋ	ba-heboŋ
DS SEQ DUR[13]	baʔ-guhebe	baʔ-guheŋ	baʔ-guheme	baʔ-guhebeʔ	baʔ-guheboʔ	baʔ-guhebeŋ	baʔ-guheboŋ
DS SIM DUR[13]	ba-gaʔgube	ba-gaʔguheŋ	ba-gaʔguheme	ba-gaʔguhebeʔ	ba-gaʔguheboʔ	ba-gaʔguhebeŋ	ba-gaʔguheboŋ

1 McEvoy gives these two variant forms for the 2SG, 2/3DU and 2/3PL of the present tense. Pilhofer and McElhanon only recorded the first variant. The exemplary verb in the table is *ba* 'take, hold'.

2 In the southern dialect of Migabac, **z* became *d*; in the northern dialect, **-b-* became *-w-* (cf. McEvoy 2012). Pilhofer and McEvoy recorded southern forms, given in the table. The northern forms of the near future tense, collected by McElhanon in Hudewa village, are: *ba-zaʔte* 1SG, *ba-zameʔte* 2SG, *ba-zeiʔte* 3SG, *ba-zawereʔte* 1DU, *ba-zawieʔte* 2/3DU, *ba-zawerente* 1PL, *ba-ziente* 2/3PL. The near future endings are made up of the future imperative endings plus the genitive-purposive enclitic *-te.*
3 Pilhofer gives the ending *-dacmecte*, no doubt a typographical error.
4 McEvoy gives both of these variant forms for the 2/3DU and 2/3PL. Pilhofer recorded the disparate variants *-dabieʔte* 2/3DU and *daiŋte* 2/3PL.
5 Pilhofer gives *-iʔneŋte* as the 1PL form of the near future, a form that does not fit into the paradigm. McEvoy gives the expected form *-dabeleŋte.*
6 Pilhofer has *-noagabileʔ*, McEvoy gives the expected form *-noagabieʔ*.
7 The second variants of these far future forms are only given by McEvoy.
8 The variant ending *-noŋ* of the 2SG of the present imperative is given by McEvoy; Pilhofer and McElhanon only have *-ʔ.*
9 Pilhofer gives the variants *-daiʔ* and *-dagiʔ,* only the first of which is confirmed by McEvoy.
10 McEvoy gives the variant ending *-daiŋ* for the 2/3PL, but not the expected parallel variant for 2/3DU.
11 The paradigm in the table is from Pilhofer (1928). When McEvoy (2008) recorded the same paradigm, leveling had taken place: *-daba* 1SG, *-deŋ* 2SG, *-deʔ* 3SG, *-dabeʔ* 1DU, *-daboʔ* 2/3DU, *-dabeŋ* 1PL, *-daboŋ* 2/3PL. In 1967, McElhanon recorded the same forms as Pilhofer, but he has the northern pronunciation *-dzeŋ* and *-dzeʔ* for the forms of the 2SG and 3SG.
12 McEvoy does not confirm these forms given by Pilhofer.
13 Pilhofer accidentally switched the DS SEQ DUR forms and the DS SIM DUR forms in his tables. McEvoy only reports the former.

Momare

(Pilhofer 1928:200-17, author's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	bi-mpa[1]	bi-moŋ	ba-e	bi-mpeʔ	bi-mpoʔ	bi-mpeŋ	bi-mpoŋ
near past	ba-mpaʔ	ba-monaŋ	ba-ha	ba-mponaʔ	ba-mpiaʔ	ba-mponaŋ	ba-mpiaŋ
present	ba-ŋkabaʔ	ba-ŋkiʔ	ba-ŋkaʔ	ba-ŋkanaʔ	ba-ŋkeaʔ	ba-ŋkanaŋ	ba-ŋkeaŋ
near future	bi-ŋkaŋkabaʔ	bi-ŋkaŋkiʔ	bi-ŋkaŋkaʔ	bi-ŋkaŋkanaʔ	bi-ŋkaŋkeaʔ	bi-ŋkaŋkanaŋ	bi-ŋkaŋkeaŋ
far future	bi-ŋkabaʔkiʔ	bi-ŋkaŋkiʔ	bi-ŋkaʔkiʔ	bi-ŋkanaʔkiʔ	bi-ŋkeaʔkiʔ	bi-ŋkanaŋkiʔ	bi-ŋkeaŋkiʔ
present imperative	ba-mpe	bi	bi-na	bi-naʔ	bi-niʔ	bi-naŋ	bi-niŋ
future imperative	bi-ŋkabaʔ	bi-ŋkaŋ	bi-ŋkaʔ	bi-ŋkanaʔ	bi-ŋkeaʔ	bi-ŋkanaŋ	bi-ŋkeaŋ
past irrealis[2]	bi-naba	bi-nteŋ[3]	bi-nteʔ[3]	bi-nabeʔ	bi-naboʔ	bi-nabeŋ	bi-naboŋ
future irrealis	bi-ŋkabaʔka	bi-ŋgaŋka[4]	bi-ŋkaʔka	bi-ŋkanaʔka	bi-ŋkeaʔka	bi-ŋkananŋka	bi-ŋkeaŋka
past CONT	ba gampaʔ	ba gamonaŋ	ba gaha[5]	ba gamponaʔ	ba gampiaʔ	ba gamponaŋ	ba gampiaŋ
present CONT	ba-akigabaʔ	ba-akigiʔ	ba-akigaʔ	ba-akiganaʔ	ba-akigeaʔ	ba-akiganaŋ	ba-akigeaŋ

DS sequential	ba-mpe	ba-ŋ	ba-me	ba-mpeʔ	ba-mpoʔ	ba-mpeŋ	ba-mpoŋ
DS simultaneous	ba-habe	ba-haŋ	ba-hame	ba-habeʔ	ba-haboʔ	ba-habeŋ	ba-haboŋ
DS SEQ DUR	ba-ŋkube	ba-ŋkuŋ	ba-ŋkume	ba-ŋkubeʔ	ba-ŋkuboʔ	ba-ŋkubeŋ	ba-ŋkuboŋ
DS SIM DUR	ba-gaŋkuhabe	ba-gaŋkuhaŋ	ba-gaŋkuhame	ba-gaŋkuhabeʔ	ba-gaŋkuhaboʔ	ba-gaŋkuhabeŋ	ba-gaŋkuhaboŋ

1 All endings beginning with an original prenasalized stop show variation between *-mp* and *-b*, *-ŋk* and *-g*, or *-nt* and *-d*. Monosyllabic verbs, like *ba* 'take, hold', take the first variant, disyllabic verbs take the second variant, e.g. far past *bi-mpa* 'I took' vs. *bantu-ba* 'I broke', present *mu-ŋkaʔ* 'she says' vs. *homa-gac* 'she dies', past irrealis *fi-nteŋ* 'you would have lain' vs. *aki-deŋ* 'you would have done'.
2 For the verb *ba* 'take, hold' I recorded the same past irrealis forms as Pilhofer. But for the verb *he* 'hit, cut' I recorded *he-taba* 1SG, *he-teŋ* 2SG, *he-teʔ* 3SG, *he-tabeʔ* 1DU, *he-taboʔ* 2/3DU, *he-tabeŋ* 1PL, *he-taboŋ* 2/3PL.
3 For the verb *hi* 'bite' I recorded the forms *hi-ntaŋ* 2SG and *hi-ntaʔ* 3SG.
4 Pilhofer's *bi-ŋgaŋka* seems to be a typographical error for *bi-ŋkaŋka*. I did not record this paradigm.
5 Pilhofer gives *ba gahaʔ,* probably a transcription error for *ba gaha*.

