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PROTO-BUNGKU-TOLAKI: RECONSTRUCTION OF ITS PHONOLOGY
AND ASPECTS OF ITS MORPHOSYNTAX

by

DAVID MEAD

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
DOCTOR OF PHILOSOPHY

APPROVED, THESIS COMMITTEE

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Houston, Texas
May 1998
Abstract

Proto-Bungku-Tolaki: Reconstruction of its Phonology and Aspects of its Morphosyntax

by

David Mead

The Bungku-Tolaki group of languages (Austronesian, Western Malayo-Pacific) comprises fifteen languages spoken in and around the southeastern peninsula of Sulawesi Island in present-day Indonesia. Although there exist no written records for these languages prior to 1900, I apply the traditional methods of historical and comparative linguistics, as well as bring to bear more recent understandings regarding the nature of grammatical and semantic change, in order to develop a picture of their common ancestor language, Proto-Bungku-Tolaki.

The dissertation has two parts. In part one, I reconstruct the sound system of Proto-Bungku-Tolaki, detailing both the innovations which distinguish it from its nearest identified ancestor, Proto-Malayo-Pacific, along with the phonological changes which occurred in the various daughter languages, bringing us up to the present day. In the second part I focus on issues of transitivity including the grammaticalization of the preposition *aken as a valence-changing applicative suffix, clause structure including relative clauses, and verbal inflection. Herein, Proto-Bungku-Tolaki is reconstructed as having three construction types which allowed the expression of both an agent and a patent, namely the active, the passive, and the antipassive. Nominative and absolutive pronoun sets served as agreement markers, though the genitive subject marking original to
subordinate temporal adverbial clauses has in some languages also made its way into main clauses.

Because there is not as yet a significant body of published material on the Bungku-Tolaki languages, I have made a conscious effort to amply supply this dissertation with the primary data upon which my analyses have been based. Therefore although the present work is of particular relevance to Austronesianists working in the field of historical reconstruction, the data and descriptions alone should make this an invaluable reference for anyone interested in the languages of this small corner of the world.

Appendices include five texts with interlinear glossing and free translation, and a compilation of Proto–Bungku-Tolaki lexical reconstructions with supporting evidence.
Acknowledgments

For all their assistance and patient labor in helping to bring the present work to fruition, my committee members have earned my enduring gratitude. I am especially grateful to have had the opportunity of working under the tutelage of Suzanne Kemmer, my thesis advisor. Not only was it a pleasure to work with someone who has such an infectious enthusiasm for linguistic research, but the present work has benefited immensely from her knowledge and critiques. Spike Gildea is a clear thinker, and I envy his solid grasp of the deep issues in linguistics. Philip Davis hides much talent under a thoughtful and reflective demeanor, and he complemented the other members of my committee very well. I must also thank Malcolm Gillis for providing an outside reader’s perspective, and I am particularly grateful that I could call upon Dr. Robert Blust and his considerable knowledge of issues in Austronesian linguistics. His extensive comments were always on target, and on more than one occasion saved me from egregious errors. Nevertheless, responsibility for any lacunae rests solely with me, and not any of the members of my committee.

I am also indebted to Rice University for their generous financial assistance throughout my program of study. Especially, I would like to thank the Lodieska Stockbridge Vaughan Fellowship committee for granting me this award, which allowed me to spend an extra year on my research. I hope they are pleased with these results.

This dissertation would not have been possible without access to data on the Bungku-Tolaki languages, and here I must acknowledge both my predecessors and my peers. Belonging with distinction to the former category are the Dutch missionary-linguists Nicolaus Adriani and Samuel J. Esser. It was Adriani who first even identified a Bungku-Tolaki group (then called ‘Bungku-Mori’), and Esser’s description of the linguistic situation in the Mori area has made an invaluable contribution to the present work. My understanding of two other Bungku-Tolaki languages has likewise been guided by very
competent linguists, respectively Scott Youngman currently working on Tolaki and the couple David and Suree Andersen working in Moronene. Not only did they allow me free access to their fieldwork and draft descriptions, but they were involved with me in a lengthy correspondence regarding these two languages. The linguistic community has much to look forward to, when their own descriptions are eventually published.

I also wish to acknowledge the Summer Institute of Linguistics, Hasanuddin University in Ujung Pandang, and Haluoleo University in Kendari, whose sponsorship ten years ago allowed me to freely collect wordlists across the Bungku-Tolaki area, and also the Indonesian Institute of Sciences (LIPI) whose sponsorship in 1996 allowed me to collect the Kulisu data presented herein. Certain language respondents must also be recognized. Among Tolaki speakers who gave willingly of their time to answer my queries must be mentioned both Arsamid and Drs. Tambunan, and among Kulisu speakers, Drs. La Ode Umar M., La Ode Wiridin, Haji La Tarima, Wa Eti, La Bura, Hasmudih and his family, La Tuade, La Djaru and his wife Wa Ode Harina, La Nduke, Abdul Hamid, La Yidu and La Di.

Making my time at Rice University a pleasure and a joy, were my fellow graduate students in linguistics over the years: Walter, Tim, Aya, Miyhun, Jeong-Hwa, Raquel, Jeff, Nila, Sergio, Mimi, Ada, Colin, Amy, John, Dave, Hilary and Stephanie. Thank you.

Beyond all these other people, however, are my wife, Melanie, and my son, Jonathan. Not only did they adventure forth with me to Indonesia, but when asked they lovingly released their claim upon my time, allowing me to devote full attention to my studies and the writing of this dissertation. To both of them I will be forever grateful.
“Let not a wise man boast of his wisdom, and let not the mighty man boast of his might, let not a rich man boast of his riches; but let him who boasts boast of this, that he knows and understands Me, that I am the LORD who exercises lovingkindness, justice and righteousness on earth, for I delight in these things.”
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## Abbreviations

Grammatical abbreviations

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<td>first person</td>
<td>INTERROG</td>
<td>interrogative</td>
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<td>first person singular</td>
<td>INTR</td>
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<td>first person plural</td>
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<td>Kodeoha</td>
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<td>Proto–South Sulawesi</td>
</tr>
<tr>
<td>KOR</td>
<td>Koroni</td>
<td>PPH</td>
<td>Proto-Philippine</td>
</tr>
<tr>
<td>KPP</td>
<td>Kapampangan</td>
<td>PUY</td>
<td>Puyuma</td>
</tr>
<tr>
<td>KOL</td>
<td>Kola</td>
<td>RAH</td>
<td>Rahambuu</td>
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<tr>
<td>KRN</td>
<td>Korean</td>
<td>SLV</td>
<td>Samar-Loyte Visayan</td>
</tr>
<tr>
<td>KUL</td>
<td>Kulisu</td>
<td>TAL</td>
<td>Taloki</td>
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<tr>
<td>LED</td>
<td>Ledo</td>
<td>TOM</td>
<td>Tomadino</td>
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<tr>
<td>MAL</td>
<td>Malay</td>
<td>PWMP</td>
<td>Proto–Western</td>
</tr>
<tr>
<td>MRA</td>
<td>Mori Atas</td>
<td></td>
<td>Malayo-Polynesian</td>
</tr>
<tr>
<td>MRB</td>
<td>Mori Bawah</td>
<td>WAR</td>
<td>Waru</td>
</tr>
<tr>
<td>MRN</td>
<td>Moronene</td>
<td>WAW</td>
<td>Wawonii</td>
</tr>
<tr>
<td>MUN</td>
<td>Muna</td>
<td>WMP</td>
<td>Western Malayo-</td>
</tr>
<tr>
<td>PAD</td>
<td>Padoe</td>
<td></td>
<td>Polynesian</td>
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<tr>
<td>PAM</td>
<td>Pamona</td>
<td>WOL</td>
<td>Wolio</td>
</tr>
<tr>
<td>PAN</td>
<td>Proto-Austronesian</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Orthographic Conventions

The following orthographic conventions have been adopted for citing present-day forms not enclosed in phonemic or phonetic bracketing. Symbols not specifically listed below have their expected phonemic values.

\[
\begin{align*}
    w &= \text{bilabial fricative} /\beta/ \\
    j &= \text{voiced palatal affricate} /\text{nd}/ \\
    nj &= \text{voiced prenasalized palatal affricate} /\text{nd}/ \\
    c &= \text{voiceless palatal affricate} /\text{t}/ \\
    nc &= \text{voiceless prenasalized palatal affricate} /\text{nt}/ \\
    ng &= \text{velar nasal} /\eta/ \\
    ngg &= \text{voiced prenasalized velar stop} /\eta/ \\
    ngk &= \text{voiceless prenasalized velar stop} /\eta/ \\
    \prime &= \text{glottal stop} /\#{}/ \\
    l &= \text{in Moronene, retroflexed flap} /\text{l}/; \text{in other languages, voiced lateral approximant} /\text{l}/
\end{align*}
\]

For the situation peculiar to the Kulisu su anterior voiced stops (§ 1.5.5):

\[
\begin{align*}
    \text{Kulisu su voiced bilabial implosive} /\beta/ &= \text{written} \quad b \\
    \text{Kulisu su voiced alveolar implosive} /\text{d}/ &= \text{written} \quad d
\end{align*}
\]

In the few cases where it is necessary to cite Kulisu su forms with anterior unimploded stops, I use the following convention:

\[
\begin{align*}
    \text{Kulisu su voiced bilabial stop} /\beta/ &= \text{written} \quad b \\
    \text{Kulisu su voiced alveolar stop} /\text{d}/ &= \text{written} \quad d \\
    \text{Kulisu su voiced interdental stop} /\text{d}/ &= \text{written} \quad dh
\end{align*}
\]

Citations of historical forms follow these conventions:

\[
\begin{align*}
    *abcd &= \text{a reconstructed form (etymon)} \\
    *(x)abcd &= \text{uncertainty whether or not } *x \text{ is to be reconstructed} \\
    *(x,y)abcd &= \text{either } *x \text{ or } *y \text{ is to be reconstructed} \\
    **abcd &= \text{an expected but unattested reflex}
\end{align*}
\]
1 Introduction

1.1 Preliminary remarks

Well over two thousand years ago, a small group of people moved into the southeastern peninsula of what is now Sulawesi, Indonesia. Over time these people multiplied and spread, and their tongue changed, developing into the fifteen languages of the present-day Bungku-Tolaki group. What can we know about this original language? What was its sound system like? How did it change? In this study I apply the traditional tools of historical and comparative reconstruction as well as more recent understandings of morphosyntactic change to answer these questions.

The goals of this dissertation are threefold. First has been to identify the shared innovations—primarily sound changes, but also including certain lexical and grammatical changes—which establish the Bungku-Tolaki languages as a valid genetic group. The determination of a Bungku-Tolaki subgrouping has until the present time rested solely on the work of the Dutch linguist Nicolaus Adriani (1914:217–247). Because of his broad knowledge of the surrounding languages, Adriani naturally made many insightful observations concerning sound change. However his work also had a certain roughness about it. First, comparisons were made between contemporaneous languages, with no attempt to provide reconstructed forms; second, he was not always clear regarding conditioning environments for sound changes; and third, he was obviously unable to benefit from the many advances in Austronesian scholarship which were initiated primarily with Dempwolff (1934–1938) and which have continued up until the present day. For these reasons, it has been time for a fresh, scholarly review of the available evidence.

Another compelling reason for looking at the Bungku-Tolaki languages is their position within Austronesian, namely they are Western Malayo-Polynesian languages. The
broad Austronesian family—in terms of number of languages the largest language family in the world—stretches from Malagasy spoken on Madagascar Island off the coast of Africa, through most of insular Southeast Asia, and eastward to include the languages dotting the great Pacific basin. A picture of subgrouping which has emerged for Austronesian languages is shown in Figure 1; see also Blust (1982), Ross (1994), and Tryon (1995). Of the four primary subgroups given here, Atayalic, Tsouic and Paiwanic languages are spoken on the island of Formosa.

![Diagram of Austronesian subgrouping]

Figure 1. Subgrouping within Austronesian, following Blust (1978)

This subgrouping engenders a picture of an ever eastward and outward migration of Austronesians. From their homeland on Formosa, Austronesians migrated to the Philippines around 3000 BC, and from there progressively to outlying regions, eventually reaching, for example, Polynesia sometime in the first millennium BC (Bellwood 1995). However, despite various attempts, no clear picture of subgrouping within Western Malayo-Polynesian—basically the languages of the Philippines and western Indonesia as far east as Sulawesi, plus a handful of other, more remotely located languages—has yet
emerged. Although Blust's 'rapid expansion' hypothesis (1997b) entails that a genetic
tree model of language grouping may never be established for Western Malayo-
Polynesian, the work of establishing relationships has also been impeded simply by a lack
of data on the extant languages. This has been especially true in regard to the languages
of central, eastern and southeastern Sulawesi. The present work is intended to fill just one
gap, the gap in our knowledge with respect to the Bungku-Tolaki group. As more
information is brought to light concerning lower order subgroups, our knowledge of
higher order groupings within Western Malayo-Polynesian can only improve.

After the Bungku-Tolaki languages are established as a valid genetic grouping, then
these languages can become a test case for examining processes of morphosyntactic
change. That is, if we can first describe how these languages differ, then trace how these
differences developed, then we should also have something useful to say about what kind
of historical processes are possible in languages—a method of understanding language
change which Greenberg has termed 'intragenetic comparison' (1974:67–68). This
concern leads to the two other goals of this dissertation.

First, it has not been an easy task to describe how these languages differ. Only one
complete description exists for any of these languages, S. J. Esser's (1927–1933) Klank-
en Vormleer van het Morisch (Phonology and Morphology of Mori), which fortunately
can be counted as one of the truly admirable grammatical descriptions stemming from the
Dutch colonial era. However, even this work has mostly faded from the view of modern
scholarship, and published information on other Bungku-Tolaki languages beyond
Mori—such as there exists—lies scattered among a handful of mainly Dutch and
Indonesian sources. Therefore a second major task which I have taken on in preparing
this dissertation has been to collect the best which these other sources have to offer,
combine it with a period of fresh field research, and present as complete a picture as
possible of the basic synchronic features of Bungku-Tolaki languages. Realizing the
present work may become a main source of information on the structure of these languages, I have endeavored to amply supply it with the primary data upon which my own analyses have been based.

The third principal aim of the present work is to move beyond the areas of phonological and lexical reconstruction and investigate, within the context of the Bungku-Tolaki languages, issues of morphosyntactic change. This in part reflects the current interest shown by linguists in topics such as grammaticalization and pathways of semantic, syntactic and morphological change. However, it also reflects my own belief (and experience) that synchronic patterns often become much more understandable when viewed in the light of history, that is, when we look at a grammatical morpheme or construction in terms of where has come from, and where it might be going. It is my hope this dissertation might add even a small measure to our understanding of these issues.

1.2 How the chapters are organized

Before commencing with these topics, however, I would like to give the reader an overview of the organization of this dissertation. I commence with phonological reconstruction (Chapters 2 and 3), then after a treatment concerning the form of Proto-Bungku-Tolaki pronoun sets (Chapter 4), I move on to issues in Proto-Bungku-Tolaki morphosyntax (Chapters 5 through 8).

In the reconstruction of Proto-Bungku-Tolaki phonology, I have adopted a top-down approach, that is, beginning with Proto-Malayo-Polynesian phonemes, I take each in turn and discuss their development first into Proto-Bungku-Tolaki and thence into the present-day daughter languages. There are various advantages and disadvantages to using a ‘top-down’ (as opposed to a ‘bottom-up’) approach, but I believe the presentation herein is of the sort which will be most user-friendly to other Austronesianists interested in sound change in this part of Sulawesi.
Chapter 2 is a discussion of certain innovations which distinguish Proto-Bungku-Tolaki from its ancestor Proto-Malayo-Polynesian, including no less than eight phonological splits and six mergers. Although the focus here is primarily on sound change, I also discuss the loss of the PMP perfective/neutral aspectual distinction (which was partly phonological, partly grammatical change) as well as certain lexical innovations which lend further support to the notion of Bungku-Tolaki as a valid genetic grouping. Chapter 3 continues the focus on historical sound change, this time from PBT into the present-day daughter languages—and the implications these changes have for subgrouping within Bungku-Tolaki.

Chapter 4 takes on the particular task of reconstructing four Proto-Bungku-Tolaki pronoun sets. Although the focus here is primarily on form, it constitutes a bridge into the second half of the dissertation which concentrates on morphological and syntactic issues.

One approach to discussing Proto-Bungku-Tolaki morphology would be to take a reconstructed affix, discuss the formal and functional properties of its reflexes, comment on its probable historical function, and then repeat this process step-wise until all possible affixes and particles had been treated. However, because morphological bits often act in concert with one another, it has seemed best to treat some aspects of the morphology together. In particular, Chapter 5 investigates the voice system of Proto-Bungku-Tolaki, demonstrating that there were three basic construction types, the antipassive marked by *poN-, the passive marked by *-in-, and the active characterized by an object agreement marker added to the transitive verb base. Chapter 6 takes a detailed look at the important morpheme *ako (from earlier *aken), and concludes that in the protolanguage it must have been present as both a suffix and as a preposition, with distinct functions. Chapter 7 investigates the different pronoun sets used as subject agreement markers, including the development of nominative pronouns from genitive pronouns and the development of future pronouns from absolutive pronouns. Chapter 8 is devoted to relative clause
structure. Two interesting features about relativization are the different relative markers which have sprung up across the Bungku-Tolaki language area, and the nominalizations which can be used as a pseudo-relativization strategy for locative and instrumental constituents.

After this survey of grammatical structures, in Chapter 10 I summarize the principal findings of the previous chapters and outline areas for further research.

In the remainder of this chapter I present mostly background information concerning the Bungku-Tolaki languages. In § 1.3 I give a brief history of the Bungku-Tolaki area, followed in § 1.4 by thumbnail sketches of the fifteen present-day Bungku-Tolaki languages. Information concerning present-day sound systems is presented in § 1.5. Finally in § 1.6 I describe the sources of lexical and morphosyntactic data which I accessed during the course of my research.

1.3 External history

Little has been written about the history of the Bungku-Tolaki peoples; indeed they constitute—historically speaking—little more than footnotes to the history of the Sultanate of Buton. The mainland of southeastern Sulawesi especially attracted little attention. Although the Dutch arrived in the Indonesian archipelago in the early seventeenth century, it was the beginning of the nineteenth before they even commissioned a ship captain to chart the coastline (Vosmaer 1839). For the next seventy years the region was subject to only a few forays by outsiders, scientific (Giglioli 1874; Sarasin 1896; Sarasin & Sarasin 1903; Elbert 1911–1912) and otherwise (Van der Hart 1853; Bosscher & Matthijsen 1853; Uhlenbeck 1861). Only when the Dutch were no longer occupied with fighting the Bugis was a concerted effort made, circa 1908, to bring mainland southeastern Sulawesi under Dutch civil authority (Van der Klint 1925:243). Despite this neglect in the literature, it is still possible to develop with broad strokes a picture of life and events in southeastern Sulawesi over roughly the past four centuries.
The area around the Banda Sea was, like most other parts of Indonesia, beset with greater and lesser native states vying among themselves for power and the most successful alliances. The most powerful and expanding people in this region four hundred years ago were the Ternateans, who having ousted the Portuguese from their island in 1575 (Ricklefs 1981:22), extended their power in 1580 by conquering the Butonese capital at Bau-Bau, introducing Islam, and exacting a tribute from the king and his followers (Ligtvoet 1878:31). They appear not to have been successful in maintaining direct control over Buton much past 1600, but even in 1677 they still laid claim to parts of the Buton kingdom, including northern Buton Island, Muna Island and the Tiworo archipelago. By no later than 1655, though probably much earlier, the Bungku kingdom on the east coast of Sulawesi had also been brought under Ternatean control (De Clercq 1890:144). In 1863 some incident led to the Ternateans being permanently expelled by the Dutch from Buton (Bakker 1989:7), but they retained hegemony over Bungku into the twentieth century, when even the appointment of a rajah there had to meet with the Sultan of Ternate’s approval (Goedhart 1908:495–497).

To the west, the Makassarese kingdom of Gowa in South Sulawesi also exerted considerable power in the sixteenth and seventeenth centuries, laying claim to places as far flung as Sumbawa, Buton and Manado (Ricklefs 1981:62). However, their influence waned after their defeat by the combined Dutch and Bugis forces in 1667–1669, and thereafter it seems to have been the Bugis who had the greater influence in southeastern Sulawesi, particularly on the peninsular mainland. Unlike the Ternateans who maintained political control via envoys and threat (or use) of force, the Bugis came primarily to trade, fish, garden and exploit forest products. One may assume that in the nineteenth century many Bugis had already settled with the native Tolaki population along the western coast as well as in other coastal areas of the mainland (Vosmaer 1839:70; Van der Klift 1920; Treffers 1914:196)—compare also Mundy’s comment (1848:165) on “Bugis and Bajow
settlers”. At the beginning of this century, Goedhart estimated the number of Bugis settlers in the Mori area to be somewhere between nine hundred and a thousand (1908:532–534), who were there mostly to trade, garden and harvest dammar. He also noted that the four Mori makoles (kings) “confessed they were vassals of the datu from Luwu [a Bugis state], and would not refuse to go to Palopo if he called them” (Goedhart 1908:530) (my translation). Relations between the Bugis and Tolaki states have been investigated in detail by Anwar and Salimin (1988).

Apart from these outside influences, there were also rivalries internal to the region. There were competing claims between Bungku and Buton over the island of Wawonii, and Bungku and Konawe (the Tolaki kingdom in the eastern part of the mainland) fought over an intervening stretch of coastline (Goedhart 1908:490–493). Several authors also report raiding between the Tolaki and Moronene (Mundy 1848:165; Vosmaer 1839:74; A. Kruyt 1922:460). But claims such as the one made by Temminck that “this [southeastern] peninsula ... is divided into a number of states, continually at war with one another” (1851:183), and similar ones for the Mori area, must be regarded as exaggerations.1

1.4 Present-day languages and classification

The Bungku-Tolaki languages are bordered on the north by languages of the Kaili-Pamona group, on the west by languages of the South Sulawesi group, on the south by languages of the Muna-Buton group, and on the east by the Banda Sea. See Map 2. The most recent and comprehensive survey of the Bungku-Tolaki area (Mead forthcoming)

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1Compare for instance these comments: “The Tolaki amongst whom I had been travelling never seem to have participated in any war in particular” (A. Kruyt 1922:456) (my translation) and “The Tolaki do not wage organized war; their forays are solely rapid excursions or raids. If ever it happened, exceptionally, that a quarrel broke out which could possibly be called a war, then—through vigilance on both sides—the matter usually ended with a fizzle” (Treffers 1914:213) (my translation).
Map 2. Language groups and selected languages of Sulawesi
tentatively proposed fifteen languages which, based on a synchronic lexicostatistic analysis,\(^2\) fell into three subgroups:

- **Bungku Subgroup**: Moronene, Taloki, Kulisu, Koroni, Wawonii, Bungku
- **Mori Subgroup**: Bahonsuai, Mori Bawah, Padoe, Mori Atas, Tomadino
- **Tolaki Subgroup**: Waru, Tolaki, Rahambuu, Kodeoha

As is demonstrated below, however, a consideration of shared historical innovations shows that only two primary genetic branches need be recognized within Bungku-Tolaki, which split the supposed Mori subgroup in two: Mori Bawah and Bahonsuai group with the Bungku languages (Moronene, Taloki, etc.) to form what is hereafter termed the Eastern branch, while together Padoe, Mori Atas, Tomadino and the Tolaki subgroup of languages compose the Western branch. The present lexical similarity which the five Mori languages exhibit is doubtless due to their prolonged contact.

Following are comments for each language. Population figures are from Mead (forthcoming) and reflect estimates made in 1988. See Map 3 for geographic locations.

**Moronene** (MRN) (31,000) The Moronene language comprises two closely related dialects, Tokotua spoken on Kabaena Island and Moronene spoken on the mainland. Place names in present-day Tolaki areas which have retained their recognizable Moronene origins bear evidence that Moronene speakers once inhabited a much larger portion of mainland Sulawesi.

**Taloki** (TAL) (500) Taloki speakers live in and around Maligano village, which lies on the northwestern coast of Buton Island opposite the Kulisu area—but separated from it by the forested, mountainous interior. Northwestern Buton is predominantly Muna-speaking (Van den Berg 1991a), and Taloki speakers claim to be bilingual in Munanese.

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\(^2\) In a synchronic approach, the focus is on how the language situation is perceived by present-day speakers, therefore no effort is made to disqualify borrowings or other false cognates as would be appropriate in a diachronic lexicostatistic approach; see further Simons (1977:11 ff.).
Map 3. Bungku-Tolaki languages and dialects
They also report they have not continuously settled this area, but migrated south under duress during the zaman Portugis ‘time of the Portuguese’, only to return in the 1910’s when a famine struck southern Buton Island.

**Kulisusu (KUL) (22,000)** Kulisusu speakers inhabit the area surrounding the Koro Bay in the northeastern corner of Buton Island. They have been well-established in this area since at least the sixteenth century (Ligtvoet 1878:62), and probably far longer. Kulisusu shares its closest linguistic relationships with Taloki and Koroni.

**Koroni (KOR) (500)** The sole surviving outpost of Koroni speakers is located in Unsongi village in Central Sulawesi, 150 miles north of their presumed homeland in northwestern Buton. According to tradition, this migration also took place during the time of the Portuguese presence in the archipelago. Together the Taloki and Koroni migrations give a picture—consistent with the historical record—of hardship in the form of seafaring marauders\(^3\) overtaking northern Buton in the sixteenth century. The Kulisusu stayed, but constructed stone ramparts to protect their principal city (cf. Dampier 1698:543). Some among the Taloki and Koroni may also have stayed in northwestern Buton, but the communities which have retained their language to the present day sought refuge in either the south or the north.

**Wawonii (WAW) (22,000)** From a lexicostatistic perspective, Wawonii occupies the central position in a language chain stretching from Bungku in the north to Kulisusu in the south. It averages 75% lexical similarity with both of its neighbors, even though Bungku and Kulisusu—the respective ends of the chain—share a lexical similarity of only 65%. Wawonii comprises two closely related dialects, distributed geographically on Wawonii and Menui Islands. Traditions of the Wawonii also report periods during which the island was abandoned and its inhabitants fled to the mainland.

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\(^3\)In tales from Southeast Sulawesi, these marauders are consistently identified as the *orang Tobelo*. The Tobelo served as fighting forces for the Sultan of Ternate.
**Bungku** (BNG) (21,500)  The Bungku kingdom was an important local power. Bungku speakers are predominantly settled along the coastal strip from near Tomori Bay as far south as the Salabanga archipelago—with outposts of To Rete speakers living in communities even further south. Some Bungku communities also migrated inland, settling the upper and lower Lindu River. Greater dialectal diversity is found here than in any of the previously discussed languages of Wawonii, Kulisu or Moronene.

**Bahonsuai** (BAH) (200)  The Bahonsuai must be recognized as a Mori Bawah community that relocated to the Bungku area, where their speech diverged from Mori Bawah and converged with Bungku. Although Bahonsuai speakers comprise only a third of the population of the village where they live, they continue to use their distinctive language at home and in the fields and boats.

**Mori Bawah** (MRB) (12,000–18,000)  Mori Bawah speakers inhabit the low hilly area to the south and southwest of Tomori Bay. Because of complex patterns of divergence and convergence the dialects of Mori Bawah resist easy classification, though Esser (1927–1933) chose five which for descriptive purposes he regarded as principal.

**Padoe** (PAD) (8,000–15,000)  The traditional Padoe language area is south and west of Lake Matano, and most present-day Padoe communities are still to be found here. As a result of a Muslim-led insurrection in the 1950's, several Padoe villages relocated further to the north in Central Sulawesi, where they have remained to this day. Esser thought Padoe could be reckoned as a dialect of Mori Atas (1927:6), and indeed the two languages share most sound changes.

**Mori Atas** (MRA) (12,000–18,000)  The Mori Atas people originally lived in the rugged mountains west of Mori Bawah, primarily in the area drained by the Laa River. However even before the turn of this century, Mori Atas people had begun resettling south of Lake Matano and eastward in the Mori Bawah area, a process which was in part later accelerated by the Dutch so as to better enforce colonial administration.

**Tomadino (TOM) (600)** Of all the Bungku-Tolaki languages, Tomadino relates most closely to Mori Atas (72% lexical similarity). This figure plus shared sound changes indicate that the Tomadino originated from the Mori Atas area. Like the Bahonsuai, their speech also exhibits convergence with Bungku. Tomadino speakers in fact report considerable bilingualism with Bungku; because there is no domain reserved strictly for Tomadino, it is hard to imagine that this can remain a stable bilingual situation.

**Waru (WAR) (350)** The Waru formerly lived in the rugged interior south of Lake Towuti, but have now resettled downstream along the lower Lindu River. Their language closely resembles Tolaki, and may in fact simply constitute another dialect thereof.

**Tolaki (TOL) (280,000)** Tolaki speakers outnumber all other Bungku-Tolaki speakers together nearly two to one. The principal dialects of this language are Konawe (230,000) spoken in the east and southeast, and Mekongga (50,000) spoken along the western coast. These dialects are named for the two kingdoms which ruled these respective areas. In terms of number of speakers, the other Tolaki dialects together number less than 1,000. Formerly these dialects (Laiwui, Asera and Wiwirano) were spoken in isolated valleys of the northern interior, but this area is now mostly uninhabited, primarily the result of fifteen years of guerrilla warfare in the 1950's and 1960's. The linguistic homogeneity of the Konawe area indicates a relatively recent settlement.

**Rahambuu (RAH) (5,000)** Except for the divergent Kodeoha isolect, the Tolaki communities along the western coast form a classic dialect chain—from Rahambuu in the north extending south through the Mekongga region. And like Mekongga, the Rahambuu area has been heavily settled by Bugis and other migrants from South Sulawesi. Today, the Rahambuu are outnumbered in their native coastal area five to one by immigrants from South Sulawesi.
Kodeoha (KOD) (1,500) Kodeoha speakers live in four villages on the northwestern coast of mainland southeastern Sulawesi. Although Kodeoha clearly groups with Tolaki, a number of unique wordlist responses (Mead forthcoming)—along with the merger of prenasalized and oral stops—attest to a unique history for this language.

1.5 Present-day sound systems

In keeping with the focus on present-day languages, in this section I give an overview of current sound systems. All present-day Bungku-Tolaki languages are open syllable languages, with the only syllable patterns being V and CV. Most roots are disyllabic, though occasionally three and four syllable roots are found. Stress is penultimate (non-phonemic), with suffixation usually precipitating stress movement. As far as is known all Bungku-Tolaki languages contrast only five vowels:4

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<td>high</td>
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<td>low</td>
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Table 1. Common Bungku-Tolaki vowel inventory

Major differences between phoneme inventories are to be found only in the consonants. As appropriate, some historical sound changes involving consonants are previewed below, but fuller discussions (including examples) are postponed to Chapter 3. Data on Kulisusu and Kodeoha consonants have been drawn from my own field notes; sources of data on other languages are: Moronene (D. Andersen 1995), Wawonii

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4Muthalib, Pattiasina, et al. (1983) propose a phonemic contrast between short and long vowels in Moronene, e.g. /i/, /iː/, /e/, /eː/, /a/, /aː/, /o/, /oː/, /u/, /uː/, but—as may be argued from patterns of stress placement—phonetically long segments [ii], [ai], etc. are here (as in other Bungku-Tolaki languages) better regarded phonemically as sequences of two like vowels. For a discussion of this issue in Tolaki, see Mead and Tambunan (1993:5–6).
(Manyambeang, Mahmoed, et al. 1982/1983), Bungku (Saro, Rahim, et al. 1982), Mori Atas and Mori Bawah (Esser 1927), Padoe (Karhunen 1991) and Tolaki (Mead & Tambunan 1993).

1.5.1 Wawonii, Mori Bawah, Padoe and Mori Atas

I begin with these four languages not only because are they similar enough to be discussed together, but also because the inventory of consonants found in these languages—though not identical to that of Proto–Bungku-Tolaki (see § 3.3.1)—is similar enough therewith to make these languages a useful point of comparison when discussing the consonants found in other languages. Table 2 thus illustrates what may be considered somewhat of a ‘standard’ set of phonemic consonant contrasts for Bungku-Tolaki languages. As in other Bungku-Tolaki languages, sequences of nasal plus homorganic obstruent are analyzed here as unit phonemes.\(^5\) Note particularly the absence of palatals, affricates, and approximants. Also, while the bilabial fricative is voiced, the other two fricatives are voiceless.

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\(^5\)The only author who has taken a different view is Barsel (1994:11 ff.). Because Mori Bawah phonetic sequences [mb], [nd] and [ng] only occur morpheme-internally, she analyzes them as unitary phonemes /mb/, /nd/, /ng/. But [mp], [nt], [nk] and [ns], which can occur both morpheme-internally and at morpheme boundaries, she analyzes as sequences of two phonemes /m/ + /p/, /n/ + /t/, etc.
Table 2. Wawonii, Mori Bawah, Padoe and Mori Atas consonant inventory

Of these consonants, it should be noted that medially the phoneme /g/, and in all positions the phoneme /ŋg/, are rare, and of the few known instances most can be attributed to borrowing.\(^6\)

Padoe differs from the other three languages in that in most dialects /ns/ merged historically with /s/ and therefore, apart from the western dialect as spoken in Kawata, Angkona and Pabeta villages in South Sulawesi (Karihunen 1991:183), this language lacks a prenasalized fricative. Other differences are phonetic at best, compare for example Manyambeang, Mahmood, et al. (1982/1983:16) who list Wawonii /t/ as an apico-dental stop (but give /d/, /s/ and /n/ as alveolar). In a number of cases on the island of Wawonii we recorded the bilabial fricative /β/ as a bilabial approximant [β]; compare also Karhunen who gives Padoe /β/ as a labial (articulated either as a bilabial of labio-dental) approximant (1995:184).

---

\(^6\)Although the rarity of /g/ and /ŋg/ will not be treated extensively, note for example that an investigation of a 1000-word list of basic terms for Wawonii (Stokhof 1985:113–125) revealed only four words with medial /g/, namely modaga ‘trade’ (compare Malay dagang), marugi ‘loss’ (compare Malay rugi), tegogo ~ tebobo ‘belch’, togi ‘earring’, and only one word with /ŋg/ in any position, pingga ‘plate’; similar results are also found in other Bungku-Tolaki languages. Refer also to Mead and Tambunan (1993:26) who discuss the rarity of /g/ in Tolaki.
1.5.2 Tolaki

As in Padoe, we also see in Tolaki the historical merger of /ns/ with /s/, but here voiceless prenasalized stops merged with their voiced counterparts, leaving Tolaki with only one series of prenasalized stops:

<table>
<thead>
<tr>
<th>stops</th>
<th>bilabial</th>
<th>alveolar</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>vl</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td>vd</td>
<td>b</td>
<td>d</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>fricatives</td>
<td>β</td>
<td>s</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trill/flap</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Tolaki consonant inventory

Voiced stops /b/ and /d/ are optionally imploded ([ɓ], [ɗ]). Implosion is more frequent preceding mid and low vowels, and more characteristic of rustic than urban speech.

1.5.3 Kodeoha

Besides undergoing the above changes with Tolaki, in Kodeoha (voiced) prenasalized stops underwent a further merger with corresponding voiced stops, leaving this language with the smallest inventory of consonants of any Bungku-Tolaki language.

<table>
<thead>
<tr>
<th>stops</th>
<th>bilabial</th>
<th>alveolar</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>vl</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td>vd</td>
<td>b</td>
<td>d</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>fricatives</td>
<td>β</td>
<td>s</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trill/flap</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Kodeoha consonant inventory
1.5.4 Bungku

The Bungku consonant inventory has two points of difference with the 'standard' inventory presented in Table 2. For one, it has a series of palatal affricates. These sounds are found only in loan words, e.g. anjo 'support' (< Malay anjung), janggo 'beard' (< Malay janggut), canggore 'peanut' (< Malay kacang goreng 'roasted peanuts') but apparently have been assimilated so as to change the native phonology.