Wamorâ

(Pilhofer 1928:200-17)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	ti-bo	to-maŋ	to-jaʔ	ti-baʔ	ti-buʔ	ti-mbaŋ	ti-mbuŋ
near past	to-baʔ	to-maʔ	to-eʔ	to-bulaʔ	to-bilaʔ	to-mbunaŋ	to-mbeŋ
present	to-gobaʔ	to-goʔ	to-gaʔ	to-gobulaʔ	to-gobilaʔ	to-ŋgobunaŋ	to-ŋgobeŋ
near future	to-bɔmu	to-ʔmu	ti-nomu	ti-noʔmu	ti-niʔmu	to-kiʔmu	ti-niŋmu
far future	ti-gegobaʔ	ti-gegoʔ	ti-gegaʔ	ti-gegobulɔ[1]	ti-gegobilaʔ	ti-geŋgobunaŋ	ti-geŋgobeŋ
present imperative	to-bɔ	to-ʔ	ti-no	ti-noʔ	ti-niʔ	to-kiʔ	ti-niŋ
future imperative	ti-gobɔ	ti-ŋgoŋ	ti-geʔ[2]	ti-gobulɔ[2]	ti-gobilɔ[2]	ti-gobunɔ[3]	ti-gobi
past irrealis	ti-nobo	ti-noŋ	ti-naʔ	ti-nobaʔ	ti-nobuʔ	ti-nombaŋ	ti-nombuŋ
future irrealis[4]	ti-baʔ	ti-maʔ	ti-gaʔ	ti-bulaʔ	ti-bilaʔ	ti-mbunaŋ	ti-mbeŋ
past continuative	to gobaʔ	to gomaʔ	to goeʔ	to gobulaʔ	to gobilaʔ	to gombunaŋ	to gombeŋ
present continuative	to-egobaʔ	to-egoʔ	to-egaʔ	to-egobulaʔ	to-egobilaʔ	to-eŋgobunaŋ	to-eŋgobeŋ

DS sequential	to-bɔ	to-ndəʔ	to-mɔ	to-bɯlɔ	to-bilɔ	to-bɯnɔ	to-bi
DS simultaneous	to-hɔbɔ	to-handɯʔ	to-hame	to-habɯlɔ	to-habilɔ	to-habɯnɔ	to-habi(e)
DS SEQ DUR	to-gubɔ	to-gundɯʔ	to-gumɔ	to-gubɯlɔ	to-gubilɔ	to-gubɯnɔ	to-gubi(e)
DS SIM DUR	to-guhɔbɔ	to-guhandɯʔ	to-guhame	to-guhabɯlɔ	to-guhabilɔ	to-guhabɯnɔ	to-guhabi(e)

1 The form *ti-gegobɯlɔ* may be a transcription error for *ti-gegobɯlaʔ.* The exemplary verb is *to* 'take'.
2 For the future imperative, Pilhofer gives the following variants: *toi-geʔ* 3SG, *toi-gobɯlɔ* 1DU, *toi-gobilɔ* 2/3DU.
3 Pilhofer's *ti-gobɯna* is probably a typographical error for *ti-gobɯnɔ.*
4 For the future irrealis, Pilhofer gives variants for all but the third person singular: *toi-baʔ* 1SG, *toi-maʔ* 2SG, *toi-bulaʔ* 1DU, *toi-bilaʔ* 2/3PL, *toi-mbɯnaŋ* 1PL, *toi-mbeŋ* 2/3PL.

Parec

(McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	to-po	to-maŋ	to-waʔ	to-paʔ	to-piʔ	to-mbaŋ	to-mbiŋ
near past	to-paʔ	to-maʔ	to-jeʔ	to-paleʔ	to-pilaʔ	to-mbaneŋ	to-mbeŋ
present	to-kopaʔ	to-koʔ	to-kaʔ	to-kopaleʔ	to-kopilaʔ	to-ŋgopaneŋ	to-ŋgopeŋ
near future	to-pɔmɯ[1]	to-ʔmɯ	ti-nomɯ	ti-noʔmɯ	to-niʔmɯ	to-kiʔmɯ	ti-niŋmɯ
far future	ti-kekopaʔ	ti-kekoʔ	ti-kekaʔ	to-ikekopaleʔ	to-ikekopilaʔ	to-iŋgekopaneŋ	to-iŋgekopeŋ
present imperative	to-pɔ	to-ʔ	to-no	ti-noʔ	ti-niʔ	to-kiʔ	ti-niŋ
past continuative	to-gopaʔ	to-gomaʔ	to-gojeʔ	to-gopaleʔ	to-gopilaʔ	[2]	[2]
present continuative	to-ekopaʔ	to-ekoʔ	to-ekaʔ	to-ekopaleʔ	to-ekopilaʔ	to-eŋgopaneŋ[3]	to-eŋgopeŋ
DS sequential	to-pɔ	to-tɔʔ	to-mɔ	to-pale	to-pila	to-pane	to-pi

1 McElhanon notes a variant *tɯ-pɔmɯ.* The exemplary verb is *to* 'take'.
2 McElhanon only gives the plural forms of the verb *mɯ* 'say': *mɯ-gobaneŋ* 1PL and *mɯ-gobeŋ* 2/3PL. These may be inexact transcriptions of the expected *mɯ-gombaneŋ* 1PL and *mɯ-gombeŋ* 2/3PL.
3 The form *to-eŋgopeneŋ* is probably a typographical error for *to-eŋgopaneŋ.*

Mâgobineng

(Pilhofer 1928:200-17)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	ti-boŋ	to-maŋ	to-waʔ	to-baʔ[1]	ti-biʔ	ti-baŋ	ti-biŋ
near past	to-baʔ	to-maʔ	to-jeʔ	to-baleʔ	to-bileʔ	to-baneŋ	to-bineŋ
present	to-gobaʔ	to-giʔ	to-gaʔ	to-gobaleʔ	to-gobileʔ	to-gobaneŋ	to-gobineŋ
near future	to-bɔmɔ	to-ʔmɔ	ti-soʔmɔ	ti-noʔmɔ	ti-niʔmɔ	ti-noŋmɔ	ti-niŋmɔ
far future	to-igegebaʔ	to-igegiʔ	to-igegaʔ	to-igegebaleʔ	to-igegebileʔ	to-igegebaneŋ	to-igegebineŋ
present imperative	to-bɔ	to-ʔ	ti-soʔ	ti-noʔ	to-niʔ	ti-noŋ	to-niŋ
future imperative, future irrealis[2]	to-igebaʔ	to-igemaʔ	to-igeʔ	to-igebaleʔ	to-igebileʔ	to-igebaneŋ	to-igebineŋ
past irrealis[3]	ti-zaboŋ	ti-zamaŋ	ti-zaʔ	ti-zabaʔ	ti-zabiʔ	ti-zabaŋ	ti-zabiŋ
past continuative	to-gu goboŋ	to-gu gomaŋ	to-gu gowaʔ	to-gu gobaʔ	to-gu gobiʔ	to-gu gobaŋ	to-gu gobiŋ
present continuative	to-egobaʔ	to-egiʔ	to-egaʔ	to-egobaleʔ	to-egobileʔ	to-egobaneŋ	to-egobineŋ
DS sequential	to-bɔ	to-teʔ	to-mɔ	to-bale	to-bile	to-bane(ŋ)	to-bine(ŋ)
DS simultaneous	to-ɔbɔ	to-aŋteʔ	to-ame	to-abale	to-abile	to-abaneŋ	to-abineŋ
DS SIM DUR	to-guɔbɔ	to-guaŋteʔ	to-guame	to-guabale	to-guabile	to-guabaneŋ[4]	to-guabineŋ

1 The form *to-baʔ* may be an error for the expected form *ti-baʔ*. The exemplary verb is *to* 'take'.

2 Pilhofer elicited the same set of forms as future imperative and future irrealis. He mentions in a footnote that the forms usually co-occur with a genitive or locative enclitic in their use as future irrealis. Under future irrealis, he notes variant forms without the root vowel *o*: *ti-gebaʔ* 1SG, *ti-gemaʔ* 2SG, *ti-geʔ* 3SG etc.

3 For all forms except the first person singular, Pilhofer gives variants with the root vowel *o*: *to-zamaŋ* 2SG, *to-zaʔ* 3SG, *to-zabaʔ* 1DU, *to-zabiʔ* 2/3DU, *to-zabaŋ* 1PL, *to-zabiŋ* 2/3 PL.

4 The form *to-guabeneŋ* is most likely a typographical error for *to-guabaneŋ*.

Wemo

(Pilhofer 1933:26-38)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	lo-po	lo-meŋ	lo-weʔ	lo-peʔ	lo-piʔ	lo-mbeŋ	lo-mbiŋ
near past	lo-paʔ	lo-meʔ	lo-jeʔ	lo-peleʔ	lo-pileʔ	lo-mbeneŋ	lo-mbieŋ
present	lo-kopaʔ	lo-komeʔ, lo-kiʔ	lo-kaʔ	lo-kopeleʔ	lo-kopileʔ	lo-ŋgopeneŋ	lo-ŋgopieŋ
near future	lo-pemu	lo-ʔmu	lo-oʔmu	lo-naʔmu	lo-niʔmu	lo-naŋmu	lo-niŋmu
far future[1]	lo-tsokopaʔ	lo-tsokomeʔ, lo-tsokiʔ	lo-tsokaʔ	lo-tsokopeleʔ	lo-tsokopileʔ	lo-ndzoŋgopeneŋ	lo-ndzoŋgopieŋ
present imperative	lo-pe	lo-ʔ	lo-oʔ	lo-naʔ	lo-niʔ	lo-naŋ	lo-niŋ
future imperative	lo-tsepaʔ	lo-tsemeʔ	lo-tsejeʔ	lo-tsepeleʔ	lo-tsepileʔ	lo-ndzepeneŋ	lo-ndzepieŋ
past irrealis	lo-tsapo	lo-ndzaŋ	lo-tsaʔ	lo-tsapeʔ	lo-tsapiʔ	lo-ndzapeŋ	lo-ndzapiŋ
future irrealis	lo-tsipo	lo-tsiʔ	lo-tsaʔ	lo-tsipeʔ	lo-tsipiʔ	lo-ndzipeŋ	lo-ndzipiŋ
past continuative	lo-jupaʔ	lo-jumeʔ	lo-jujeʔ	lo-jupeleʔ	lo-jupileʔ	lo-jumbeneŋ	lo-jumbieŋ
present continuative	lo-ekopaʔ	lo-ekomeʔ, lo-ekiʔ	lo-ekaʔ	lo-ekopeleʔ	lo-ekopileʔ	lo-eŋgopeneŋ	lo-eŋgopieŋ
DS sequential	lo-pe	lo-teʔ	lo-me	lo-pele	lo-pile	lo-pene	lo-pie
DS simultaneous	lo-hape	lo-ha(ŋ)teʔ	lo-hame	lo-hapele	lo-hapile	lo-hapene	lo-hapie
DS SEQ DUR	lo-kupe	lo-kuteʔ	lo-kume	lo-kupele	lo-kupile	lo-kupene	lo-kupie
DS SIM DUR	lo-kuhape	lo-kuha(ŋ)teʔ	lo-kuhame	lo-kuhapele	lo-kuhapile	lo-kuhapene	lo-kuhapie

1 The far future tense has become obsolete; I only heard it in memorized texts, such as songs, in the 1990s. The exemplary verb is *lo* 'take'.

Naga

(Pilhofer 1928:200-17, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	lo-bo	lo-meŋ	lo-jaʔ	lo-beʔ	lo-bɔʔ	lo-beŋ	lo-bɔŋ
near past	lo-baʔ	lo-meʔ	lo-eʔ	lo-beleʔ	lo-bəleʔ	lo-beneŋ	lo-biʔ
present	lo-ga	lo-geʔ	lo-gaʔ	lo-gobeleʔ	lo-gobəleʔ	lo-gobeneŋ	lo-goʔ
near future	lo-bemuŋ[1]	lo-ʔmiŋ	lo-iŋgo[1]	lo-noʔmiŋ	lo-niʔmiŋ	lo-kiʔmiŋ	lo-niŋmiŋ
far future[2]	lo-iŋgoga	lo-iŋgogeʔ	lo-iŋgogaʔ	lo-iŋgogobeleʔ	lo-iŋgogobəleʔ	lo-iŋgogobeneŋ	lo-iŋgogoʔ
present imperative	lo-be	lo-ŋ	lo-jo	lo-noʔ	lo-niʔ	lo-kiʔ	lo-niŋ
future imperative	lo-inega[3]	lo-negeʔ	lo-ineʔ	lo-nebeleʔ	lo-inebəleʔ[3]	lo-nebeneŋ	lo-inebiʔ[3]
past irrealis	lo-joboʔ	lo-joŋ	lo-joʔ[4]	lo-jobeʔ	lo-jobɔʔ	lo-jobeŋ	lo-jobɔŋ
future irrealis	lo-iga	lo-igeʔ	lo-igaʔ	lo-igobeʔ	lo-igobɔʔ	lo-igobeŋ	lo-igoʔ
far past continuative	lo lebo	lo lemeŋ	lo lejaʔ	lo lebeʔ	lo lebɔʔ	lo lebeŋ	lo lebɔŋ
near past continuative	lo lebaʔ	lo lemeʔ	lo leeʔ	lo lebeleʔ	lo lebəleʔ	lo lebeneŋ	lo lebiʔ
present continuative	lo-lega	lo-legeʔ	lo-legaʔ	lo-legobeleʔ	lo-legobəleʔ	lo-legobeneŋ	lo-legoʔ
DS sequential	lo-be	lo-ŋteʔ	lo-me	lo-bele	lo-bəle	lo-beneŋ	lo-bi
DS simultaneous	lo-kabe	lo-kaŋteʔ	lo-kame	lo-kabele	lo-kaiʔ[5]	lo-kabeneŋ[5]	lo-kaiŋ[5]
DS SIM DUR	lo-gukabe	lo-gukaŋteʔ	lo-gukame	lo-gukabele	lo-gukaiʔ	lo-gukabeneŋ	lo-gukaiŋ

1 McElhanon notes *lo-bemiŋ* 1SG and *lo-iŋ* 3SG. The exemplary verb is *lo* 'take'.

2 For the far future, McElhanon recorded forms containing the verb root *le* 'do' rather than *go* 'be, live': *lo-iŋlega* 1SG, *lo-iŋlegeʔ* 2SG, *lo-iŋlegaʔ* 3SG, *lo-iŋlegobeleʔ* 1DU, *lo-iŋlegobəleʔ* 2/3DU, *lo-iŋlegobeneŋ* 1PL, *lo-iŋlegoʔ* 2/3PL.