<table>
<thead>
<tr>
<th></th>
<th>bilabial</th>
<th>alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>prenas</td>
<td>mp</td>
<td>nt</td>
<td>ntʃ</td>
<td>ɳk</td>
<td></td>
</tr>
<tr>
<td>vd stops</td>
<td>mb</td>
<td>nd</td>
<td>ndʒ</td>
<td>ɳg</td>
<td></td>
</tr>
<tr>
<td>fricative</td>
<td>ns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vl stops</td>
<td>p</td>
<td>t</td>
<td>tʃ</td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td>vd stops</td>
<td>b</td>
<td>d</td>
<td>dʒ</td>
<td>g</td>
<td>h</td>
</tr>
<tr>
<td>fricatives</td>
<td>φ</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td></td>
<td>ɳ</td>
<td></td>
</tr>
<tr>
<td>lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trill/flap</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Bungku consonant inventory

The other difference concerns the bilabial fricative, which in other languages is pronounced voiced (and written w), but in Bungku is often pronounced voiceless (and written f). The area around the capital city of Bungku is doubtless the center for this innovation, whence it has spread for seventy miles up and down the coast into Koroni, Tomadino and Bahonsuai, as well as some of the Mori Bawah communities immediately to the north of Bungku. It reaches its furthest extent in the Menui dialect of Wawonii, where it constitutes the major distinguishing feature between Menui and standard Wawonii.7

---

7This change has also spread into the long-standing Pamona communities of the Bungku area (Mead & Mead 1991).
1.5.5 Kulisusu

Kulisusu has the largest inventory of consonants of any Bungku-Tolaki language.\textsuperscript{8} It differs from the inventory presented in Table 2 in having palatal consonants, as well as contrasting five voiced stops in the anterior region /b/, /ɓ/, /ɬ/, /d/ and /ɗ/, where most Bungku-Tolaki contrast only two.

\begin{tabular}{lccccccc}
 & bilabial & interdental & alveolar & palatal & velar & glottal \\
prenas vl stops & mp & nt & ntʃ & ηk & \\
ṿd stops & mb & nd & ndʒ & ηg & \\
fricative & & & & \\
stops & p & t & tʃ & k & ? & \\
ṿl & b & ɗ & d & dʒ & g & \\
ṿd impl & b & ɗ & & & & \\
fricatives & β & s & & & h & \\
nasals & m & n & & η & \\
lateral & l & & & & \\
trill/flap & & r & & & & \\
\end{tabular}

Table 6. Kulisusu consonant inventory

Voiceless palatal affricates in Kulisusu developed through a fairly clear historical process (what is said concerning /t/ applies \textit{mutatis mutandis} to /nt/). In stage one, /t/ allophonically became [tʃ] when preceding high vowels /i/ and /u/. In stage two this [tʃ] merged with the /tʃ/ being found increasingly in loan words, and thus became separated from (that is, no longer viewed as an allophone of) /t/—what Hoenigswald would term a “split from reassignment of non-contrasting phones” (1960:88). Voiced palatal affricates in Kulisusu, though, apparently owe their origin solely to borrowing.

\textsuperscript{8} In Mead (forthcoming) it was reported that no Bungku-Tolaki language had more than twenty-two consonant phonemes. This must be regarded as an error which resulted from the small amount of Kulisusu (and Bungku) lexical material—228 words of basic vocabulary—available at that time.
A contrast between the five anterior stops /ɓ/, /ɓ/, /ɗ/, /ɗ/ and /ɗ/ is illustrated by the following lexemes: /ɓoku/ 'bundle, sheaf', /boku/ 'book', /ɗo/ 'to count', /ɗoʔa/ 'prayer' and /ɗi/ 'money'. In most cases only the two implosives can be considered as inherited. Of the other three, /ɗ/ and /ɗ/ each occur in only a handful of items, while /ɓ/, in positions where it contrasts with /ɓ/, is found almost exclusively in recognizable loans.¹⁰

### 1.5.6 Moronene

As in Padoe and Tolaki, in Moronene the prenasalized fricative /ns/ also underwent unconditioned merger with /s/ (the phoneme /ns/ thus appears to have been somewhat unstable in Bungku-Tolaki languages through time). Moronene also has two liquids, but is unusual in that “instead of the common distinction between a flap and a lateral, there are two flaps differing in point of articulation” (D. Andersen 1995:2).

<table>
<thead>
<tr>
<th></th>
<th>bilabial</th>
<th>alveolar</th>
<th>retroflex</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>prenas vl stops</td>
<td>mp</td>
<td>nt</td>
<td></td>
<td>ηk</td>
<td></td>
</tr>
<tr>
<td>vd stops</td>
<td>mb</td>
<td>nd</td>
<td></td>
<td>ηg</td>
<td></td>
</tr>
<tr>
<td>vl stops</td>
<td>p</td>
<td>t</td>
<td></td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td>vd stops</td>
<td>b</td>
<td>d</td>
<td></td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>fricatives</td>
<td>β</td>
<td>s</td>
<td></td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td></td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>flap</td>
<td>r</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Moronene consonant inventory

Although D. Andersen does not list any in his phoneme inventory, it is clear from his description that Moronene has an emergent series of palatals. In Moronene velar stops

---

¹⁰The contrast between /ɓ/ and /ɓ/ appears to be neutralized before back high vowel /u/, with only an unimploded articulation [ɓ] occurring in this position.

¹⁰Compare also Anceaux (1988) who describes for nearby Wolio ɓ and ɗ sounds of “high muscular tension” which “seem to occur in loan-words only, mainly of Arabic origin. ɗ is in some words actualised by educated speakers as a voiced dental stop according to their Arabic models” (1988:4, 6).
/k, ηk, g, η/ are palatalized following high vowel /i/, respectively [tʃ, ntʃ, dʒ, n].\(^{11}\)
However, as /i/ is now sometimes being lost word initially in prestress position, the
original allophonic variation is developing into a classic case of secondary split, to wit:

<table>
<thead>
<tr>
<th>Allophonic Variation</th>
<th>/ikoʔo/ ‘2sg’</th>
<th>/koo/ ‘tied bundle’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of /i/</td>
<td>[tʃoʔo]</td>
<td>[koo]</td>
</tr>
<tr>
<td>Reanalysis as contrast</td>
<td>[tʃoʔo]</td>
<td>[koo]</td>
</tr>
</tbody>
</table>

In particular the ‘new’ palatal phonemes are also merging with palatals found in loan
words such as coco ‘suitable’ (< Malay cocok), rancana ‘plan’ (< Malay rencana), ajoa
‘yoke’ (< Bugis ajoa) and ranja ‘bed’ (< Malay ranjang) such that ‘/tʃ/ is gaining status
as a phoneme in its own right, not merely, or not always, an allophone of /k/’
(D. Andersen 1995:26).\(^{12}\)

1.6 Sources of data

In the remainder of this chapter, I review the available sources of data on Bungku-
Tolaki languages, divided here into sources of lexical data and sources of morphosyntactic
data. As a general note on morphosyntactic data, among both Dutch and Indonesian
writers the tradition has been to give sentence (or clause or phrase) data with only a Dutch
or, respectively, Indonesian free translation. As it is my practice to give in addition a
morpheme-by-morpheme gloss, one can assume that where I cite from a Dutch or an
Indonesian source, the morpheme breaks as well as morpheme glossing are my own, and
are not to be found in the original. Likewise, any English free translation is my own
rendering of what appeared in the original in either Dutch or Indonesian.

\(^{11}\) No information is provided about the voiced prenasalized stop /ŋg/, though one may assume it also
would have a palatalized variant in this context.

\(^{12}\) Of all the palatals, [tʃ] seems to be on the leading edge of developing into a full-fledged phoneme,
perhaps because most instances of loss of initial /i/ involve this palatal. Compare also Muthalib,
Pattiasina, et al. (1983:12) who accord [tʃ] (but not the other palatals) phonemic status in Moronene.
1.6.1 Sources of lexical data

Only one published dictionary exists for any of these languages: Muthalib, Alimuddin, Chalik, et al.’s (1985) *Kamus Tolaki-Indonesia*. Besides being small as far as dictionaries go, it unfortunately also suffers from having been poorly typeset. There have been however several other sources which have proved useful for gleaning lexical information.

The most extensive information concerning the word-stocks of these languages comes from 113 wordlists\(^{13}\) collected from 1986–1989 by myself and six other linguists working under the auspices of the then UNHAS-SIL Cooperative Program. For breadth of coverage, especially concerning the dialect situation, they cannot be matched. However, they have the disadvantage of providing responses to only 228 wordlist items.

Greater coverage of lexical material was obtained from the so-called Holle lists, wordlists containing approximately one thousand items which were collected by Dutch civil servants, missionaries, and linguists throughout Indonesia during the first half of this century. Many of these hand-written lists were later compiled and published under the direction of W. A. L. Stokhof (1980). Of over two hundred such Holle lists, eight are from Bungku-Tolaki languages.\(^{14}\) When citing the supporting evidence on which a lexical

\(^{13}\) Of these, twenty-seven representative wordlists appear in Mead (forthcoming).

\(^{14}\) These eight wordlists are (by list number, title and where published):

<table>
<thead>
<tr>
<th>List</th>
<th>Title</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>244</td>
<td>Wawoni</td>
<td>Stokhof 1985:113–25</td>
</tr>
<tr>
<td>196c</td>
<td>Bungku</td>
<td>Stokhof 1985:59–74</td>
</tr>
<tr>
<td>196b</td>
<td>Mori</td>
<td>Stokhof 1985:43–58</td>
</tr>
<tr>
<td>137</td>
<td>To Padoé</td>
<td>Stokhof 1985:95–112</td>
</tr>
<tr>
<td>188</td>
<td>Kendari</td>
<td>Stokhof 1985:3–25</td>
</tr>
<tr>
<td>Cod.Or. 399 a,b,c</td>
<td>Tolaki</td>
<td>Stokhof 1987:181–98</td>
</tr>
<tr>
<td>242</td>
<td>Tolelaki, Kendari</td>
<td>Stokhof 1985:27–42</td>
</tr>
<tr>
<td>191</td>
<td>Mekongga</td>
<td>Stokhof 1985:75–93</td>
</tr>
</tbody>
</table>

One is naturally tempted to ask, of which Mori language is list 196b representative? In fact, I regard lists 196b and 137 both to be attestations of Mori Bawah. Despite the designation of the latter as ‘To Padoé’, neither wordlist exhibits any of the innovations peculiar to Padoe or Mori Atas. Because the last four lists are all from Tolaki, then these eight wordlists are sources of information about only four present-day languages: Wawonii, Bungku, Mori Bawah and Tolaki.
reconstruction was based (Appendix 2), I have been careful to distinguish by subscripted $H$ when my sole source of information was a Holle list, because of the sometimes questionable reliability of these data.\textsuperscript{15}

In addition to these wordlists, I also made frequent use of material compiled by the missionaries N. Adriani and S. J. Esser. Both were top-notch linguists in their day, and I have found their transcriptions to be highly reliable. Three works in particular turned out to be rich sources of lexical data for Bungku-Tolaki languages:

(a) In 1899, the missionaries Adriani and Alb. C. Kruyt visited the Mori and Bungku areas. As a result of this visit, a year later Adriani—the linguist of the two—published the

\textsuperscript{15} Difficulties include not only possible errors of transcription in the originals, but also known and possibly unknown errors introduced during the subsequent process of typesetting. For example there is little doubt that in these examples:

... 770, 701, 772 ...
... maama, maama, maama, maama ... 'uncle'
... koboeroe, koboeroe, kaloeroe, koboeroe ... 'grave'
... ihi, ihno, ihino, ihi ... 'the flesh of the fruit'

0 ought to be 7
am ought to be ma
lo ought to be b
m ought to be in

More disconcerting was when the supposed 'error' could just as well reflect a plausible sound change:

... mompoaha, mopoa, mopaha, mopoaha, momboaka ... 'shoulder'

However, the appearance of $k$ for expected $h$ (as above), and $l$ for expected initial $t$, was so common in List 188—and nowhere corroborated by the UNHAS-SIL wordlists—that they ceased to trouble me; I regard them simply as typesetting errors. List 188 was recorded by the missionary J. Gouweloos, and I happen to have a sample of his handwriting from another source. Pity the typist who didn't know Tolaki (!):

\begin{verbatim}
\textsuperscript{15}
\end{verbatim}

I have corrected all such supposed errors without mention if another wordlist from the same language contained the expected form, or if the expected form of a root occurred under a different wordlist item. I have also summarily substituted $u$ for Dutch $oe$, and I have dropped dieresis and vowel diacritics, as these did not seem vital once an 'interpretation' of the data had been made.

Dieresis, of course, was used by the Dutch to distinguish for example $oe = [u]$ from $o\bar{e} = [oe]$. Also, the diacritic (\textsuperscript{*}) was sometimes useful in interpreting whether a vowel was phonetically long or short—a feature not always indicated in transcription. Consider, for instance, these four words:

... mefo, woo, mewoo, mew\textsuperscript{*} ... 'to stink, to smell'

which I interpret respectively as:

... mefoo, woo, mewoo, mewoo ... 'to stink, to smell'
first solid information known about these languages in a journal article *De Talen der To Boengkoe en To Mori* (The Languages of the To Bungku and To Mori). In this article he included brief phonological and morphological descriptions for (and comparisons between) three languages: Bungku, Petasia (= Mori Bawah), and Mori (= Mori Atas).

(b) The third volume of Adriani and Kruyt’s *De Bare’e-sprekende Toradja’s van Midden Celebes* (The Bare’e-speaking Torajas of Central Celebes) was primarily authored by Adriani and represents the culmination of his language research across the breadth of Sulawesi. His treatment of languages resembles his earlier treatment of Bungku and Mori, but in the section devoted to ‘Bungku-Mori’ (Adriani 1914:217–47) he both condensed his earlier work and expanded it geographically to include languages of the entire mainland southeastern peninsula as well as the offshore islands of Kabaena and Wawonii. His treatment of some languages was necessarily sketchy due to the small amount of available data.

(c) Adriani in turn became mentor to his compatriot and fellow linguist, S. J. Esser. The first of Esser’s two-volumed *Klank- en Vormleer van het Morisch* (Phonology and Morphology of Mori) (1927–1933) was the culmination of three years of fieldwork and constituted his doctoral dissertation. In this work Esser wades through the complex dialect situation in Mori, and his chapter on phonology (1927:10–70), including some discussion of sound change, can be regarded as the only attempt to improve on Adriani’s Bungku-Mori comparative work.

Importantly, the writings of these two linguists—together with a small unpublished Padoe dictionary (Lara, Larobu, et al. 1991)—were frequently my only source of information regarding Mori Atas and Padoe, two languages which have proven to be key to understanding a number of aspects of Proto-Bungku-Tolaki phonology.
1.6.2 Sources of morphosyntactic data

Although some attention has also been given to synchronic structural descriptions of Bungku-Tolaki languages, there exist only three works which can be regarded as principal:

(a) Besides treating verb morphology, Esser’s above-mentioned two-volume work on Mori (1927–1933) also contained a thorough discussion of form and function in regard to pronoun sets and affixes, as well as incidentally treating many syntactic features of the language.

(b) The missionary Gouweloos’s (1936) Spraakkunst der Toolaki Taal (Grammar of the Tolaki Language) was written with Esser as consultant, and so in organization and treatment resembles Esser’s own work on Mori, only in a more abbreviated form. Because Gouweloos was killed in World War II, however, this grammar was never published. A surviving draft copy is archived at the Royal Institute of Linguistics and Anthropology in Leiden.

(c) Barsel’s (1994) The Verb Morphology of Mori, Sulawesi (the publication of her 1984 dissertation) presents a structural, taxonomic analysis of verbs in the Tinompo dialect of Mori Bawah, though incidental to treating verb forms she also discusses word classes and basic sentence structure. Notably Barsel’s grammar is the only major work on any Bungku-Tolaki language to be published in English.

In addition, brief treatises were published by various of the Dutch missionaries, some of these works of linguistic value. Since about 1980, various grammatical descriptions and other monographs on Bungku-Tolaki languages have appeared, written and published under the auspices of the Indonesian Department of Education and Culture, or written as theses by Indonesian graduate students. Since an extensive review of the minor Dutch and Indonesian sources may be found in Noorduyn’s annotated bibliography (1991:107–119), I do not list them individually here. Also to be mentioned are three articles published on the Padoe language since the time of Noorduyn’s review, concerning respectively
phonology (Karhunen 1991), noun phrase structure (Karhunen 1994) and pronoun sets (Vuorinen 1995).

In addition to the above sources, I have made extensive use of field material. First, there was my own fieldwork conducted in Tolaki and Kulisusu. Since about 1988 much material has also been collected by SIL researchers Scott Youngman on Tolaki and David and Suree Andersen on Moronene. The present work has benefited greatly from their granting me access to much of their data and draft descriptions.
2 From PMP to PBT

Austronesian expansion into insular Southeast Asia and the Pacific began when Neolithic rice cultivators ventured from the Asian mainland to settle what is now Formosa. Based on linguistic reconstruction correlated with archeological evidence, modern scholarship places the arrival of Proto-Austronesian (PAN) speakers on Formosa sometime around 4000 BC. Over the course of time their language became differentiated, so that when some thousand years later a minor portion of their descendants migrated to the northern Philippines, they left behind a mixture of gradually varying dialects and or languages, all of which differed in some respects from Proto-Austronesian. This migration to the Philippines was an important step in the prehistory of Austronesian languages; from here the descendants of these migrants eventually colonized places as far flung as the Hawaiian Islands in the east and Madagascar in the west, taking their ever-changing, ever-developing language with them. When talking about the language which this original Philippines offshoot group spoke, in order to differentiate it from Proto-Austronesian, linguists have come to use the term Proto-Malayo-Polynesian (PMP). Proto-Malayo-Polynesian is the presumed ancestor of all Austronesian languages outside of Formosa.

The Bungku-Tolaki languages, along with the other languages of Sulawesi, western Indonesia, Madagascar, Borneo, and the Philippines, belong to a further branch of Malayo-Polynesian identified as Western Malayo-Polynesian (WMP). However, the migration which resulted in a western-eastern Malayo-Polynesian split was an eastward migration, so in this case western languages represent the ‘stay-at-home’ population. Determining lines of genetic relationship within Western Malayo-Polynesian has proved elusive. Although a number of subgroups have been recognized—for instance, Sneddon
(1993) lists no less than nine 'established microgroups' on Sulawesi Island alone, Bungku-Tolaki included as just one of these—the picture of how these build into higher order groupings is not yet apparent.\textsuperscript{16} If we want to discuss a common ancestor, frequently we must resort to the one clear ancestor which we know all these languages had, that is, Proto–Malayo-Polynesian.

I am in fact obliged to do this in the present study. For the Bungku-Tolaki languages, there is no established genetic grouping which includes Bungku-Tolaki but which is smaller than Malayo-Polynesian. Therefore in this chapter I set out to describe the major innovations which set Proto–Bungku-Tolaki (PBT) apart from its closest recognized ancestor, Proto–Malayo-Polynesian (PMP). These innovations, although they do characterize all Bungku-Tolaki languages, should therefore not be viewed as \textit{exclusively shared} innovations. Although it is expected that some of the changes will serve to establish the Bungku-Tolaki languages as a genetic unit, hopefully other of the changes—to the extent that they are shared by other languages and represent a period of common development—will indicate the macrogrouping of Bungku-Tolaki with other language groups.

\textbf{2.1 Phonological innovations: initial and medial consonants}

Herein I present the major phonological innovations in consonants which set the Bungku-Tolaki languages apart from Proto–Malayo-Polynesian. For the most part, only the fate of PMP consonants in initial and medial position—where their reflexes are readily observed in present-day languages—are considered in this section. Over the course of time all Bungku-Tolaki languages have lost consonants in final position, therefore

\textsuperscript{16}See Tryon (1995) for a summary of attempts at subclassification of Western Malayo-Polynesian languages. This statement should not be taken to mean that no large macrogroupings have been established; compare for example Blust's arguments (1991) for combining eight Philippine subgroups and one Sulawesi subgroup into a Greater Central Philippines macrogroup.
reconstructing PBT final consonants is usually possible only indirectly. A separate section (§ 2.3) addresses this issue.

As an introduction to the sound system of Proto-Austronesian, Table 8 presents an inventory of PAN consonant contrasts. In cases where the symbol traditionally employed by Austronesianists is nonstandard for the field of linguistics at large, a probable phonetic value is given in brackets following.

voiceless stops:   \( p \ t \ C \ [ts] \ c \ [tʃ] \ k \ q \)
voiced stops:     \( b \ d \ Z \ [dʒ] \ j \ [ɡ] \ g \)
fricatives:       \( s \ [s] \ S \ [s] \ h \)
nasals:           \( m \ n \ ɲ \ ŋ \)
liquids:          \( N \ [ɾ] \ l \ r \ [ɾ] \ R \ [ɾ \ or \ R] \)
semivowels:       \( w \ y \)

Table 8. Proto-Austronesian consonants, following Blust (1990a)\(^{17}\)

Since Dempwolff's original reconstruction of PAN phonology and etyma (1934–1938), scholars have vigorously debated both the number of consonant contrasts present in Proto-Austronesian, and the phonetic values which these consonants might plausibly have had. Table 8 is therefore not to be accepted uncritically; controversies and dissenting views are discussed in the subsections below devoted to individual consonants.

Proto–Malayo–Polynesian of course differed from Proto-Austronesian, and in regard to consonants three changes have received widespread recognition: the merger of PAN \(^*\)C and \(^*\)t as PMP \(^*\)t; the merger of PAN \(^*\)S and \(^*\)h as PMP \(^*\)h; and the merger in non-initial position of PAN \(^*\)N and \(^*\)n as PMP \(^*\)n. Table 9 sets out the PMP consonants which

\(^{17}\)I differ in using \(^*\)N for Blust's \(^*\)L, and \(^*\)Z for his \(^*\)z; although there is some merit to using his symbols, both \(^*\)N and \(^*\)Z have wide currency among other Austronesian scholars.
therefore remained from the initial PAN inventory, along with giving their principle reflexes in Proto–Bungku-Tolaki.

<table>
<thead>
<tr>
<th>PMP</th>
<th>*p</th>
<th>*t</th>
<th>*k</th>
<th>*q</th>
<th>*b</th>
<th>*d, r</th>
<th>*s</th>
<th>*Z, c</th>
<th>*g</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT</td>
<td>*p</td>
<td>*t</td>
<td>*k</td>
<td>*Ø, q</td>
<td>*b, w</td>
<td>*r</td>
<td>*s, h</td>
<td>*s</td>
<td>*g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PMP</th>
<th>*m</th>
<th>*n, ŋ</th>
<th>*ŋ</th>
<th>*N-</th>
<th>*l</th>
<th>*R</th>
<th>*w</th>
<th>*j, y</th>
<th>*h</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT</td>
<td>*m</td>
<td>*n</td>
<td>*ŋ</td>
<td>*n-</td>
<td>*l</td>
<td>*R, Ø</td>
<td>*h, Ø</td>
<td>*y, Ø</td>
<td>*Ø</td>
</tr>
</tbody>
</table>

Table 9. PMP consonants and their principle reflexes in PBT

Some caveats apply to Table 9, for example when preceded by a nasal, PMP *b, *d, *r and *s became prenasalized and did not undergo any of the weakening processes which otherwise characterized these consonants. These and other factors—such as the conditioning environment for phoneme splits—are discussed below. As the PMP phonemes *p, *t, *k, *g, *m and *ŋ underwent no mergers or splits (other than when occurring in consonant clusters), their reflexes are illustrated only incidentally and receive no separate treatment.

In the following discussions, PMP etyma have been drawn from a number of references. The source for any particular PMP (or otherwise) etymon included in the following discussion can always be found listed in Appendix 2 under the corresponding reconstructed PBT item. Note that in PMP, *q is generally regarded as a back velar or uvular stop, but the same symbol in PBT represents a glottal stop; likewise PMP *e is regarded as a mid central vowel (schwa), but the same symbol in PBT represents a mid front vowel.
2.1.1 Consonant clusters

Consonant clusters, other than a nasal plus following consonant, were invariably reduced:

PMP | PBT
---|---
*niknik* | *niniQ*
*tabtab* | *tatap-i ‘wash clothes’*
*tuqtuq* | *tutuk-i*
*dutdut* | *ruruQ*
*qali-petpet* | *olimpopoQ*

In two cases known to me it appears that the first rather than the second consonant was preserved:

PMP | PBT
---|---
*kurkur* | *kuru*
*turtur* | *tulur-a*

Sequences of nasal plus stop were retained, but the nasal, if different in point of articulation, assimilated to the following stop.

PMP | PBT
---|---
*sa(m)pak* | *sampaQ*
*kempaŋ* | *kompoN*
*panŋpaŋ* | *pampaN*
*kambaŋ* | *kambaN*
*le(n)taw* | *lonto*
*punti* | *punti*
*diŋdiŋ* | *rindiN*
*banaŋkaq* | *bangkaq*

The only known exception to this pattern is PBT *rįŋN < PMP *diŋdiŋ ‘cold’ which has an unexplained nasal instead of the expected prenasalized stop.

2.1.2 PMP *q

PAN *q was probably a back velar stop, not a laryngeal, even though it is often reflected as a glottal stop in languages outside of Formosa (Zorc 1982:114, Blust
1990a:233). In the Bungku-Tolaki languages, PMP *q was retained as glottal stop in medial position, symbolized also as *q.\(^\text{18}\)

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*daqih</td>
<td>'forehead'</td>
</tr>
<tr>
<td>*paqit</td>
<td>'bitter'</td>
</tr>
<tr>
<td>*taqi</td>
<td>'feces'</td>
</tr>
<tr>
<td>*laqia</td>
<td>'ginger'</td>
</tr>
<tr>
<td>*paqet</td>
<td>'chisel'</td>
</tr>
<tr>
<td>*paqa</td>
<td>'thigh'</td>
</tr>
<tr>
<td>*tuqah</td>
<td>'old'</td>
</tr>
<tr>
<td>*taqun</td>
<td>'year'</td>
</tr>
<tr>
<td>*taqu</td>
<td>'know (how)'</td>
</tr>
<tr>
<td>*puquun</td>
<td>'trunk, origin'</td>
</tr>
</tbody>
</table>

However in initial position PMP *q was lost or—perhaps more correctly—reflexes of PMP *q merged with the phonetic [?] glottal stop ordinarily supplied to vowel-initial roots at word and morpheme boundaries. I have chosen to represent such PBT forms without an initial glottal stop:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*qasin</td>
<td>'salty'</td>
</tr>
<tr>
<td>*qasu</td>
<td>'smoke'</td>
</tr>
<tr>
<td>*qahelu</td>
<td>'pestle'</td>
</tr>
<tr>
<td>*qanitu</td>
<td>'spirit, soul'</td>
</tr>
<tr>
<td>*qitem</td>
<td>'black'</td>
</tr>
<tr>
<td>*qudaq</td>
<td>'crustacean'</td>
</tr>
<tr>
<td>*quzan</td>
<td>'rain'</td>
</tr>
<tr>
<td>*qulin</td>
<td>'steer, rudder'</td>
</tr>
</tbody>
</table>

Compare for example:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*anak</td>
<td>'child'</td>
</tr>
<tr>
<td>*anay</td>
<td>'termite'</td>
</tr>
<tr>
<td>*ikuR</td>
<td>'tail'</td>
</tr>
<tr>
<td>*uRat</td>
<td>'vein, sinew'</td>
</tr>
</tbody>
</table>

\(^{18}\)In only two cases do I know of PMP *-q- reflected as *-O-, in Bungku-Tolaki mobea 'heavy' < PMP *beReqat, and Bungku-Tolaki laa, laa- 'river, streambed' < PMP *laqad 'dry stream bed' (Blust 1980:103). In the latter case this morpheme is often prefixed when giving the name of a river, for example, from the Tolaki area: LaKonawe 'the Konawe River', LaSolo 'the Swift River' or 'the River Swift', compare also Moronene Lao'e 'Big Creek', Laakomea 'Dry Creek' (S. Andersen 1994a:15). It may be this frequent use which contributed to the loss of glottal in this lexical item.
2.1.3 Split of PMP *b

PMP *b is reflected in present-day Bungku-Tolaki languages as b and w. This phonemic split is not restricted to Bungku-Tolaki, but is common throughout Sulawesi as has been noted by authors such as Martens (1989) for Kaili-Pamona, Van den Berg (1991b) for Muna, and Mills (1975, 1981) for South Sulawesi languages. Determining the conditioning environment for this split has not proved tractable. Martens (1989:53) for example notes a tendency in Proto–Kaili-Pamona (but with a number of exceptions) for PMP *b preceding *i to remain *b, and preceding *a and *u to become *w, but with neither pattern predominating for PMP *b before *e. For Muna, Van den Berg found no obvious explanation for the split either in terms of following vowel, word position, or phonotactic constraints—and even viewed in terms of lexical diffusion he found no regular patterns between languages of Central and Southeast Sulawesi (1991b:10–12). Mills assumes that some doublets with /b~w/ in initial position could have arisen through “analogy based on morphophonemic alternants determined by vowel- or consonant-final prefixes” (1981:60), but this does not explain cases where b is found in South Sulawesi languages in medial position. The possibility of sporadic denasalization of *mb > b and/or lenition of *b > w (as well as that of unrecognized borrowing) complicate the picture, and any account which seeks a unified explanation is probably bound to fail.

As we turn to the Bungku-Tolaki data, let us first consider PMP *b in intervocalic (medial) position. The clear pattern was for PMP *-b- > PBT *-w-, as in the following items all known reflexes exhibit w:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ubiq</td>
<td>‘yam’</td>
</tr>
<tr>
<td>*laban</td>
<td>‘oppose’</td>
</tr>
<tr>
<td>*taban</td>
<td>‘capture’</td>
</tr>
</tbody>
</table>

(7)

19For an alternative view, see Donohue (forthcoming) who believes the data do support a hypothesis of lexical diffusion.
*tebuh 'sugarcane' *towu
*tabuni 'afterbirth' *towuni
*tabu-an 'noisy insect' *towuan 'wasp'
*sa-Ribu 'thousand' *sowu
*qabu 'ashes' *awu
*qabuk 'dust' *awuQ
*kabut 'fog, mist' *gawuQ (with irregular *g < *k)

So far, only four possible exceptions have come to light. Other than the Padoe and Tolaki lenited form rowu 'bamboo sprout', all known witnesses for these four etyma have -b-:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(8)</td>
<td></td>
</tr>
<tr>
<td><strong>tebek</strong></td>
<td>'pierce'</td>
</tr>
<tr>
<td>*tebuθ</td>
<td>'pierce'</td>
</tr>
<tr>
<td>*rebun</td>
<td>'bamboo shoot'</td>
</tr>
</tbody>
</table>

In initial position the results are considerably more mixed. Initial *w is reconstructed in the following items, at present there being no evidence to reconstruct otherwise (all known reflexes with w):

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9)</td>
<td></td>
</tr>
<tr>
<td><strong>benkeg</strong></td>
<td>'swelling'</td>
</tr>
<tr>
<td>*belaj</td>
<td>'spread out'</td>
</tr>
<tr>
<td>*beteq</td>
<td>'millet'</td>
</tr>
<tr>
<td>*beRas</td>
<td>'uncooked rice'</td>
</tr>
<tr>
<td>*besar</td>
<td>'big'</td>
</tr>
<tr>
<td>*besuR</td>
<td>'satisfied'</td>
</tr>
<tr>
<td>PPH *betak</td>
<td>'crack'</td>
</tr>
<tr>
<td>*baR-an</td>
<td>'shaman'</td>
</tr>
<tr>
<td>*bahaq</td>
<td>'flood'</td>
</tr>
<tr>
<td>*balun</td>
<td>'roll up together'</td>
</tr>
<tr>
<td>*bataq</td>
<td>'trunk, log'</td>
</tr>
<tr>
<td>*banun</td>
<td>'wake up'</td>
</tr>
<tr>
<td>*baRah</td>
<td>'glowing coals'</td>
</tr>
<tr>
<td>*babaw</td>
<td>'above'</td>
</tr>
<tr>
<td>*baba</td>
<td>'carry'</td>
</tr>
<tr>
<td>*buaq</td>
<td>'fruit'</td>
</tr>
<tr>
<td>*buhuk</td>
<td>'hair of head'</td>
</tr>
<tr>
<td>*bulan</td>
<td>'moon'</td>
</tr>
<tr>
<td>*bulu</td>
<td>'hair, feathers'</td>
</tr>
<tr>
<td>*buluQ</td>
<td>'bamboo species'</td>
</tr>
<tr>
<td>*bulaw-an</td>
<td>'gold'</td>
</tr>
<tr>
<td>*bubu</td>
<td>'fishtrap'</td>
</tr>
<tr>
<td>*bu(q)buq</td>
<td>'sow, plant'</td>
</tr>
</tbody>
</table>
In a smaller set of cases only *b is exhibited in all known reflexes, and therefore *b is tentatively reconstructed for the PBT etymon. However, the possibility of borrowing should not be excluded.

\[
\begin{array}{ccc}
\text{PMP} & \text{PBT} \\
\text{*beReqat} & \text{‘heavy’} & \text{*beaQ} \\
\text{*beŋel} & \text{‘deaf’} & \text{*bongo} \\
\text{*beŋeq} & \text{‘young coconut’} & \text{*botoN ‘seed, classifier used in counting’} \\
\text{*benut} & \text{‘coconut husk’} & \text{*benuQ} \\
\text{*baŋkaq} & \text{‘boat’} & \text{*bangkaq} \\
\text{*bukay} & \text{‘full’} & \text{*buke} \\
\text{*buŋkaŋ} & \text{‘crab’} & \text{*bungkaN} \\
\end{array}
\]

In some instances *b is reflected as b in some languages, but as w—via sporadic lenition in the concerned languages, one might suppose—in a complementary set of languages. Here I tentatively also reconstruct PBT *b, as the lenition of *b > w would be more expected than the reverse.

\[
\begin{array}{ccc}
\text{PMP} & \text{PBT} \\
\text{*beŋaŋ} & \text{‘thread’} & \text{WAW, MRB: bana; TOL: wana.} \\
\text{*beRsay} & \text{‘paddle’} & \text{KUL, BNG, MRB: boso; TOL: wose.} \\
\text{*bakid} & \text{‘basket’} & \text{WAW, BNG, MRB, PAD: baki; MRA: waki; TOL: baki.} \\
\text{*bubuŋ} & \text{‘ridge of roof’} & \text{KUL: pobumbu; BNG: fumbunga; WAW, TOL: bumbunga; MRB: mbumbunga.} \\
\end{array}
\]

In the cases presented below in example (12) doublets have arisen, that is, there is found at least one language which reflects forms with b and with w from the same etymon, and which difference in form is also almost always associated with a difference in context or meaning. For example, Kulisu has at present waho ‘rain’ and mobaho ‘bathe’ (trans.), both from PMP *baseq ‘wet’. A question then arises, how did these doublets come about, and to what time depth can this differentiation be ascribed? In answer to the first part of this question, the difference could for example reflect borrowing between languages or even dialects, one in which the initial consonant of *baseq remained /f/, and another in which it had become /β/. Another possibility, operating internally to the language, is that
the initial consonant became or remained strengthened when prefixed as in the verb form, but weakened when unaffixed. As far as time depth is concerned, only Taloki, Kulisu and Koroni are known to me to reflect the development *baseq ‘wet’ > waho ‘rain’, making it likely this was a local innovation. However, in three cases it appears possible to reconstruct doublets for the protolanguage, namely: PBT *bibi ‘lips’ versus PBT *wiwi ‘edge’ (both from PMP *birbir ‘rim, edge’), PBT *bali ‘enemy’ versus *wali ‘spouse, friend’ (both from PMP *bali ‘equal’), and PBT *wuku ‘bone, seed’ versus *buku lale ‘ankle’ (assuming PMP *buku ‘node, joint’ is to be equated with the initial element of PMP *buku lali(η) ‘ankle bone’).

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(12) *baseq ‘wet’</td>
<td>*bahoq TAL, KUL KOR: waho ‘rain’; BNG: baho ‘water’; BNG, WAW, MRB: mobaho ‘wet’; MRN, TAL, KUL, KOR, WAW, BNG, WAR, TOL, KOD: mobaho ‘bathe’</td>
</tr>
<tr>
<td>*bidiŋ ‘side, edge’</td>
<td>*biriri all languages: biri ‘ear’; MRN: wiri ‘ear, edge’</td>
</tr>
<tr>
<td>*buŋa ‘flower, fruit’</td>
<td>*bunga all languages: bunga ‘flower’; BNG: funga lima ‘fingers’; WAW: wunga lima ‘fingers’ (lit. ‘fruit of the hand’).</td>
</tr>
<tr>
<td>*birbir ‘rim, edge’</td>
<td>*bibi² ‘lips’ MRN, WAW, MRB: wiwi ‘lips’; BNG: fifi ‘lips’; TOL: bibi ‘lips’²⁰</td>
</tr>
<tr>
<td>*wiwi ‘edge’</td>
<td>MRN, WAW, MRB: wiwi ‘edge’; BNG: fifi ‘edge’; TOL: wiwi ‘edge’</td>
</tr>
<tr>
<td>*wali ‘spouse’</td>
<td>WAW, MRA, TOL: wali ‘spouse’; KUL, PAD: wali ‘friend’.</td>
</tr>
<tr>
<td>*buku ‘node, joint’</td>
<td>*buku lale ‘ankle’ KUL, WAW, BNG, TOL: buku lale ‘ankle’; MRB: wuku lale ‘ankle’.</td>
</tr>
<tr>
<td>*wuku ‘bone, seed’</td>
<td>all languages: wuku ‘bone’ and/or ‘seed’.</td>
</tr>
</tbody>
</table>

Certain morphemes meaning ‘carry’ present an interesting case. Based on Kulisu, Bungku and Mori Bawah mowawa ‘carry, bring’ and Padoe and Tolaki mowawo ‘carry, carry,”

²⁰If Tolaki bibi ‘lips’ is an innovation or borrowing, rather than inherited, then PBT doublets would not be indicated.
bring’ we can reconstruct PBT *wawa ‘carry, bring’, the regular reflex of PMP *baba ‘carry on one’s back’. However we also find with more specific meaning Kulisu
moabá ‘carry (as a child) on one’s back or shoulders’, Padoe moabá ‘carry on the back or in a sarong’, and Tolaki moabá ‘carry someone piggyback’—another case of PBT
doublets from the same PMP etymon. However, if baba reflected genetic inheritance of
PMP *baba, then we would expect raising of final *-a in eastern languages, i.e. Padoe and
Tolaki **mobabo (compare mowawo; see also § 2.2.2). The conclusion is that Tolaki and
Padoe mowawo and moabá must have two different sources: either they trace back to
different etyma or—perhaps more likely—Bungku-Tolaki moabá has its origin in
borrowing (which was subsequent to the breakup of PBT).

As the above data indicate, there is no simple explanation for the split of *b > b, w
either in terms of following vowel, word position, or phonotactic constraint—although
there does appear to be a preference for not having b and w in contiguous syllables—nor
does it appear that any explanation is to be forthcoming in terms of word accent (Zorc
1978, 1983).\footnote{In the following examples Proto-Philippine *b corresponds to PBT *w regardless of whether the root
was a paroxytone or oxytone (Proto-Philippine etyma from Zorc 1978, 1983):

<table>
<thead>
<tr>
<th>PPH</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bátu</td>
<td>‘stone’</td>
</tr>
<tr>
<td>*bálay</td>
<td>‘house’</td>
</tr>
<tr>
<td>*ba:los</td>
<td>‘repay, revenge’</td>
</tr>
<tr>
<td>*ba:Rah</td>
<td>‘embers’</td>
</tr>
<tr>
<td>*tátu</td>
<td>*watu</td>
</tr>
<tr>
<td>*wale</td>
<td>*walo°</td>
</tr>
<tr>
<td>*waRa</td>
<td></td>
</tr>
</tbody>
</table>

On the other hand, in the following instances PBT sometimes has *b, sometimes *w, when the
corresponding Proto-Philippine root is a paroxytone:

<table>
<thead>
<tr>
<th>PPH</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*básuR</td>
<td>‘full, satisfied’</td>
</tr>
<tr>
<td>*bátaq</td>
<td>‘crack’</td>
</tr>
<tr>
<td>*bâmánj</td>
<td>‘body’</td>
</tr>
<tr>
<td>*básanj</td>
<td>‘thread’</td>
</tr>
<tr>
<td>*bóhuR</td>
<td>*wóhuR</td>
</tr>
<tr>
<td>*woqa</td>
<td>*botóN</td>
</tr>
<tr>
<td>*banán</td>
<td></td>
</tr>
</tbody>
</table>
groups? Second, if similarities do exist, do they result from borrowing, parallel developments in daughter languages (drift), or a period of shared history?

\[22\] Working with the Idahan languages of Sabah, D. J. Prentice noted a split of PAN *b into Proto-Idahan *b and *w, for which—as in Bungku-Tolaki—there was no discernible phonological or morphological conditioning factor. Subsequently, he observed a similar split of PAN *b in Javanese which corresponded to the Proto-Idahan case “with a degree of regularity that was too high to be attributable to coincidence” (Prentice 1974:35), which became the basis for his reconstructing a phoneme *B, distinct from the traditionally recognized PAN *b (*B became w in Javanese and *w in Proto-Idahan). Although his proposed protophoneme has received little support—indeed almost no mention—from subsequent researchers, Prentice’s reconstructions do provide a basis for comparing the Idahan and Javanese situation with languages elsewhere. Considering cases where Prentice unambiguously reconstructs either *b or *B in initial position, his etyma and PBT show agreement in the following forms (PAN reconstructions following Prentice 1974):

<table>
<thead>
<tr>
<th>PAN</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*benaŋ</td>
<td>‘thread’</td>
</tr>
<tr>
<td>*bengel</td>
<td>‘deaf’</td>
</tr>
<tr>
<td>*butbut</td>
<td>‘pluck’</td>
</tr>
<tr>
<td>*Buak</td>
<td>‘fruit’</td>
</tr>
<tr>
<td>*Belaj</td>
<td>‘spread out’</td>
</tr>
<tr>
<td>*Bahaq</td>
<td>‘flood’</td>
</tr>
<tr>
<td>*Bales</td>
<td>‘repay’</td>
</tr>
<tr>
<td>*Balun</td>
<td>‘roll up’</td>
</tr>
<tr>
<td>*BaRa(h)</td>
<td>‘embers’</td>
</tr>
<tr>
<td>*Bataŋ</td>
<td>‘trunk, log’</td>
</tr>
<tr>
<td>*Batu</td>
<td>‘stone’</td>
</tr>
<tr>
<td>*Buhek</td>
<td>‘hair’</td>
</tr>
<tr>
<td>*Buku</td>
<td>‘knot, knuckle’</td>
</tr>
<tr>
<td>*Bulan</td>
<td>‘moon’</td>
</tr>
<tr>
<td>*Bulu</td>
<td>‘hair, fur, feathers’</td>
</tr>
<tr>
<td>*Buluq</td>
<td>‘bamboo’</td>
</tr>
</tbody>
</table>

In about a fourth of the cases, however, the reconstructed forms fail to agree:

<table>
<thead>
<tr>
<th>PAN</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bulaw</td>
<td>‘glitter’</td>
</tr>
<tr>
<td>*bayaD</td>
<td>‘pay’</td>
</tr>
<tr>
<td>*ba(b,B)uy</td>
<td>‘pig’</td>
</tr>
<tr>
<td>*BeRqat</td>
<td>‘heavy’</td>
</tr>
<tr>
<td>*BeBes</td>
<td>‘knock about’</td>
</tr>
</tbody>
</table>
2.1.4 Split of PMP *s

PMP *s, generally regarded to have been a dental or alveolar fricative,\(^{23}\) is reflected as \(s\) and \(h\) in present-day Bungku-Tolaki languages. At some stage prior to Proto–Bungku-Tolaki, the articulation of *s must have exhibited an allophonic variation between [s] and an [h], but by the time of PBT this variation had precipitated as a phonemic distinction, at least in part because of the introduction of /h/ and /s/ from other sources, respectively PMP *w (§ 2.1.5) and PMP *Z and *c (§ 2.1.7). Because the present-day languages are consistent in whether they have an \(s\) or an \(h\) reflex of PMP *s, the precipitation of [s] ~ [h] as phonemic distinction must have been complete by the time of PBT.

However, as with *b there is no readily apparent phonetic environment for the split of *s, either in terms of word position, following vowel, or phonotactic constraint.\(^{24}\) In the following lexical items, PMP *s is reflected as PBT *h:

---

\(^{23}\)Dempwolff considered *s (in his notation, *t') to have been a palatal stop. There is some indirect evidence from morphophonemic behavior that *s may have been a palatal stop or fricative—compare Pamona which has for example sampe ‘lay (something) so that it is supported and at the same time hangs down’, participle form mancampe (Adriani 1928:680) < PMP *sampay ‘hang, wear’—but as Blust notes, “the majority of Austronesian languages in all major subgroups reflect *s as a dental sibilant” (1990a:234).

\(^{24}\)Probably word accent should be added to this list. Note for example *s became *h in the following items regardless of whether the Proto-Philippine cognate is reconstructed as a paroxytone or an oxytone (Zorc 1978, 1983)

<table>
<thead>
<tr>
<th>PPH</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*šida</td>
<td>*3PL</td>
</tr>
<tr>
<td>*si:ku</td>
<td>‘elbow’</td>
</tr>
<tr>
<td>*qäsiN</td>
<td>‘salty’</td>
</tr>
<tr>
<td>*qäsuN</td>
<td>‘smoke’</td>
</tr>
<tr>
<td>*a:su</td>
<td>‘dog’</td>
</tr>
<tr>
<td>*ha:saq</td>
<td>‘whet, sharpen’</td>
</tr>
</tbody>
</table>

* *i-hira
* hiku
* ahin
* ahu
* d-ahu\(^{9}\)
* ahaq

However, a firm statement is prevented, since forms in which PMP *s remained *s in PBT generally lack a cognate in Zorc’s work. Two exceptions are the PPH numerals *isa ‘one’ and *şiyam ‘nine’ (Zorc 1978:109, 111) (which in PBT are respectively *asa and *sio).
(13)  

However, PMP *s is also reflected as PBT *s in both initial and medial position:

(14)  
PMP  |  ‘nine’  |  ‘thousand’  |  ‘branch’  |  ‘hang, wear’  |  ‘python’  |  ‘blowgun’  |  ‘tooth’  |  ‘peg, nail’  |  ‘knife’  |  ‘big’  |  ‘one’  |  ‘mouth’  |  *sio  |  *sowu  |  *sampaQ  |  *sampe  ‘hang, dangle down’  |  *saa  |  *sumpiQ  |  *ngisi  |  *pasOQ  |  *piso  |  *o-wose°  |  *asa  |  *ngusu
Only when the stem contained two *s’s does it appear that phonotactic constraints played a role, as here different reflexes are found in the daughter languages, but never do *s and *h co-occur in the same stem.

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*sepsep</td>
<td>‘suck’</td>
</tr>
<tr>
<td>*susu</td>
<td>‘breast’</td>
</tr>
<tr>
<td>*susuk</td>
<td>‘pierce’</td>
</tr>
<tr>
<td>*soso</td>
<td>*oso</td>
</tr>
<tr>
<td>*susuQ</td>
<td>*uhuQ</td>
</tr>
</tbody>
</table>

MRN: *mo ‘oso ‘suck’; KUL, BNG: *monsoso ‘suck’; MRB: monsoso ‘suck up, smoke’ mo ‘oso ‘suck out’; PAD, TOL: mo ‘oso ‘suck’

MRN, WAW, BNG: susu; WAR, TOL, KOD: *uhu.\(^{25}\)

KUL: mo ‘uhu ‘pierce, enter’; TOL: mo ‘uhu ‘stab, pierce, prick’, mosusu ‘skewer’

Provisionally, I entertain the possibility that doublets existed in Proto–Bungku-Tolaki, though the demonstration of this would require more evidence than is at hand (for example, one would need to find both *oso and *soso ‘suck’ attested in the eastern and western branches Bungku-Tolaki languages; presently only *oso is known to occur in both primary branches). An alternative hypothesis—outside of borrowing—would be to assume that PBT had a single form, say *hososo ‘suck’, which then gave rise, as phonotactic constraints came into play, to either *oso or *soso or both.\(^{26}\)

In two instances a form with *h appears to be inherited, but later a cognate form with *s was introduced via borrowing: In the first case, compare Bungku hala ‘fault, debt, penalty; remainder of a distribution’, Tolaki hala ‘debt, sin’ (< PMP *salaq ‘sin, error, mistake’) with the now widely distributed Bungku-Tolaki form sala ‘wrong, false’. Presumably the latter is via borrowing form Malay salah. In the second case, Mori Bawah has hawu ‘sarong’ via direct inheritance (< PMP *sabuk ‘loincloth’), but sawu ‘cloth’ via

\(^{25}\)Mori languages all have *uo ‘breast’; it is not clear whether this form is cognate or has a separate source.

\(^{26}\)Compare also the doublets found in Mori Bawah hodu ‘hiccough’, mohodu ‘to hiccough’, and sonsodu ‘to sob’, < PMP *se(n)du). I assume sonsodu arose from prior *honsodu, with *s replacing the initial *h by analogy through recognition of the reduplicative nature of the initial syllable.
borrowing (compare also Bungku *satu, Moronene, Kulisu, Wawonii, and Tolaki *sau ‘sarong’).

Since it has not been possible to describe the phonetic environment(s) which gave rise to the different reflexes, the splits of PMP *b and *s in Bungku-Tolaki resist being described within the framework of the Neogrammarians regularity hypothesis. Although it may be possible to account for some ‘exceptional’ instances—particularly the appearance of doublets—in terms of borrowing or analogical change, on the whole no satisfying comprehensive solution has yet emerged. In the absence of regular sound change, one may assume the solution is to be sought elsewhere, either in terms of dialect mixture, lexical diffusion, lexical correction (Labov 1994:453), or even unrecognized large scale borrowing. Even so, the details of ‘when’ and ‘where’ (and ‘from whom’) remain so obscure for the Bungku-Tolaki data as to render these solutions close to being vacuous. One clear fact which seems to emerge is that the lenition of *b was occurring over a long stretch of time, i.e. both preceding PBT and following its breakup. The lenition of *s on the other hand—because Bungku-Tolaki languages are in almost all cases consistent in showing either an s or an h reflex—must have been largely complete by the time of PBT.

2.1.5 Split of PMP *w

PMP *w became PBT *h word-initially (where it merged with *h < PMP *s), but was lost elsewhere, as indicated in the following reconstructions:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*wakat</td>
<td>‘mangrove root’</td>
</tr>
<tr>
<td>*walu</td>
<td>‘eight’</td>
</tr>
<tr>
<td>*wa-walu</td>
<td>‘eight’</td>
</tr>
<tr>
<td>*wa-wañi</td>
<td>‘honeybee’</td>
</tr>
<tr>
<td>*bulawan</td>
<td>‘gold’</td>
</tr>
<tr>
<td>*hawak</td>
<td>‘waist’</td>
</tr>
<tr>
<td>*hawan</td>
<td>‘open space’</td>
</tr>
<tr>
<td>*lawas</td>
<td>‘long time’</td>
</tr>
</tbody>
</table>
PPH *lawas  ‘internode, phalanx’  *laa stopwatch
*sawah  ‘python’  *sa stopwatch
*(ta)-tawa  ‘laugh’  *totaa stopwatch
*(ma)-ñawa  ‘breathe’  *naa stopwatch
*alawi(d,D,j)  ‘far’  *olai stopwatch
*kawit  ‘hook’  *kaiQ stopwatch

In at least one case PMP *u lost its syllabicity, and underwent the same development as *w:

PMP

(17)  *ma-huab  ‘yawn’  *maa stopwatch

A brief explanation of the two forms given above for ‘eight’, *halu- and *hoalu, is in order. The first was a prefixing form used in compounds with a unit of measure (including units of ten), as for example in present-day Tolaki halu-etu ‘eight hundred’, halu-mbingga ‘eight platefuls (of something)’, while the second was a free form used in straight counting and the counting of referential objects, for example Tolaki hoalu opingga ‘eight plates’.\(^{27}\)

\(^{27}\)A difference between free and prefixing forms is found in all numerals two through nine, not just with the numeral eight. As reconstructed for Proto-Bungku-Tolaki, the difference in most cases was the presence or absence of a prosthetic vowel, though further differences also show up in the forms for ‘four’ and ‘six’.

<table>
<thead>
<tr>
<th>FREE</th>
<th>PREFIXING</th>
</tr>
</thead>
<tbody>
<tr>
<td>*asa</td>
<td>*asa</td>
</tr>
<tr>
<td>*o-rua</td>
<td>*rua</td>
</tr>
<tr>
<td>*o-tolu</td>
<td>*tolu</td>
</tr>
<tr>
<td>*o-o(m)paQ</td>
<td>*pato</td>
</tr>
<tr>
<td>*o-lima</td>
<td>*lima</td>
</tr>
<tr>
<td>*o-onON</td>
<td>*nomo</td>
</tr>
<tr>
<td>*o-pitu</td>
<td>*pitu</td>
</tr>
<tr>
<td>*hoalu</td>
<td>*halu</td>
</tr>
<tr>
<td>*o-sio</td>
<td>*sio</td>
</tr>
</tbody>
</table>

‘one’
‘two’
‘three’
‘four’
‘five’
‘six’
‘seven’
‘eight’
‘nine’

A parallel difference is also found in the Muna numerals ‘four’ and ‘six’; regarding the history of this development, see Van den Berg (1991b:22).

The prosthetic vowel o- of the free forms in turn almost certainly traces back to a reduplicating syllable, the vowel of which was stereotypically *a, e.g. PBT *o-rua < PMP *da-dua, PBT *o-tolu < PMP *ta-telu, etc.—compare Blust (1997a) who reconstructs this very pattern for Proto-Austronesian. Compare also the free form of the Bungku-Tolaki question word for ‘how many?’. In eastern Bungku-Tolaki languages this form runs opia, in Waru, Tolaki, Rahambuu and Kondeho opio, but in Mori Atas and Padoe papio—which forms also strongly suggest an original reduplicating syllable, i.e. opia, opio, papio < PBT *po-pia < pre-PBT *pa-pia, ultimately from PMP *pija. (The corresponding prefixing form is everywhere pia-.)
A similar difference between prefixing and free forms for the numeral eight is found in neighboring languages as well, compare for example Muna alu-{'eight'} (Van den Berg 1989:111) and Pamona wayu-, uayu {eight'} (Dahl 1981a:50). As far as I am aware, three explanations may be advanced for these differences:

(a) Dahl (1976:18, 1981a:50) derives both Pamona wayu- {'eight'} (prefixing form) and uayu {'eight'} (free form) from PMP *ualu, the present-day doublets reflecting whether the first segment was respectively non-syllabic or syllabic.

(b) Following Mills (1981:60), both wayu- and uayu could derive from PMP *walu, where the protophoneme *w sometimes had a vocalic onset (*walu ~ *uwalu).

(c) Following Blust, the initial element found in forms such as Pamona uayu, "Tondano nulu, Tonsea uadu, and Palawan Batak qualu, < *walu (Dempwolff) 'eight' is almost certainly to be explained from *wawalu {'eight'} " (1974:137).

Although all three proposals could account for the Pamona, Tondano, etc. data, only Blust's explanation is directly corroborated by the Bungku-Tolaki data: the form hoalu found across Bungku-Tolaki is the completely regular reflex of PMP *wa-walu (see § 2.2.2 regarding the lowering of pretonic *a > *o), but could be derived only indirectly from *walu, *ualu or *uwalu.\footnote{The same explanation could also be adopted for Muna, i.e. oalu {'eight'} < *wa-walu. The development would be completely regular (in Muna PMP *w > Ø in all positions, and pretonic *a > o). If so, then Van den Berg’s hypothesis—that the o of oalu was “a lowering of *u in the prestressed syllable. The *u was probably retained here because of the preceding word pitu, which ends in u” (1991b:22–23)—could likewise be dispensed with.}

Note that the same ho ~ u correspondence is found in both Bungku-Tolaki hoalu, Pamona uayu {'eight'} and in Bungku-Tolaki hoani, Pamona uani 'bee' (Esser 1927:52), and I ascribe the same explanation to both.

Prefixed roots with initial PMP *w- have undergone one of three developments in the Bungku-Tolaki languages: (a) because of prefixation, the *w occurred internally and by regular development was reduced to *-Ø-; (b) in at least some cases, however, an h was
restored, presumably by analogy with an unprefixed form; (c) on the other hand a glottal stop may be analogically inserted at the morpheme boundary. All three developments can be observed in the following examples:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(18) *wanan</td>
<td>‘right’</td>
</tr>
<tr>
<td>*walu</td>
<td>‘eight’</td>
</tr>
<tr>
<td>*waRi</td>
<td>‘day, sun’</td>
</tr>
<tr>
<td>*pa-waRi</td>
<td>‘dry in sun’</td>
</tr>
</tbody>
</table>

One other facet regarding *w bears mentioning: as should be clear from the above discussion and examples, at no point in their respective histories did reflexes of PMP *b and *w ever merge. Therefore we must assume either that the change PMP *w > *h-/−∅-predated the change PMP *b > *w, or as illustrated in Figure 2, that the two *w’s (from respectively PMP *b and *w) remained somehow phonetically (and phonologically) distinct.

---

29 When *w has been lost at a morpheme boundary (but no glottal stop has been inserted), such words constitute exceptions to an otherwise regular pattern of glottal insertion between the final vowel of a prefix and the initial vowel of the stem. The exceptional nature of these words has been noted in both Mori Bawah (Esser 1927:54) and Moronene (D. Andersen 1995:6). However, the two authors differ as to how such words should be treated synchronically. Esser (1927:54) simply considers Mori Bawah formations such as `ialu` ‘eight nights’, `pealu` ‘eight times’ to be exceptions to an otherwise regular pattern of “glottal retention”. D. Andersen (1995:7) considers roots which regularly appear with glottal stop to actually begin with a phonemic glottal, while the few ‘exceptional’ cases he treats as vowel-initial stems.

30 As far as I know, this statement also holds true for Muna (Van den Berg 1991b) and the Kaili-Pamona languages (Martens 1989). Compare this with the situation in South Sulawesi, where *w from PMP *b merged with PMP *w in medial position, but in initial position “the /w/- that arose < *b must have been phonetically distinct from PSS *w < PAN *w, since the latter usually has a vocalic onset, the former never, as in [Bugis] wai ~ uvai (note Sinjai dial. hai ~ uhai) ‘water’ vs. watang ‘trunk, stem’ (never **uwatang)” (Mills 1981:60). The Bungku-Tolaki reflexes suggest that here PMP *w- developed a voiceless onset, eventually becoming entirely voiceless (see Esser 1927:52–53), a feature not found in *w- from PMP *b.
2.1.6 Merger of PMP *d and *r

PMP *d is considered to have been an alveolar stop, *r an alveolar tap or trill (Blust 1990a; Ross 1992). Although Dempwolff also recognized a voiced retroflexed stop, symbolized by him as *q and by others as *D, this protophoneme has come under serious attack since his time. With the collapse of the Tagalog evidence (Zorc 1987), *D and *d are now known to be reflected differently—the former a retroflex, the latter not—only in Javanese and Madurese, where the difference “has in any case been attributed by scholars to Sanskrit influence” (Ross 1992:40).\textsuperscript{31} Wolff (1974) likewise dismissed *r as a superfluous phoneme—often reconstructing instead *d, *R, or *j—but others still find evidence for reconstructing *r in at least some etyma (Blust 1990a, Ross 1992:43).

In Proto-Bungku-Tolaki, PMP *d and *r merged as *r, as shown by the forms in example (19):

\textsuperscript{31}For a dissenting view, see Mahdi (1996).
<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>duha</td>
<td>*rua</td>
</tr>
<tr>
<td>*demdem</td>
<td>*rondom-an ‘darkness’</td>
</tr>
<tr>
<td>dalem</td>
<td>*larO (&lt; metathesis)</td>
</tr>
<tr>
<td>*danaw</td>
<td>*rano</td>
</tr>
<tr>
<td>*dapuR</td>
<td>*rapuR</td>
</tr>
<tr>
<td>*deŋeR</td>
<td>*rongoR</td>
</tr>
<tr>
<td>*duRi</td>
<td>*rui</td>
</tr>
<tr>
<td>*dasan</td>
<td>*rahaN</td>
</tr>
<tr>
<td>*deŋan</td>
<td>*rongoN ‘with, together’</td>
</tr>
<tr>
<td>*daRaq</td>
<td>*raRaq</td>
</tr>
<tr>
<td>*dajem</td>
<td>*reO&lt;</td>
</tr>
<tr>
<td>*daqiŋ</td>
<td>*raqi ‘face’</td>
</tr>
<tr>
<td>*dakiŋ</td>
<td>*raki</td>
</tr>
<tr>
<td>*dakep</td>
<td>*rakoQ</td>
</tr>
<tr>
<td>*rebuiŋ</td>
<td>*robuiN</td>
</tr>
<tr>
<td>*rumbia</td>
<td>*rumbia</td>
</tr>
<tr>
<td>*rumpak</td>
<td>*rumpaQ</td>
</tr>
<tr>
<td>*(si)ida</td>
<td>*hi-ira</td>
</tr>
<tr>
<td>*quaŋ</td>
<td>*uraN</td>
</tr>
<tr>
<td>*tuduR</td>
<td>*turuR</td>
</tr>
<tr>
<td>*sed[eq]</td>
<td>*hori</td>
</tr>
<tr>
<td>*bidiŋ</td>
<td>*biriN ‘ear’</td>
</tr>
<tr>
<td>*kuden</td>
<td>*kurO&lt;</td>
</tr>
<tr>
<td>*gadep</td>
<td>*aroQ</td>
</tr>
<tr>
<td>*jadies</td>
<td>*ngaraO</td>
</tr>
<tr>
<td>*uda</td>
<td>*ng-ura</td>
</tr>
<tr>
<td>*keras</td>
<td>*kora&lt;</td>
</tr>
<tr>
<td>*burit</td>
<td>*puriQ</td>
</tr>
</tbody>
</table>

In two instances PMP *r is reflected as PBT *l. We can attribute *r > *l to dissimilation in the case of PBT *tulura; in the second case either the change was sporadic, or it reflects borrowing.

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*turtur</td>
<td>*tulur-a°</td>
</tr>
<tr>
<td>*tarap</td>
<td>*talaQ</td>
</tr>
</tbody>
</table>

In the following instances, PMP *d is reflected as /d/ in present-day Bungku-Tolaki languages. In some cases this must be due to borrowing—in particular note the irregularities in the forms for ‘oar’, which attest to borrowing.
On the other hand Moronene adii ‘this’ (with d < PMP *d) likely represents a case of direct inheritance but with sporadic denasalization (compare the cognate Mori Bawah form andio).

2.1.7 PMP palatals *Z and *c

In this subsection I discuss the two widely accepted PMP palatal affricates, voiced *Z and voiceless *c, plus a third palatal *z, one which is usually not distinguished by modern scholars.

Originally, Dempwolff reconstructed a single palatalized voiced stop, *z (in his notation, *d’). Where Dempwolff had reconstructed doublets, e.g. *zuRuq, *duRuq ‘sap’, *dalan, *zalan ‘road’, Dyen (1951) ascertained that once borrowings were recognized, individual languages were consistent in whether they reflected *d or *z. Since this consistency would not be accounted for if the protolanguage had doublets, Dyen argued instead for the recognition of a new protophoneme, *Z. At the time, Dyen’s recognition increased the inventory of PAN consonant contrasts by one. Subsequently, Dyen’s protophoneme *Z has been accepted by most researchers; however other instances of Dempwolff’s *z have been thought not to contrast with *d (Wolff 1982; Zorc 1987; Ross 1992), a difference in their reflexes being found only in a “fairly limited area of western
Indo-Malaysia", and which appears to be the result of "local developments" (Ross 1992:36). As illustrated in (23), however, in Bungku-Tolaki reflexes of PMP *z fall together with those of *Z, not *d. In other words, Bungku-Tolaki must be included in the limited area in which *z and *d are reflected differently.

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Zalan</td>
<td>*salan</td>
</tr>
<tr>
<td>*ZaRum</td>
<td>*sayun</td>
</tr>
<tr>
<td>*ZaRamih</td>
<td>*soRami</td>
</tr>
<tr>
<td>*Zilat</td>
<td>*sileq</td>
</tr>
<tr>
<td>*zukit</td>
<td>*sukiQ</td>
</tr>
<tr>
<td>*zelay</td>
<td>*sole ‘grain, maize’</td>
</tr>
<tr>
<td>*quZan</td>
<td>*usan</td>
</tr>
<tr>
<td>*taZem</td>
<td>*tason</td>
</tr>
<tr>
<td>*tuZuk</td>
<td>*tisq</td>
</tr>
<tr>
<td>*qazay</td>
<td>*ase</td>
</tr>
</tbody>
</table>

(23)

In another set of examples, *Z and *z correspond to present-day j in Bungku, g in Mori, and d in Tolaki. In this case borrowing is clearly indicated. The correspondence j ~ g ~ d in these languages in fact reflects the respective strategies employed by these languages for phonemicizing loan words with /d3/. Compare Mori Bawah seu ‘needle’ and Mori Atas garu ‘needle’, both originating from PMP *ZaRum. The former represents direct inheritance; the second was borrowed either from Malay jarum or a similar form in another language.

<table>
<thead>
<tr>
<th>PMP</th>
<th>BNG: jaji; MRB: gaji; WAW, TOL: dadi. (compare Bugis jaji)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Zadi</td>
<td>‘become, happen’</td>
</tr>
<tr>
<td>*ZaRum</td>
<td>‘needle’</td>
</tr>
<tr>
<td>*zangut</td>
<td>‘beard’</td>
</tr>
<tr>
<td>*zariŋ</td>
<td>‘net’</td>
</tr>
<tr>
<td>*zalin</td>
<td>‘bind, tie, weave’</td>
</tr>
<tr>
<td>*hizaw</td>
<td>‘unripe, green’</td>
</tr>
</tbody>
</table>

MRA: garu. (compare MAL jarum)

BNG: jango; MRB, PAD: ganggo;
TOL: dango. (compare Bugis jango ‘beard’)

TOL: dari.

MRB: gali ‘rattan mat’ (compare Bugis jali ‘rattan mat’)

BNG, KUL: ijo; TAL, TOL, KOD: mado. (compare MAL hijau)
Compare also the following examples of borrowing:

<table>
<thead>
<tr>
<th>(25) BUG jampu</th>
<th>‘EUGENIA’</th>
<th>BNG: jampu; MRB, PAD: *gampu; WAW, TOL: dambu.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAL jembatan</td>
<td>‘bridge’</td>
<td>BNG: jambata; MRB: gambata; TOL: dambata.</td>
</tr>
<tr>
<td>BUG jori</td>
<td>‘line, mark’</td>
<td>BNG: jori ‘line’ MRB: nggori ‘pattern, marking’; TOL: dori ‘scratch, line’</td>
</tr>
<tr>
<td>MAL jala</td>
<td>‘net’</td>
<td>MRB: gala ‘castnet’; TOL: jala, dala ‘castnet’</td>
</tr>
<tr>
<td>BUG jaka</td>
<td>‘comb’</td>
<td>TOL: daka.</td>
</tr>
<tr>
<td>BUG jama</td>
<td>‘work’</td>
<td>TOL: modama, madama.</td>
</tr>
</tbody>
</table>

Note that even where *z is reflected as s in present-day Bungku-Tolaki languages (as in sole ‘grain’), it may be possible to follow Wolff (1982:6) and regard these forms as borrowings as well—presumably from Malay—but note that we are then dealing with two different stages of borrowing. If the borrowing was early, then /dʒ/ in loan words was phonemicized as /s/ (possibly via /tʃ/); but if the borrowing was later (definitely post-PBT) then /dʒ/ as indicated was variously phonemicized as /d/, /g/, or remained /dʒ/. In no case, however, is there an example of *z becoming r, the regular reflex of PMP *d in Bungku-Tolaki.

PMP *c is thought to have been a voiceless palatal affricate, though it is reflected differently from PMP *s only in portions of western Indonesia (Blust 1990a, Ross 1992); PMP *c is also another protophoneme dismissed by Wolff (1982). The evidence though scant indicates PMP *c merged with *s:

```
(26) PMP                       PBT
    *cincin           ‘ring’    *sinsin
    *picit            ‘squeeze’  *pisiQ
    *apucuk           ‘mountain peak’  *pusuQ ‘mountain, rise’
```

It appears then in Bungku-Tolaki both voiced and voiceless palatal stops ended up as the fricative *s. As there are no examples of PMP *Z or *c ever becoming *h, one may conclude on the basis of counter-additive reasoning that the split of PMP *s > *s, *h must have preceded the merger of PMP *Z and *c with *s:
2.1.8 Voicing cross-over between *k and *g

In the history of Austronesian languages, voicing cross-over is found primarily in the velar region. Voicing cross-over simply means that a k reflex is found where **g is expected, and g occurs for expected **k. It is most common in initial position, rare intervocally or medially following a nasal, and not found in final position—but when it does occur in Austronesian languages its sporadic nature makes it one place where “we should seriously consider the possibility of true irregularity” (Blust 1990a:257).

Bungku-Tolaki languages have, by and large, the expected reflexes for PMP *k and *g in inherited words. The clearest and possibly only good example to the contrary is the following, where all known BT witnesses reflect gawu (variously ‘fog’, ‘mist’ or ‘cloud’) for expected **ka\textit{wu}.\textsuperscript{32}

\textsuperscript{32}And even here one should not rule out a possible origin from—or conflation with—PMP *Rabun ‘cloud’, via borrowing from a language with PMP *R > g.

Another possible example which has come to my attention is BT *kangga\textsuperscript{9} ‘spider’, if one accepts the etymology < pre-BT *kaa-N-kaa < PMP *kawa ‘spider’. However, both the unusual voicing cross-over—medially next to a nasal—and the failure of BT final *-a to raise to -o in Padoe, Mori Atas and Tolaki (§ 2.2.2) make this etymology doubtful.
The reverse case, namely that \( k \) occurs where \( **g \) is expected, is not known to me.

A more common case is to find some BT languages with \( g \) where others have \( k \)—the very presence of a \( g \sim k \) correspondence indicating that a switch in voicing was made somewhere—but such cases as far as I know are restricted to borrowed words. For example this is surely the case in Kulisu karaka, Bungku garagaji and Tolaki and Moronene garagadi (noun) ‘saw’ (from Malay gergaji), in Mori Bawah kadera, gadera and Tolaki kadera ‘chair’ (from Portuguese cadeira) as well as in Padoe kakaha ‘brave’ and Tolaki gaga ‘brave, dashing’ (from Malay gagah). Furthermore, where \( g \sim k \) correspondences reflect PMP \( *R \), we must also suppose borrowing, presumably from some language where \( *R > g \):

\[
\begin{align*}
\text{PMP} \\
(28) & *baReqa\text{i} & \text{‘molar tooth’} & \text{WAW, BNG: baga; TOL: baka.} \\
& *paRi & \text{‘sting ray’} & \text{BNG, MRB, MRA: pagi; TOL: paki.}
\end{align*}
\]

Compare further these examples. I feel somewhat safe in assigning these to borrowing also, particularly as the last three also have unexpected reflexes of PMP \( *e \):

\[
\begin{align*}
\text{PMP} \\
(29) & *guci & \text{‘earthen jar’} & \text{KUL: gusi; BNG, MRB: kusi.} \\
& *gendaj & \text{‘drum’} & \text{MRN, BNG, MRB: ganda; TOL: kanda.} \\
& *deket & \text{‘mud, mire’} & \text{KUL: moreko ‘muddy’; MRB: moreko, morego ‘id.’; PAD: morego ‘id.’; TOL: moreko ‘id.’.} \\
& *taked & \text{‘climb’} & \text{WAW, BNG: tumaga ‘go upstream’; TOL: tumaka ‘id.’.}
\end{align*}
\]

This leaves only the words for ‘island, shoal’ (Mori Bawah and Padoe togo, Tolaki, Wawonii and Bungku toko) and ‘cry, call out’ (Kulisu and Tolaki gora, Wawonii kora) to be accounted for, and until evidence arises to convince me otherwise I consider these to be borrowings as well.
In the above data, I have not encountered any clear-cut patterns except that Tolaki consistently has -k- medially, as in baka, paki, moreko, tumaka, and toko. However, -g- is also found as in garagadi and a few other recent borrowings.\footnote{In their entire Kamus Tolaki-Indonesia, Muthlib, Pattiasina, Chalik, et al. (1985) give only eight morphemes with medial -g-, and they are all almost certainly loans:}

### 2.1.9 Merger of PMP *n and *ñ

There is no evidence that PBT maintained the contrast between PMP *ñ and *n:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*nanaq</td>
<td>‘pus’</td>
</tr>
<tr>
<td>*qanitu</td>
<td>‘spirit, soul’</td>
</tr>
<tr>
<td>*paniki</td>
<td>‘bat’</td>
</tr>
<tr>
<td>*tabuni</td>
<td>‘afterbirth’</td>
</tr>
<tr>
<td>*anak</td>
<td>‘child’</td>
</tr>
<tr>
<td>*anay</td>
<td>‘termite’</td>
</tr>
<tr>
<td>*inum</td>
<td>‘drink’</td>
</tr>
<tr>
<td>*sunuR</td>
<td>‘burn’</td>
</tr>
<tr>
<td>*ñawa</td>
<td>‘breathe’</td>
</tr>
<tr>
<td>*ñañi</td>
<td>‘sing’</td>
</tr>
<tr>
<td>*peñu</td>
<td>‘turtle, tortoise’</td>
</tr>
<tr>
<td>*wa-wañi</td>
<td>‘honeybee’</td>
</tr>
</tbody>
</table>

(30)

The only possible evidence that *n and *ñ had not merged in PBT comes from the PMP form *añam ‘weave’ which is reflected as the stem ana in western languages (Padoe and Tolaki), but as ena in eastern languages (Moronene, Kulususu, Wawonii, Bungku and Mori Bawah). However the development en < *añ is not exhibited in any other item (compare for example Kulususu, Wawonii, Bungku and Mori Bawah lana ‘vegetable oil’ < PMP *laña); therefore it seems better to consider the Eastern Bungku-Tolaki stem -ena

\footnote{33In their entire Kamus Tolaki-Indonesia, Muthlib, Pattiasina, Chalik, et al. (1985) give only eight morphemes with medial -g-, and they are all almost certainly loans:}

\begin{itemize}
\item agama ‘religion’ \textless{} MAL agama
\item bagaa ‘outline, design’ \textless{} MAL bagan
\item daga ‘awake’ \textless{} MAL jaga
\item garagadi ‘saw’ \textless{} MAL gergaji
\item gaga ‘handsome’ \textless{} MAL gaga ‘strong, dashing’
\item gaga ‘fight’ \textless{} compare MAL gaga ‘strong, dashing’
\item baga ‘whim, caprice’ \textless{} compare MAL memper-bagai-kan ‘treat as one pleases’
\item baguli ‘marble’ \textless{} compare Wolio baguli ‘marble’ (Anceaux 1987)
\end{itemize}
'weave' to result from sporadic change or borrowing, rather than postulate a phonemic contrast in the protolanguage which was preserved in only one item.

2.1.10 PMP *N

The merger of PAN non-initial *N and *n as PMP *n has received wide acceptance among Austronesianists, therefore in this subsection we need consider only reflexes of *N in initial position.

Proto-Austronesian *N was not reconstructed by Dempwolff, who did not consider the Formosan evidence. Ogawa and Asai (1935), who were the first to identify this protophoneme, symbolized it as *n₂. Dyen (1965) and others following him popularized the notation *N, Blust (1990a) and Ross (1992) briefly adopted *L, while Dahl (1976, 1981b) alone has preferred *l. It is generally recognized that this protophoneme was a lateral, possibly a fricative and possibly voiceless (Dahl 1981b:106; Wolff 1988:133–134; Blust 1990a:235; Ross 1992:38).