3 McElhanon gives endings without initial *i* for all forms of the future imperative except the third person singular. The following forms differ from Pilhofer's: *lo-nega* 1SG, *lo-nebəlec* 2/3DU, *lo-nebiʔ* 2/3PL.

4 The form *lo-joʔ* was recorded by McElhanon. Pilhofer's *lo-joŋ* must be a typographical error.

5 For the 2/3DU, McElhanon recorded the variant *lo-kabəle.* For the plural, he noted forms without final velar nasal: *lo-kabene* 1PL and *lo-kai* 2/3PL.

Mape

(Pilhofer 1928:200-17, author's fieldnotes, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	lo-bo[1]	lo-meŋ	lo-jaʔ	lo-beʔ	lo-buʔ[2]	lo-beŋ	lo-bɯŋ[2]
near past	lo-baʔ	lo-meʔ	lo-eʔ	lo-beleʔ	lo-bileʔ	lo-beneŋ	lo-biʔ
present	lo-gɔ	lo-geʔ	lo-gaʔ	lo-gobeleʔ	lo-gobileʔ	lo-gobeneŋ	lo-gobiʔ
near future	lo-bemuŋ[3]	lo-ʔmiŋ	lo-iŋ(go)	lo-noʔmiŋ	lo-niʔmiŋ	lo-kiʔmiŋ	lo-nimiŋ[4]
far future[5]	lo-iegɔ	lo-iegeʔ	lo-iegaʔ	lo-iegobeleʔ	lo-iegobileʔ	lo-iegobeneŋ	lo-iegobiʔ
present imperative	lo-be	lo-ʔ	lo-no	lo-noʔ	lo-niʔ	lo-kiʔ	lo-niŋ
future imperative	lo-inegɔ	lo-igoŋ[6]	lo-ineʔ[6]	lo-inebeleʔ	lo-inebileʔ	lo-inebeneŋ	lo-inebiʔ
past irrealis	lo-nobo	lo-noŋ	lo-naʔ	lo-nobeʔ	lo-nobɯʔ	lo-nobeŋ	lo-nobɯŋ
future irrealis	lo-igɔ	lo-igeʔ	lo-igaʔ	lo-igobeʔ	lo-igobuʔ	lo-igobeŋ	lo-igobɯŋ
past continuative	lo-kuʔ gobo	lo-kuʔ gomeŋ	lo-kuʔ gojaʔ	lo-kuʔ gobeʔ	lo-kuʔ gobuʔ	lo-kuʔ gobeŋ	lo-kuʔ gobɯŋ
present continuative	lo-egɔ	lo-egeʔ	lo-egaʔ	lo-egobeleʔ	lo-egobileʔ	lo-egobeneŋ	lo-egobiʔ
DS sequential	lo-be	lo-ndeʔ	lo-me	lo-bele	lo-bile	lo-bene	lo-bi(e)
DS simultaneous	lo-kabe	lo-kandeʔ	lo-kame[7]	lo-kabele	lo-kabile[8]	lo-kabene(ŋ)	lo-kabuŋ[8]
DS SIM DUR	lo-gukabe[9]	lo-gukandeʔ[10]	lo-gukɔ	lo-gukabele	lo-gukabile, lo-gukabuʔ	lo-gukabeneŋ	lo-gukabuŋ

1 In 1998, I recorded *lo-voŋ* and *lo-boŋ* from different speakers; Pilhofer (1928) has *lo-bo*. The exemplary verb is *lo* 'take'.

2 These are the forms given by Pilhofer. I recorded the endings *-buʔ* 2/3DU and *-buŋ* 2/3PL from one speaker and *-bic* 2/3DU and *-biŋ* 2/3PL from another. Presumably there were variants with the vowel *ɯ* and with the vowel *u* of both forms at the time Pilhofer recorded them, cf. the past irrealis.

3 Both McElhanon and I recorded a variant *lo-bemiŋ*. An informant claimed there was a semantic difference between *lo-bemuŋ* and *lo-bemiŋ*, but it did not become clear what the difference should have been.

4 McElhanon recorded a variant *lo-niŋmiŋ*.

5 McElhanon and I recorded yet another far future paradigm: *lo-iŋgogɔ* 1SG, *lo-iŋgogeʔ* 2SG, *lo-iŋgogaʔ* 3SG, *lo-iŋgogobeleʔ* 1DU, *lo-iŋgogobileʔ* 2/3DU, *lo-iŋgogobeneŋ* 1PL, *lo-iŋgogobiʔ* 2/3PL.

6 In 1998, I elicited the renewed forms *lo-inegeʔ* 2SG and *lo-inegaʔ* 3SG.

7 For the third person singular of the simultaneous different subject medial verb, I recorded the variant endings *-kame* and *-kɔ*.

8 In a footnote, Pilhofer mentions the variants *-kabuʔ* and *-kabɯʔ* for the 2/3DU. For the 2/3PL, he only gives *-kabuŋ*; I also recorded the variants *-kabi* and *-kabie*.
9 Pilhofer's *-gukape* is a typographical error.
10 McElhanon and I recorded *lo-ukaŋ* 2SG. In our data, the tense marker is *-uka*, as opposed to Pilhofer's *-guka*.

Dedua

(Pilhofer 1928:200-17, Ceder and Ceder 1990:74-92, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	me-ai	me-neʔ	me-eʔ	me-iʔ	me-oʔ	me-iŋ	me-i[1]
near past	me-dua	me-daŋ	me-daʔ	me-diʔ	me-daoʔ	me-diŋ	me-dau
present	me-duae	me-dambe[2]	me-de	me-dipe	me-dape	me-dimbe	me-da(w)e[3]
future	me-bade	me-nade	me-ude	me-dede	me-eʔde	me-nide	me-geʔde
present imperative	me-ba	me-na	me-u	me-de	me-eʔ	me-ni	me-geʔ
future imperative	me-besaʟe	me-besena	me-beso	me-bisiʟa[4]	me-beseʟa[4]	me-bisina	me-bisia
irrealis I[5]	me-bai	me-baŋ	me-baʔ	me-biʔ	me-baoʔ	me-biŋ	me-bau
irrealis II[5]	me-baʟaʔ, me-bainaʔ	me-baŋnaʔ	me-naʔ	me-biʟaʔ	me-boʟaʔ	me-binaʔ	me-biaʔ
far past habitual	me anai	me aŋneʔ	me aneʔ	me aniʔ	me anoʔ	me aniŋ	me ani
past continuative	me kefai	me keʔneʔ	me kefeʔ[6]	me kefiʔ	me kefoʔ	me kefiŋ	me kefi
present continuative	me-keʔduae	me-keʔdambe[7]	me-keʔde	me-keʔdipe	me-keʔdape	me-keʔdimbe	me-keʔda(w)e
DS sequential	me-ba	me-na	me-u	me-de	me-eʔ	me-ni	me-geʔ
DS simultaneous	me-baʟe(guʔ)	me-mana(guʔ)	me-manu(guʔ)	me-miʟa(gaʔ)	me-maeʔ(guʔ)	me-mina(gaʔ)	me-mageʔ(guʔ)
DS SIM DUR	me-keʔbaʟe	me-keʔmana	me-keʔmanu	me-keʔmiʟa	me-keʔmaeʔ	me-keʔmina	me-keʔmageʔ