In most Formosan languages, *N is reflected as a lateral (usually fricative) in all positions, and distinct from reflexes of *l. Outside of Formosa non-initial *N merged with *n, while the most common but not exclusive reflex of *N in initial position is l:

When I first discovered that PAN *l in initial position has the reflex l outside of Formosa, I believed that this was common to all languages outside of Formosa... Later I have found that in several languages in Sulawesi, in eastern Indonesia, in Chamorro, and also sometimes in the Philippines, the reflex is n also in initial position. (Dahl 1981b:104)

Perhaps unusually but not surprisingly, in Bungku-Tolaki *N- is generally reflected as n as shown in the following reconstructions:

---

34 The symbol *L was also first suggested by Dyen, but in a later paper (Dyen 1971). This use of *L is therefore different than the way it is employed by Tsuchida (1976); see the following footnote.

35 Tsuchida (1976) found grounds for distinguishing two protophonemes, which he gave as *N and *L, but this view has been rejected by both Dahl (1981:102–104) and Wolff (1993).
Reflexes of PMP *Nanjuy ‘swim’ show some unusual developments, both in respect to the initial consonant (sometimes *n, sometimes *l) and the final diphthong (§ 2.2.3). The distribution of *l and *n forms is highly irregular. Although *n forms are more common, the stem *lango predominates in the Konawe dialect region of Tolaki, from where it seems to have spread into adjacent portions of the Mekongga dialect region. However, both in Taloki on the island of Buton and in Koroni (whose speakers migrated from Buton to Central Sulawesi) we find *langi, which is also found in the Torete dialect of Bungku. How this distribution arose is at present unexplained.

Where PMP *N- is found as *l in Bungku-Tolaki languages, borrowing is probably indicated. In the case of *labu (as in Tolaki *melabu ‘to dock’, Wawonii *labua ‘harbor’) (compare PMP *Nabuq ‘drop, fall’) both the presence of initial *l as well as the semantic development argue that this form has been borrowed from Malay *labuh ‘drop anchor’.37 Bungku-Tolaki *lomba ‘hole; perforate’ (compare PMP *Nubaa ‘hole’) is perhaps also a loan, but on less certain grounds. If the etymon corresponding to Bungku-Tolaki *linta ‘leech’ is to be reconstructed with *N—compare Dahl (1976:75) PAN *Nimatek, but Blust (1986:12) PWMP *qali-metaq—then this would constitute a third exception.

Finally, a word must be mentioned regarding the use of some Bungku-Tolaki data. Although I agree with Dahl when he says “from the reflex *n- in Sulawesi languages it is possible to construct wordbases with initial *n even when cognates from Formosan

36 Blust (1980) reconstructs doublets PAN *Nahu or *nasuk ‘cook by boiling’. The Padoe and Kulisusu third singular object form nahu-o ‘cook it’ (without an inserted glottal stop; see § 2.3.1) makes the former the more likely source.

37 Compare Pamona which has both *nahu ‘drop’ (inherited form) and *labu ‘anchor’ (borrowed) (Adriani 1928:s.v.).
languages are lacking" (1981b:105), his selection of Moronene data in his two accompanying examples is unfortunate:


PMP *tit’an, MlgSak lisa ‘to pestle’, with suffix lisan-e, Maronene nisa ‘pestled rice’ (Adriani 1914)

In both cases the Moronene form should be segmented with passive prefix in-, and therefore cannot reflect PMP *N-. Moronene nisa is an aphonetic form of in-isa (stem isa ‘pound, pestle’), literally ‘that which has been pestled’.

2.1.11 PMP *R

The protophoneme *R, possibly an alveolar or uvular trill (though written by Dempwolff as a velar fricative *γ), has had a varied history:

Its most common reflexes are /g/, /h/, /r/, and zero, with /h/, /s/, and /γ/ also occurring in at least two widely separated languages... Some languages have a single reflex, but many others exhibit two or more reflexes without clear conditions. In some cases (Ngaju, Dayak, Tiruray) the split of *R is almost certainly due to borrowing, but in others (Bisaya of Brunei, the Melanau languages of Sarawak, the languages of the Manus, Nuclear Micronesian), no straightforward hypothesis of borrowing is available. (Blust 1990a:257)

In the descendant Bungku-Tolaki languages, PMP *R was either lost, or else merged with other consonants (primarily r, h and γ—the latter eventually merging with zero after affecting a preceding vowel). Despite these mergers, however, present-day correspondences provide straightforward evidence that *R must have existed as a distinct phoneme within PBT. Of the different fates of PMP *R, it is possible to identify the following inherited patterns:

(a) in initial position *R was lost, but effected the fronting of the following vowel:38

38This assumes that r in Mori Atas rusu ‘rib’ (compare PMP *Rusuk) and Mori Bawah, Padoe ravu ‘white mist, haze’ (compare PMP *Rabun ‘cloud’) is the result of borrowing.
(32)  
PMP  |  PBT  
---|---
*Rusuk  |  *ihuQ  
*Ratus  |  *etu⁶  

(b) *R was also lost contiguous to i:

PMP  |  PBT  
---|---
*pi(R)sa  |  *piha  
*qasiRa  |  *ohia  
*diRuq  |  compare TOL *meririu  
*ma-iRaq  |  *meaq  
*sa-Ribu  |  *sowu  
*duRi  |  *rui  
*maRi  |  *mai  
*waRi  |  *hai, -ai  

(c) In medial position PMP *R was retained as PBT *R when followed by *a and not precede by *i, that is, in the environments *e_a, *a_a and *u_a (in one case below, also *e_e). The evidence for PBT *R in this position is an h (in one instance r) in Tolaki corresponding with r in Padoe and Mori Atas, and fronting of the preceding vowel in eastern languages. As Adriani (1914:233) noted, the development in Eastern Bungku-Tolaki was presumably via *y, e.g. *uRa > *uya > ia, and so forth.

PMP  |  PBT  
---|---
(34)  
*uRat  |  *uRaQ  
*baRah  |  *waRa  
*ZaRamih  |  *soRami  
PPH  
*duRan  |  *tuRaN  
*beRas  |  *woRa⁶  
*teRas  |  *toRa⁶  
*daRaq  |  *raRaq  
POC  
*taRam  |  *taRaN  
*teRep  |  *toRoQ  
*kaRat  |  *kaRaQ  

BNG, WAW, MRB: ia; PAD: ure; TOL: utha.  
BNG: fea; MRB: wea. (dialect) waro; PAD: waro; TOL: waho.  
BNG, MRB: seami; PAD: sorami; TOL: sohahi.  
BNG: riangi; TOL: tuhani.  
BNG: fea; WAR, TOL, KOD: wha.  
BNG, MRB, PAD: motea 'hard'; TOL: motoha 'hard'.  
MRN, KUL, WAW, BNG, MRB, PAD, MRA: rea; WAR: raha.  
MRN: teeto; TOL: totoha.  
MRB: teo; KON: toho.  
MRN, BNG: kea; PAD, MRA: karasi; TOL: kara, karasi.

39Where data exist; in over half the examples a cognate form with r is lacking for these languages. Padoe and Mori Atas sometimes reflect the form expected for Mori Bawah, and vice versa—doubtless this is to be attributed to borrowing.
In two cases, *R may be reconstructed for PBT on external evidence; however an expected Padoe, Mori Atas, or Tolaki reflex has not yet been encountered:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*qabadRa</td>
<td>‘shoulder’</td>
</tr>
<tr>
<td>*owaRa</td>
<td>BNG: ofea; MRB: PAD: owa; PAD, MRA: **owaro; TOL: **owaho.</td>
</tr>
<tr>
<td>*paRa</td>
<td>‘storage loft’</td>
</tr>
<tr>
<td>*paRa</td>
<td>KUL: pea ‘attic’; BNG, WAW: pea ‘shelf above fireplace’ MRB: lambea ‘shelf above fireplace’; PAD, MRA: **paro; TOL: **paho.</td>
</tr>
</tbody>
</table>

(d) *R can also be reconstructed in final position on the basis of a back vowel in Tolaki, a front vowel in Eastern languages, and—attested in a few cases—a back vowel followed by -i in Mori Atas and/or Padoe (that is, in the last two languages, *-R > -i).

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ikur</td>
<td>‘tail’</td>
</tr>
<tr>
<td>*ikur</td>
<td>MRN, KUL, WAW, BNG, MRB, PAD: iki; MRA: okui; WAR, TOL: iku.</td>
</tr>
<tr>
<td>*sabur</td>
<td>‘sow, scatter’</td>
</tr>
<tr>
<td>*hawur</td>
<td>BNG: mohafi; KUL, WAW, MRB: mohawi; TOL: mohawu.</td>
</tr>
<tr>
<td>PPH *naquR</td>
<td>‘descend’</td>
</tr>
<tr>
<td>*i-naquR</td>
<td>KUL: mina ‘i; PAD: mine ‘i; TOL: ina ‘u.</td>
</tr>
<tr>
<td>*dapiR</td>
<td>‘hearth’</td>
</tr>
<tr>
<td>*qiletluR</td>
<td>‘egg’</td>
</tr>
<tr>
<td>*itoluR</td>
<td>BNG: toli; MRB, MRA: su’ului (&lt; metathesis); TOL: ti’olu (&lt;met.).</td>
</tr>
<tr>
<td>*besuR</td>
<td>‘satisfied’</td>
</tr>
<tr>
<td>*wohuR</td>
<td>BNG: mohofi (&lt; met.); MRN, WAW, MRB: mowohi; TOL: mowohu.</td>
</tr>
<tr>
<td>*tuduR</td>
<td>‘sleep’</td>
</tr>
<tr>
<td>*turuR</td>
<td>MRN, KUL, WAW, BNG, MRB, PAD, MRA: moturi; WAR, TOL: moturu.</td>
</tr>
<tr>
<td>*tuquR</td>
<td>‘dry’</td>
</tr>
<tr>
<td>*tuquR</td>
<td>MRN, KUL, WAW, BNG, MRB: motu ‘i; PAD, MRA: mosu ‘i; RAH: motu ‘u.</td>
</tr>
<tr>
<td>*sunuR</td>
<td>‘burn’</td>
</tr>
<tr>
<td>*hunuR</td>
<td>KUL: mohuni; TOL: mohunu.</td>
</tr>
<tr>
<td>*dejeR</td>
<td>‘hear’</td>
</tr>
<tr>
<td>*rongoR</td>
<td>KUL, MRB: moronge; MRA, PAD: morongoi; WAR, TOL: morongo.</td>
</tr>
</tbody>
</table>

(e) In a few cases PMP *R may have merged with PMP *j and *y as PBT *y; these are discussed further in § 2.1.12.

In the following items *R exhibits none of the regular reflexes described above. Examples are listed here without comment, though in a fair number of examples
borrowing is indicated (*R reflected as g or k indicates borrowing from the Philippines or the north; *R reflected as r indicates borrowing from Malay or South Sulawesi):

PMP

(37)  *baReqaŋ   ‘molar tooth’
*paRi   ‘sting ray’
*beReq   ‘pig’
PPH *laiR-an   ‘house’

*Rabun   ‘cloud’
*siRup   ‘slurp’
*baReq   ‘sore’
*baRu   ‘hibiscus’
*puRuq   ‘quail’
*kaRaj   ‘dry’

*baRat   ‘wind—NW’
*sindiR   ‘mock’

*paRaw   ‘hoarse’
*baqeRu   ‘new’
*beRsay   ‘paddle’
*sinaR   ‘day’
*tabaR   ‘flat, tasteless’
*bahaR   ‘loin cloth’
*labeR   ‘wide’

WAW, BNG: baga; TOL: baka.
BNG, MRB, MRA: pagi; TOL: paki.
TOL: beke.
MRN, TOL: laika ‘house’; KUL: laika ‘garden house’; MRB, PAD: laika ‘hut’
MRB, PAD: rawu ‘mist, white haze’
BNG, TOL: siro; WAW, TOL: sirobo.
MRB: bara.
MRB: baru.
MRB: puru.
MRB, PAD: mokara ‘fierce’ (said of the sun); MRA: mokara ‘dry’; MRB, MRA: mokoranga ‘be thirsty’.
MRN: bara ‘wind’; most languages: bara ‘west’
MRB: mompasanggiri; TOL: mosindiri.
WAW: mopaho; MRB, MRA: moparo; TOL: mopeho.
WAW, BNG: baru; MRB: wo ’ohu;
PAD: wowo ’u, wou; MRA: wo ’u, woo ’u; TOL: wo ’ohu, wu ’ohu.
BNG, MRB: bose; TOL: wose.
BNG: tefe; MRB, TOL: motewe.
BNG: fe ’e; MRB, PAD, MRA: we ’e, TOL: waa.
MRN, MRB, TOL: molewe ‘flat, broad’

2.1.12 PMP *j and *y

Distributionally, neither PMP *j nor *y have been reconstructed in morpheme initial position. Although *y is generally considered to have been a glide, scholars have debated what the phonetic character of *j might have been historically. Wolff (1988) considered that *j (his *g) was a voiced velar stop; Blust (1990a) considered it to be a palatalized velar stop [gᶓ] which had no voiceless counterpart; while Ross (1992) has argued—in part because he believes in pre-PAN *g and *j were in complementary distribution—that it was
likely a voiced velar fricative [ɣ, ɣ̃]. Its regular reflexes are, for example, in Tagalog -l- (medially) and -d (finally), in Toba Batak -g- and -k, in Malay -d- and -t, and in Javanese r in all positions.

In the languages in this study, PMP *j was usually lost in medial position. We may assume however that on its way to Proto-Bungku-Tolaki, PMP *j developed into a palatal fricative or glide. The basis of this assumption is the similarity of effect—if not actual merger—which *j and *y share. As the follow examples show, both PMP *j and *y (in two cases *y from desyllabification of *i) conditioned the fronting of a preceding *e or *a > PBT *e before being lost (recall that PMP *e is regarded as a mid central vowel, but the same symbol in PBT represents a mid front vowel).

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*pija</td>
<td>*pia</td>
</tr>
<tr>
<td>*ma-dajem</td>
<td>*reON</td>
</tr>
<tr>
<td>*sejem</td>
<td>*heoN</td>
</tr>
<tr>
<td>*qalejaw</td>
<td>*oleo</td>
</tr>
<tr>
<td>*najam</td>
<td>*neaN</td>
</tr>
<tr>
<td>*najan</td>
<td>*ngeaN</td>
</tr>
<tr>
<td>*sayad</td>
<td>*heao</td>
</tr>
<tr>
<td>*ma-iRaq</td>
<td>*meaq</td>
</tr>
<tr>
<td>*ma-hiaq</td>
<td>*meeq</td>
</tr>
</tbody>
</table>

The following two etyma have been reconstructed for PBT, but the failure of *j/y to front the preceding vowel is unexplained:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*pajey</td>
<td>*pae</td>
</tr>
<tr>
<td>*layap</td>
<td>*laoQ</td>
</tr>
</tbody>
</table>

On the following small amount of evidence, PMP *j and *y are reconstructed as PBT *y preceding *u, where possibly they also merged with PMP *R. The evidence for PBT *y consists of a front vowel in eastern languages, a non-fronted vowel in Padoe and Mori Atas, and either a fronted vowel or s in Tolaki. Note however that the expected Padoe, Mori Atas form **opou ‘gall bladder’ has not been found. Without further evidence it appears that the development of PBT *y > s in Tolaki was sporadic:
*qapeju ‘gall (bladder)’ *opoyu MRN, BNG, MRB, PAD, MRA: upeu; TOL: posu.
*layu ‘withered’ *layu KUL, MRB: moleu; PAD: molau; TOL: moleu.
*kahiw ‘wood’ *kayu MRN, KUL, WAW, BNG, MRB: keu; PAD, MRA: kau; TOL: kasu.

In final position we know that PMP *j and *y must not have merged, though their effects were strikingly similar—and in fact a difference is to be found only in two languages, Padoe and Mori Atas. First consider PMP diphthongs *-ay and *-ey. Both of these sequences have only an -e reflex in Bungku-Tolaki, which is therefore reconstructed for PBT:

(41) PMP PBT
*taŋkay ‘stem, trunk’ *tangke
*qazay ‘chin’ *ase
*matey ‘die’ *mate
*qatey ‘liver’ *ate

The same could almost be said for PMP *-aj and *-ej, except that in this case Padoe and Mori Bawah reflexes with -ai and -oi provide the crucial evidence for the retention of PMP *j (in one case *R) in PBT:

(42) PMP PBT
*palaj ‘palm, sole’ *palay MRN, KUL, WAW, BNG, MRB: pele; PAD, MRA: palai; TOL: pele.
*belaj ‘spread’ *wolay KUL: wole; PAD: wola; TOL: wole.
*s(a)jelaR ‘fry w/o oil’ *holay MRN, KUL, MRB: hole; PAD, MRA: holai; TOL: hole.
*pusej ‘navel’ *puhoy KUL, WAW, MRB: puhe; PAD, MRA: puhoi; TOL: puhe.
*lalej ‘fly’ (insect) *laloy KUL, WAW, BNG, MRB: lale; PAD, MRA: latoi; TOL: lale.

---

40 Padoe wola possibly by backformation from **wolai.
The cognate set in (43) shows that PMP *j was retained in final position even following *i (corresponding PMP *-iy has not been reconstructed):\(^{41}\)

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*pani̇j</td>
<td>‘palm, sole’</td>
</tr>
<tr>
<td></td>
<td>*paniy</td>
</tr>
</tbody>
</table>

To date, Bungku-Tolaki reflexes of an etymon with PMP *-uj have not been found. However, we do know that PMP *-uy was maintained in PBT based on the following reflexes (note Tolaki has nango for expected **nangi):

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(h)apuy</td>
<td>‘fire’</td>
</tr>
<tr>
<td></td>
<td>*(h)apuy</td>
</tr>
<tr>
<td>*(h)Nguy</td>
<td>‘swim’</td>
</tr>
<tr>
<td></td>
<td>*(n,l)anguy</td>
</tr>
</tbody>
</table>

As one can see from the above examples, PMP *j and *y exhibit curious similarities in their historical development. Whatever the original phonetic character of *j, both PMP *j and *y resulted in the fronting of a preceding vowel before becoming lost. This same behavior could (and perhaps should) be explained by positing the merger of these two phonemes in medial position. In final position, however, the evidence suggests they did not merge. Rather, outside of Padoe and Mori Atas, *-j followed the same phonological pathway as *-y, but only as a drift-like tendency after the breakup of PBT.

2.1.13 Loss of PMP *h

PMP *h reflects two Proto-Austronesian phonemes which merged in Proto-Malayo-Polynesian, PAN *S which is generally regarded as a voiceless sibilant\(^{42}\) and PAN *h

---

\(^{41}\)In this case a fortuitous vowel assimilation (Mori Atas penei < *penej < *paji) left the evidence preserved. Compare for example Wawonii, Bungku, Mori Bawah, Padoe and Tolaki kunji ‘tumeric’ < PMP *kunij as well as Kulisu, Wawonii, Bungku, Mori Bawah, Padoe, Mori Atas and Waru olai < PMP *alawi(ddj). In both cases present-day reflexes provide no evidence for reconstructing a PBT final consonant.
which is regarded as a voiceless glottal fricative *h. As the following reconstructions illustrate, PMP *h was invariably lost in Bungku-Tolaki:43

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*hepat</td>
<td>'four'</td>
</tr>
<tr>
<td>*hapuy</td>
<td>'fire'</td>
</tr>
<tr>
<td>*hepi</td>
<td>'dream'</td>
</tr>
<tr>
<td>*hikan</td>
<td>'fish'</td>
</tr>
<tr>
<td>*hawak</td>
<td>'waist'</td>
</tr>
<tr>
<td>*hawan</td>
<td>'open space'</td>
</tr>
<tr>
<td>*hasaq</td>
<td>'sharpen'</td>
</tr>
<tr>
<td>*halas</td>
<td>'tree'</td>
</tr>
<tr>
<td>*duha</td>
<td>'two'</td>
</tr>
<tr>
<td>*buhuk</td>
<td>'hair of head'</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>*opaQ</td>
<td></td>
</tr>
<tr>
<td>*apuy</td>
<td></td>
</tr>
<tr>
<td>*ipi</td>
<td></td>
</tr>
<tr>
<td>*ikaN</td>
<td></td>
</tr>
<tr>
<td>*aaQ</td>
<td></td>
</tr>
<tr>
<td>*in-alah-i</td>
<td>'forest'</td>
</tr>
<tr>
<td>*rua</td>
<td></td>
</tr>
<tr>
<td>*wuuQ</td>
<td></td>
</tr>
</tbody>
</table>

In not a few cases two vowels originally separated by *h apparently fused as a single PBT vowel:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*qahelu</td>
<td>'pestle'</td>
</tr>
<tr>
<td>*kahepal</td>
<td>'thick'</td>
</tr>
<tr>
<td>*pa-hasek</td>
<td>'dibble'</td>
</tr>
<tr>
<td>*ma-hataq</td>
<td>'raw, unripe'</td>
</tr>
<tr>
<td>*Nihepis</td>
<td>'thin, tenuous'</td>
</tr>
<tr>
<td>*palihi</td>
<td>'taboo'</td>
</tr>
<tr>
<td>*i-kahu</td>
<td>'2SG'</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>*alu</td>
<td></td>
</tr>
<tr>
<td>*kapa°</td>
<td></td>
</tr>
<tr>
<td>*pahoQ</td>
<td>'plant with dibble'</td>
</tr>
<tr>
<td>*mataq</td>
<td></td>
</tr>
<tr>
<td>*nipi°</td>
<td></td>
</tr>
<tr>
<td>*i-pali</td>
<td></td>
</tr>
<tr>
<td>*iko</td>
<td></td>
</tr>
</tbody>
</table>

---

42 According to Blust (1990a:234), PAN *S was probably an alveolar or alveo-dental fricative. Ross (1992:39) however finds some evidence for considering PAN *S to be a retroflexed or alveo-palatal fricative.

43 Another—though far from universally accepted—reconstructed laryngeal is PAN *ʔ, proposed by Dyen (1965), and argued for by Zorc (1982, 1996). As the following forms indicate, no evidence for *ʔ is to be found in Bungku-Tolaki languages (etyma from Zorc 1982):

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ʔuRat</td>
<td>'vein, tendon'</td>
</tr>
<tr>
<td>*ʔenem</td>
<td>'six'</td>
</tr>
<tr>
<td>*ʔabuk</td>
<td>'dust'</td>
</tr>
<tr>
<td>*ʔudaʔ</td>
<td>'young'</td>
</tr>
<tr>
<td>*beRʔat</td>
<td>'heavy'</td>
</tr>
<tr>
<td>*taʔas</td>
<td>'high, long'</td>
</tr>
<tr>
<td>*kaʔen</td>
<td>'eat'</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>*uRaQ</td>
<td></td>
</tr>
<tr>
<td>*onON</td>
<td></td>
</tr>
<tr>
<td>*awuQ</td>
<td></td>
</tr>
<tr>
<td>*ng-ura</td>
<td></td>
</tr>
<tr>
<td>*beaQ</td>
<td></td>
</tr>
<tr>
<td>*taʔa°</td>
<td></td>
</tr>
<tr>
<td>*kaaN</td>
<td></td>
</tr>
</tbody>
</table>
2.2 Phonological innovations: vowels and diphthongs

There is widespread agreement that Proto–Austronesian had only four vowels, plus a handful of diphthongs that occurred only in final position. "In Austronesian linguistics the term 'diphthong' generally is restricted to word-final sequences of vowel plus semivowel. For reasons of syllabification the similar sequence word-internally usually behaved differently, and is analyzed as a VC sequence like any other" (Blust 1990a:236). The segments that I will be concerned with are as follows:

vowels: i e [ə] a u

diphthongs: -ay -ey -uy -aw -ew -iw

Table 10. Proto-Austronesian vowels and diphthongs

The Proto–Bungku-Tolaki vowel system straightforwardly continues the four-vowel PAN system. The only major difference is the development of a mid front vowel in PBT, which sprang from a number of sources, including in final position PMP *-iq, *-ay and *-ey and in medial position PMP *i, *e and *a.

Except for the cases noted below, the reflexes of PMP *i, *e, *a and *u are respectively PBT *i, *o, *a and *u. These reflexes are illustrated abundantly throughout this chapter, and are not discussed separately. The changes illustrated below are the lowering of *i preceding final glottal stop (§2.2.1), the raising of *a in antepenultimate position (§2.2.2), the development of diphthongs in final position (§2.2.3), and, finally, certain vowel changes which, despite their irregularity, have been noted with some frequency (§2.2.4). For the coalescence of PMP *-ej-, *-aj-, *-ay-, *-ai- > PBT *e, see under §2.1.12 above. Table 11 summarizes the regular vowel changes between PMP and PBT. The reader should bear in mind that in PMP, the symbol *e represents a mid central vowel (schwa), but the same symbol in PBT represents a mid front vowel.
Table 11. PMP vowels and diphthongs and their principle reflexes in PBT

<table>
<thead>
<tr>
<th>PMP</th>
<th>*i</th>
<th>*e</th>
<th>*a</th>
<th>*u</th>
<th>*-ay/-ey</th>
<th>*-aw/-ew</th>
<th>*-iw</th>
<th>*-uy</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT</td>
<td>*i (*e)</td>
<td>*o</td>
<td>*a (*o)</td>
<td>*u</td>
<td>*-e</td>
<td>*-o</td>
<td>??</td>
<td>*-uy</td>
</tr>
</tbody>
</table>

2.2.1 Lowering of PMP *i

PMP *i lowered to *e in the ultimate syllable when followed by *q, as in:

```
PMP          | PBT
-------------|-------------
*biniq       | *wine
*piliq       | compare TOL momile
*putiq       | *pute
PPH *suliq   | *hule
PWMP *paliq  | *pole ‘cut off’
```

When the vowel of the penultimate syllable was PMP *e (schwa), not only did final *i lower but also the preceding schwa vowel was fronted, harmonizing to become PBT *e (not *o as under ordinary circumstances):

```
PMP          | PBT
-------------|-------------
*kemiq       | *eme
*letiq       | compare TOL watu lete ‘lightning bolt’
```

Interestingly, the change PMP *-iq > *-e is characteristic of two other language groups of Sulawesi, Sangiric (Sneddon 1984:6) and South Sulawesi (Mills 1975:257 ff.), and in both cases a parallel change of *-uq > *-o is also found. However, although the change *-uq > *-o is one of the developments by which western Bungku-Tolaki languages are subgrouped (§ 3.3), it did not occur in eastern Bungku-Tolaki languages and therefore cannot be ascribed to PBT, except possibly irregularly in one lexical item:

```
PMP          | PBT
-------------|-------------
*penuq       | *puno
```
2.2.2 Raising of PMP antepenultimate \(^a\)

In antepenultimate position, PMP \(^a\) raised to \(^o\) and, under the influence of a labial, sometimes further to \(^u\):

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bali-an</td>
<td>'shaman'</td>
</tr>
<tr>
<td>*paniki</td>
<td>'bat'</td>
</tr>
<tr>
<td>*ZaRami</td>
<td>'rice stalk, straw'</td>
</tr>
<tr>
<td>*qasiRa</td>
<td>'salt'</td>
</tr>
<tr>
<td>*qapeju</td>
<td>'gall (bladder)'</td>
</tr>
<tr>
<td>*qalejaw</td>
<td>'day'</td>
</tr>
<tr>
<td>*qanifu</td>
<td>'spirit, soul'</td>
</tr>
<tr>
<td>*qalipan</td>
<td>'centipede'</td>
</tr>
<tr>
<td>*laqia</td>
<td>'ginger'</td>
</tr>
<tr>
<td>*pa-wai</td>
<td>'dry in sun'</td>
</tr>
</tbody>
</table>

Since PMP \(^e\) has not been reconstructed in antepenultimate position—that is, in antepenultimate position PMP \(^a\) contrasted only with \(^i\) and \(^u\)—originally the change \(^a\) \(\rightarrow\) \(^o\) must have been subphonemic (not a merger). However, through borrowing there now exists a contrast between \(a\) and \(o\) in this position, compare for example *lasuna ‘onion, garlic’, *salaka ‘silver’ and *walira ‘sulphur’, all widely attested BT words which have \(a\) in antepenultimate position, not \(o\) as one would expect if these words had been directly inherited.\(^{44}\) Depending on the antiquity of such loans, a contrast between \(^a\) and \(^o\) may have existed in this position even in PBT.

2.2.3 PMP diphthongs

Six combinations of vowel plus semivowel are reconstructed for PMP in final position: \(^-ay\), \(^-ey\), \(^-uy\), \(^-aw\), \(^-ew\) and \(^-iw\). Since these combinations in final position frequently exhibit different reflexes than the same combinations in medial position, in Austronesian linguistics they are usually treated separately under the rubric ‘diphthongs’

---

\(^{44}\) Compare PMP *la(n)sunaq (Dempwolff, cited in Zorc 1971), PPH *s-al-apiq ‘silver, money’ (Zorc 1971) and PMP *baliraj ‘sulphur’ (Dempwolff, cited in Zorc 1971)
All available evidence indicates that both PMP *-ay and *-ey became PBT *-e (which merged with PBT *-e < PMP *-iq, § 2.2.1):

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tilay</td>
<td><em>vagina</em></td>
</tr>
<tr>
<td>*tankay</td>
<td><em>stem, trunk</em></td>
</tr>
<tr>
<td>*bukay</td>
<td><em>full</em></td>
</tr>
<tr>
<td>*qazay</td>
<td><em>chin</em></td>
</tr>
<tr>
<td>*matey</td>
<td><em>die</em></td>
</tr>
<tr>
<td>*qatey</td>
<td><em>liver</em></td>
</tr>
</tbody>
</table>

On the other hand, PMP *-aw and *e clearly merged as PBT *o. PMP *-ew is probably also to be included in this merger, though to date the evidence comes from only one etymon, *behew ‘odor’ (but with no counter-examples):

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*danaw</td>
<td><em>lake</em></td>
</tr>
<tr>
<td>*pisaw</td>
<td><em>knife</em></td>
</tr>
<tr>
<td>*le(n)taw</td>
<td><em>float</em></td>
</tr>
<tr>
<td>*lakaw</td>
<td><em>go</em></td>
</tr>
<tr>
<td>*babaw</td>
<td><em>on, over</em></td>
</tr>
<tr>
<td>*behew</td>
<td><em>odor</em></td>
</tr>
</tbody>
</table>

Although PMP *-uy is realized in most Bungku-Tolaki languages as -i, it nevertheless was maintained in PBT. The evidence for the retention of PMP *-uy primarily comes from Mori Atas and Padoe which, for example, have the reflexes respectively *apui ‘fire’ and *nangoi ‘swim’ for:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*hapuy</td>
<td><em>fire</em></td>
</tr>
<tr>
<td>*Nanjuy</td>
<td><em>swim</em></td>
</tr>
</tbody>
</table>

Evidence for the fate of PMP *-iw is inconclusive. To my knowledge, only two etyma with PMP *-iw are widely reflected in present-day Bungku-Tolaki. In both cases the preceding consonant was lost,\(^{45}\) apparently resulting in the resegmentation *-iw > *-yu.

\(^{45}\)The only example known to me where the consonant preceding *-iw was retained is if Kulisusu *halu ‘seek, search for’ is to be considered cognate with PPH *saliw ‘buy, exchange’ (Zorc 1978:111); but this etymology must be considered tenuous.
2.2.4 Irregular vowel changes

In this subsection I deal with three other vowel changes which, though perhaps not phonologically unmotivated, appear not to have occurred with the regularity of the vowel changes discussed above. These three changes are the lowering of PMP *i > PBT *e, the lowering of PMP *u > PBT *o, and the fronting of PMP *e (schwa) > PBT *e or *i. In the following data sets, I have limited myself to cases where the witness languages all reflect a certain sound change, and thus the possibility exists for ascribing the irregularity to Proto–Bungku-Tolaki. Of course, borrowing, or parallel developments in the daughter languages should not be excluded as possible explanations.

One irregular but nevertheless recurrent phenomenon is the occurrence of PBT *e for expected *i, particularly contiguous to a resonant:

\[
\begin{array}{lll}
\text{PMP} & \text{PBT} \\
*{(q)ilu} & \text{‘orphan’} & *elu \\
*bila & \text{‘wound’} & \text{compare WAW, BNG, MRB bela} \\
*hinuq & \text{‘bead’} & *enuq \\
*si\text{r}u\text{j} & \text{‘dark, shade’} & *seruN ‘cloud’ \\
*limaw & \text{‘citrus’} & *le\text{mo} \\
*ria(q) & \text{‘abundant’} & *to-re\text{a} ‘leftover, more’ \\
*buku lali(t) & \text{‘ankle’} & *buku lale\text{o} \\
*gel\text{i} & \text{‘tickle’} & *gele \\
\end{array}
\]

Similarly, *o occurs for expected *u in various other items:

\[\text{In Eastern BT languages, PBT *layu ‘flee’ and *leu ‘come, arrive’ would have merged as leu by regular sound change, which perhaps accounts for the absence in these languages of leu in the meaning ‘flee’. In its stead at least Moronene, Kulisu and Mori Bawah have molai ‘flee, run away’, possibly to be linked with PPH *la\text{Ri} ‘hurry, fast’ (Zorc 1971).}\]
Although the ordinary reflex of PMP *e (schwa) is PBT *o, this vowel was regularly fronted in certain environments, for example when followed by *j or *y; see § 2.1.12 above. Bungku-Tolaki languages have e (in one case i) corresponding to PMP *e in the following instances as well, although in these cases there is nothing which might be regarded as a regular conditioning environment.

2.3 Final consonants and final consonant loss

The primary work to date on reconstructing PBT final consonants is Mead (1996). The principal results may be summarized as follows:

(a) Reflexes of PMP *-R, *-j and *-y were retained in final position (though the latter only in the combination *-uy). The evidence consists not only of patterns of vowel alternation but also of an -i reflex of all three which was maintained in Padoe and Mori Atas (see §§ 2.1.11 and 2.1.12 above).

(b) In the ancestor to modern Padoe, Mori Atas and Tolaki, *a raised to *o when it occurred in final position, but failed to raise when it was not final—in most cases, presumably because it was ‘protected’ by a final consonant which must have still been present at that time. The following are exemplary of lexical items in which raising of *-a did occur (illustrative data only from Bungku and Tolaki) (Mead 1996:185).
We may conclude that PMP final *-h had been lost in PBT—an unsurprising result, given that this consonant had also been lost in initial and medial position (§ 2.1.13). Perhaps more surprising are the following data, in which PBT *a was not raised. Assuming present-day forms are not due to borrowing, the following provide some convincing evidence that PBT must have maintained reflexes of all the following PMP final consonants (Mead 1996:186):

<table>
<thead>
<tr>
<th>PMP</th>
<th>BNG</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*laqia</td>
<td>lo 'ia</td>
<td>loio</td>
</tr>
<tr>
<td>*sawa</td>
<td>saa</td>
<td>sao</td>
</tr>
<tr>
<td>*lima</td>
<td>olima</td>
<td>olimo</td>
</tr>
<tr>
<td>*kita</td>
<td>mongkita</td>
<td>monggito</td>
</tr>
<tr>
<td>*baRah</td>
<td>wea</td>
<td>wako</td>
</tr>
<tr>
<td>*tuqah</td>
<td>motu 'a</td>
<td>motu 'o</td>
</tr>
</tbody>
</table>

(59)

<table>
<thead>
<tr>
<th>PMP</th>
<th>BNG</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*layap</td>
<td>lumaa</td>
<td>lumaa</td>
</tr>
<tr>
<td>*tarap</td>
<td>metala</td>
<td>mbetala</td>
</tr>
<tr>
<td>*kulat</td>
<td>mokula</td>
<td>mokula</td>
</tr>
<tr>
<td>*uRat</td>
<td>ia</td>
<td>uha</td>
</tr>
<tr>
<td>*tasak</td>
<td>motaha</td>
<td>motaha</td>
</tr>
<tr>
<td>*sa(m)pak</td>
<td>sampa</td>
<td>samba</td>
</tr>
<tr>
<td>*buq</td>
<td>wua</td>
<td>wua</td>
</tr>
<tr>
<td>*teŋaq</td>
<td>tonga</td>
<td>tonga</td>
</tr>
<tr>
<td>*aŋam</td>
<td>mo'ena</td>
<td>mo'ana</td>
</tr>
<tr>
<td>*na-najam</td>
<td>monea</td>
<td>monea</td>
</tr>
<tr>
<td>*Zalan</td>
<td>sala</td>
<td>sala</td>
</tr>
<tr>
<td>*quZan</td>
<td>usa</td>
<td>usa</td>
</tr>
<tr>
<td>*quaŋ</td>
<td>ura</td>
<td>ura</td>
</tr>
<tr>
<td>*kambaŋ</td>
<td>kamba</td>
<td>kamba</td>
</tr>
<tr>
<td>*(na)-huab</td>
<td>momaa</td>
<td>momomaa</td>
</tr>
<tr>
<td>*laqaD</td>
<td>laa</td>
<td>laa</td>
</tr>
<tr>
<td>*kahepal</td>
<td>mokapa</td>
<td>mokapa</td>
</tr>
<tr>
<td>*lembal</td>
<td>molemba</td>
<td>molemba</td>
</tr>
<tr>
<td>*keras</td>
<td>mokora</td>
<td>mokora</td>
</tr>
<tr>
<td>*teRas</td>
<td>motea</td>
<td>motoha</td>
</tr>
</tbody>
</table>

However, even when the above evidence for the retention of final consonants is accepted, a question still remains of how many contrasts were maintained in final position. We know for example that a three-way contrast was maintained between PMP *-R, *-j
and *-y at least following PMP *e, though only two PBT consonants need be reconstructed:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
<th>BNG, MRB</th>
<th>PAD, MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-eR</td>
<td>*-oR</td>
<td>-e</td>
<td>-oi</td>
<td>-o</td>
</tr>
<tr>
<td>*-ej</td>
<td>*-oy</td>
<td>-e</td>
<td>-oi</td>
<td>-e</td>
</tr>
<tr>
<td>*-ey</td>
<td>*-e</td>
<td>-e</td>
<td>-e</td>
<td>-e</td>
</tr>
</tbody>
</table>

Table 12. Reflexes of PMP *-eR, *-ej and *-ey

PBT *-R and *-y also both need to be reconstructed following *u to account for the following correspondences:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
<th>BNG, MRB</th>
<th>PAD, MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-uR</td>
<td>*-uR</td>
<td>-i</td>
<td>-ui</td>
<td>-u</td>
</tr>
<tr>
<td><em>-uy / (</em>-uj??)</td>
<td>*-uy</td>
<td>-i</td>
<td>-ui</td>
<td>-i</td>
</tr>
</tbody>
</table>

Table 13. Reflexes of PMP *-uR and *-uy

But for the other consonants the evidence discussed to date has not allowed us to decide exactly how many mergers might have taken place in final position. In the remainder of the section, I continue this investigation of final consonants by bringing to bear two new sources of evidence: (a) the lexically conditioned allomorphs -o, -'o, -ho and -ngo of the third singular object suffix in Padoe and Kulisusu; and (b) another sound change involving final consonants—the lowering of PBT *-uq > *-o in Tolaki, Padoe and Mori Atas—which was not recognized at the time of writing my 1996 paper.

2.3.1 Inserted (thematic) consonants

A number of suffixes in present-day Bungku-Tolaki languages have lexically conditioned allomorphs, the difference consisting of a consonant which is inserted between the final vowel of the stem (all stems today are vowel final) and the initial vowel of the
suffix. Compare for example the various consonants which precede the transitive suffix -i such as in Kulisu laha ‘run’, laha-r-i ‘pursue s.o.’; kuli ‘skin’, kuli-s-i ‘peel s.th.’; lonso ‘jump’, lonso-p-i ‘jump up toward s.th.’; motapu ‘severed, apart’, sapu-k-i ‘cut, sever s.th.’; mata ‘jewel’, mata-Ø-i ‘set s.th. with jewels’. Such consonantalts have been described under various names. The Dutch called them tussenklanken, literally ‘between sounds’; they have also been termed ‘suffixal consonants’, ‘inserted consonants’ and (more commonly in Oceanic linguistics) ‘thematic consonants’. Generally it is thought that at least some of them reflect what was originally a stem final consonant.

However, suffices or rather the consonants preceding them are not equal when it comes to reconstructing consonants at an earlier stage. The suffix -ako (or its cognates) is notorious for phonological and probably semantic reshaping of its accompanying consonant, as well as variation in present-day languages. Compare Adriani (1931:303, 304) who notes among other examples (all in the same meaning) Pamona lombonaka and lomboraka ‘let hang slack’, lupisaka and luptaka ‘fold up’, and longkobaka, longkowaka and longkomaka ‘make loose, roomy’. Van den Berg concluded regarding the cognate suffix in Muna that “in many other examples extensive reorderings must have taken place among these suffixal consonants, and new consonants have also been introduced, even in loanwords... The presence of dialectal and even idiolectal variation in the shape of the suffix is a further complication” (1991b:19). See also Arms (1973) on Fijian where thematic consonants show evidence of having taken on a semantic life of their own—similar to what have been described elsewhere as ‘submorphemic differentials’ or ‘phonestemes’ (Waugh 1983:298 ff.) such as in English flutter, flurry, flit and flicker. Esser on the other hand investigated the Mori Bawah suffix -a and found that it frequently occurred without any intervening consonant. In cases where inserted consonants did occur, however, Esser felt “they are presumably the original stem final consonants of the various stems, or consonants originating therefrom; the opposite is at any rate not to be
demonstrated and must be esteemed very improbable" (1933:363–364) (my translation). His examples include *beata ‘exhausted’ (< PMP *beReqat ‘heavy’), *ulima ‘stern’ (compare PPH *ulin ‘steer; rudder’), and *kaanga ‘food stuff’ (< PMP *kaen ‘eat’).

However, even if we accept that some inserted consonants accurately reflect an original stem consonant from an earlier stage, I do not know any way of guaranteeing that that stage is, say, PBT. If the suffix is derivational, then presumably the now ‘inserted consonant’ would (without intervening phonological or semantic reshaping) reflect the stem final consonant at the time the derivation was coined—or the last time the form was ‘updated’ by analogy to the still existent original stem—regardless of when that time was. To take a simple example, most if not all Bungku-Tolaki languages have a stem *kuli meaning ‘skin, rind, bark (of tree)’ (< PMP *kulit ‘skin’). In addition there is also found in (at least) Kulisusu, Bungku, Mori Bawah and Tolaki the transitive stem *kulisi meaning ‘to peel’ on the basis of which we may also reconstruct PBT *kulisi ‘id.’. However it does not follow that PBT must also have had *kulis ‘skin’; on this evidence alone *kuli and *kulih, even *kuli, would also be possible reconstructions. Furthermore, Padoe has simple *kulii ‘take off bark, peel’ (Lara, Larobu, et al. 1991:30); the lack of an inserted consonant in this form must be attributed to a recent analogizing which recognized the transitive stem as being composed of *kuli + transitive suffix -i.

Many inserted consonants in and of themselves, then, may have no bearing on the reconstruction of PBT final consonants. Presumably a protolanguage could have lost final consonants and yet the daughter languages could still have all manner of inserted consonants—from, of course, derivations which predate said protolanguage. Given their antiquity, this is perhaps especially true of the present-day suffixes -i (early capture of preposition *i), -a (< Proto-Austronesian *-an and *-en), and -ako (reconstructable in intensive and causative meaning as a suffix at a very early stage; see Chapter 6).
On the other hand, there are two suffixes the thematic consonants of which hold more promise of reflecting a PBT or post-PBT stage: (a) reflexes of the third person singular object pronoun *io\(^{47}\) which was a clitic in PBT; and (b) reflexes of PBT *ako, a preposition used to introduce beneficiaries, causes, and instruments. Although clearly a preposition in PBT, this *ako has tended through time both to merge with a following pronoun and be captured as a suffix on the verb. Where known, stem-conditioned allomorphs of these two suffixes in present-day languages are given in (60). Only third singular forms of *ako are given; similar allomorphs are found mutatis mutandis in other persons and numbers:

(60)

\*io
- Padoe: -o, -’o, -ho, -ngo (Vuorinen 1995)
- Kulisu: -o, -’o, -ho
- Moronene: -o, -’o, -ho (S. Andersen 1995a)

\*ako
- Padoe: -akeo, -’akeo, -hakeo, -ngakeo (Vuorinen 1995)
- Kulisu: -akono, -’akono, -hakono
- Moronene: -akono, -’akono, -hakono (S. Andersen 1995a)

According to Vuorinen (1995:111) Padoe stems are consistent in which thematic consonant they require. For example, if a stem takes the allomorph -ho then it also takes the allomorph -hakeo, and so forth. Note also that with these suffixes we never find any inserted consonants other than zero, glottal, h and ng (the last of these only in Padoe) and so presumably these represent the end stage of final consonant loss—a case which is

\(^{47}\)Reflexes of other PBT vowel initial object pronouns, namely first person singular *aku and third person plural *ira (§ 4.3), also have stem-conditioned allomorphs in Padoe and Moronene (but not Kulisu).

Scott Youngman (1997:pers.comm.) has noted that in Tolaki both the first person singular and third person plural object suffixes have stem-conditioned allomorphs, respectively -’akul-haku and -’iro-l-hiro, but that no such allomorphy is found with the third singular form.
especially strong when we can show that these correlate regularly with the reconstructed final consonants of an earlier (in this case, PMP) stage.

Unfortunately the lexical resources available for these languages are insufficient to allow a full-fledged investigation at this time. The following analysis, limited as it is to data from Padoe and Kulisu, should be regarded as tentative and may be subject to revision as more data become available. Padoe verb classes are from Lara, Larobu, et al. (1991); Kulisu data are from my own field notes. All verbs are cited with third singular object pronoun.

(a) a glottal stop is inserted in recent loan words, even when the borrowed stem has been phonemicized with a paragogic vowel:

<table>
<thead>
<tr>
<th>MAL</th>
<th>KUL</th>
<th>PAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>gergaji</td>
<td>karakaji-’o</td>
<td>—</td>
</tr>
<tr>
<td>intip</td>
<td>intipu-’o</td>
<td>—</td>
</tr>
<tr>
<td>ukur</td>
<td>ukaru-’o</td>
<td>—</td>
</tr>
<tr>
<td>seterika</td>
<td>istirika-’o</td>
<td>—</td>
</tr>
<tr>
<td>periksa</td>
<td>parakisa-’o</td>
<td>paresa-’o</td>
</tr>
<tr>
<td>baca</td>
<td>—</td>
<td>basa-’o</td>
</tr>
<tr>
<td>terima</td>
<td>—</td>
<td>tarima-’o</td>
</tr>
</tbody>
</table>

(b) no consonant is inserted when the historical (PMP) source was vowel final, including diphthongs, or else ended in *-R (presumably also *-j):

<table>
<thead>
<tr>
<th>PMP</th>
<th>KUL</th>
<th>PAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bayu</td>
<td>pembeu-o</td>
<td>—</td>
</tr>
<tr>
<td>*isi</td>
<td>ihi-’o</td>
<td>—</td>
</tr>
<tr>
<td>*belay</td>
<td>wole-o</td>
<td>—</td>
</tr>
<tr>
<td>*sunuR</td>
<td>huni-o</td>
<td>—</td>
</tr>
<tr>
<td>*deñeR</td>
<td>ronge-o</td>
<td>rongot-o</td>
</tr>
<tr>
<td>*baba</td>
<td>wawa-o</td>
<td>wawe-o</td>
</tr>
<tr>
<td>*ala</td>
<td>ala-o</td>
<td>ale-o</td>
</tr>
<tr>
<td>*Nasu</td>
<td>nahu-o</td>
<td>nahu-o</td>
</tr>
<tr>
<td>*pa-patey</td>
<td>pepate-o</td>
<td>pepate-o</td>
</tr>
<tr>
<td>*kena</td>
<td>kona-o</td>
<td>kono-o</td>
</tr>
<tr>
<td>*pa-waRi</td>
<td>puai-o</td>
<td>puei-o</td>
</tr>
<tr>
<td>*tunu</td>
<td>—</td>
<td>sunu-o</td>
</tr>
<tr>
<td>*buni</td>
<td>—</td>
<td>buni-o</td>
</tr>
<tr>
<td>*kita</td>
<td>—</td>
<td>kite-o</td>
</tr>
</tbody>
</table>
Included in this class is a large group of stems consisting of a root plus the transitivizing suffix -i. The following are chosen as exemplary:

<table>
<thead>
<tr>
<th>PMP</th>
<th>KUL</th>
<th>PAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tabtab</td>
<td>*totapi-0</td>
<td>—</td>
</tr>
<tr>
<td>*tutup</td>
<td>*tutuwi-0</td>
<td>—</td>
</tr>
<tr>
<td>*taqu</td>
<td>*to’ori-o</td>
<td>*to’ori-o</td>
</tr>
<tr>
<td>*kulit</td>
<td>*kulisi-o</td>
<td>*kulii-o</td>
</tr>
<tr>
<td>*kaRat</td>
<td>—</td>
<td>*karasi-o</td>
</tr>
</tbody>
</table>

‘wash (clothes)’
‘cover, close’
‘know’
‘remove skin’
‘bite’

In Kulisusu this pattern applies even to Malay loans with -i (no data for Padoe):

<table>
<thead>
<tr>
<th>MAL</th>
<th>KUL</th>
<th>PAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>hadir-i</td>
<td>hadiri-o</td>
<td>—</td>
</tr>
<tr>
<td>jaga-i</td>
<td>jagai-o</td>
<td>—</td>
</tr>
</tbody>
</table>

‘attend’
‘guard’

(c) a glottal stop is inserted when the historical source ended in a voiceless stop (evidence lacking for *-t):

<table>
<thead>
<tr>
<th>PMP</th>
<th>KUL</th>
<th>PAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tebek</td>
<td>*tobo-’o</td>
<td>—</td>
</tr>
<tr>
<td>*tumbuk</td>
<td>*cumbu-’o</td>
<td>—</td>
</tr>
<tr>
<td>*susuk</td>
<td>*uhi-’o</td>
<td>—</td>
</tr>
<tr>
<td>*baseq</td>
<td>*baho-’o</td>
<td>—</td>
</tr>
<tr>
<td>*hasaq</td>
<td>*aha-’o</td>
<td>*aha-’o</td>
</tr>
<tr>
<td>*sepsep</td>
<td>*soso-’o</td>
<td>*oso-’o</td>
</tr>
<tr>
<td>*kerik</td>
<td>—</td>
<td>*nggori-’o</td>
</tr>
<tr>
<td>*tuZuk</td>
<td>—</td>
<td>*tiso-’o</td>
</tr>
<tr>
<td>*pa-hasek</td>
<td>—</td>
<td>*paho-’o</td>
</tr>
<tr>
<td>*dakep</td>
<td>—</td>
<td>*rako-’o</td>
</tr>
</tbody>
</table>

‘stab’
‘punch’
‘pierce’
‘bathe’
‘sharpen’
‘suck’
‘carve’
‘point’
‘plant’
‘catch’

(d) Kulisusu has -ho and Padoe has -ngo, when the original stem ended in a nasal:

<table>
<thead>
<tr>
<th>PMP</th>
<th>KUL</th>
<th>PAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*giliŋ</td>
<td>*gili-ho</td>
<td>—</td>
</tr>
<tr>
<td>*banjun</td>
<td>*wangu-ho</td>
<td>—</td>
</tr>
<tr>
<td>PPH</td>
<td>*enterŋ</td>
<td>*onto-ho</td>
</tr>
<tr>
<td>*kaen</td>
<td>*kaa-ho</td>
<td>*kaa-ngo</td>
</tr>
<tr>
<td>*pa’kan</td>
<td>—</td>
<td>*paka-ngo</td>
</tr>
<tr>
<td>*dalem ‘inside’</td>
<td>—</td>
<td>laro-ngo</td>
</tr>
<tr>
<td>*lujan</td>
<td>—</td>
<td>ula-ngo</td>
</tr>
<tr>
<td>*añam</td>
<td>—</td>
<td>ana-ngo</td>
</tr>
</tbody>
</table>

‘grind’
‘build, raise’
‘see’
‘eat’
‘feed’
‘remember’
‘load, transport’
‘weave’

(e) Kulisusu has -o and Padoe has -ho, when the original stem ended in any other consonant (*-b, *-d, *-r, *-l, *-s):
(67) || PMP | KUL | PAD  
---|---|---|---
*lunga(r,R) | longko-'o | — | ‘loosen’ 
*lembal | lemba-'o | — | ‘carry on shoulders’ 
*sayad | hea-'o | ea-ho | ‘slice’ 
*ajkat | engka-'o | engka-ho | ‘lift’ 
PPH *daq/mus | — | ro'u-ho | ‘wash face’

This last pattern of course must be held to very tentatively until more evidence is accumulated for or against it. But to the extent the above analysis is provisionally accepted, we must recognize at least five final consonants in Proto–Bungku-Tolaki, reflecting mergers of PMP final consonants as follows:

<table>
<thead>
<tr>
<th>PMP</th>
<th>&gt;</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-h</td>
<td>&gt;</td>
<td>zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(note PMP *h is not reconstructable in <em>any</em> position)</td>
</tr>
<tr>
<td>*-R</td>
<td>&gt;</td>
<td>*-R</td>
</tr>
<tr>
<td>*-j</td>
<td>&gt;</td>
<td>*-y</td>
</tr>
<tr>
<td>*-p, -t, -k, -q</td>
<td>&gt;</td>
<td>*-Q</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(reflected as a glottal stop thematic consonant in Padoe and Kulisu)</td>
</tr>
<tr>
<td>*-m, -n, -ŋ</td>
<td>&gt;</td>
<td>*-N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(reflected as -h- thematic consonant in Kulisu and as -ng- in Padoe)</td>
</tr>
<tr>
<td>*-b, -d, -r, -l, -s</td>
<td>&gt;</td>
<td>*-D (?)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(reflected as a glottal stop thematic consonant in Kulisu, and as -h- in Padoe)</td>
</tr>
</tbody>
</table>

Table 14. Proto–Bungku-Tolaki contrasts in final position

---

The number of exceptions to all patterns has remained small, especially given the potential for stems to shift stem-class membership and for idiolectal variation (yet to be confirmed). I know of only the following seven exceptions: PAD wala-ngə ‘fence it’, compare PIN *bala(q,h) ‘enclosure’ (if inherited, one would expect **walo-’o or **walo-o); PAD, KUL bali-’o ‘change it’, compare PPH *bali, *baliw (from the former one would expect **bale-’o, from the latter ?**bali-o); KUL pewoo-ho ‘smell it’, compare PMP *beheu ‘odor’ (possibly to avoid a vowel sequence of three o’s); KUL dahu-’o ‘hound it’, compare PMP *asu; KUL palu-’o ‘hammer it’, compare PMP *palu; KUL sepa-’o ‘kick it’, compare PPH *sipa; and KUL cukana-’o ‘ask him/her/it’, compare PMP *kutana.
The reflexes of a single etyonym, *arjkat ‘lift’ suggest that PMP final *-t merged with at least PMP *-d, *-l and *-s (compare the forms of example (67) above). However, this seems improbable from a phonetic perspective and, as I indicate in Table 14, I consider it far more likely that *t would have fallen together with *p and *k. Compare Sneddon (1993) who documents this very merger (under the rubric ‘final consonant reduction’) in other language groups of Sulawesi.49 However, we are about to see that the merger symbolized above as *-Q in all probability represents a post-PBT stage, and that in PBT itself even *-p, *-t, *-k and *-q had remained distinct to at least some degree.

2.3.2 Lowering of *u > *o in Proto–Western Bungku-Tolaki

In a handful of cognate sets, Mori Bawah and other eastern languages have -u where Padoe, Mori Atas and Tolaki have final -o. Based on the forms shown in (68), it appears that not only was PBT *u original, but also that the lowering of *u > *o (in Proto–Western Bungku-Tolaki) was conditioned by a following *-q. Although the conditioning environment (final *q) has subsequently been lost, the present-day -u ~ -o vowel correspondence provides additional support for an hypothesis that PMP *-q must have survived into PBT. In other words, if final *q had been lost prior to PBT, then there would be no way to account for the regular u ~ o correspondence observed in these forms.

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(68) *puluq</td>
<td>'ten' *puluq</td>
</tr>
<tr>
<td>*huluq</td>
<td>'torch' *huluq</td>
</tr>
<tr>
<td>*buluq</td>
<td>'bamboo sp.' *wuluq</td>
</tr>
</tbody>
</table>

| MRN, KUL, WAW, BNG, MRB: pulu; PAD, MRA, TOL: pulo. |
| MRN, WAW, BNG: wulu; PAD, TOL, KOD: wulo. |

49In that PMP stems reconstructed with final *-p, *-t, and *-k (also *-q) fell together as Class 2 noun stems in Moronene (§ 4.1d), there does appear to be some internal basis for assuming this to be true in Bungku-Tolaki languages as well.
*hunq ‘beads’ *enuq


*tu(q)tuq ‘prune’ *tutuq-i


Reflexes of the first four in particular are widespread, and the distribution of u and o forms could hardly be due to chance. Four apparent exceptions—where both eastern and western languages reflect PMP *-uq as -u—are known to me, but are probably to be explained by other factors. In Bungku-Tolaki melabu ‘dock, drop anchor’, labua ‘port’ etc. (ultimately from PMP *Nabuq ‘fall, drop throw’), the semantic shift plus *N > l almost certainly indicates borrowing from Malay. Bungku-Tolaki mokus ‘embrace’ (compare PMP *kepuq ‘enclose, encircle’) if assigned instead to the PMP doublet *kepuq, no longer constitutes an exception. PBT *lipu ‘village, homeland’ irregularly reflects Proto-Indonesian *lipuq ‘village’ (Mills 1981:69)—but so do South Sulawesi languages, which have lipu for expected **lipo; either borrowing is indicated, or else the etymon itself should be reconstructed as *lipu. Finally, a number of Bungku-Tolaki languages have tumbo or a similar form for ‘bud, sprout’ (from PMP *tu(m)buq ‘grow, increase’), which constitutes a true exception but one which perhaps should also be attributed to borrowing (from Malay tumbo).

The lowering of *u > o is significant for another reason: not only does it provide additional evidence for the retention of PMP *-q, but it also allows us to gauge the extent to which other final consonants may have merged with *-q by the time this sound change occurred. If any mergers had taken place—a likely scenario is for *-q along with other voiceless stops to have reduced to /-ʔ/ (see Sneddon 1993)—then we ought to see the same lowering of *u > o with other PMP consonants, namely the ones which had merged with PMP *-q. So far the evidence is meager, consisting of the following:
However, the cases in which PMP *-uk is reflected as -u in all present-day languages are more numerous and better attested, and cannot collectively be explained away by borrowing or other such factors. The PBT forms in (70) thus should be reconstructed with some consonant other than *q:

PMP | PBT
---|---
*tuZuk | *tisuq
*busuk | *wuhuq
*guluk | *guluq

WAR, TOL, RAH, KOD: tanu; others: tandu.
KUL: mo’uhu ‘pierce, enter’; TOL: mo’uhu ‘stab, pierce, prick’, mosusu ‘skewer’.
BNG, MRB: ihu; TOL: ehu.
MRN: pusu ‘mountain’; TOL: wawombusu ‘mound’.
KUL, WAW, BNG, MRB, PAD, TOL: manu ‘chicken’.

The conclusion must be that at the time of the sound change—which clearly post-dates the breakup of PBT—at most only *-k had begun to merge with *-q,\(^{50}\) and if this merger occurred at all, at best it occurred only sporadically.

So, how many contrasts need to be reconstructed in final position? If PMP *-q had not merged with *-p, *-t or *-k, is it possible that these latter could have merged with each other? If such a merger had taken place, one would expect *-p, *-t and *-k to have merged as */-ʔ/. But this would then imply that PBT *-q must have had some other phonetic value.

\(^{50}\)Compare for example, the following PBT and PMP reconstructions (all known present-day witnesses with -u): PBT *ulu ‘head’ (< PMP *ulu); PBT *wulu ‘body hair, feathers’ (< PMP *bulu); PBT *uluq ‘sap, resin’ (< PMP *pulut ‘sticky, glue’); PBT puquN ‘base, trunk’ (< PMP *puquN).
2.3.3 Symbolizing final consonants

Two kinds of evidence for final consonants in Proto-Bungku-Tolaki have been discussed: (a) vowel changes conditioned by then-present final consonants, and (b) the thematic consonants which occur between a verb stem and certain recently captured suffixes. The first shows that PMP *-q had not merged with other phonemes, while the latter suggests that PMP *-q had merged with at least *-p and *-k. This information is not contradictory; rather it suggests that thematic consonants may actually be providing us with information not about PBT but about post-PBT stages of development in which further mergers had occurred. A question still remains as to how many contrasts had been maintained in PBT in final position and how they should be symbolized.

As outlined above, there are solid reasons for considering that PBT maintained *-R, *-y and *-q in final position, and that in addition there was at least one other final consonant with a nasal articulation (representing the merger of PMP *-m, *-n and *-ŋ), and at least one other final consonant with a stop articulation (representing the merger of PMP *-p and *-k, and likely *-t also), which was distinct from *-q. However, since there is next to no evidence that *-m/*-n/*-ŋ or *-p/*-t/*-k contrasted phonemically, then following accepted practice in historical reconstruction, they are not to be symbolized separately. For the former I use small *-N, and for the latter small *-Q.

In addition, PBT retained reflexes of other PMP final consonants, including at least *-b, *-d, *-D, *-r, *-l, *-s, and maybe also *-g, though regarding this last phoneme the data are silent; recall example (59) and the discussion included therewith. On the one hand, it is unlikely from a phonetic perspective that this diverse group of phonemes merged as a single phoneme in PBT. On the other hand, the kind of evidence presently available is either too meager or simply of the wrong kind to allow us to make a determination of how many further consonant contrasts ought to be symbolized. As an
interim measure, I adopt the symbol \( *_{-0} \), which in the context of the present work simply means: point for further investigation.

Finally, it should be noted that the evidence for final consonants comes in varying degrees, from the raising of final \(*a > *o\) in Proto-Western Bungku-Tolaki, which indicates which PMP consonants had reflexes in PMP (but virtually nothing about how many contrasts were maintained), to the lowering of PMP \(*-uq > *o\) in the same protolanguage, which provides us information about the retention of a very specific phoneme (phonemic contrast). But what if we come across a stem which did not have \(*a\) in the final syllable, or end in \(*-uq\), or (from a semantic perspective) cannot be supplied with a third singular object pronoun—in short, a stem for which there is no internal evidence that it had a final consonant? There are a considerable number of stems which fall into this category, and in such cases the reconstruction of final consonants must proceed on a different basis. As Blust has noted about a similar situation in Oceanic languages involving loss of final consonants:

The lexically most conservative Oceanic languages ... have lost original final consonants, but a geographically contiguous chain of languages in western Melanesia which is lexically much less conservative preserves them. It thus not uncommonly happens that a CVCVC form in western Indonesia or the Philippines is cognate with a CVCV form in one or more of the lexically more conservative Oceanic languages, but lacks a known cognate in any of the Oceanic languages which preserve final consonants. Yet in reconstructing the Proto-Oceanic form it is clear that a final consonant must be posited. To do otherwise would imply that final consonants were lost in Proto-Oceanic only in certain morphemes: to wit, in those morphemes which failed to survive in an Oceanic language which preserves final consonants. Such a set of relationships requires a special extension of the Comparative Method which I have called “reconstruction from the top down” (Blust 1972), and which Anttila (1972) had called ‘inverted reconstruction’. Inverted reconstruction, to use Antilla’s more felicitous alternative, raises an interesting issue in general scientific method, as it requires the justification of an inference not primarily by observation, but by reference to the presumed validity of a predetermined principle (in this case the regularity of sound change). (Blust 1990b:140–141).
In the present case, since we know that PMP final consonants were preserved (in some form) following PBT *a, we may—indeed must—presume they were retained following other vowels as well. Furthermore, the PMP contrast between *-q and *-k was retained following *u; can we assume that the contrast was also maintained following other vowels? In the face of silence from the data itself, I do make this claim, reconstructing for example not only PBT *puluq ‘ten’ (< PMP *puluq), but PBT *asaq ‘sharpen’ (< PMP *hasaq) and PBT *basoq ‘bathe’ (< PMP *baseq) as well.

2.4 Lexical innovations

In this section I present several lexical innovations as further evidence for subgrouping the Bungku-Tolaki languages. These innovations include lexical replacements as well as phonological and semantic innovations. As far as I am aware, unless otherwise noted they are not found in any of the surrounding language groups of south, southeast or central Sulawesi. In accordance with accepted practice, I cite innovations drawn only from basic vocabulary, and have excluded items of trade and culture.

These lexical innovations are intended to supplement the evidence from historical sound change, which in any case must be considered the primary evidence by which the Bungku-Tolaki languages are established as a subgroup. The qualitative difference between the two kinds of evidence is easily illustrated by a small amount of data from the Mori area. For example, we could cite the following lexical innovations as ‘establishing’ Mori Bawah, Padoe and Mori Atas as a subgroup within Bungku-Tolaki: (a) *uo ‘breast’, irregular phonological development from PBT *susu, *uhu; (b) *bemu ‘coconut’, semantic shift from *benuQ ‘coconut husk’; (c) *kompo ‘belly’, lexical replacement of PBT *tia ‘belly’ and reflecting a semantic shift of PBT *kompo ‘guts, intestines’; and (d) *morawu ‘blind’, semantic shift of *rawu ‘hazy’. The problem is that this evidence is flatly contradicted by the evidence of shared sound change, by which we know Padoe and Mori
Atas are genetically more closely related to Tolaki than either of them are to Mori Bawah (§ 3.3).

With this caveat in mind, I present the following Proto–Bungku-Tolaki lexical innovations:

*birin ‘ear’, replacing PMP *taliŋa. Compare PIN (Mills 1981:66) *biding ‘side, edge; aslant’, but the semantic development is unique to Bungku-Tolaki.

*bungku ‘back (of body)’, replacing PMP *likuD. Possibly related to PPH *bukut ‘hunched’.

*dahu ‘dog’. Related to PMP *qasu, but *d onset is an innovation which is also found in Muna-Buton languages, compare Proto–Muna (Van den Berg 1991a:48) *dahu ‘dog’.

*ehe ‘want, desire’. Nothofer (1994:400) considers Mentawai (west coast of Sumatra) mu-isi ‘to like’ to be cognate.

*elo ‘tongue’. This form exhibits irregular phonological development of PMP *dilaq especially in the loss of the initial consonant, which is retained in surrounding languages.

*eme ‘urine’, from PMP *kemiq but loss of initial consonant is an innovation.

*enge ‘nose’, from PMP *qiiju, but with irregular vowel developments not found in surrounding languages. Compare Kaili-Pamona languages which have either engo or onge ‘nose’.

*hapa ‘what?’, from PMP *apa, but consonantal onset is an innovation. Compare Blust who considers PCEMP *sapa to be an irregular morphological change, and one piece of evidence for subgrouping the Central-Eastern Malayo-Polynesian languages (Tryon 1995:31). In Sulawesi the Bungku-Tolaki languages are unique in having an h (or s) onset.
*karu° ‘foot’, also meaning ‘paw’ in several (if not all) Bungku-Tolaki languages.

Possibly reflecting a semantic shift of PMP *karut, *kadus ‘scrape’.

*leu° ‘come, arrive’. Compare Balantak (and elsewhere) liu ‘pass by’. If cognate, both

the phonological and semantic developments in Bungku-Tolaki are innovative.

*luwu° ‘all’. Lexical replacement of PMP *abiq ‘all’.

*raqi ‘forehead, face’, from PMP *daqih ‘forehead’. The extension to ‘face’ is found in

both eastern and western Bungku-Tolaki, but not in surrounding languages.

*pua° ‘wind’. Lexical replacement of PMP *hanjin ‘wind’, possibly reflecting PMP

*pua(q)aŋ ‘empty’ via semantic shift.

*tora ‘life; alive’. Lexical replacement of PMP *qudip.

*uso ‘green’, from PMP *hiZaw, but the backing of *i to *u is a sporadic change not

found in surrounding languages.

2.5 Grammatical innovations

Although the old Proto-Austronesian perfective/neutral aspeetual distinction is found

in other language groups of Sulawesi—in Sulawesi linguistics this distinction is often

characterized synchronically as one of realis versus irrealis (Barr 1988a; Martens 1988;
Busenitz 1994; inter alia)—it was lost in Proto-Bungku-Tolaki.

Before discussing two mergers of grammatical morphemes which has occurred in the

Bungku-Tolaki languages, I begin with a brief overview of the PAN focus system. As

reconstructed by Ross (1995), in indicative mood PAN distinguished three foci, actor,

undergoer and location (often a fourth, the instrumental marked by *Si- and/or *Sa-, is

included in this inventory; see Wolff 1973; Dahl 1976; Pawley & Reid 1980; Starosta,
Pawley & Reid 1982) and three aspects, neutral, perfective and durative, here illustrated with the stem *kaRáC ‘bite’ (Ross 1995:739):

<table>
<thead>
<tr>
<th>ACTOR</th>
<th>UNDERGOER</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUTRAL</td>
<td>*k&lt;um&gt;aRáC</td>
<td>*kaRáC-én</td>
</tr>
<tr>
<td>PERFECTIVE</td>
<td>*k&lt;um&gt;&lt;in&gt;aRáC</td>
<td>*k&lt;in&gt;aRáC</td>
</tr>
<tr>
<td>DURATIVE</td>
<td>*k&lt;um&gt;a-kaRáC</td>
<td>*ka-kaRáC-én</td>
</tr>
</tbody>
</table>

Table 15. Proto-Austronesian verbal inflection, following Ross (1995)

The actor, undergoer and locative morphemes served both as verbal pivot markers and as nominalizers. The nominalizing function was likely historically prior, and by a process whereby equative clauses became reinterpreted as verbal clauses (e.g. ‘the man was the builder of canoes’ > ‘the man built canoes’), these affixes developed into focus pivot markers (see also Starosta, Pawley and Reid 1982). These morphemes in their nominalizing function are illustrated by Ross from the present-day Formosan language Paiwan using the verb kan ‘eat’ (1995:752). Bracketing indicates infixation.

PAI (71)

- k[em]an ‘eater’, ‘someone who eats’
- kan-én ‘food’, ‘something to be eaten’
- k[in]an ‘consumed food’, ‘something eaten’
- kan-an ‘place where one eats’
- si-kan ‘eating utensil’, ‘something to eat with’

---

The perfective/neutral distinction is characterized by Wolff (1973) as one of past versus non-past. The durative forms are clearly the same as the neutral forms except with reduplication (in PAN, the consonant copied the initial stem consonant, but the vowel of the reduplicated syllable was always *a). As far as I am aware Bungku-Tolaki languages do not presently know Ca-reduplication; however the durative marker may be reflected in Bungku-Tolaki languages as one-syllable (CV-) reduplication as in the following examples: Tolaki mo‘ea ‘slice’, moe‘ea ‘slice repeatedly’ (S. Youngman 1993:pers.comm.); Mori Bawah kita ‘see’, kikiita ‘look’ (Esser 1927:75); Kulisuha halu ‘seek’, hohalu ‘seek about’, lempe ‘step on’, lelempe ‘step on several times’; Moronene humehe ‘neigh’, huhumehe ‘neigh repeatedly’ (D. Andersen 1995:18).
One characteristic of all Bungku-Tolaki languages (as far as is known), and hence of PBT itself, is the merger of the PMP undergoer and location focus morphemes *-en and *-an as the suffix *-an (in present-day languages, -a). This merger has resulted in a very broad meaning for this suffix—as Esser describes it in Mori Bawah, one which indicates "(speaking in general) the place where the action occurs or on which it is directed, or where the situation or the quality expressed by the root is existing" (1933:363) (my translation). However, it is also true that this suffix at present functions almost exclusively as a nominalizer. The following are examples from Mori Bawah of -a where it functions as a nominalizing suffix which profiles the goal, corresponding to the meaning of PAN *-en ‘something to be X-ed’ (Ross 1995:756). In this meaning -a is not productive (Adriani 1914:234, Esser 1933:370):

MRB (72) a. *tumu-a ‘firewood’ (stem *tumu ‘burn’)  
    b. *kaang-a ‘food stuff, what is intended to be eaten’ (stem *kaar ‘eat’)  
    c. *mama-a ‘ingredients for a betel chew’ (stem *mama ‘chew betel’)

In the following examples, Mori Bawah -a serves as a nominalizer which profiles the location, corresponding to the function of PAN *-an ‘place where one X-s’ (Ross 1995:756). In this function -a remains a productive suffix (Esser 1933:364, 365):

MRB (73) a. *tutu-a ‘pounding plank’ (stem *tutu ‘pound bark cloth’)  
    b. *nahu-a ‘the place (in other words the thing) in which one cooks’  
    c. *poturi-a ‘sleeping place’ (stem *poturi ‘sleep’)  
    d. *pebangka-a ‘place where one sails’ (stem *pebangka ‘go by boat’)  
    e. *raha mate-a ‘death house’ (stem *mate ‘dead’)

As *-en merged with *-an and became reduced to being strictly a nominalizer, its function as a verbal goal pivot marker (neutral aspect) was taken over by *-in- which already served as the perfective goal pivot marker. Thus, although -in- may be used perfectly as in Mori Bawah (Esser 1933:351, 352) *ninaa ‘placed, left behind’ (< *naa ‘put, place’),
wineweu 'made, fixed' (< wewe'u 'make'), such forms are not restricted to a perfective interpretation, for example (Esser 1933:352):^52

MRB (74)  a. rau t(in]unu
   over.there PASS:grill
   'it is grilled over there.'

   b. ta p[in]epate
      3SG.FUT PASS:kill
      'he shall/may/should/must be killed'

   c. ta t[in]ambua
      3SG.FUT PASS:banish
      'he must be banished'

Another important merger is that of infix *<um> 'actor focus (neutral aspect)' with the morphologically complex infix sequence *<um><in> 'actor focus (perfective aspect)' (see Table 15) as the PBT verbal infix *-um-, so that in present-day Bungku-Tolaki languages it is simply not possible for the two morphemes -um- and -in- to co-occur in the same stem. I am not aware of any traces which would allow us to reconstruct the pathway by which *-umin- > *-um-. However compare Reid (1992:82–83) who, discussing a parallel change in pre-Tagalog, describes the process as one of vowel ellipsis (*-umin- > *-umm-) followed by nasal assimilation (> *-umm-) and lastly simplification of the geminate consonant cluster (> *-um-).