1 For the 2/3PL of the far past tense, Ceder and Ceder (1990) give the ending *-geʔ.* In Pilhofer's (1928) data, this ending only occurs in the sequential different subject medial verb and in the present imperative. The exemplary verb is *me* 'take, make'.
2 For the 2SG of the present tense, Ceder and Ceder give the ending *-neʔ,* as in the far past tense. Evidence of this ending within the present tense paradigm can already be found in Pilhofer's far future forms: *-besaŋ-duae* 1SG, *-besaŋ-nec* 2SG, *-besaŋ-de* 3SG, *-besaŋ-dipe* 1DU, *-besaŋ-dape* 2/3DU, *-besaŋ-dimbe* 1PL, *-besaŋ-da(w)e* 2/3PL. Formally, these are present tense forms of a verb stem *besaŋ*. It is doubtful whether these forms served as a far future tense; Ceder and Ceder do not mention them.
3 Pilhofer's notation *-da(w)e* seems to indicate a weak intervocalic *w*. McElhanon and the Ceders give *-dae.*

4 Ceder and Ceder give the endings *-besera* 1DU and *-bisira* 2/3DU. It is possible that Pilhofer accidentally switched the forms.
5 The irrealis I is used in counterfactual conditional sentences (Ceder and Ceder 1990:84). The forms of the irrealis II are taken from Pilhofer; Ceder and Ceder do not confirm them. They seem to have been replaced by a regular formation made up of the irrealis I endings plus the suffix *-aʔ.* These forms are said to express the thought "do not do it, you might experience something unpleasant" (Ceder and Ceder 1990:84).
6 Pilhofer's *me hefeʔ* is a typographical error for *me kefeʔ.*
7 Pilhofer's *-keʔdambeʔ* must be a typographical error for *-keʔdambe*. In 1967, McElhanon recorded *-keʔneʔ* for this form.

Mongi

(Pilhofer 1928:200-17, Lee and Lee 1993:22-29, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
past	me-ji[1]	me-neʔ	me-jeʔ[1]	me-jiʔ[1]	me-joʔ[1]	me-jiŋ[1]	me-giʔ
present	me-tsua	me-tsaŋ	me-tsaʔ	me-tsiʔ	me-tsaoʔ	me-tsiŋ	me-tsou[2]
future	me-maŋ	me-wəsəmaŋ	me-maʔ	me-wiʔ[3]	me-maoʔ	me-wiŋ[3]	me-mu
imperative	me-wa[3]	me-na	me-ju[1]	me-tsi	me-jiʔ[1]	me-ni	me-giʔ
irrealis[4]	me-wi[3]	me-waŋ[3]	me-waʔ[3]	me-wiʔ[3]	me-waoʔ[3]	me-wiŋ[3]	me-wu[3]
past habitual	me aŋi	me aŋneʔ	me aŋeʔ	me aŋdziʔ[6]	me aŋoʔ	me aŋiŋ	me aŋgiʔ
present habitual	me-andzua	me-andzaŋ	me-andzaʔ	me-andziʔ	me-andzaoʔ	me-andziŋ	me-andzou
past continuative[5]	mema kehi	mema keʔneʔ	mema kehеʔ	mema keʔdziʔ[6]	mema keroʔ	mema keriŋ	mema keʔgiʔ
DS sequential	me-wa[3]	me-na	me-ju[1]	me-tsi	me-jiʔ[1]	me-ni	me-giʔ
DS simultaneous	me-waguʔ	me-naguʔ	me-juguʔ[1]	me-tsiguʔ	me-jiʔguʔ[1]	me-niguʔ	me-giʔguʔ
DS SEQ DUR	me-keʔwa	me-keʔna	me-kehu	me-keʔdzi	me-kehiʔ	me-keʔni	me-keʔgiʔ

1 Following vowel-final verb roots such as *me* 'take, do', the endings beginning with a vowel take an epenthetic *j* (Lee and Lee 1993:15).
2 Pilhofer (1928) gives the ending *-tsou*, Lee and Lee (1993) have *-tsu.*
3 McElhanon noted with a *b* all endings that begin with a *w* in Pilhofer's and the Lees' data. Thus, for the irrealis he gives *me-bi* 1SG, *me-baŋ* 2SG, *me-baʔ* 3SG etc.
4 Pilhofer lists the irrealis forms followed by the ablative enclitic *-neʔ* under past irrealis and the same followed by the comitative enclitic *-guʔ* under future irrealis. Lee and Lee (1993:24) state that the complex forms with the ablative *-neʔ* indicate "an imagined or contemplated action" while the complex forms with the genitive *-aʔ* indicate "an action which is not desired"; they do not mention the combination with the comitative *-guʔ.*

5 In a footnote, Pilhofer (1928:211) states that the same subject suffix *-ma* is omitted if duration rather than frequency is to be expressed. McElhanon gives forms without *-ma*. Note that Pilhofer gives *keʔ* 'stay' with a root-final consonant *h* in the 1SG and 3SG forms and with a root-final consonant *r* in the 2/3DU and 1PL forms. McElhanon has *r* throughout: *me-keri* 1SG, *me-kereʔ* 3SG, *me-keriʔ* 1DU, *me-keroʔ* 2/3DU, *me-keriŋ* 1PL.
6 These first person dual forms given by Pilhofer do not fit into the paradigm and are probably due to an elicitation error. They are present tense forms while the rest of the paradigm is in the past tense.

Tobo

(Mankins 2012:3-5, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past[1]	mi-e	me-nek	me-jep	mi-it	me-jot	mi-in	mi-ɣit
near past	mi-tsua	me-tsan	me-tsap	mi-tsit	me-tsot	me-tsin[2]	mi-ts(o)u[3]
future	me-mam	me-man	me-map	mi-wit	me-mot	me-win[2]	mi-m(o)u[3]
imperative	me-wa	me-na	mi-u	mi-tsi	mi-it	mi-ni	mi-ɣit
irrealis I[4]	me-wal[5]	me-wan	me-wap	me-wet	me-wot	me-wen	me-w(o)u[3]
irrealis II[4]	me-walək	me-wanək	me-wawək	me-werək	me-worok	me-wenək	me-w(o)uɣok[3]
present habitual	me-wamdzua	me-wamdzan	me-wamdzap	me-wamdzit	me-wamdzot	me-wamdzin	me-wamdz(o)u[3]
past continuative[6]	mi-kewe	mi-kepnek	mi-kiwep	mi-kirit	mi-kerot	mi-kirin	mi-kipkit
different subject	me-wa	me-na	mi-u	mi-tsi	mi-it	mi-ni	mi-ɣit

1 The exemplary verb is *me ~ mi*, taken from McElhanon's data. Mankins only gives the verb endings. According to Mankins, the far past tense endings beginning with a vowel, except for the 1DU and 1PL forms, have variants with an epenthetic *j*: *-e ~ -je* 1SG, *-ep ~ -jep* 3SG, *-ot ~ -jot* 2/3DU.
2 McElhanon gives these 1PL forms with the root vowel *e* even though the high vowel of the ending lets one expect *i*.
3 In the 2/3PL, Mankins notes variants with *ou* and with *u*, e.g. present tense *-tsou* and *-tsu*.
4 Mankins (2012:3) notes that the irrealis I indicates "that which hasn't happened but could happen" and the irrealis II "that which didn't happen but should have".
5 The irrealis endings and others beginning with a *w* after vowel-final verb roots have allomorphs beginning with *p* after voiceless consonants and with *b* after voiced consonants (Mankins 2012:4).
6 This paradigm is taken from McElhanon's fieldnotes. Mankins does not mention it.