Taken together, the two mergers described above resulted in the demise of the PAN perfective/neutral aspectual distinction and the reinterpretation of PAN *<in>—originally the marker of perfective aspect—as strictly a marker of passive voice (when the perfective/neutral aspectual distinction was lost in verbal forms, apparently this distinction

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^52 Compare also the Mori Bawah nominalizations asa-a-ku 'that which is to be sold by me' (< asa 'sell'), ka-a-nga-ku 'that which is to be eaten by me' but also in-asa-ku, k[in]aa-ku in the very same meanings (Esser 1933:370).
was also lost in locative nominalizations. Where Proto-Austonesian had three verbal voices and two aspects, PBT inherited only two verbal voices. Arrows indicate merger.

Stage 1 (PAN):

<table>
<thead>
<tr>
<th>Type</th>
<th>Actor</th>
<th>Undergoer</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral</td>
<td>*k&lt;um&gt;aRâC</td>
<td>*kaRaC-ên</td>
<td>*kaRaC-ân</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfactive</td>
<td>*k&lt;um&gt;&lt;in&gt;aRâC</td>
<td>*k&lt;in&gt;aRâC</td>
<td>*k&lt;in&gt;aRaC-ân</td>
</tr>
</tbody>
</table>

Stage 2 (PBT):

<table>
<thead>
<tr>
<th>Type</th>
<th>Active</th>
<th>Passive</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*k&lt;um&gt;aRaQ</td>
<td>*k&lt;in&gt;aRaQ</td>
<td>(strictly nominal)</td>
</tr>
</tbody>
</table>

Table 16. Summary comparison of PAN and PBT verbal inflection

Another important grammatical innovation is the development of nominative pronouns from what were genitive pronouns in PMP; see further § 7.7.2.
3 From PBT to the Present

The first major split to occur in the post Proto–Bungku-Tolaki (PBT) period was a breakup into eastern and western branches. The former is represented today principally by Moronene, Kulisusu, Wawonii, Bungku and Mori Bawah; the latter by Padoe, Mori Atas, and Tolaki. The reconstruction of a Proto–Bungku-Tolaki etymon requires then, minimally, one witness from the eastern branch and one witness form the western branch, borrowings excluded.

This caveat is easier said than put into practice, and I do not presume to have excised every example of borrowing. One fortuitous factor, however, is that among the daughter languages which arose from PBT, there appears to have been none which gained in prominence and prestige over the others and thus became a primary source of borrowed words within the language group. The most prestigious languages always lay outside: Tolaki, Padoe, Mori Atas and even Mori Bawah borrowed extensively from Bugis (South Sulawesi); Kulisusu and to a lesser extent Moronene from Wolio (Wotu-Wolio group); and of course all languages from Malay (Malayic). In some cases sound changes which occurred in these other groups but not in Bungku-Tolaki, or vice versa, reliably indicate borrowing. To take a very simple example, consider bara ‘west’ found throughout the Bungku-Tolaki area, ultimately from PMP *baRat. However PMP *R > r would be irregular in Bungku-Tolaki, and given the Malay form barat (where *R > r is regular), surely borrowing through this intermediate source is indicated.

I have also avoided choosing cognates from known contact areas unless sound change mitigates against an hypothesis of borrowing. A prime example is the Mori area, where Mori Bawah, Mori Atas and Padoe have probably never really lost contact with one another since the breakup of PBT. The lexical convergence which these languages exhibit
is so great that—even though in terms of sound change Mori Bawah is clearly an ‘eastern’ language and Padoe and Mori Atas are clearly ‘western’—they were together considered a single language by the Dutch (Adriani 1914; J. Kruyt 1924; Esser 1927–1933, 1938) as well as several later researchers following their lead (Salzner 1960; Sneddon 1983; Wumbu, Kadir, et al. 1986; *inter alia*). Given this long period of contact it is unsurprising to find expected Mori Bawah reflexes in Padoe or Mori Atas and vice versa. Another contact area is Tolaki with Bungku, especially with the more southern Bungku dialects, and Tolaki (Mekongga dialect) with Moronene (see Map 3, page 12).

Besides the principal languages given above—five for eastern Bungku-Tolaki and three for western Bungku-Tolaki—there are almost as many ‘minor’ languages: minor in terms of number (mostly with speakers numbering only in the hundreds) but also—of particular relevance for reconstruction—minor in terms of the available data. Data for all of them are limited to lists of 226 words collected under field survey conditions. Although these short lists would probably be inadequate in themselves for reconstructing Proto–Bungku-Tolaki, they do provide a basis for subgrouping with the other more well attested languages. In particular the reader may assume that unless otherwise noted:

<table>
<thead>
<tr>
<th>sound changes discussed for</th>
<th>Mori Bawah, Wawanii and Bungku</th>
<th>likewise apply to</th>
<th>Bahonsuai, Koroni and Taloki</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot; &quot; &quot; &quot;</td>
<td>Mori Atas</td>
<td>&quot; &quot; &quot;</td>
<td>Tomadino</td>
</tr>
<tr>
<td>&quot; &quot; &quot; &quot;</td>
<td>Tolaki</td>
<td>&quot; &quot; &quot;</td>
<td>Waru, Rahambuu and Kodeoha</td>
</tr>
</tbody>
</table>

The major exception known to me is the merger of prenasalized and voiced stops which occurred in Kodeoha but not in Tolaki, Waru or Rahambuu (§ 3.2.5). The danger in

---

53 This merger is also found in the Laiwu dialect of Tolaki, either independently or—more likely—as the result of areal diffusion from Kodeoha; see further Mead (forthcoming).
making such assumptions, of course, is that historical reconstruction proceeds on the basis of Occam’s Razor, namely that ‘no evidence for’ be interpreted as ‘evidence against’. As long as the minor languages fall in line with the major languages in that they provide either the same amount or less evidence for historical reconstruction, then the present analysis will stand. Based as it is on 226 words of evidence, this is hopefully a correct assumption.

3.1 PBT phonology

3.1.1 Segmental phonemes

The following vowel and consonant contrasts are reconstructed for the Proto-Bungku-Tolaki phonological system. Although the prenasalized stops and the velar nasal are written as digraphs, they are considered unit phonemes. Consonant contrasts shown in Table 17 apply only to initial and medial position; a smaller number of contrasts were found in final position (see below).

vowels: \( \text{i} \) \( \text{u} \)  
\( \text{e} \) \( \text{a} \) \( \text{o} \)

consonants: \( \text{mp} \) \( \text{nt} \) \( \text{ngk} \)  
\( \text{mb} \) \( \text{nd} \) \( \text{ngg} \)  
\( \text{ns} \) \( \text{nt} \) \( \text{k} \) \( \text{q} \)  
\( \text{p} \) \( \text{d} \) \( \text{g} \) \( \text{h} \)  
\( \text{w} \) \( \text{s} \) \( \text{ng} \)  
\( \text{m} \) \( \text{n} \) \( \text{R} \)  
\( \text{l} \) \( \text{r} \) \( \text{y} \)

Table 17. PBT reconstructed vowel and consonant phonemic contrasts

Note particularly the absence of palatals, and at most only one approximant *y, though this phoneme may have had a close articulation. (PBT *w is reconstructed as a bilabial
fricative, not an approximant.) PBT *q was likely a glottal stop, at least it is reflected as such in medial position in all Bungku-Tolaki languages. The phonetic character of *R has not been determined; its reflexes are -r-, -h-, -i, -Ø and ᵇ, though this last was always lost, usually after affecting a preceding vowel. Other symbols have their expected phonetic values.

The phoneme *ngg occupies a tenuous position within the protolanguage, as it has been reconstructed in only one lexical item, *kangga ‘spider’, of unknown origin. Although the PBT phoneme *g is rare—I have not yet found good evidence for reconstructing it in medial position—it must be regarded as well-established in initial position, where it continued older *g in morphemes such as PBT *garu ‘stir’ (<PWMP *garu ‘stir, mix’) and PBT *giliN ‘grind’ (< PMP *giliŋ ‘grind’), and where it is still reflected as g in present-day languages.

Finally, a note should be added regarding PBT *d. Certain PMP protophonemes including *d, *z and *j have regularly yielded d in other Austronesian languages. However as noted in Chapter 2, the fate of these protophonemes in PBT were as follows:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*d</td>
<td>*r</td>
</tr>
<tr>
<td>*z</td>
<td>*s</td>
</tr>
<tr>
<td>*j</td>
<td>*y, Ø</td>
</tr>
</tbody>
</table>

Table 18. Reflexes of PMP *d, *z and *j

In effect this means there was no regular genetic source for PBT *d, and in the daughter languages most instances of d must be attributed to borrowing. The question remains, however, were some words with /d/ present even at the stage of Proto–Bungku-Tolaki? It seems that there must have been. In particular daihu ‘dog’ with innovative initial /d/ (compare PMP *asu) is so widespread—it is found in every Bungku-Tolaki language and
dialect except Rahambuu—that its distribution could hardly be accounted for except by postulating PBT *dahu*. Other stems for which it seems safe to reconstruct PBT *d include *podea* ‘hear’, *doa* ‘count’, and *hodu* ‘hiccough’.

Interestingly, one must suppose that in pre-PBT voiced stops were under process of elimination: PMP *b* was being lenited to *w*, PMP *d* rhotacized to *r*, and PMP *z* assibilated to *s*, while *g* itself though unchanged was uncommon. However, if there ever were various processes conspiring toward a single teleological end (the elimination of voiced stops), they failed to achieve it—managing only to eliminate voiced affricates in the palatal region. Perhaps lenition, rhotacism, and assibilation never built up enough ‘critical mass’ to establish a clear direction (Hock 1991:165), though this is hard to imagine given that the latter two applied maximally. It seems more likely to me that there was no conspiracy and these were—and never would have been anything more than—three independent phonological processes. It was remnant (non-lenited) *b*’s and unchanged *g*’s that then must have provided the structural slot in the phonemic system for the reintroduction of *d*.

### 3.1.2 Syllable patterns and stress

The syllable patterns reconstructed for Proto-Bungku-Tolaki are V(C) and CV(C), with a coda possible only in word-final position—in other words no consonant clusters were possible word-medially. The origin of this pattern is clear, namely it was via the reduction of PMP consonant clusters (...VC.CV...) by one of two processes. If the cluster was a nasal plus following stop, the nasal assimilated to the following stop and eventually became treated as a partial geminate (prenasalized stop), e.g. PMP *paŋ.pañ ‘(river) bank’ > *paŋ.pañ > *pa.mpañ. It seems likely other consonant clusters proceeded through a stage of complete gemination followed by reduction of the geminate cluster, e.g. PMP *tuktuk ‘knock’ > *tuttuk > *tut:uk/*tu:tuk > *tutuk. For further examples, see § 2.1.1.
I assume that in Proto-Bungku-Tolaki stress fell on the penultimate syllable, there being no reason to reconstruct otherwise. All present-day Bungku-Tolaki languages also exhibit penultimate stress.

3.1.3 Distribution of phonemes

Within the morpheme, all vowels occurred in initial position:

(75) *ate ‘liver’ *ota° ‘chaff’
     *elo° ‘tongue’ *ula° ‘rope’
     *ikaN ‘fish’

All vowels occurred in medial position:

(76) *paqa ‘thigh’ *koloro° ‘rope’
     *tete ‘foot bridge’ *wuwui ‘sow, drop seeds’
     *ngisi ‘tooth’

All vowels occurred in final position:

(77) *toka ‘guest’ *rano ‘lake’
     *ase ‘chin’ *ulu ‘head’
     *uni ‘sound’

Neither *y, *R nor prenasalized stops\(^{54}\) have been reconstructed in morpheme initial position, and neither did glottal stop contrast with null and has therefore not been written (see however footnote 29, page 47). Examples of other consonants in initial position are:

(78) *pae ‘field rice’ *wulaN ‘moon’
     *tahiQ ‘sea, ocean’ *saa ‘python’
     *kasi° ‘tongs’ *hapa ‘what’
     *biriN ‘ear, edge’ *mata ‘eye’
     *dahu° ‘dog’ *nahu ‘cook’
     *garu ‘stir’ *ngisi ‘tooth’
     *rongaN ‘with’ *lako ‘go’

---

\(^{54}\)Two exceptions are known to me: *mbui ‘back’—but apparently even in PBT this form occurred only in the collocation *ri mbui ‘in back’—and *nduu-nduu ‘crashing, booming sound’.
All consonants except possibly *g occurred in medial position:

(79) *kompisi° 'cheek' *kambaN 'swelling'
     *lonto 'float' *rindiN 'wall'
     *runku° 'scrawny' *kangga° 'spider'
     *ipi 'dream' *tinsu° 'awaken (someone)'
     *ota° 'chaff' *uwi 'tuber'
     *ikuR 'tail' *usaoN 'rain'
     *rabuQ 'pull out' *ihi 'contents'
     *hodu 'hiccough' *lemo 'citrus'
     *kuronN 'cookpot' *ane 'termite'
     *alu 'pestle' *langu 'drunk'
     *waRa 'embers' *layu 'withered'
     *puqun 'base'

Even though all present-day Bungku-Tolaki languages are open syllable languages, we can reconstruct at least *-q, *-y, and *-R in final position. The evidence for these three phonemes is seen primarily in the effect they had on a preceding vowel before being lost, though the latter two also have an -i reflex in Padoe and Mori Atas.

(80) *huluq 'torch' *huloy 'top' (toy)
     *puluoq 'ten' *ikuR 'tail'
     *puhoy 'navel' *rongoR 'hear'

Furthermore we know that PBT maintained reflexes of other PMP consonants in final position, but our current understanding—summarized in § 2.3.3—leaves open the question as to exactly how many contrasts were maintained finally. It seems that we must recognize at the very least two other contrasts in final position. PBT *-N represents a merger of PMP *-m, *-n and *-ŋ, while PBT *-q represents a probable merger of PMP *-p, and *-k, and probably also *-t.

PMP

| *-m, -n, -ŋ | > | *-N |
| *-p, -t(?), -k | > | *-Q |

In addition, Proto–Bungku-Tolaki maintained reflexes of yet other PMP final consonants including *-b, *-d, *-D, *-r, *-l and *-s. However, since the present amount of available
evidence does not allow us to specify how many additional contrasts these phonemes might represent, in this case I use *-ö to indicate that further research is needed. I also use *-ö in situations where both internal and external evidence is silent about reconstructing a final consonant, i.e. present evidence is compatible with either a final consonant having been present or not. Note, however, that where none of the symbols *-R, *-y, *-q, *-Q, *-N or *-ö are employed, then the PBT form is to be regarded as vowel final.

\[
\begin{array}{llll}
\text{*kaaN} & \text{‘eat’} & \text{*opuö} & \text{‘use up’} \\
\text{*suquN} & \text{‘carry on head’} & \text{*lapiö} & \text{‘layer’} \\
\text{*rakoQ} & \text{‘catch’} & \text{*mate} & \text{‘die, dead’} \\
\text{*uhuQ} & \text{‘pierce’} & \text{*kita} & \text{‘see’}
\end{array}
\]

3.1.4 Morphophonemic processes

Only one morphophonemic process is reconstructed for PBT, that of nasal accretion. The potential for nasal accretion is symbolized by *N, although in the protolanguage as a productive process nasal accretion was overtly realized only as prenasalization of a following *p, *t, *k or *s. The morphophoneme *N is reconstructed in the coda position of various verbal prefixes, including the plural subject marker *meN- and the antipassive marker *poN- (participle form *moN-); an element having the shape *-N- apparently also occurred as a ligature in compound constructions. For example, we might suppose that the following occurred as antipassive participle forms in the protolanguage:

\[
\begin{align*}
PBT & (83) \quad \text{a. } *\text{moN-puai} & \rightarrow & *\text{mompuai} \quad \text{‘dry in sun’} \\
& \text{b. } *\text{moN-tiaö} & \rightarrow & *\text{montiaö} \quad \text{‘divide’} \\
& \text{c. } *\text{moN-kaaN} & \rightarrow & *\text{mongkaaN} \quad \text{‘eat’} \\
& \text{d. } *\text{moN-sowiö} & \rightarrow & *\text{monsowiö} \quad \text{‘harvest’}
\end{align*}
\]

With other consonants nasal accretion had no effect, and even with vowel initial morphemes, nasal accretion had no ‘nasal’ realization (a phonetic glottal stop probably was inserted). Consider for example the following Mori Bawah forms, which illustrates
these patterns with present-day language data. First, with initial \( p \), \( t \) and \( k \) and \( s \) (Mori Bawah data from Tapehe 1984):\(^55\)

**MRB (84)**  
\begin{align*}
  a. \text{moN-paho} & \rightarrow \text{mompaho} \quad \text{‘plant’} \\
  b. \text{moN-puai} & \rightarrow \text{mompuai} \quad \text{‘dry in sun’} \\
  c. \text{moN-tunu} & \rightarrow \text{montunu} \quad \text{‘roast, grill’} \\
  d. \text{moN-tia} & \rightarrow \text{montia} \quad \text{‘divide’} \\
  e. \text{moN-keke} & \rightarrow \text{mongkeke} \quad \text{‘dig’} \\
  f. \text{moN-kaa} & \rightarrow \text{mongkaa} \quad \text{‘eat’} \\
  g. \text{moN-saru} & \rightarrow \text{monsaru} \quad \text{‘borrow’} \\
  h. \text{moN-saira} & \rightarrow \text{monsaira} \quad \text{‘sickle’}
\end{align*}

With other initial consonants, however, \( N \) elides without observable effect:

\begin{align*}
  i. \text{moN-basa} & \rightarrow \text{mobasa} \quad \text{‘read’} \\
  j. \text{moN-dagai} & \rightarrow \text{modagai} \quad \text{‘guard’} \\
  k. \text{moN-gonti} & \rightarrow \text{mogonti} \quad \text{‘cut with scissors’} \\
  l. \text{moN-maru} & \rightarrow \text{momaru} \quad \text{‘climb’} \\
  m. \text{moN-nahu} & \rightarrow \text{monahu} \quad \text{‘cook, boil’} \\
  n. \text{moN-wawa} & \rightarrow \text{mowawa} \quad \text{‘carry’} \\
  o. \text{moN-hola} & \rightarrow \text{mohola} \quad \text{‘mix’} \\
  p. \text{moN-rako} & \rightarrow \text{morako} \quad \text{‘capture, catch’} \\
  q. \text{moN-lulu} & \rightarrow \text{molulu} \quad \text{‘chase’}
\end{align*}

When the stem begins with a vowel, a phonetic glottal stop is inserted between the prefix and the stem (but no nasal phoneme or nasal feature appears in this position):

\begin{align*}
  r. \text{moN-aha} & \rightarrow \text{mo’aha} \quad \text{‘whet’} \\
  s. \text{moN-ena} & \rightarrow \text{mo’ena} \quad \text{‘weave’} \\
  t. \text{moN-inu} & \rightarrow \text{mo’imu} \quad \text{‘drink’} \\
  u. \text{moN-oli} & \rightarrow \text{mo’oli} \quad \text{‘buy’} \\
  v. \text{moN-ula} & \rightarrow \text{mo’ula} \quad \text{‘load’}
\end{align*}

This basic pattern is found repeated again and again throughout Bungku-Tolaki languages, with slightly different manifestations depending on historical sound change.

\(^{55}\)Tapehe also lists a handful of exceptions to this pattern (1984:38–39); in every case the second consonant of the stem is a voiceless prenasalized stop, e.g. \( \text{moN-pingo} \rightarrow \text{mopingko} \) ‘to finish off’; \( \text{moN-tampele} \rightarrow \text{motampele} \) ‘to hit, smack’; \( \text{moN-kungku} \rightarrow \text{mokungku} \) ‘to clench’; \( \text{moN-songka} \rightarrow \text{mosongka} \) ‘to arrange’. At present I am not able to comment on how widely this pattern may be found among Bungku-Tolaki languages. However this pattern does not occur in Moronene (D. Andersen 1998:pers.comm.), Kulisusu or the Konawe dialect of Tolaki (S. Youngman 1998:pers.comm.).
For example in Kulisu where PBT *t, *nt became c, nc before high vowels (§ 3.2.7),
this morphophonemic process naturally has a prenasalizing effect on c as well as p, t, k and
s, compare for example Kulisu moncia ‘give’ (from monN-cia < *moN-tia°), moncumu
‘roast, grill’ (from monN-cumu < *moN-tunu).

In Tolaki where *ns merged with *s, and the other voiceless stops merged with their
voiced counterparts (see respectively §§ 3.2.6 and 3.2.5), the effect of nasal accretion on a
following p, t, k or s has changed correspondingly (with other consonants and vowel-initial
stems the pattern has remained the same as in Mori Bawah; see Mead & Tambunan
1993:16 ff.):

TOL  (85)  a. monN-paho  →  mombaho  ‘plant’
b. monN-puai  →  mombuai  ‘dry in sun’
c. monN-tumu  →  mondumu  ‘roast, grill’
d. monN-tia  →  mondia  ‘divide’
e. monN-keke  →  monggeke  ‘dig’
f. monN-kaa  →  monggaa  ‘eat’
g. monN-saru  →  mosaru  ‘borrow’
h. monN-saira  →  mosaira  ‘sickle’

In Kodeoha where voiced prenasalized stops further merged with voiced oral stops
(§ 3.2.5), N is realized only as voicing of a following p, t, or k. In Kodeoha, then, there is
no nasality or nasalization whatsoever associated with ‘nasal accretion’, only the change in
voicing:

KOD  (86)  a. monN-pepe  →  mobepate  ‘kill’
b. monN-puai  →  mobuai  ‘dry in sun’
c. monN-tumu  →  modumu  ‘roast, grill’
d. monN-tuha  →  moduha  ‘drop’
e. monN-kara  →  mogara  ‘bite’
f. monN-kaa  →  mogaa  ‘eat’

As a productive process, then, nasal accretion has an overt realization—as phonetic
prenasalization—only on consonants which reflect PBT *p, *t, *k or *s. However, there
are two kinds of evidence which suggest that nasal accretion may have had a wider scope
in the prehistory of the Bungku-Tolaki languages: first, prenasalization of consonants
other than those which reflect \*p, \*t, \*k or \*s; second, the appearance of a velar nasal
onset in forms which at an earlier stage were vowel initial (i.e. a morpheme boundary
\*\*\*+V\*\*\* became reinterpreted as \*\*\*+\eta V\*\*\*).

Some examples of the first kind of evidence are to be found in the Nuha dialect of
Mori Bawah. For example in the standard dialect we find transitive verb base \textit{weweu} ‘do,
make’, antipassive participle \textit{moweweu}, but in Nuha the corresponding forms are \textit{weweu}
and \textit{mombeweu}, likewise in this dialect \textit{rongo} ‘carry on the back’, antipassive participle
\textit{moundongo} (Esser 1927:7). Compare also Bungku which has \textit{ana wula} ‘stars’ (a
compound which translates literally child-of-moon), but in some dialects \textit{ana mbula}.
However, apart from the possible exception of Nuha—which still requires further
investigation—I know of no languages where this kind of prenasalization exists as a
productive process.\textsuperscript{56}

There are two cases known to me where one finds an intrusive velar nasal in forms
which at an earlier stage were vowel initial, namely in PBT \*\textit{mongura}, reflexes of which
are found across Bungku-Tolaki (compare PMP \*\textit{uda}), and in \textit{ngapi} ‘lime’ found in at
least Moronene, Bungku and Mori Bawah (compare PMP \*\textit{qapu}R ‘lime’, \*\textit{apu}R ‘betel
chew’).

The PBT prefix \*\textit{m}o\textit{N}- illustrated above in examples (84) through (86) derives from
PMP \*\textit{ma}N-, and it has generally been taken that the nasal coda of this protomorpheme
was a ‘morphophoneme of substitution’ of a following voiceless stop or spirant (Wolff

\textsuperscript{56}In the case of PBT \*\textit{oru}a ‘two’, \*\textit{pendu}a ‘twice’ (compare PMP \*\textit{du}ha ‘two’) prenasalization of \*\textit{d} is to
be assigned to the protolanguage. In another case, where Tolaki has \textit{meriri} ‘bathe oneself’, but in certain
of the Mori languages one finds \textit{mandiu} (compare PMP \*\textit{d}i\textit{Ru}q ‘bathe’), the Mori form \textit{mandiu} is almost
certainly a borrowing from Pamona. Not only does the limited distribution of \textit{mandiu} argue for this, but
also the fact that while \textit{maN-pa}N- is a productive prefix in Pamona—compare Pamona \textit{nu}R\textit{i}u ‘you bathe
(s.o.), na-R\textit{iu} ‘he bathes (s.o.)’, transitive participle \textit{ma}R\textit{iu}, etc. (Adrian 1928:638)—it serves as a fixed
element in the Mori form, i.e. these same languages have antipassive participle form \textit{mom-pandiu} ‘bathe
someone’.
Nasal substitution is widely found in languages of the Philippines and Western Indonesia, for example in present-day Indonesian.\(^{57}\)

<table>
<thead>
<tr>
<th>BI</th>
<th>PMP</th>
<th>MRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>(87)</td>
<td>meN-pahat</td>
<td>memahat ‘chisel’</td>
</tr>
<tr>
<td></td>
<td>meN-tanem</td>
<td>menanem ‘plant’</td>
</tr>
<tr>
<td></td>
<td>meN-kenai</td>
<td>mengenai ‘hit, touch, concern’</td>
</tr>
</tbody>
</table>

Esser (1927:22) in fact collected a number of Mori Bawah forms which exhibited, in his opinion, and older pattern of nasal substitution. Some of his examples, contrasted here with reconstructed etyма, included:

<table>
<thead>
<tr>
<th>PMP</th>
<th>MRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>*palihi</td>
<td>*momali ‘keep a prohibition; mourn’</td>
</tr>
<tr>
<td>*pe(g)ka</td>
<td>*momeka ‘to angle’, compare peka ‘fishhook’</td>
</tr>
<tr>
<td>PPH *pawed</td>
<td>*momau ‘sew roofing thatch’</td>
</tr>
<tr>
<td>*takaw</td>
<td>*monako ‘steal’</td>
</tr>
<tr>
<td>*kajaw</td>
<td>*mongae ‘headhunt’</td>
</tr>
<tr>
<td>*zalzal</td>
<td>*monasa ‘fetch sago leaves for roofing thatch’</td>
</tr>
</tbody>
</table>

An interesting fact about the Mori verbs of example (88), is that they are all intransitive forms (Esser 1927:22), a feature which—though perhaps easily overlooked—has parallels in other languages of Sulawesi. For example, it is a general feature of Pamona (Kaili-Pamona group) that nasal substitution occurs only with intransitive verbs, never with stems used transitively, compare for example mamongo ‘chew betel’ (intr.), mampongō ‘chew betel’ (trans.), both from the stem pongo. Likewise in Konjo (South-Sulawesi) the so-called transitive indefinite object prefix ang- results in the nasalization of a following p, t, k or s, but the transitive definite object prefix ang- does not, compare respectively angnganre ‘eat’ (indefinite object), versus angkanre-i ‘eat it’ (definite object), both from the stem kanre (Friberg & Friberg 1991:84–88; Friberg 1996). Because cases of nasal

\(^{57}\)Compare the Mori Bawah cognates to these forms, which run respectively momp' o ‘chisel’, mentano ‘bury’, and mongkona ‘hit, reach’.

\(^{58}\)The derivation of ka'e < PMP *kajaw shows a number of phonetic irregularities. Esser himself suggested mongae 'e < *ka'e < *kabe ‘take close to oneself’, related to ‘headhunt’ through an intermediate meaning of ‘harvest’ (1927:22).
substitution are comparatively rare in Bungku-Tolaki languages—the pattern of nasal substitution is no longer productive—there are few such contrasts to be gleaned in these languages. However, Mori Bawah does have at least monasa ‘fetch sago leaves’ (intr.) and monasa ‘hack something’ (antipassive) (Esser 1927:22). In these languages, then, we find a difference in form (nasal substitution versus nasal assimilation) consistently associated with a difference in meaning, namely shift along a pragmatic scale of transitivity. Upon further investigation it may be possible to document this same correlation in other parts of Austronesia as well.

<table>
<thead>
<tr>
<th>nasal substitution:</th>
<th>nasal assimilation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pamona maN- (intr.)</td>
<td>Pamona maN- (trans.)</td>
</tr>
<tr>
<td>Mori Bawah moN- (intr.)</td>
<td>Mori Bawah moN- (antipassive)</td>
</tr>
<tr>
<td>Konjo ang- (indefinite object)</td>
<td>Konjo ang- (definite object)</td>
</tr>
</tbody>
</table>

Table 19. Correlation of nasal substitution and nasal assimilation with pragmatic transitivity

Allomorphs of the passive marker *-in- are discussed in § 5.2; allomorphs of the active participle marker *-um- are discussed in § 7.2.

### 3.2 Diachronic changes

In this section, I lay out the sound changes which have occurred since the breakup of Proto–Bungku-Tolaki. Some changes are limited to a single language; other changes have been shared by several languages. The implications which this has for subgrouping within Bungku-Tolaki is taken up in the conclusion to this chapter.

#### 3.2.1 Lowering of *u in Padoe, Mori Atas and Tolaki

The lowering of *u > *o preceding final *-q was previously discussed in regard to the reconstruction of word-final consonants (§ 2.3.2). It is mentioned here again because it is one of the shared innovations by which Padoe, Mori Atas and Tolaki are subgrouped. I
repeat a portion of the data, in order to emphasize that all three languages share in this change:

\[
\begin{array}{cccccc}
\text{PBT} & \text{MRB, BNG etc.} & \text{PAD} & \text{MRA} & \text{TOL} \\
\hline
(89) *huluq & \text{hulu} & \text{hulo} & \text{hulo} & \text{hulo} & \text{torch, lamp'} \\
*puluq & \text{pulu} & \text{pulo} & \text{pulo} & \text{pulo} & \text{ten'} \\
*enuq & \text{enu-emu} & \text{eno-eno} & \text{eno-eno} & \text{beads, necklace'} \\
*buluq & \text{wulu} & \text{wulo} & \text{wulo} & \text{bamboo'} \\
\end{array}
\]

3.2.2 Raising of final *a to o in Padoe, Mori Atas and Tolaki

As with the lowering of *-uq > o, the raising of word-final *-a > o was also discussed in regard to the reconstruction of word-final consonants (§ 2.3). Example (90) repeats a portion of those data, showing that Padoe, Mori Atas and Tolaki all share in this change:

\[
\begin{array}{cccccc}
\text{PBT} & \text{MRB, BNG etc.} & \text{PAD} & \text{MRA} & \text{TOL} \\
\hline
(90) *oruua & \text{oruua} & \text{oruo} & \text{oruo} & \text{oruo} & \text{two'} \\
*olima & \text{olima} & \text{olimo} & \text{olimo} & \text{olimo} & \text{five'} \\
*mongura & \text{mongura} & \text{monguro} & \text{monguro} & \text{monguro} & \text{young'} \\
*ohia & \text{ohia} & \text{ohio} & \text{ohio} & \text{ohio} & \text{salt'} \\
*o-pia & \text{opia} & \text{popio} & \text{popio} & \text{opio} & \text{how many'} \\
\end{array}
\]

3.2.3 Raising of *a to e in Padoe and Mori Atas

PBT *a raised to e in Padoe and Mori Atas when the preceding syllable contained a high vowel, either *i or *u. Data from Bungku and Tolaki are given by way of comparison:

\[
\begin{array}{cccccc}
\text{PBT} & \text{BNG} & \text{PAD} & \text{MRA} & \text{TOL} \\
\hline
(91) *wulaN & \text{wula} & \text{wule} & \text{wule} & \text{wula} & \text{moon'} \\
*usaN & \text{usa} & \text{use} & \text{use} & \text{usa} & \text{rain'} \\
*puai & \text{puai} & \text{puei} & \text{puei} & \text{puai} & \text{dry in sun'} \\
*te-ipiaN & \text{te'impia} & \text{te'epie} & \text{te'epie} & \text{te'ipia} & \text{when’} (future) \\
*iniaB & \text{inia} & \text{inie} & \text{inie} & \text{inie} & \text{place, village'} \\
\end{array}
\]

In forms such as PBT *oruua ‘two’, *olima ‘five’ and *ngura ‘young’, the phonological conditions for the raising of *a > e and for the raising of *-a > o (§ 3.2.2) are both met. The fact that Padoe and Mori Atas have for example oruo, olimo and monguro, and not
**orue, **olime, **mongure, etc., is strong evidence that raising of final *-a > o must have preceded raising of *a > e.

Consider also the following two cases which exhibit raising of *a > e, even though the conditioning environment (a preceding high vowel) appears to be absent:

\[
\begin{array}{cccccc}
\text{PBT} & \text{BNG} & \text{PAD} & \text{MRA} & \text{TOL} \\
(92) & *\text{anu} & \text{anu} & \text{henu} & \text{henu} & \text{hanu} & \text{‘whatsit’} \\
& *\text{lako} & \text{lako} & \text{leko} & \text{leko} & \text{lako} & \text{‘go’}
\end{array}
\]

In both cases, however, the presence of e can be accounted for by analogy with more complex forms in which *a > e was regular. In the first instance, Padoe and Mori Bawah also have i henu ‘whats-his-name’ < PWBT *i hanu < PBT *hi anu (< PMP *si anu), and in the second case lumeke < PBT *i[um]ako. i henu and lumeke are, of course, the respective analogical sources for henu and leko.

In three items, raising of *a > e is found regularly in Padoe and Mori Atas, but in addition is also observed in eastern Bungku-Tolaki languages. At present, the raising of *a > e in these other languages is unaccounted for, though possibly it was effected by a final consonant which is no longer present.

\[
\begin{array}{cccccc}
\text{PBT} & \text{MRB, BNG, etc.} & \text{PAD} & \text{MRA} & \text{TOL} \\
(93) & *\text{pua}^o & \text{pue} & \text{pue} & \text{-} & \text{pua} & \text{‘whatsit’} \\
& *\text{lua}^o & \text{molue} & \text{molue} & \text{molue} & \text{molua} & \text{‘broad, wide’} \\
& *\text{holua}^o & \text{holue} & \text{-} & \text{holue} & \text{holua} & \text{‘ladle’}
\end{array}
\]

3.2.4 *i and *u crossover

In at least five cases, eastern Bungku–Tolaki languages have i in the penultimate syllable where western Bungku–Tolaki languages exhibit u. In two cases PBT *u is clearly to be reconstructed, because the change of *u > i was conditioned by a following *R:

\[
\begin{array}{cccccc}
\text{PBT} & \text{MRB, BNG, etc.} & \text{PAD, MRA} & \text{TOL} \\
(94) & *\text{uRaQ} & \text{ia} & \text{ure} & \text{uha} & \text{‘whatsit’} \\
& *\text{tuRaN-i} & \text{tiangi} & \text{-} & \text{tuhani} & \text{‘add, increase’}
\end{array}
\]
In four other cases, however, I leave it ambiguous as to which segment is to be reconstructed for PBT.

<table>
<thead>
<tr>
<th>PBT</th>
<th>BNG, MRB, etc.</th>
<th>PAD, MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(t,i,u)sa°</td>
<td>*tisa</td>
<td>*suse</td>
<td>*tusa</td>
</tr>
<tr>
<td>*(i,u)saQ</td>
<td>*isa</td>
<td>*use</td>
<td>*usa</td>
</tr>
<tr>
<td>*(w,i,u)taq</td>
<td>*wita</td>
<td>*wute</td>
<td>*wuta</td>
</tr>
</tbody>
</table>

The forms for ‘earth’—*wite, *wute and *wuta—raise an intriguing question: given that the corresponding PMP etymon has been reconstructed as *buRtaq, should an *R also be reconstructed in the PBT form, i.e. *wuRtaq ‘earth’? For now, I argue against this reconstruction, since it appears at any rate that alternative explanations are to be sought for the same vowel correspondences found in the forms for ‘post’ and ‘pound’. If the reconstruction *wuRtaq were to be adopted, the sequence *-Rt- in this form would constitute (at present) our only example of a reconstructed consonant cluster.

A crossover between *i and *u is also to be noted in antepenultimate position. Here the most common occurrence has been for *i > u in Mori Atas and Padoe. The change was precipitated either by a contiguous bilabial consonant or by the presence of *u in the following syllable.

<table>
<thead>
<tr>
<th>PBT</th>
<th>BNG</th>
<th>MRB</th>
<th>PAD</th>
<th>MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(i)pa</em></td>
<td>*ipali</td>
<td>*ipali</td>
<td>*peli</td>
<td>*upeli</td>
<td>*ipeli</td>
</tr>
<tr>
<td>*ikuR</td>
<td>*iki</td>
<td>*iki</td>
<td>*iki</td>
<td>*ukui\textsuperscript{59}</td>
<td>*iku</td>
</tr>
<tr>
<td>*bali</td>
<td>*bali</td>
<td>*iwali</td>
<td>*uweli</td>
<td>*uweli</td>
<td>*bali</td>
</tr>
</tbody>
</table>

Although this change appears to be regular in Padoe and Mori Atas, the shift of *i to u (and from there sometimes further to o) in antepenultimate position is not unusual as a sporadic change in other Bungku-Tolaki languages. Compare for example Moronene me-rumbui ‘be/go in back’ and Tolaki rombui ‘last, in back’, both from PBT (stem) *ri + *mbui ‘at + back’ (versus Kulisusu me-rimbui ‘be/go in back’ retains original *i).

\textsuperscript{59}Mori Atas ukui ‘tail’ was given by Adriani (1900:293), but now usually pronounced as okui.
3.2.5 Prenasalized stops

In five cases noted to date, original *nd became n in Tolaki:

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRB, BNG etc.</th>
<th>PAD</th>
<th>MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tandumQ</td>
<td>tandu</td>
<td>tandu</td>
<td>tandu</td>
<td>tanu</td>
</tr>
<tr>
<td>*tondo^o</td>
<td>tondo</td>
<td>—</td>
<td>—</td>
<td>tonaha</td>
</tr>
<tr>
<td>*tanda^o</td>
<td>tanda</td>
<td>tanda</td>
<td>—</td>
<td>tana</td>
</tr>
<tr>
<td>*ondalon</td>
<td>ondalo</td>
<td>onalo</td>
<td>onalo</td>
<td>olono (&lt; met.)</td>
</tr>
<tr>
<td>*rindin</td>
<td>rindi</td>
<td>—</td>
<td>rini</td>
<td>rini</td>
</tr>
</tbody>
</table>

Three interesting observations may be made about this change: (a) in two cases Padoe and Mori Atas follow Tolaki (onalo < *ondalon and rini < *rindin); (b) it effected only forms with original PBT *nd, and never forms with *nd < PBT *nt (see below), and (c) the merger with n was partial—in fact a larger number of examples where *nd remained nd can be cited—but no conditioning environment for the change is apparent. Compare for example these forms:

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRB, BNG etc.</th>
<th>PAD</th>
<th>MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tonto^o</td>
<td>tondo</td>
<td>tondo</td>
<td>—</td>
<td>tondo</td>
</tr>
<tr>
<td>*tundo^o</td>
<td>tondo</td>
<td>toondo</td>
<td>—</td>
<td>toondo</td>
</tr>
<tr>
<td>*onda^o</td>
<td>onda</td>
<td>—</td>
<td>—</td>
<td>onda</td>
</tr>
<tr>
<td>*kundo^N</td>
<td>kundo</td>
<td>—</td>
<td>—</td>
<td>kundo</td>
</tr>
</tbody>
</table>

Where PBT contrasted voiceless and voiced prenasalized stops, the former completely merged with the latter in the language ancestral to Waru, Tolaki, Rahambuu and Kodeoaha. This situation is still reflected in the first three languages, but in Kodeoaha, prenasalized stops further merged with corresponding voiced stops:

<table>
<thead>
<tr>
<th>PBT</th>
<th>other BT</th>
<th>WAR, RAH</th>
<th>TOL</th>
<th>KOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ampa^o</td>
<td>ampa</td>
<td>—</td>
<td>amb</td>
<td>—</td>
</tr>
<tr>
<td>*kumbi^o</td>
<td>kumbi</td>
<td>—</td>
<td>kumbi</td>
<td>—</td>
</tr>
<tr>
<td>*punti</td>
<td>punti</td>
<td>pundi</td>
<td>pundi</td>
<td>pudi</td>
</tr>
<tr>
<td>*lintaq</td>
<td>linta</td>
<td>—</td>
<td>linda</td>
<td>—</td>
</tr>
<tr>
<td>*kundo^N</td>
<td>kundo</td>
<td>—</td>
<td>kundo</td>
<td>—</td>
</tr>
<tr>
<td>*bangkaq</td>
<td>bangka</td>
<td>bangga</td>
<td>bangga</td>
<td>—</td>
</tr>
<tr>
<td>*i(n)kita</td>
<td>ingkita</td>
<td>inggito</td>
<td>inggito</td>
<td>igito</td>
</tr>
<tr>
<td>*kangga^o</td>
<td>kangga</td>
<td>—</td>
<td>kangga</td>
<td>—</td>
</tr>
</tbody>
</table>
This change also affected voiceless prenasalized stops which were the result of morphophonemic processes (§ 3.1.4):

<table>
<thead>
<tr>
<th>PBT</th>
<th>other BT</th>
<th>WAR, RAH</th>
<th>TOL</th>
<th>KOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*moN-podea°</td>
<td>mompodea</td>
<td>mombodea</td>
<td>mombodea</td>
<td>mobodea</td>
</tr>
<tr>
<td>*moN-tunu</td>
<td>montunu</td>
<td>monduu</td>
<td>monduu</td>
<td>modumu</td>
</tr>
<tr>
<td>*meN-tia°</td>
<td>mentia</td>
<td>mendia</td>
<td>mendia</td>
<td>media</td>
</tr>
<tr>
<td>*meN-taa°</td>
<td>mentaa</td>
<td>mendaa</td>
<td>mendaa</td>
<td>medaa</td>
</tr>
<tr>
<td>*moN-kaan</td>
<td>mongkaa</td>
<td>monggaa</td>
<td>monggaa</td>
<td>mogaa</td>
</tr>
<tr>
<td>*kuliq-N-kayu</td>
<td>kulingkeu</td>
<td>kulinggasu</td>
<td>kulinggasu</td>
<td>kuligasu</td>
</tr>
</tbody>
</table>

One may also suppose that a similar merger of voiceless and voiced stops is now proceeding in Padoe and Mori Atas—or at least had been in process at one time. However, whereas the change in Tolaki affected all voiceless prenasalized stops, the change as far as it has proceeded in Padoe and Mori Atas has affected only certain lexical items, e.g. here the change exhibits lexical diffusion. The most common occurrence has been for *ngk > ngg, which represents not so much of a merger as a spread into unoccupied phonological space (PBT *ngg being rare as a reconstructed phoneme). In Table 20, I list thirteen lexical items along with how the prenasalized velar is pronounced; the notation “ngk/ngg” indicates that a pronunciation [ŋk] was found in some isolects but [ŋg] in other isolects of that language.\(^\text{60}\)

Voicing of presanализed stops other than *ngk has occurred but is rare; the only case known to where mb occurs for expected mp is Mori Atas tomba ~ tompa, Padoe tomba ‘extremity, border’ (compare Mori Bawah, Bungku, etc. tompa ‘extremity, tip’). In two cases nd is found instead of expected nt: Mori Atas mondasu ‘sharp’ (compare Padoe, Mori Bawah montasu, from PMP *tasZem), and Mori Atas lumondi, Padoe limondi ‘black ant species’ (compare Mori Bawah limonti, ultimately from PMP *kali-mentik).

---

\(^{60}\)A dialect geography for this change has not been worked out in detail, and in fact data are limited in regard to the words for ‘drum’, ‘already’, ‘each’ and ‘twine’.
| hengke ‘cough’     | ngk/ngg | ngg   | ngg   |
| mokoningko ‘hungry’| ngk/ngg | ngk/ngg | ngk/ngg |
| mongkuni ‘yellow’  | ngk     | ngk/ngg | ngk/ngg |
| mongkita ‘see’     | ngk     | ngg   | ngk/ngg |
| mongkaa ‘eat’      | ngk     | ngg   | ngg   |
| tongkimo ‘star’    | ngk     | ngg   | ngk   |
| singkala ‘drum’    | ngk     | ngg   | ngg   |
| pingko ‘already’   | ngk     | ngg   | ngg   |
| ungka ‘each’       | ngk     | —     | ngg   |
| mongkoloro ‘twine’ | ngk     | ngk   | ngg   |
| langkai ‘male’     | ngk     | ngk   | ngk   |
| bangka ‘boat’      | ngk     | ngk   | ngk   |
| bungku ‘back’      | ngk     | ngk   | ngk   |

Table 20. Reflexes indicating sporadic change of *ngk > ngg

In regard to the palatalization of PBT *nt and *ngk in the environment of high vowel vowels, see respectively §§ 3.2.7 and 3.2.8.

3.2.6 Pre nasalized fricative *ns

PBT *ns and *s merged as s in the Rumbia-Poleang dialect of Moronene,\(^{61}\) in most Padoe dialects,\(^{62}\) and—as far as is known—in all dialects of Tolaki.\(^{63}\) As the following examples illustrate, this merger occurred both morpheme internally and at morpheme

\(^{61}\)Compare the forms tinsu ‘awaken (s.o.)’ and asansowu ‘one thousand’ (< asa-N-sowu) taken from the Tokotu’a dialect of Moronene, which indicate that *ns was preserved here.

\(^{62}\)Only the western dialect is excluded; see Karhunen (1991:183).

\(^{63}\)The small amount of available evidence suggests that this same merger also occurred in Waru, Rahambuu and Kodeoha. Compare for example Mori Bawah asasowu and Mori Atas asasowu (< PBT *asa-N-sowu ‘one thousand’) versus Moronene asasowu and Padoe, Waru, Tolaki, Rahambuu and Kodeoha asasowu.
boundaries where /ns/ was the result of morphophonemic processes. Data from Mori
Bawah and Bungku are given by way of comparison.

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRB, BNG</th>
<th>MRN</th>
<th>PAD</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*winso°</td>
<td>winso</td>
<td>wiso</td>
<td>—</td>
<td>wiso</td>
</tr>
<tr>
<td>*tinsu°</td>
<td>tinsu</td>
<td>tisu</td>
<td>—</td>
<td>tisu</td>
</tr>
<tr>
<td>*kansai°</td>
<td>kansai</td>
<td>kasai</td>
<td>—</td>
<td>kasai</td>
</tr>
<tr>
<td>*moN-saru°</td>
<td>monsarur</td>
<td>mosaru</td>
<td>mosaru</td>
<td>mosaru</td>
</tr>
<tr>
<td>*moN-soyu</td>
<td>monseu</td>
<td>moseneuni</td>
<td>mosou</td>
<td>mosaeu</td>
</tr>
<tr>
<td>*moN-sile°</td>
<td>monsile</td>
<td>mosile</td>
<td>—</td>
<td>mosile</td>
</tr>
<tr>
<td>*moN-sakan</td>
<td>monsaka</td>
<td>mosaka</td>
<td>mosaka</td>
<td>mosaka</td>
</tr>
</tbody>
</table>

3.2.7 Palatalization of *t and *nt

In Padeo and Mori Atas, *t became palatalized and eventually merged with s when
followed by high vowel *i or *u. Comparisons with Morone and Tolaki are given by
way of contrast:

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRN</th>
<th>PAD</th>
<th>MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*motuqa</td>
<td>motu’a</td>
<td>mosu’o</td>
<td>mosu’o</td>
<td>motu’o</td>
</tr>
<tr>
<td>*watu</td>
<td>watu</td>
<td>wasu</td>
<td>wasu</td>
<td>watu</td>
</tr>
<tr>
<td>*kutu</td>
<td>kutu</td>
<td>kusu</td>
<td>kusu</td>
<td>kutu</td>
</tr>
</tbody>
</table>

In the same environment *nt > *ns, and in Padeo the resulting fricative was further
denasalized to become simple s:

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRN</th>
<th>PAD</th>
<th>MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*punti</td>
<td>punti</td>
<td>punsi</td>
<td>punsi</td>
<td>punti</td>
</tr>
<tr>
<td>*moN-tunu</td>
<td>montunu</td>
<td>mosunu</td>
<td>monsunu</td>
<td>monsunu</td>
</tr>
</tbody>
</table>

PBT *t also developed palatal allophones in Kulisu and in the Landawe and
Tulambatu dialects of Bungku in this same environment (that is, preceding high vowels).
The changes to PBT *t here and in Padeo/Mori Atas must be regarded as parallel
developments as this distribution fails to correlate with any other measure by which the
Bungku-Tolaki languages are internally subgrouped.
The data for Landawe and Tulambatu are insufficient to determine whether [tʃ] (written c) should be regarded as a separate phoneme, or if it simply remains an allophone of /t/. In Kulisusu however the presence of numerous loans, mainly Indonesian words with c and nc (for example coco ‘suitable’ < Malay cocok, cangkiri ‘cup’ < Malay cangkir) has led to the splitting off of [tʃ] and [ntʃ] as allophones of /t/ and /nt/, to where they are now regarded as a phonemes in their own right. As further evidence of this new-found phonemic status, note that certain alternations in stem form—depending on context—are now in the process of being regularized by analogy.

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRN</th>
<th>KUL</th>
<th>LAN/TUL</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*moN-tunu</td>
<td>montumu</td>
<td>moncumu</td>
<td>moncumu</td>
<td>montumu</td>
</tr>
<tr>
<td>*tina</td>
<td>tina</td>
<td>cina</td>
<td>cina</td>
<td>tina</td>
</tr>
<tr>
<td>*watu</td>
<td>watu</td>
<td>wacu</td>
<td>wacu</td>
<td>watu</td>
</tr>
<tr>
<td>*kutu</td>
<td>kutu</td>
<td>kucu</td>
<td>kucu</td>
<td>kutu</td>
</tr>
<tr>
<td>*punti</td>
<td>punti</td>
<td>punci</td>
<td>punci</td>
<td>punti</td>
</tr>
</tbody>
</table>

The data for Landawe and Tulambatu are insufficient to determine whether [tʃ] (written c) should be regarded as a separate phoneme, or if it simply remains an allophone of /t/. In Kulisusu however the presence of numerous loans, mainly Indonesian words with c and nc (for example coco ‘suitable’ < Malay cocok, cangkiri ‘cup’ < Malay cangkir) has led to the splitting off of [tʃ] and [ntʃ] as allophones of /t/ and /nt/, to where they are now regarded as a phonemes in their own right. As further evidence of this new-found phonemic status, note that certain alternations in stem form—depending on context—are now in the process of being regularized by analogy.

<table>
<thead>
<tr>
<th>Stage 0:</th>
<th>*toqori ('to know')</th>
<th>*tumoqori (participle form)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1:</td>
<td>[tʃ]umo?ori</td>
<td>[tʃ]umo?ori</td>
</tr>
<tr>
<td>Stage 2:</td>
<td>/tʃumo?ori</td>
<td>/tʃumo?ori</td>
</tr>
<tr>
<td>Stage 3:</td>
<td>/tʃumo?ori</td>
<td>/tʃumo?ori</td>
</tr>
</tbody>
</table>

Table 21. Development of *t in Kulisusu

In the first stage [t] and [tʃ] are in allophonic variation. In the second stage articulation remains unchanged but the [t] – [tʃ] difference becomes phonemicized via ‘reassignment’ of the [tʃ] allophone to /tʃ/ found in loan words. Stage two is in fact the pronunciation maintained by many older Kulisusu speakers. At stage three, the now recognized variation in stem form is leveled by analogy, at the expense that the regularity of the original
allophonic rule is broken. Thus the younger generation usually say [tumo?ori], not [tʃumɔ?ori] as do their elders.64

3.2.8 Palatalization of velars and l in Moronene

Where other Bungku-Tolaki languages have a velar stop, in Moronene this sound has a palatalized articulation following high front vowel /i/. Data from Kulisu and Tolaki are given by way of comparison:

<table>
<thead>
<tr>
<th></th>
<th>KUL</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ikan</td>
<td>ika</td>
<td>‘fish’</td>
</tr>
<tr>
<td>ikuR</td>
<td>iku</td>
<td>‘tail’</td>
</tr>
<tr>
<td>hiku</td>
<td>hiku</td>
<td>‘elbow’</td>
</tr>
<tr>
<td>moiko</td>
<td>moiko</td>
<td>‘good’</td>
</tr>
<tr>
<td>singkolodo</td>
<td>singgolodo</td>
<td>‘space behind knee’</td>
</tr>
<tr>
<td>lingaa</td>
<td>lingaa</td>
<td>‘bright (day)’</td>
</tr>
<tr>
<td>*tampil-an</td>
<td>tambila</td>
<td>‘sheath’</td>
</tr>
</tbody>
</table>

David Andersen (1995:39 ff.), who is the source of the above Moronene data, has described this palatalization process in detail, noting that it affects not only inherited velars and /l/, but also these same sounds in loan words (e.g. Moronene tarigu [taridʒu] ‘flour’, compare Malay terigu). Palatalization also operates progressively across morpheme boundaries, for example kuli-N-keu [kulintʃeu] ‘tree bark’, hai garega [haidʒarega] ‘at church’. He concludes that palatalization is an allophonic process. However, certain forms present difficulties for a synchronic analysis, in particular forms in which the conditioning environment has been (or is being) lost, namely:

- [tʃo’o] ~ [iʃo’o] 2SG < iko’o
- [tʃomiu] ~ [iʃomiu] 2PL < ikomiu
- [tʃita] ~ [iʃita] 1PLN < ikita
- [tʃami] ~ [iʃami] 1PLX < ikami
- [tʃina?ai] ‘in the past’ < i kira’ai

---

64 One young adult speaker explained the pronunciation of an old Kulisu man to me this way: “He only knows ta, te, ci, to, cu.”
The difficulty for synchronic analysis, of course, is that what we find here is a classic case of secondary split in progress; once the conditioning environment is lost, a new phonemic contrast between /k/ and /tʃ/ will have emerged. This developing phonemic contrast is also being aided by the presence of palatals in loan words such as corita ‘story’ (< Malay cerita), cengke ‘cloves’ (< Malay cengke) and rancana ‘plan’ (< Malay rancana) (D. Andersen 1995:26).

3.2.9 Reflexes of *R

In medial position, PBT *R is reflected as h in Tolaki, r in Padoe and Mori Atas, and presumably became *y in eastern languages. This *y was subsequently lost, but its former presence is still seen in the fronting of a preceding vowel.

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRB, BNG, etc.</th>
<th>PAD, MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(106)</td>
<td>*uRaQ</td>
<td>ia</td>
<td>ure</td>
</tr>
<tr>
<td></td>
<td>*tuRaN</td>
<td>tiangi</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>*soRami</td>
<td>seami</td>
<td>sorami</td>
</tr>
<tr>
<td></td>
<td>*woRa°</td>
<td>wea</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>*waRa°</td>
<td>wea</td>
<td>waro</td>
</tr>
<tr>
<td></td>
<td>*kaRa°</td>
<td>kea</td>
<td>karasi</td>
</tr>
<tr>
<td></td>
<td>*raRa°</td>
<td>rea</td>
<td>—</td>
</tr>
</tbody>
</table>

In final position, *R was lost except in Padoe and Mori Atas, where it is still sometimes reflected as -i. As in medial position, *R caused a preceding vowel to be fronted in eastern languages:

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRB, BNG, etc.</th>
<th>PAD, MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(107)</td>
<td>*ikuR</td>
<td>iki</td>
<td>ukui</td>
</tr>
<tr>
<td></td>
<td>*itoluR</td>
<td>toli</td>
<td>su’ului (&lt; met.)</td>
</tr>
<tr>
<td></td>
<td>*hawuR</td>
<td>hawi</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>*rongoR</td>
<td>range</td>
<td>rongoi</td>
</tr>
</tbody>
</table>

In three cases the Padoe or Mori Atas cognate appears to reflect influence from Mori Bawah:
3.2.10 Reflexes of 

PBT *y has been reconstructed in medial position only preceding *u. Its reflexes are a fronted preceding vowel in eastern languages, either a fronted preceding vowel or (sporadically) s in Tolaki, and a non-fronted preceding vowel in Padoe and Mori Atas (note upeu ‘gall bladder’ is an exception, possibly due to influence from Mori Bawah):

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRB, BNG, etc.</th>
<th>PAD, MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*soyun</td>
<td>monseu</td>
<td>mosou</td>
<td>moseu</td>
</tr>
<tr>
<td>*kayu</td>
<td>keu</td>
<td>kau</td>
<td>kasu</td>
</tr>
<tr>
<td>*layu</td>
<td>moleu</td>
<td>molau</td>
<td>moleu</td>
</tr>
<tr>
<td>*opoyu</td>
<td>upeu</td>
<td>upeu</td>
<td>oposu</td>
</tr>
</tbody>
</table>

In final position, *y is reflected as a fronted preceding vowel everywhere except Padoe and Mori Atas where, like *-R, it has the reflex -i.

<table>
<thead>
<tr>
<th>PBT</th>
<th>MRB, BNG, etc.</th>
<th>PAD, MRA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*apuy</td>
<td>api</td>
<td>apui</td>
<td>api</td>
</tr>
<tr>
<td>*puhoy</td>
<td>puhe</td>
<td>puhei</td>
<td>puhe</td>
</tr>
<tr>
<td>*laloy</td>
<td>lale</td>
<td>laloi</td>
<td>lale</td>
</tr>
<tr>
<td>*huloy</td>
<td>hule</td>
<td>huloi</td>
<td>hule</td>
</tr>
<tr>
<td>*holay</td>
<td>hole</td>
<td>holai</td>
<td>hole</td>
</tr>
</tbody>
</table>

3.2.11 Vowel lengthening

Vowel lengthening is a secondary development, observed sporadically throughout the Bungku-Tolaki area. The form which undergoes lengthening is—in all cases known to me—a two syllable word, and almost always either an intransitive or stative verb, or an adverbiaal. The result of lengthening is a three syllable word, as in for example Kulisusu daa-ho /exist-3sg/ ‘there is, there are’ from earlier da-ho. The original disyllabic form is still found in the language, but in contexts where it receives further affixation, e.g. da-ho-mo ‘there is/are already’, da-ho-po ‘there is/are still’. The motivation for vowel
lengthening appears to be articulatory movement toward a canonical shape for verbs which consists minimally of three syllables.\textsuperscript{65} The usual evidence that vowel lengthening has occurred is to find long and short allomorphs of the same morpheme—for example Kulisusu \textit{daa} \textasciitilde \textit{da}—\textit{in} the appropriate contexts. In Moronene the cognate forms run \textit{da-ho-mo}, \textit{da-ho-po} and \textit{da-hoo}, that is Moronene speakers chose to lengthen the final syllable. In most cases, however, lengthening is \textit{of} the penultimate syllable.

Further instances of lengthening are given below in (111). These examples are all taken from Padoe, where this process appears to have been particularly prevalent. The first column gives the word as it is articulated in isolation, or (apparently) as it would occur in sentence context as a word \textit{by itself}; the second column gives the same stem in a context where the two-syllable form still occurs. Karhunen (1991), who describes this allomorphy for Padoe, analyzes it synchronically as a process of vowel shortening. However, comparative evidence argues that—at least historically—the phonetically longer forms are the more recent formations. Note that lengthening is found even in loan words, for example \textit{gaagi} in (111d), from Bugis \textit{jaji}; compare Tolaki which has invariant \textit{dadi} \textit{in} all contexts. Data are from Karhunen (1991:192–193) and Lara, Larobu, et al. (1991:s.v.).

\textbf{PAD} (111)
\begin{itemize}
\item a. \textit{tuw} \textit{wu} ‘life; live’ \hspace{1cm} \textit{mompotuw} \textit{wu} ‘take care of, bring up’
\item b. \textit{maa} \textit{ta} ‘die’ \hspace{1cm} \textit{maa} \textit{te} ‘death’
\item c. \textit{buwe} ‘full’ \hspace{1cm} \textit{buko} ‘already full’
\item d. \textit{gaag} \textit{i} ‘thus; become’ \hspace{1cm} \textit{mompokag} \textit{ag} ‘make, create’
\item e. \textit{toon} \textit{du} ‘drown’ (intr.) \hspace{1cm} \textit{mompokot} \textit{on} \textit{du} ‘drown’ (trans.)
\item f. \textit{loonto} ‘float’ \hspace{1cm} \textit{melonto-lonto} ‘float’
\item f. \textit{aam} \textit{bo} ‘not yet’ \hspace{1cm} \textit{ambo lalau} ‘there is not yet’
\item g. \textit{paa} \textit{ni} ‘wing’ \hspace{1cm} \textit{pan} \textit{i} ‘its wing’, \textit{me} \textit{paa} \textit{ni} ‘be winged’
\end{itemize}

\textsuperscript{65}It appears that with nouns there is no canonical three syllable target and hence with nominals no movement toward a trisyllabic articulation. Some exceptions to this generalization are to be found in Padoe, however, compare example (111g) in the main text.
3.3 Subgrouping within Bungku-Tolaki

Certain of the above phonological developments are shared by more than one language and may be viewed as reflecting a period of common development. My proposed subgrouping for the Bungku-Tolaki languages is as follows, based primarily on these shared sound changes. I first present the overall subgrouping, then summarize the shared innovations which establish branches (a) through (e).

![Figure 4. Subgrouping within Bungku-Tolaki](image)

Of particular note in this tree model is that the former Mori subgroup (Mead forthcoming)—indeed, what some considered to be the 'Mori language'—has been cleaved in two. Mori Atas, Tomadino and Padoe constitute half of the western branch of Bungku-Tolaki, while Mori Bawah (and the closely related Bahonsuai) fall together with Bungku and other eastern languages.
The shared innovations which establish the subgroups shown in Figure 4 are respectively:

(a) (Western): raising of PBT final \(*-a > o\); lowering of \(*u > o\) preceding final \(*-q\).

(b) (Eastern): merger of PBT \(*R > \emptyset\), with fronting of the preceding vowel. Eastern languages also exhibit the parallel change \(*y > \emptyset\) with fronting of the preceding vowel, but so do Waru, Tolaki, Rahambuu and Kodeoza.

(c) (West Coast): PBT \(*R > h\); merger of voiced and voiceless prenasalized stops. These languages apparently are also characterized by \(*ns > s\), but since this change is also known to occur in other Bungku-Tolaki languages it constitutes a weak subgrouping argument.

(d) (Interior): PBT \(*t > s\) preceding high vowels \(*i\) and \(*u\); \(*R\) in medial position \(-r-\); \(*-R\) and \(*-y\) in final position \(-i\) (without fronting of a preceding vowel).

(e) (East Coast): innovation of a new set of free pronouns based on the pattern \(*o+\text{GEN.PRN}+de\). This innovation is discussed in the following chapter; see § 4.5.

In addition it is possible to cite various lexical replacements which further support the western and west coast subgroups. All western languages reflect the replacement of PBT \(*\text{lima} \text{ ‘hand’ by } kae\), and a corresponding reshaping of PBT \(*\text{karu} \text{ ‘foot’ to become } kare\). Western languages are also characterized by loss of the old completive marker \(*-mo\) (where in most of its functions it has been replaced by \(-lo\), and by the metathesis of \(*h\) in PBT \(*\text{hi-ira} \text{ ‘3PL’ > } *\text{hiro} \text{ and } *\text{hi anu ‘whats-his-name’ > } *\text{i hanu}\). West Coast languages are further characterized by the replacement of PBT \(*\text{rumbia ‘sago palm’ with } tawaro\), PBT \(*\text{kita ‘see’ with } kii\), PBT \(*\text{ngean ‘name’ with } tamo\), and PBT \(*\text{hi ‘meat’ with } ramo\) (but \(ihi\) retained in the sense of ‘contents, filling, flesh of fruit’).

I know of far fewer lexical innovations which characterize eastern languages, but one may cite at least the metathesis found in two of the free numerals, namely PBT \(*\text{o-opa ‘four’ > } *\text{opaa and PBT } *\text{o-ono ‘six’ > } *\text{onoo}\). This development, however, is also found
in neighboring Muna-Buton languages. Although Van den Berg (1991b:22) considers the change in those languages to reflect a more general process of phonological reshaping of VCV to CVV, in eastern Bungku-Tolaki it is limited strictly to these two lexemes, where it appears to have been effected by contamination from the other numerals.

As can be seen, the Western, West Coast and Interior branches of Bungku-Tolaki are much better established than any of the Eastern branches. The identification of an East Coast subgroup, in fact, rests not on any sound change but rather in the lexical innovation of a new set of free pronouns. One possible explanation of this qualitative difference is the initial migration which resulted in an east-west split was a westward migration from the coast around Tomori Bay, into the interior, while languages along the eastern coast, representing the ‘stay-at-homes’, developed more along the lines of a dialect chain. At any rate, one must suspect the original Bungku-Tolaki homeland to have been in the area of Tomori Bay, because it is here that we find the greatest amount of dialectal variation.

Finally, it should be noted that two Mori Bawah dialects, Watu and Karunsi’e, exhibit a West Coast linguistic substratum. This substratum is evident, for example, in the fact that one can still find relic forms in Watu and Karunsi’e which exhibit raising of final *-a > o, for example aaso ‘one’, oruo ‘two’, mo’alo ‘take’ and mowowo ‘bring’ (Esser 1927:7) (in standard Mori Bawah these forms run respectively aasa, orua, mo’ala and mowawa), and also in the fact that Watu speakers also use kii ‘see’ (above, kii was given as a lexical innovation characterizing the West Coast branch). Among the Mori Bawah, the Watu and Karunsi’e were also excluded from what were considered the ‘princely’ or ‘noble’ tribes (Esser 1927:3–6), a fact which also suggests their outside origin. We must suppose that their ancestors were once Tolaki (pre-Tolaki) speakers who by volition or force found their way to the Mori Bawah area.

Perhaps the clearest demonstration of a West Coast substratum in these dialects, however, is to be found in the form of pronouns, where on several points we find the
Watu and Karuni’e dialects patterning with Tolaki, and differently than their Mori Bawah neighbors. It is to the pronouns that I now turn.
4 Pronouns

Four sets of pronouns are reconstructed for Proto–Bungku-Tolaki. Although I designate these pronoun sets with functional labels—respectively the genitive, nominative, absolutive and free sets—this chapter is concerned almost exclusively with form. For a justification of these labels and examples of these pronouns used in context, see especially Chapter 7. In addition to the set of free pronouns which is attributable to PBT, I also discuss a second set of free pronouns which apparently developed in the eastern branch of Bungku-Tolaki, and which in time and in certain of the daughter languages completely supplanted the original free pronouns.

It is also true that in most daughter languages the PBT preposition *ako has been in the process of fusing with a following absolutive pronoun, in many cases yielding yet another set of pronouns, usually labeled ‘benefactive’, ‘dative’ or ‘indirect object’ in synchronic descriptions. Indirect object pronouns, however, are not attributable to PBT, and are more appropriately treated in Chapter 6, which is devoted to *ako.

For the following discussion I have had to draw again and again on certain sources for knowledge about pronouns in particular languages. Unless otherwise noted, sources of present-day forms are as follows: Moronene (S. Andersen 1995a), Wawonii (Manyambeang, Mahmoe, et al. 1982/1983), Bungku (Adriani 1900; Saro, Rahim, et al. 1982), Mori Bawah (Esser 1927; Barsel 1994), Padoe (Esser 1927; Vuorinen 1995), and Mori Atas (Esser 1927). Kulisu and Tolaki pronoun sets are from my own field notes.

The greatest amount of dialectal variation in the pronouns is found in Mori Bawah, and thus when presenting the data I must resort to giving more than one ‘Mori Bawah’ pronoun set. The Tinompo dialect may be regarded as ‘standard’ Mori Bawah. This dialect was promoted by the Dutch missionaries (Karhunen & Vuorinen 1991:42–43); it is
also the dialect to which Esser (1927–1933) gave particular attention and Barsel (1994) sole attention. Furthermore, it is in the pronouns where the Watu and Karunsi’ê dialects of Mori Bawah most strongly exhibit a Tolaki substratum; it should be of no surprise, then, that where these two dialects differ from standard Mori, it is nearly always in the direction of resembling Tolaki. See also § 6.1 regarding the similarity of Watu, Karunsi’ê and Tolaki indirect object pronouns.

4.1 Genitive pronouns

The genitive pronoun suffixes which I attribute to PBT are given in Table 22. Present-day forms which constitute the basis for this reconstruction are given in Table 23. A discussion follows.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>*-ngku, -ku</td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>*-mu, -u</td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td>*-no</td>
<td></td>
</tr>
<tr>
<td>1PLX</td>
<td>*-mami</td>
<td></td>
</tr>
<tr>
<td>1PLN</td>
<td>*-nto, -to</td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td>*-miu</td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td>*-ndo, -ro</td>
<td></td>
</tr>
</tbody>
</table>

Table 22. PBT genitive pronouns
<table>
<thead>
<tr>
<th>Moronene</th>
<th>Kulisu</th>
<th>Bungku</th>
<th>Mori Bawah</th>
<th>(Tinompo, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ngku, -ku</td>
<td>-ngku</td>
<td>-ngku, -ku</td>
<td>-ku</td>
<td>1SG</td>
</tr>
<tr>
<td>-u, -'u</td>
<td>-u</td>
<td>-mu</td>
<td>-mu</td>
<td>2SG</td>
</tr>
<tr>
<td>-no</td>
<td>-no</td>
<td>-no</td>
<td>-no</td>
<td>3SG</td>
</tr>
<tr>
<td>-mami</td>
<td>-mai</td>
<td>-mami</td>
<td>-mami</td>
<td>1PLX</td>
</tr>
<tr>
<td>-nto, -to</td>
<td>-nto</td>
<td>-nto</td>
<td>-to</td>
<td>1PLN</td>
</tr>
<tr>
<td>-miu</td>
<td>-miu</td>
<td>-miu</td>
<td>-miu</td>
<td>2PL</td>
</tr>
<tr>
<td>-ndo, -do</td>
<td>-ndo</td>
<td>-ndo</td>
<td>-ndo</td>
<td>3PL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mori Bawah</th>
<th>Padoe</th>
<th>Mori Atas</th>
<th>Tolaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ku</td>
<td>-ku</td>
<td>-nggu</td>
<td>-nggu</td>
</tr>
<tr>
<td>-mu</td>
<td>-mu</td>
<td>-mu</td>
<td>-mu</td>
</tr>
<tr>
<td>-no</td>
<td>-no</td>
<td>-no</td>
<td>-no</td>
</tr>
<tr>
<td>-mami</td>
<td>-mami</td>
<td>-mami</td>
<td>-mami</td>
</tr>
<tr>
<td>-to</td>
<td>-to</td>
<td>-ndo</td>
<td>-ndo</td>
</tr>
<tr>
<td>-miu</td>
<td>-miu</td>
<td>-miu</td>
<td>-miu</td>
</tr>
<tr>
<td>-ro</td>
<td>-ro</td>
<td>-ro</td>
<td>-ro</td>
</tr>
</tbody>
</table>

Table 23. Present-day Bungku-Tolaki genitive pronouns

(a) The second person singular genitive pronoun suffix -u is known only in Moronene and Kulisu, but the -mu/-u distinction was inherited from PMP and thus must have been present in PBT. Presumably *-mu was a polite form of *-u (Blust 1977:11), but all present-day Bungku-Tolaki languages for which data are available have retained only one or the other, with -mu being the favored form.

(b) The first person plural exclusive variant -mai—presumably a shortened form of the more common -mami—is likewise restricted, being found only in Kulisu, and dialectally in Mori Bawah; however this may reflect a lack of data. Compare the parallel but more widespread variation between kai and kami found in the absolutive and free pronouns (and the discussion included thereunder, §§ 4.3c and 4.5b). I consider -mai, wherever it occurs, to be a post-PBT development.
(c) Kulisu is in the process of losing the first person inclusive/exclusive distinction paradigmatically in all pronoun sets, e.g. -mai is now a generalized first person plural form. The former first person plural inclusive form -nito has been vestigially retained, but is now used only in a collective sense, for example wita-nito ‘our land’ (in the sense of, say, all that territory which the Kulisu occupy); ana-nito ‘our children’ (in the sense of the children of all the Kulisu collectively).

(d) On the basis of present-day alternations, Dyen (1974) reconstructed postvocalic and postconsonantal forms of genitive pronouns in three persons and numbers: first person singular *ku (postconsonantal) ~ *ŋku (postvocalic), likewise first person plural exclusive *ta ~ *nta, and third person plural *da ~ nda.66 As Dyen himself explained:

In dealing with the first singular enclitic genitive it seems best to start with the fact that a number of Hesperonesian [= non-Formosan, non-Oceanic] languages exhibit an alternation for this form. The alternation usually depends on whether the enclitic appears after a consonant or a vowel and the difference is in the matter of an initial nasal, suggesting that Proto-Austronesian might have had a similarly conditioned alternation *ku? ~ ŋku?, the first alterant appearing after consonants and the second after vowels. Ngaju regularly shows such an alternation in arut-ku ‘my boat’ beside arut ‘boat’ and in huma-ŋku ‘my house’ beside huma ‘house’. The same alternation appears in Old Javanese… (Dyen 1974:20)

The prima facie evidence that this distinction was maintained in Proto–Bungku–Tolaki comes from Moronene, where—even though final consonants have been lost—there still exist corresponding differences in the forms of pronominal suffixes, which correlate with the presence or absence of a final consonant at an earlier stage. A minimal pair can illustrate this. In Moronene wulu ‘body hair, feathers’ (< PMP *bulu) inflected for first person becomes wulu-ngku ‘my hair’; compare also wulu-nito ‘our (incl.) hair’, wulu-ndo ‘their hair’. On the other hand, possessed forms of wulu ‘kind of bamboo’ (< PMP

66Dyen also suggested, on less certain grounds, similar allomorphs in other persons and numbers, for example second person *Xu? (postconsonantal) ~ *mu? (postvocalic) (1974:29). See also Blust (1977) who reconstructed a difference in all persons and numbers but on a different basis, namely *i + genitive pronoun (postconsonantal) versus *ni + genitive pronoun (postvocalic). The difference between the two authors, however, lacks relevance to the present discussion.
*buluq, that is, with final consonant) run wulu-ku ‘my bamboo’, wulu-to ‘our (incl.) bamboo’ and wulu-do ‘their bamboo’. For the Moronene today, these alternate forms of the possessive suffixes are no longer conditioned (that is, they must be learned), thus we might say the shape of the possessive suffixes now define two stem classes. A particular stem belongs to Class 1 or Class 2 depending on which set of possessive suffixes shown in Table 24 it requires.