Borong

(Olkkonen and Olkkonen 2000:6-9, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
past	me-we	me-na	me-ro	me-ri	me-ri	me-niŋ	me-gi
past emphatic	me-weta	me-naa	me-rota	me-rita	me-rita	me-niŋa	me-gita
present	me-dzeŋ[1]	me-dzaŋ	me-dza	me-dzo	me-dzao	me-dzoŋ	me-dzu
present emphatic	me-dzeŋa, me-dzia	me-dzaŋa	me-dzaa	me-dzota	me-dzaota	me-dzoŋa	me-dzua
future[2]	me-maŋ	me-waa	me-waa	me-wo	me-wao	me-woŋ	me-wu
future emphatic	me-maŋa	me-waga	me-waga	me-wota	me-waota	me-woŋa	me-wuja, me-wia
irrealis[3]	me-wenaga	me-naga	me-naga	me-woraga	me-waoraga	me-wonaga	me-wujaga
negative irrealis[4]	me-mambo	me-wabo	me-wabo	me-wobo	me-waobo	me-wombo	me-wubo
past habitual	me-ŋkebe	me-ŋkena	me-ŋkero	me-ŋkeri	me-ŋkeri	me-ŋkeniŋ	me-ŋkegi
present habitual	me-ŋkedzeŋ[1]	me-ŋkedzaŋ	me-ŋkedza	me-ŋkedzo	me-ŋkedzao	me-ŋkedzoŋ	me-ŋkedzu
future habitual	me-ŋkemaŋa	me-ŋkebaa	me-ŋkebaa	me-ŋkebo	me-ŋkebao	me-ŋkeboŋa	me-ŋkebu
different subject[5]	me-we	me-na	me-ro	me-ri	me-ri	me-niŋ	me-gi

1 McElhanon recorded present *me-dze* 1SG and present habitual *me-ŋkedze* 1SG. The exemplary verb is *me* 'take, make'.
2 Olkkonen and Olkkonen (2000:7) state that the future forms can also be used as imperatives. In that function, the 2SG and 3SG forms are both *me-wa*.
3 McElhanon gives irrealis forms without final *-ga*. The forms with *-ga* that the Olkkonens give alone must once have been emphatic forms.
4 The Olkkonens translate this mood with 'lest'.
5 According to Olkkonen and Olkkonen (2000:7), the different subject medial verb endings are identical to the past tense forms. In 1967, McElhanon noted down different endings in the dual: *-dzi* 1DU and *-ni* 2/3DU.

Somba

(Olkkonen and Olkkonen 1983:20-30, Pilhofer 1928:200-17)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
past	me-al	me-nəŋ	me-jək[1]	me-it	me-joɣot[1]	me-in	me-ŋget
present	me-tsal	me-tsan	me-tsap[2]	me-tsit	me-tsaɣot[2]	me-tsin	me-tse
future	me-mam	me-man	me-map	me-mbit[3]	me-maɣot	me-mbin[3]	me-me
imperative[4]	me-mbi	me-nəŋ	me-jək	me-it	me-joɣot	me-in	me-ŋget
irrealis I	me-mbileŋbuk[5]	me-mbanbuk	me-mbappuk	me-mbitpuk	me-mbaɣotpuk	me-mbinbuk	me-mbebuk
irrealis II	me-mbil(eŋ)ak[5]	me-(mba)nak	me-mbawak, me-nak	me-mbirak	me-mbaɣorak	me-mbinak	me-mbeak
past habitual	me-malal	me-malnəŋ	me-malək	me-malit	me-maloɣot	me-malin	me-malget
present habitual	me-maktsal	me-maktsan	me-maktsap	me-maktsit	me-maktsaɣot	me-maktsin	me-maktse
future habitual	me-makŋam	me-makŋan	me-makŋap	me-makit	me-makŋaɣot	me-makin	me-makŋe
different subject	me-al(ga)[6]	me-nəŋ(ga)	me-i(ga)	me-tsi(ga)	me-joɣot(ka)	me-in(ga)	me-ŋget(ga)
DS sequential	me-algu(n)	me-nəŋgu(n)	me-igu(n)	me-tsigu(n)	me-joɣotku(n)	me-ingu(n)	me-ŋgetku(n)

1 After vowel-final verb roots such as *me* 'take, make' a transitional *j* is inserted before the endings of the 3SG and 2/3DU. It is absent after consonant-final roots, cf. *mal-ək* 3SG and *mal-oɣot* 2/3DU from the verb *mal* 'be, live' (Olkkonen and Olkkonen 1983:25).

2 Olkkonen and Olkkonen (1983:25) state that the third singular present tense ending is *-tsap* in the Wanduhum dialect and *-tsaʔ* in the Yaknge dialect, but that the final consonant is commonly dropped in both dialects. In the 2/3DU, the ending *-tsaɣot* is found in the Wanduhum dialect whereas the Yaknge dialect has *-tsawət.*

3 The prenasalization of the endings *-bit* 1DU and *-bin* 1PL is triggered by the nasal consonant *m* in the verb root. The same holds for all irrealis I and irrealis II forms.

4 According to Olkkonen and Olkkonen (1983:23), the past tense forms serve as imperatives, except for the distinct 1SG imperative ending *-bi*. The replacement of the original imperative forms by past tense forms must have been in progress when Pilhofer (1928) recorded his paradigms. He gives past tense forms for the the plural, but notes that the bare verb root is used as 2SG imperative form. In the dual, he gives both the past tense endings and the old imperative endings *-tsi* 1DU and *-it* 2/3DU.

5 Pilhofer gives *-bəleŋbuk* 1SG (irrealis I) and *-bəlak* 1SG (irrealis II).

6 Olkkonen and Olkkonen (1983:29) state that *-bi* 1SG occurs in the Yaknge dialect instead of *-al*. Pilhofer gives *-bi*, though in the following sequential paradigm he has *-algu.*

Mesem

(Vanaria and Vanaria 1995:29-40, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	mət-baŋ	mət-bin	mət-gəŋ	mət-biliŋ[1]	mət-bin[1]	mət-bin	mət-bieŋ
intermediate past[2]	mət-zima	mət-zim	mət-zã	mət-zim	mət-zim	mət-zime	mət-zime
near past[3]	mət-ləŋ	mət-dək	mət-ləp	mət-lu	mət-lu	mət-luŋ	mət-loŋ
present[4]	mət-ap	mət-dik	mət-zi	mət-zu	mət-zu	mət-zuŋ	mət-lip
near future	mət-sap	mət-sanik	mət-sanzi	mət-sanzu	mət-sanzu	mət-sanzuŋ	mət-saip
far future[5]	mət-bəŋ[6]	mət-banik	mət-bap[6]	mət-buk	mət-basuk	mət-buŋ	mət-baip
imperative[7]	mət-bi	mət	mət-də	mət-zi	mət-zi	mət-dn	mət-ip
irrealis[8]	mət-bak	mət-bek	mət-dak	mət-bilik	mət-bik	mət-blaik	mət-biele
different subject	mət-ma	mət-də[9]	mət-m	mət-m	mət-m	mət-m	mət-m

1 For the dual of the far past tense, McElhanon recorded [mʌbitn] 1DU and [mʌbiiŋ] 2/3DU in 1968. After vowel-final verbs, the 3SG ending is *-kəŋ* and the endings of the other person-number forms begin with *p* rather than *b*. The exemplary verb is *mət* 'go'. Morphophonological processes that operate between verb root and endings are suspended in the table.

2 After vowel-final verbs, all endings begin with *s* rather than *z*.

3 After vowel-final verbs, the 2SG ending is *-nək* and the endings of the other person-number forms begin with *j* rather than *l*.

4 After vowel-final verbs, the endings have the following allomorphs: *-jap* 1SG, *-nik* 2SG, *-si* 3SG, *-u* 1DU, *-u* 2/3DU, *-suŋ* 1PL, *-jip* 2/3PL.

5 After vowel-final verbs, all endings begin with *p* rather than *b*.

6 Perhaps Vanaria and Vanaria accidentally switched the 1SG and 3SG forms in this paradigm.

7 After vowel-final verbs, McElhanon noted the following allomorphs: *-pi* 1SG, *-jə* 3SG, *-si* 1DU. For the 2/3DU, McElhanon gives the ending *-i*. For the 1PL, McElhanon recorded [kutun] and [mʌtn] 'let's go', which suggests that the ending is *-ŋ*.

8 After vowel-final verbs, the 3SG ending is *-tak* and the endings of the other person-number forms begin with *p* rather than *b*. For the dual and plural, McElhanon recorded the following forms in 1968: *-bidik* 1DU, *-biik* 2/3DU, *-binik* 1PL, *-biek* 2/3PL.

9 After vowel-final verbs, the 2SG ending is *-nə*.

Nabak

(Fabian, Fabian and Waters 1998:49-56, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past[1]	witik-ban	witik-banan	witik-ge	witik-belin	witik-bun	witik-benn	witik-bien
intermediate past	witik-man	witik-manan	witik-zan[2]	witik-melin	witik-mun	witik-menn	witik-mien
near past[3]	witiɣ-a	witik-dak	witiɣ-ep	witik-lut	witik-lut	witik-ŋ	witiɣ-o
present[4]	witiɣ-ap	witik-dik	witik-zin	witik-lup	witik-lup	witik-nup	witiɣ-ip
near future	witik-sap	witik-senik	witik-sem	witik-selup	witik-selup	witik-senup	witik-seip
far future[5]	witik-bap	witik-banik	witik-be	witik-balup	witik-balup	witik-banup	witik-bep
imperative[6]	witik-bi	witik	witiɣ-ak	witik-di	witiɣ-it	witik-ne	witiɣ-it
irrealis[7]	witik-bak	witik-bek	witik-dak	witik-belek	witik-buk	witik-benek	witik-biek
past continuative[8]	witik-teman	witik-temanan	witik-tan	witik-temelin	witik-temun	witik-temenn	witik-temien
different subject[9]	met-ma	met-mane	met-me	met-malu	met-malu	met-mann	met-me

1 After vowel-final verbs, the ending of the 3SG is *-je* and the endings of the other person-number forms begin with *w* rather than *b*. The exemplary verb given by McElhanon is *witik* 'miss (in shooting)'. Morphophonological processes that operate between verb root and endings are suspended in the table.
2 After vowel-final verbs, the 3SG form has the allomorph *-jan*.
3 After vowel-final verbs, the following allomorphs are found: *-ja* 1SG, *-nak* 2SG, *-p* 3SG, *-jo* 2/3PL.
4 After vowel-final verbs, the following allomorphs are found: *-jap* 1SG, *-nik* 2SG, *-in* 3SG.
5 After vowel-final verbs, all endings begin with *w* rather than *b*.
6 After vowel-final verbs, the following allomorphs are found: *-wi* 1SG, *-k* 3SG, *-mdi* 1DU. For the 3SG, McElhanon noted the variant *-ek* beside *-ak*.
7 After vowel-final verbs, the ending of the 3SG is *-nak* and the endings of the other person-number forms begin with *w* rather than *b*.
8 After vowel-final verbs, all endings begin with *mt* rather than *t*, e.g. *-mtan* 3SG.
9 For the different subject medial verb forms, McElhanon exceptionally gives forms of the verb *met* 'go'.

Nomu

(McElhanon's fieldnotes, author's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
past	ari-an	ari-on	ari-op	ari-et	ari-ot	ari-en	ari-e
present[1]	ari-wan	ari-zan	ari-zap	ari-weret	ari-worot	ari-wenen	ari-wene
future	ari-gan	ari-gon	ari-gop	ari-get	ari-got	ari-gen	ari-ge
imperative	ari-be	ari-no	ari-ok	ari-de	ari-ot	ari-ne	ari-ŋet
irrealis	ari-balak	ari-bononak	ari-nak	ari-bererak	ari-bororak	ari-benenak	ari-beak
present habitual	ari-mawan	ari-malan	ari-malap	ari-maweret	ari-maworot	ari-mawenen	ari-mawene
DS sequential	ari-be	ari-no	ari-e	ari-ere[2]	ari-oro[2]	ari-ene[2]	ari-e
DS simultaneous	ari-beso	ari-noso	ari-eso	ari-reso	ari-otso	ari-neso	ari-ŋetso
DS SEQ DUR	ari-mabe	ari-mano	ari-male	ari-malere	ari-maloro	ari-malene	ari-male

1 I recorded the present tense forms that start with *w* in McElhanon's data with initial *b*. The exemplary verb is *ari* 'go'.
2 For these different subject medial verb forms I elicited the same endings as in the imperative: *-de* 1DU, *-ot* 2/3DU, *-ne* 1PL. I did not record the following simultaneous forms for which McElhanon gives dual and plural forms with the same person-number formatives as in the imperative. The recording of all these different subject medial verb forms is not safe.

Kinalaknga

(McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
past	ari-mban	ari-on	ari-op	ari-wet	ari-et	ari-wen	ari-weŋ
present[1]	ari-wan	ari-zan	ari-zap	ari-mbonet	ari-mbonet	ari-mbonen	ari-mboneŋ
imperative	ari-mbo	ari-non	ari-ok	ari-ndo	ari-et	ari-no	ari-ŋek
present habitual	ari-manan	ari-majan	ari-majap	ari-manet	ari-manet	ari-manen	ari-maneŋ
DS sequential	ari-ala	ari-no	ari-o	ari-wero	ari-woro	ari-weno	ari-ŋego

1 The future and the irrealis paradigms have not been satisfactorily elicited and are therefore not given here. The exemplary verb is *ari* 'go'.

Kumukio

(McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
past	ari-an	ari-en	ari-ep	ari-wet	ari-et	ari-wen	ari-weŋ
present[1]	ari-wan	ari-an	ari-ap	ari-wonet	ari-wonet	ari-wonen	ari-woneŋ
imperative	ari-mbo	ari-non	ari-ok	ari-ndo	ari-ot	ari-no	ari-ŋek[2]
present habitual	ari-mawan	ari-majan	ari-majap	ari-maweret[3]	ari-maworot[3]	ari-mawenen[3]	ari-mawoneŋ
DS sequential	ari-ala	ari-no	ari-o	ari-wero	ari-ero	ari-weno	ari-ŋego

1 The future and the irrealis paradigms have not been satisfactorily elicited and are therefore not given here. The exemplary verb is *ari* 'go'.
2 It is not clear if the 2/3PL ending of the imperative mood is *-ŋet* or *-ŋek.*
3 The person-number formatives of these present habitual forms are identical to the Nomu present tense endings and differ from the present tense forms of Kumukio. It seems that a mistake happened in copying the data. The Kumukio 1DU, 2/3DU and 1PL forms are unknown.

Komba

(Southwell 1979:93-112, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past[1]	ʌi-wan	ar-in	ar-ip	ʌi-wet	ʌi-wet	ʌi-wen	ʌi-we
near past[2]	ari-an	ari-at	ari-ap	ar-et	ar-et	ar-en	ar-e[3]
near future	ʌi-βʌman	ʌi-βʌmat	ʌi-βʌmap	ʌi-rʌmet	ʌi-rʌmaβot	ʌi-nʌmen	ʌi-nʌme
far future	ʌi-βat	ʌi-βan	ʌi-βap	ʌi-rat	ʌi-βaβot	ʌi-nat	ʌi-βi
imperative	ʌi-βʌ	ʌi(-nan)	ar-ik	ʌi-rʌ	ar-it	ʌi-nʌ	ʌi-nek
counterfactual	ʌi-βam	ʌi-βat	ʌi-βap	ʌi-βet	ʌi-βaβot	ʌi-βem	ʌi-βe
permissive[4]		ʌi-βoot			ʌi-βaroŋ		ʌi-βioŋ
readiness	ʌi-βam	ʌi-βam	ʌi-βam	ʌi-ram	ʌi-ram	ʌi-nam	ʌi-nam

past habitual	ari-marʌβan	ari-mʌin	ari-mʌip	ari-marʌβet	ari-marʌβet	ari-marʌβen	ari-marʌβe
present habitual	ari-man	ari-mat	ari-map	ari-met	ari-maβot	ari-men	ari-me
future habitual	ari-mʌmbat	ari-mʌmban	ari-mʌmbap	ari-mʌndat	ari-mʌmbaβot	ari-mʌnat	ari-mʌmbi
different subject	ari-a(ndʌ)	ʌi-na(ndʌ)	ar-i	ar-itʌ	ar-itʌ	ar-indʌ	ʌi-ne(tʌ)
DS durative[5]	ari-ama	ʌi-nʌma	ar-ima	ar-itʌma	ar-itʌma	ar-indʌma	ʌi-netʌma

1 According to Southwell and Southwell (1972:17) there is an opposition between intervocalic *-w-* and *-β-* in Komba. They give the minimal pair *gʌwan* 'I came' (far past) and *gʌβan* 'you will come' (far future). The exemplary verb is *ʌi ~ ari* 'go', whose alternants are given after McElhanon.
2 After vowel-final verbs like *ʌi ~ ari* 'go', the near past tense endings start with a vowel, cf. *ni-ap* 'she eats', *u-ap* 'she cooks', *isi-ap* 'she cries', *siwitku-ap* 'she pinches'. After consonant-final verbs, an initial *s* is added to the endings, cf. *ek-sap* 'he sees', *zaat-sap [zaasap]* 'he gets up', *kon-sap* 'he calls'.
3 For the 2/3PL of the near past tense, McElhanon noted *aree*, apparently with a long vowel in the ending; Southwell gives the ending *-e*.
4 Permissive forms only exist for the second person.
5 This paradigm of different subject medial verb forms is taken from McElhanon's data.

Selepet

(McElhanon 1972:112-13)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	ari-wan	ari-on	ari-op	ari-wit	ari-owot	ari-win	ari-wi
near past[1]	ari-an	ari-at	ari-ap	ari-(a)it	ari-awot	ari-(a)in	ari-ai
near future	ari-wom	ari-wuat	ari-wuap	ari-rom	ari-romawot	ari-nom	ari-nomai
far future	ari-wiom	ari-wion	ari-wiop	ari-wioit, ari-wieit	ari-wiowot	ari-wioin, ari-wiein	ari-wioi, ari-wiei
imperative	ari-we	ari	ari-ɔk	ari-re	ari-jet	ari-ne	ari-ŋet
counterfactual	ari-mbɔm	ari-mbɔt	ari-mbɔp	ari-mbɔit	ari-mbɔwot	ari-mbɔin	ari-mbɔi
permissive[2]		ari-wot			ari-weloŋ		ari-wioŋ
past habitual	ari-miniwan	ari-minion	ari-miniop	ari-miniwit	ari-miniowot	ari-miniwin	ari-miniwi
present habitual	ari-man	ari-mat	ari-map	ari-mait	ari-mawot	ari-main	ari-mai
future habitual	ari-bisɔm	ari-bisɔn	ari-bisɔp	ari-bisɔit	ari-bisɔwot	ari-bisɔin	ari-bisɔi

different subject	ari-mune	ari-rɔ	ari-mu	ari-mutŋe	ari-mutɔ	ari-munŋe	ari-ŋetɔ

1 The forms of the exemplary verb *ari* 'go' illustrate the near past tense endings following vowel-final verbs. After consonant-final verbs, an initial *s* is added to the endings, cf. *ek-sap* 'he sees', *jaɣat-sap* 'he gets up', *kun-sap* 'he calls'.
2 Permissive forms only exist for the second person.

Timbe

(Foster 1972:21-35, McElhanon's fieldnotes)

	1SG	2SG	3SG	1DU	2/3DU	1PL	2/3PL
far past	ari-ɔn	ari-en	ari-ep	ari-jeot	ari-jeat	ari-jeon	ari-jei
near past[1]	ari-ɔn	ari-ɔt	ari-ɔp	ari-et	ari-at	ari-en	ari-ɔe[2]
near future	ari-werɔn	ari-werɔt	ari-werɔp	ari-weret	ari-werat	ari-weren	ari-werɔe[2]
far future	ari-wean	ari-weat	ari-weap	ari-waet	ari-weandat	ari-waen	ari-wae[2]
imperative	ari-we	ari	ari-ɔk	ari-re	ari-et	ari-ne	ari-ŋet
counterfactual	ari-wom	ari-wɔt	ari-wop	ari-wet	ari-wat	ari-wen	ari-wɔe[2]
past habitual	ari-minɔn	ari-minen	ari-minep	ari-mineot	ari-mineat	ari-mineon	ari-minei
present habitual[3]	ari-man	ari-mat	ari-map	ari-maet	ari-mandat	ari-maen	ari-mai
different subject[4]	ari-re	ari-menɔ	ari-mbo	ari-etŋe	ari-mbela	ari-enŋe	ari-mbi

1 Foster posits underlying forms with initial *t* for the near past tense endings: *-tɔn* 1SG, *-tɔt* 2SG, *-tɔp* 3SG etc. In fact, monosyllabic verbs ending in a vowel add initial *nd* to the ending, cf. *ne-ndɔp* 'she eats', *o-ndɔp* 'she cooks', *je-ndɔp* 'she sleeps'. Vowel-final verbs of two or more syllables lack this extension, cf. *ari-ɔp* 'she goes', *inde-ɔp* 'she cries', *gɔwɔri-ɔp* 'she scrapes off', *diwitku-ɔp* 'she pinches'. Verbs ending in a consonant take initial *d*, cf. *ek-dɔp* 'he sees', *aɣat-dɔp* 'he gets up', *kon-dɔp* 'he calls'. The exemplary verb is *ari* 'go'.
2 For the 2/3PL, McElhanon noted *ari-ɔi* (near past), *ari-werɔi* (near futur), *ari-wai* (far future) and *ari-wɔi* (counterfactual).
3 McElhanon recorded a different set of present habitual forms: *ari-mandɔn* 1SG, *ari-mandɔt* 2SG, *ari-mandɔp* 3SG, *ari-mandet* 1DU, *ari-mandat* 2/3DU, *ari-manden* 1PL, *ari-mandɔi* 2/3PL. The 2/3DU form is identical with the form given by Foster (in the table), the rest of the paradigm contains an *nd* extension like some allomorphs of the near past tense endings.
4 After consonant-final verbs, the following endings are found (Foster 1972:29): *-dere* 1SG, *-menɔ* 2SG, *-do* 3SG, *-detŋe* 1DU, *-bela* 2/3DU, *-denŋe* 1PL, *-bi* 2/3PL.

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