<table>
<thead>
<tr>
<th>Class 1</th>
<th>Class 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ngku</td>
<td>-ku</td>
</tr>
<tr>
<td>-u</td>
<td>-'u</td>
</tr>
<tr>
<td>-no</td>
<td>-no</td>
</tr>
<tr>
<td>-mami</td>
<td>-mami</td>
</tr>
<tr>
<td>-ndo</td>
<td>-do</td>
</tr>
<tr>
<td>1SG</td>
<td>2SG</td>
</tr>
<tr>
<td>3SG</td>
<td>1PLX</td>
</tr>
<tr>
<td>1PLN</td>
<td>2PL</td>
</tr>
<tr>
<td>3PL</td>
<td></td>
</tr>
</tbody>
</table>

Table 24. Moronene possessive suffixes, from S. Andersen (1995a:44–45)

As demonstrated by the data in (112) and (113) below, Class I includes stems which at an earlier stage of the language were either vowel final or ended in a nasal, while Class 2 includes stems which ended in some other consonant. The fact that nasal-final stems ended up in Class 1 can be attributed to reanalysis of morpheme boundary, e.g. original *kempun-ku ‘my stomach’ became kompo-yku. The glottal found in the Class 2 second person singular form -'u (compare Class I -u without glottal) presumably represents a remnant articulation of the original final consonant, e.g. *atep-u ‘my roofing thatch’ became ato-‘u, then finally through reanalysis of morpheme boundary, ato-‘u.

---

67The first person forms -ngku and -ku also have the conditioned allomorphs respectively -ncu and -cu following high front vowel i. This allomorphy is the result of regular historical sound change; see §3.2.8.

68In a large sample of basic vocabulary, I know of only two exceptions to this otherwise regular pattern, namely onitu ‘spirit’ which belongs to Class 2 even though the corresponding PMP etymon (*qanitu) is vowel-final, and elo ‘tongue’ which is a Class 1 stem, even though the supposed corresponding PMP etymon (*dilaq) is consonant final.
begin with examples of Class 1 stems (that is, stems taking \(-ngku, -u\), etc.), shown here with their PMP reflex. Data regarding stem class membership are from D. Andersen (1998:pers.comm.).

<table>
<thead>
<tr>
<th>MRN (112)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. anu</td>
<td>‘whatsit’</td>
<td>*anu</td>
</tr>
<tr>
<td>b. apu</td>
<td>‘lord’</td>
<td>*apu</td>
</tr>
<tr>
<td>c. ase</td>
<td>‘chin’</td>
<td>*azey</td>
</tr>
<tr>
<td>d. ate</td>
<td>‘liver’</td>
<td>*qatey</td>
</tr>
<tr>
<td>e. hiku</td>
<td>‘elbow’</td>
<td>*siku</td>
</tr>
<tr>
<td>f. ithi</td>
<td>‘flesh’</td>
<td>*isi</td>
</tr>
<tr>
<td>g. ika</td>
<td>‘fish’</td>
<td>*hikan</td>
</tr>
<tr>
<td>h. kire</td>
<td>‘eyebrow’</td>
<td>*kiday</td>
</tr>
<tr>
<td>i. kuro</td>
<td>‘cookpot’</td>
<td>*kuden</td>
</tr>
<tr>
<td>j. kompo</td>
<td>‘stomach, guts’</td>
<td>*kempunj</td>
</tr>
<tr>
<td>k. kutu</td>
<td>‘louse’</td>
<td>*kutu</td>
</tr>
<tr>
<td>l. lima</td>
<td>‘hand’</td>
<td>*lima</td>
</tr>
<tr>
<td>m. mata</td>
<td>‘eye’</td>
<td>*mata</td>
</tr>
<tr>
<td>n. nganga</td>
<td>‘mouth’</td>
<td>*ŋanja</td>
</tr>
<tr>
<td>o. ngisi</td>
<td>‘tooth’</td>
<td>*ŋisi</td>
</tr>
<tr>
<td>p. pa’a</td>
<td>‘thigh, leg’</td>
<td>*paqa</td>
</tr>
<tr>
<td>q. paku</td>
<td>‘ferns’</td>
<td>*paku</td>
</tr>
<tr>
<td>r. punti</td>
<td>‘banana’</td>
<td>*punti</td>
</tr>
<tr>
<td>s. ra’i</td>
<td>‘face’</td>
<td>*daqih</td>
</tr>
<tr>
<td>t. seu</td>
<td>‘needle’</td>
<td>*ZaRum</td>
</tr>
<tr>
<td>u. ta’i</td>
<td>‘feces’</td>
<td>*taqi</td>
</tr>
<tr>
<td>v. tama</td>
<td>‘father’</td>
<td>*t-ama</td>
</tr>
<tr>
<td>w. tia</td>
<td>‘belly’</td>
<td>*tian</td>
</tr>
<tr>
<td>x. tina</td>
<td>‘mother’</td>
<td>*t-ina</td>
</tr>
<tr>
<td>y. towu</td>
<td>‘sugarcane’</td>
<td>*tebuh</td>
</tr>
<tr>
<td>z. towuni</td>
<td>‘afterbirth’</td>
<td>*tabuni</td>
</tr>
<tr>
<td>aa. tuli</td>
<td>‘ear wax’</td>
<td>*tuli</td>
</tr>
<tr>
<td>bb. tuali</td>
<td>‘younger sibling’</td>
<td>*hua(n)ji</td>
</tr>
<tr>
<td>cc. uma</td>
<td>‘garden’</td>
<td>*quma</td>
</tr>
<tr>
<td>dd. uni</td>
<td>‘sound’</td>
<td>*huni</td>
</tr>
<tr>
<td>ee. wulu</td>
<td>‘body hair’</td>
<td>*bulu</td>
</tr>
<tr>
<td>ff. wowu</td>
<td>‘fishtrap’</td>
<td>*bubu</td>
</tr>
</tbody>
</table>

Compare stems belonging to Class 2, e.g. aa-ku ‘my waist’, aa-‘u ‘your waist’, etc.
MRN (113) a. *aa ‘waist’ *hawak
b. *ana ‘child’ *anak
c. *ato ‘roofing thatch’ *atep
d. *emu-emu ‘necklace’ *hinuq
e. *haka ‘root’ *wakat
f. *hulu ‘lamp’ *suluq
g. *ehu ‘rib’ *Rusuk
h. *kuli ‘skin’ *kulit
i. *rea ‘blood’ *daRaq
j. *taba ‘fat’ (noun) PPH *tabaq
k. *unta ‘brain’ *qutak
l. *wulu ‘bamboo species’ *buluq
m. *wuu ‘head hair’ *buhuk

Since PMP *nd regularly became PBT *nd, likewise PMP *d became PBT *r, one might expect an original alternation in the third person between *nda ~ *da to be reflected in Moronene as *ndo ~ *ro. The allomorphy at present however is instead *ndo ~ *do, presumably the result of analogy, i.e. ngku:ku :: nto:to :: *ndo:do.

(e) To my knowledge, apart from Moronene there are no other Bungku-Tolaki languages which have stem-conditioned allomorphs of the genitive pronouns. That Moronene maintained a Proto-Austronesian distinction, however, implies perforce that this distinction must also have been present in Proto-Bungku-Tolaki. Since PBT maintained final consonants (§ 2.3), we may further suppose at this stage the reconstructed allomorphic pairs *ngku ~ *ku ‘1SG’, *nto ~ *to ‘1PLN’ and *ndo ~ *ro ‘3PL’ were conditioned, and therefore did not define stem classes.

Other Bungku-Tolaki languages have reduced this original allomorphy to invariance, usually with only postvocalic forms surviving. Outside of Moronene, reflexes of *ngku ‘1SG’ and *nto ‘1PLN’ predominate almost exclusively, though in Mori Bawah the original alternation appears to have been resolved instead in favor of *ku and *to.69

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69 Prenasalized forms are still found in Mori Bawah in two contexts where genitive pronouns coalesced with certain other formatives, namely in the so-called emphatic personal pronouns discussed in § 4.1g, and in the emphatic free pronouns discussed in § 4.5. See also the following footnote.
In regard to the third person plural forms, eastern languages such as Kulisusu and Bungku have *ndo— in Mori Bawah -do—while western languages such as Padoe, Mori Atas, and Tolaki use exclusively -ro. The appearance of -ro in these languages may be due in part to the voicing of the first person plural form *nto, a sporadic change which apparently occurred in Proto-Western Bungku-Tolaki, and whereby *nto ‘1PLN’ and *ndo ‘3PL’ fell together as *ndo. In order to maintain paradigmatic contrast, the postconsonantal form *ro then became the favored form for indicating third person plural. Note that it is precisely those languages which have -ndo ‘1PLN’, which also have -ro ‘3PL’.71

(f) In what is clearly a secondary development, the Kulisusu first person singular suffix -ngku has come to have a denasalized variant -ku when following stems containing a prenasalized consonant in the final syllable. Compare for example raha-ngku ‘my house’, ika-ngku ‘my fish’, kantadu-ngku ‘my scooper’, etc. versus torompu-ku ‘my short sword’. Dissimilation in the first person singular is apparently also found in Wawonii, e.g. badu-ngku ‘my clothes’, tuwai-ngku ‘my younger sibling’ but sinsi-ku ‘my ring’ (Manyambeang, Mahmood, et al. 1982/1983:132–133) and Bungku, e.g. apu-ngku ‘my father’, kaka-ngku ‘my older sibling’ but indo-ku ‘my mother’ (Saro, Rahim, et al.

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70Presumably through the same process which gave rise to -do in Moronene (§ 4.1d). There also exists the possibility that at some prior stage Mori Bawah genitive pronouns were identical to those found presently in Bungku, but later (in a secondary process) underwent across-the-board denasalization. Compare:

<table>
<thead>
<tr>
<th>Bungku</th>
<th>Mori Bawah</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ngku, -ku</td>
<td>-ku</td>
</tr>
<tr>
<td>-mu</td>
<td>-mu</td>
</tr>
<tr>
<td>-no</td>
<td>-no</td>
</tr>
<tr>
<td>-mami</td>
<td>-mami</td>
</tr>
<tr>
<td>-nto</td>
<td>-to</td>
</tr>
<tr>
<td>-miu</td>
<td>-miu</td>
</tr>
<tr>
<td>-ndo</td>
<td>-do</td>
</tr>
</tbody>
</table>

71This assumes that Watu and Karuni’e also had *ndo ‘1PLN’ at a former stage, which was later replaced by -to ‘1PLN’ under influence from Mori Bawah.
1982:72–73), though my data on these other two languages are extremely limited. To my knowledge, this pattern is not found with either -nto ‘1PLN’ or -ndo ‘3PL’.

(g) Although PMP *a is not regularly reflected as PBT *o, this change did occur in all single-syllable pronouns containing this vowel, namely third person singular *ña > *-no, first person plural inclusive *nta > *-nto and third person plural *nda > *-ndo. This is not the complete picture, however, as in fact forms with a have been retained in stressed or emphatic contexts. That is, we must recognize:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>unemphatic</td>
</tr>
<tr>
<td>*ña</td>
<td>&gt; *-no</td>
</tr>
<tr>
<td>*nta / ta</td>
<td>&gt; *-nto / -to</td>
</tr>
<tr>
<td>*nda / da</td>
<td>&gt; *-ndo / -ro</td>
</tr>
</tbody>
</table>

Table 25. Reflexes of *ña, *nta and *nda

Emphatic forms are found in Mori Bawah in what Barsel termed ‘emphatic personal pronouns’. The following forms “mean approximately ‘(pronoun) too’” (Barsel 1994:42). Note also the retention of prenasalization which otherwise disappeared in Mori Bawah:

MRB (114) a. ngkuda(‘a) 1SG
b. muda(‘a) 2SG
c. nada(‘a) 3SG
d. mamida(‘a) 1PLX
e. ntada(‘a) 1PLN
f. mida(‘a) 2PL
g. ndada(‘a) 3PL

They are also found in the so-called Moronene ‘additive pronouns’. Interestingly, although S. Andersen enumerates a number of different functions for these pronouns, she often translates them as ‘(pronoun) too’ (1995a:58–59):
MRN (115) a. na'angku 1SG
b. na'au 2SG
c. na'anana 3SG
d. na'amami 1PLX
e. na'anta 1PLN
f. na'amitu 2PL
g. na'anda 3PL

The Watu and Karunsi'e dialects also have a set of what are presumably ‘additive’ pronouns. Although the formatives a- and -hae appear to be unrelated to Mori Bawah da'a or Moronene na'a (compare instead the Tolaki particle hae ‘in addition’), again we find emphatic forms of the genitive clitics (data from Esser 1927:121):

<table>
<thead>
<tr>
<th>Karunsi'e</th>
<th>Watu</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRB (116) a. angkuhae</td>
<td>angku, angkuhae</td>
</tr>
<tr>
<td></td>
<td>amuhae</td>
</tr>
<tr>
<td></td>
<td>anahe</td>
</tr>
<tr>
<td></td>
<td>antahae</td>
</tr>
<tr>
<td></td>
<td>amamihae</td>
</tr>
<tr>
<td></td>
<td>amihuhae</td>
</tr>
<tr>
<td></td>
<td>arahae</td>
</tr>
</tbody>
</table>

The free pronouns discussed in § 4.5 are also built upon emphatic genitive pronouns.

4.2 Nominitative pronouns

Nominative pronouns are discussed next because of their close connection to the genitive pronoun suffixes. Comparison of the two sets reveals many similarities.

<table>
<thead>
<tr>
<th></th>
<th>*ku</th>
<th>*u</th>
<th>*i</th>
<th>*ki</th>
<th>*to</th>
<th>*mi</th>
<th>*ro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1PLX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1PLN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 26. PBT nominative pronouns
<table>
<thead>
<tr>
<th>Moronene</th>
<th>Kulisu</th>
<th>Mori Bawah (Tinompo - Tiu - Moiki)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ku</em></td>
<td><em>ku</em></td>
<td><em>ku</em> <em>ku</em> <em>ku</em> 1SG</td>
</tr>
<tr>
<td>-<em>u, Ø-</em></td>
<td><em>u</em></td>
<td><em>u</em> <em>u</em> -<em>u, mu-</em> 2SG</td>
</tr>
<tr>
<td>-<em>i, Ø-</em></td>
<td><em>i</em></td>
<td><em>i</em> <em>i</em> <em>i</em> 3SG</td>
</tr>
<tr>
<td><em>ko</em></td>
<td>—</td>
<td><em>ki</em> <em>ki</em> <em>ki</em> 1PLX</td>
</tr>
<tr>
<td><em>to</em></td>
<td><em>to</em></td>
<td><em>to</em> <em>to</em> <em>to</em> 1PLN</td>
</tr>
<tr>
<td><em>mi</em></td>
<td><em>mi</em></td>
<td><em>i</em> <em>ndi</em> -<em>i, mi-</em> 2PL</td>
</tr>
<tr>
<td><em>ndo</em></td>
<td><em>ndo</em></td>
<td><em>ndo</em> <em>ndo</em> <em>ndo</em> 3PL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mori Bawah (Watu-Kar.)</th>
<th>Padoe</th>
<th>Mori Atas</th>
<th>Tolaki</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ku</em></td>
<td><em>ku</em></td>
<td><em>ku</em></td>
<td><em>ku</em></td>
</tr>
<tr>
<td>-<em>u, au-</em></td>
<td>-<em>u-</em></td>
<td><em>u</em></td>
<td><em>u</em></td>
</tr>
<tr>
<td><em>no</em></td>
<td><em>no</em></td>
<td><em>no</em></td>
<td><em>no</em></td>
</tr>
<tr>
<td><em>ki</em></td>
<td><em>ki</em></td>
<td><em>ki</em></td>
<td><em>ki</em></td>
</tr>
<tr>
<td><em>to</em></td>
<td><em>to</em></td>
<td><em>to</em></td>
<td><em>to</em></td>
</tr>
<tr>
<td>-<em>i, ai-</em></td>
<td>-<em>i-</em></td>
<td><em>i</em></td>
<td><em>i</em></td>
</tr>
<tr>
<td><em>ro</em></td>
<td><em>ro</em></td>
<td><em>ro</em></td>
<td><em>ro</em></td>
</tr>
</tbody>
</table>

Table 27. Present-day Bungku-Tolaki nominative pronouns

(a) I avoid calling this set of pronouns either prefixes or suffixes. From the research of others, it appears that they are best considered clitics. In some contexts, they pattern as proclitics, attaching phonologically to a following verb; but in other contexts they are enclitics (or suffixes) which attach to certain preceding particles. In Tolaki, for instance, the cases where they function as enclitics are restricted to the following functors (Youngman 1996:13):

- *a* ‘and, then’
- *ke* ‘if’
- *ko* ‘NEG’ (Mekongga dialect)
- *ha* (meaning unknown)
- *sa* ‘when’
- *ta* ‘NEG’
Compare, for example, *ke-u lako rif-2SG go/`if you go`, *sa-no leu /when-3SG arrive/`when he came` (Youngman 1996:13). For any language, it appears that the number of such particles is small. For Moronene, S. Andersen gives *ka `and`, *ki `if`, the negative markers *na and *sa, the temporal markers *sa and *ha, and *taba (short form *ba) `except` (1995a:28–34). For Padoe, Vuorinen lists *ka `so that`, *la `not`, *ba `if, when` and *ako `because`; incidentally she considers the subject markers which follow these particles to be suffixes (1995:109).

In addition, certain differences have begun to accrue to these pronouns, depending on whether they are used as enclitics or proclitics, and where they exist these differences have been duly noted in the pronoun sets listed above. For example, Moronene has reduced second singular *u and third singular *i to zero in the contemporary language *except in cases where they occur as enclitics (S. Andersen 1995a:35). Padoe, on the other hand, has developed alternative long forms in the second person, respectively *au from *u `2SG` and *ai from *i `2PL`; however, only the *short forms can be used in enclitic position (Vuorinen 1995:106–109). Differences in Mori Bawah forms are mentioned as appropriate in the following notes. In general, enclitic forms are more conservative.

(b) In the second person singular, I reconstruct only *u as the subject marker in PBT. The variant *mu is known to occur as a subject marker only in the Moiki, Karunsi’e and Watu dialects of Mori Bawah. And as Esser notes (1927:120), even here the form *u appears in certain contexts, such as following the particle *ka `and, so that` (as in Moiki *ka-*u... `so that you...`). This contrasts with the widespread occurrence of *-mu `2SG` in the genitive series.

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72 Though this *a is obviously a secondary development, its origin is unknown. As Esser noted, Padoe and the Watu and Karunsi’e dialects of Mori Bawah share the feature that an optional *a may also precede the article *i for personal names, e.g. *(ai) Laemadi, as well as the preposition *i `at, to` e.g. *(ai) Malili (1927:125). In Watu and Karunsi’e, an *a may also precede any of the free pronouns, as in *(ai)naku `1SG`, *(a)ingo`o `2SG`, etc.
(c) As shown in Table 28, in the third person singular eastern languages have exclusively *i*, while western languages (including the Watu and Karunsi’e dialects of Mori Bawah) have exclusively *no*.

<table>
<thead>
<tr>
<th>Language</th>
<th>Case</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moronene</td>
<td></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Kulisu</td>
<td></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Bungku</td>
<td></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Mori Bawah:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinompo d.</td>
<td></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Tiu d.</td>
<td></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Moiki d.</td>
<td></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Karunsi’e d.</td>
<td></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Watu d.</td>
<td></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Padoe</td>
<td></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Mori Atas</td>
<td></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Tolaki</td>
<td></td>
<td><em>no</em></td>
</tr>
</tbody>
</table>

Table 28. Nominative third person singular pronoun across Bungku-Tolaki languages

Although this situation would apparently give us no basis for deciding which form to reconstruct for Proto–Bungku-Tolaki, there is in fact an asymmetry in certain Tolaki paradigms involving the consecutive linking particle *a* ‘and, so that’ (< PBT *ka* via loss of the initial consonant) which points back to an earlier form *i*. In Tolaki, the consecutive linker is followed by a nominative pronoun, which pattern is common across Bungku-Tolaki languages (§ 7.4.1). The clauses of (117) for example mean ‘and so (pronoun) went/go/will go’:

TOL (117) a. *a-ku lako* 1SG
   b. *a-u lako*  2SG
   c. *a-no lako* 3SG
   d. *a-ki lako* 1PLX
   e. *a-to lako* 1PLN
   f. *a-i lako*  2PL
   g. *a-ro lako* 3PL
However, when the combination of ə + nominative pronoun is followed by the aspectual marker -to, an asymmetry emerges in the third person singular. The clauses of (118) mean ‘(pronoun) will in the immediate future go’; compare especially (118c) with (117c) above (data from S. Youngman 1990:pers.comm.):

TOL (118) a. ə-ku-to lako 1SG  
b. ə-u-to lako 2SG  
c. ke-to lako 3SG  
d. ə-ki-to lako 1PLX  
e. ə-to-to lako 1PLN  
f. ə-i-to lako 2PL  
g. ə-ro-to lako 3PL

In my opinion, there is no way to explain this asymmetry except to postulate that ke originates from earlier *ka-i, which thus points back not only to an older form of the consecutive linker ə, but also an older form of the third singular nominative pronoun—compare Mori Bawah, Bungku, Kulisu, and Moronene which at present all have ka-i lako /and-3SG go/ ‘and so he went, goes, will go...’ corresponding to (117c). The form ke also shows up in Tolaki for expected ə-no in the paradigm of ə + nominative pronoun + ikaa, meaning ‘(pronoun) still wants to...’ (data from S. Youngman 1990:pers.comm.):

TOL (119) a. ə-ku-ikaa lako 1SG  
b. ə-u-ikaa lako 2SG  
c. ke-ikaa lako 3SG  
d. ə-ki-ikaa lako 1PLX  
e. ə-to-ikaa lako 1PLN  
f. ə-i-ikaa lako 2PL  
g. ə-ro-ikaa lako 3PL

Compare also Tolaki ə-u teokoni... ‘you’re not to...’ versus kee teokoni... ‘he’s not to...’, which are used to express prohibition of respectively second and third person singular. If therefore at some prior stage, Tolaki had a third person singular form *i, then of the two forms *i and *no, the former is also more clearly reconstructible for Proto–Bungku-Tolaki as a nominative pronoun. Presumably at some point in their history
western languages such as Tolaki, Padoe and Mori Atas replaced *i in most of its occurrences with *no, the third singular form extended from the genitive set.

(d) As shown in Table 29, a similar situation obtains in regard to the third person plural suffix: eastern languages have almost exclusively ndo, while western languages (including the Watu and Karunsi’e dialects of Mori Bawah) have only ro.

<table>
<thead>
<tr>
<th>Language</th>
<th>Pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moronene</td>
<td>ndo</td>
</tr>
<tr>
<td>Kulisusu</td>
<td>ndo</td>
</tr>
<tr>
<td>Bungku</td>
<td>ndo</td>
</tr>
<tr>
<td>Mori Bawah:</td>
<td></td>
</tr>
<tr>
<td>Tinompo</td>
<td>do</td>
</tr>
<tr>
<td>Tiu</td>
<td>ndo</td>
</tr>
<tr>
<td>Moiki</td>
<td>ndo</td>
</tr>
<tr>
<td>Watu</td>
<td>ro</td>
</tr>
<tr>
<td>Karunsi’e</td>
<td>ro</td>
</tr>
<tr>
<td>Padoe</td>
<td>ro</td>
</tr>
<tr>
<td>Mori Atas</td>
<td>ro</td>
</tr>
<tr>
<td>Tolaki</td>
<td>ro</td>
</tr>
</tbody>
</table>

Table 29. Nominative third person plural pronoun across Bungku-Tolaki languages

Is there any basis for deciding what form to reconstruct for Proto–Bungku-Tolaki? Unlike with the third singular form, in this case I am not aware of any ‘frozen’ uses which might indicate one or the other form was older. I tentatively reconstruct *ro, rather than *ndo, on the following indirect line of argumentation. First, the reconstruction of the nominative pronouns *ku ‘1SG’ and *to ‘1PLN’ rests on very certain grounds; as far as I know throughout the Bungku-Tolaki area one finds these pronouns reflected only as ku and to. Second, we also know that *ku ‘1SG’ and *to ‘1PLN’ reflect what were at an earlier stage postconsonantal forms. Compare Dyen’s reconstructions, discussed above in § 4.1d, first person singular *ku (postconsonantal) ~ *ŋku (postvocalic), likewise first person plural exclusive *ta (postconsonantal) ~ *nta (postvocalic). On the basis of pattern
symmetry, then we might also suppose in the third person plural PBT inherited a postconsonantal form, namely *ro from earlier *da (compare Dyen's postvocalic reconstruction *nda). This argument however is far from ironclad, and other explanations may eventually prove valid. One thing which is clear is that in the third person plural, genitive and nominative pronouns mirror each other: in all eastern languages, ndo serves as both the nominative and genitive form (in standard Mori Bawah one finds instead do; also in Moronene do is employed as a genitive suffix with some nouns), while in western languages only ro occurs in both pronoun sets.

(e) In the first person plural exclusive, the subject marker *ki bears no direct or obvious connection to the corresponding genitive suffix *mami (-mai), and this paradigmatic asymmetry remains a point for further investigation.

In addition, the reconstruction of *ki itself is problematic. Although it is the form which is known to occur in most present-day BT languages, there is no explanation as to how Moronene -ko might be related (based on one example in Manyambeang, Mahmoed, et al. 1982/1983:85, the form of this pronoun in Wawonii may also be -ko). Perhaps the form to be reconstructed for PBT (or pre-PBT) should be *kai, which could then have given rise—depending on which vowel was elided—to both -ko (< *kə < *ka < *kai) and -ki (< *kəi < *kai).

(f) In the second person plural, presumably *mi and *i reflect progressive shortening of original *miu, though other explanations may eventually prove valid. There is, however, in the present-day languages a correlation between the form of the second person plural and the third person singular subject markers. Table 30 repeats Table 28, with information added regarding second person plural forms.
<table>
<thead>
<tr>
<th>Language</th>
<th>2PL</th>
<th>3SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moronene</td>
<td><em>mi</em></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Kulisu</td>
<td><em>mi</em></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Mori Bawah:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinompo d.</td>
<td><em>i</em></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Tiu d.</td>
<td><em>ndi</em></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Moiki d.</td>
<td>-<em>i, mi-</em></td>
<td><em>i</em></td>
</tr>
<tr>
<td>Karunsi'e d.</td>
<td>-<em>i, mi-</em></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Watu d.</td>
<td><em>mi</em></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Padoe</td>
<td>-<em>i, ai-</em></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Mori Atas</td>
<td><em>i</em></td>
<td><em>no</em></td>
</tr>
<tr>
<td>Tolaki</td>
<td><em>i</em></td>
<td><em>no</em></td>
</tr>
</tbody>
</table>

Table 30. Nominative second person plural and third person singular pronouns across Bungku-Tolaki languages

As can be seen in Table 30, outside of Mori Bawah the known pattern is for languages to exhibit either *mi* ‘2PL’ and *i* ‘3SG’, or else *i* ‘2PL’ and *no* ‘3SG’. Only in the Tinompo dialect of Mori Bawah is there not at present a contrast between second person plural and third person singular. The Tiu dialectal form *ndi* is unexplained, though Esser (1927:123) ascribes its origin to analogy with the third person plural form *ndo*. The Moiki and Karunsi’e dialects generally have *mi-*-, but also employ -*i* ‘2PL’ as the enclitic form, e.g. Moiki *ka-i-...* ‘so that you all...’ (Esser 1927:120).

(g) Following the particle *ma* ‘after’, Moronene speakers utilize pronouns which in most cases appear to be genitive pronouns; compare this text example:

```
MRN (120)     Pomone-akita-'o-mo     ma-nto-mo     metila-'o.
climb-BEN:1PLN-3SG-COMP     later-1PLN-COMP     divide-3SG
'Climb it for us! Later we will share together.' (S. Andersen 1995a:60)
```

However in the first person plural exclusive and the second person plural the pronouns following *ma* resemble instead nominative pronouns.

---

73The form *ndi* is also found in the Pamona language, where it also marks second person plural subjects (Adriani 1931:337).
MRN (121) a. ma-ngku 1SG
b. ma-u 2SG
c. ma-no 3SG
d. ma-ngko 1PLX
e. ma-ndo 1PLN
f. ma-mi 2PL
g. ma-ndo 3PL

This pattern is unexplained, especially as instead of *ma-ngko* one can also say *ma-ngkami* ‘later we (exclusive) will...’, where *kami* is an absolutive form, of those discussed in the following section.

4.3 Absolutive pronouns

Table 31 sets out the absolutive pronoun clitics which I reconstruct for PBT. Present-day forms follow.

<table>
<thead>
<tr>
<th></th>
<th>1SG</th>
<th>2SG</th>
<th>3SG</th>
<th>1PLX</th>
<th>1PLN</th>
<th>2PL</th>
<th>3PL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*aku</td>
<td>*ko</td>
<td>*io</td>
<td>*kami</td>
<td>*kita</td>
<td>*komiu</td>
<td>*ira</td>
</tr>
</tbody>
</table>

Table 31. PBT absolutive pronouns
The Kulisu forms listed in Table 32 are no longer used to index subjects, and thus technically are better regarded as accusative pronouns. In some persons and numbers the Padoe pronouns have come to have alternate forms when indexing subjects; this secondary development is discussed in § 7.7.1.

Some researchers have noted allomorph sets for the pronouns given in Table 32, for example in the first person singular, Moronene has -aku, -'aku, or -haku depending on the verb root to which the absolutive suffix is attached (S. Andersen 1995a:2); Padoe has all of these plus -nganggu (Vuorinen 1995:110). Presumably, these forms reflect an earlier stage in which verb stems had final consonants, the stem final consonant now being viewed as part of the suffix (§ 2.3.1). Such allomorphs may safely be ignored for

---

74 The form -kai is now a generalized first person plural marker (unmarked for either inclusive or exclusive), the form -kita now being used only in a collective sense; compare also § 4.1c.
purposes of reconstructing the pronouns, so I do not mention them in the following discussion.

(a) In the third singular, all languages outside of Tolaki and the Watu and Karunsi’e dialects of Mori Bawah exhibit only -o as the absolutive pronoun. As Tolaki and these two Mori Bawah dialects provide the crucial evidence for reconstructing *-io, it is best to look at them more closely. In the present-day languages, the following patterns are noted:

- In the Karunsi’e dialect, -i (with glottal stop) or -e (without glottal stop) is used to mark a third singular subject or object on verbs with stem-final a, e or o; but -o (without glottal stop) is used when the verb ends in i or u (Esser 1927:122)—compare for instance ku-kaa-’i /1SG-eat-3SG/ ‘I eat it’, ku-kii-o /1SG-see-3SG/ ‘I see it’.

- The Watu dialect exhibits a nearly identical pattern, except that -e (with or without glottal stop) marks a third singular subject or object after stem-final a, e or o (Esser 1927:122).

- In Tolaki, -i ‘3SG’ and -iro ‘3PL’ have the alternate realizations respectively -o, -oro if the stem ends in i or u, and the alternants -e, -ero if the stem ends in a, e or o (Mead & Tambunan 1993:22)—for example rabu-’i, rabu-o ‘pull it out!’, baho-’i, baho-e ‘bathe him!’.

These patterns are summarized in Table 33, to which I add my own reconstructions:

<table>
<thead>
<tr>
<th></th>
<th>Mori Bawah (Karunsi’e)</th>
<th>Mori Bawah (Watu)</th>
<th>Tolaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-’i</td>
<td>-’i, -e</td>
<td>-’e, -e</td>
<td>-’i, -e</td>
</tr>
<tr>
<td>*-o</td>
<td>-o</td>
<td>-o</td>
<td>-’i, -o</td>
</tr>
</tbody>
</table>

3SG (following a, e or o)

3SG (following i or u)

Table 33. Pre-Tolaki allomorphs of the third singular absolutive pronoun, and reflexes in present-day languages

The allomorphs found in Karunsi’e, Watu, and Tolaki are too similar to have arisen independently, and therefore must be attributed to a common period of development. The
Mori Bawah dialects show that -e must have arisen as a relaxed variant of *'-i, as both -'i and -e are found in the same environment. In Tolaki -e is still a variant of -'i in its original environment, but now -'i has become extended as a marker of third person singular in all environments. (In Tolaki this pattern was also extended mutatis mutandis to the third person plural.)

I consider that the reconstructed forms *'-i and *-o originate from earlier *-io, the form I posit for PBT. The tendency in pre-Tolaki was for the final vowel to be lost (PBT *-io > *'-i), but following high vowels the *i was syncopated (*-io > *-o).

(b) That the PBT third singular pronoun was not simply *-o but rather *io can also be deduced from the form of three transitive verbs. In Western Bungku-Tolaki languages, the relevant verbs are alo ‘take’, wawo ‘carry’, and kito ‘see’ from, respectively, PBT *ala, *wawa, and *kita (the present-day forms all with raising of final *a as described in § 2.3). A curious fact about these verbs is that when followed by a third person pronoun, the final vowel of the stem is not o but rather e. Example (122) illustrates this for example with the Tolaki verb wawo ‘carry’; note particularly that the form of the stem in (122d&h) is wawe, not wawo (data from Mead & Tambunan 1993:22):

TOL (122) a. mo-wawo ‘carry (something)’
b. wawo-aku ‘carry me’
c. wawo-ko ‘carry you’
d. wawe-’i ‘carry him’
e. wawo-komami ‘carry us (exclusive)’
f. wawo-komiu ‘carry us (inclusive)’
g. wawo-keito ‘carry you all’
h. wawe-’iro ‘carry them’

In Tolaki, this allomorphy can be explained as the result of vowel assimilation to the i of the third person suffixes. In Padoe and Mori Atas, however, at present there is no

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75 However, compare Bugis -i ‘3sg’ (infrequently -a) and Makassar -i or -a ‘3sg’ (Matthes, cited in Esser 1927:122). External evidence may eventually make us want to reconstruct *'-i (following low vowels), *-o (following high vowels) as the pattern for PBT.
recourse to explaining this alternation as vowel assimilation—at least in the third person singular—since here these forms run *ale-o ‘take it’, wawe-o ‘carry it’ and kite-o ‘see it’ (Esser 1933:415; Karhunen 1991:194). However, if we reconstruct *-io ‘3SG’ in a language ancestral to Padoe and Mori Atas, then an hypothesis of vowel assimilation becomes possible here as well.

(c) In the first person plural exclusive I reconstruct *kami, but kai now also occurs, mirroring the genitive forms -mami and -mai. As far as the available evidence indicates, if a language or isoelect has -kami ‘1PLX’ absolutive, then it also has -mami ‘1PLX’ genitive; conversely, if it has -kai ‘1PLX’ absolutive, then it also has -mai ‘1PLX’ genitive.

(d) In the first person plural, Tolaki absolutive pronouns exhibit some peculiarities not found in other BT languages. The aberrant Tolaki form -komami ‘1PLX’ may have been formed by analogy to the second person plural, viz.:

\[
\begin{array}{cccc}
2PL & 1PLX \\
(GEN) & (ABS) & (GEN) & (ABS) \\
PBT: & *-miu & *-komiu & *-mami & *-kami \\
Tolaki: & -miu & -komiu & -mami & -komami \\
\end{array}
\]

Table 34. Analogical formation of Tolaki -komami

However, comparable first person plural exclusive forms are found elsewhere in Austronesia, compare for example Palauan komám, object or emphatic pronoun (Josephs 1990:110) and similar forms in various Melanesian languages such as Raga kamai, Paama komai, and Pango komam (Tryon 1976:440–449). A second possibility would therefore be to assign Tolaki -komami to a cognate set with these other forms in support of reconstructing PMP *kamami. However, this tack would then leave certain questions unresolved in regard to the Bungku-Tolaki languages. For example, should *komami and *kami both be reconstructed for Proto–Bungku-Tolaki, and if so, with what difference(s)
in meaning? Second, if *komami is reconstructed for PBT, how then do we account for its absence in eastern Bungku-Tolaki languages, Padoe and Mori Atas?

In the first person plural inclusive, Tolaki has -keito where other Bungku-Tolaki languages have either -kita or -kito. The only likely explanation for the Tolaki form, in my opinion, is that it originates from *ako + *kita, and therefore represents an extension from the set of indirect object pronouns into the set of absolutive pronouns. Regarding the development of -keito from *ako + *kita, see further § 6.1.

(e) Except for a slight discrepancy in the second person plural, the PBT absolutive pronouns are straightforward reflexes of the so-called ‘long’ forms of the Proto-Austronesian pronouns (Dahl 1976, Blust 1977). In the following comparison I use Blust’s PMP reconstructions (1977:11), with the person marker (*i for first and second person, *si for third person) enclosed in parentheses, as this formative obviously did not contribute to the development of the PBT absolutive enclitics:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(i)-aku</td>
<td>*-aku</td>
</tr>
<tr>
<td>*(i)-kahu</td>
<td>*-ko</td>
</tr>
<tr>
<td>*(si)-ia</td>
<td>*-io</td>
</tr>
<tr>
<td>*(i)-kami</td>
<td>*-kami</td>
</tr>
<tr>
<td>*(i)-kita</td>
<td>*-kita</td>
</tr>
<tr>
<td>*(i)-kamu, ihu</td>
<td>*-komiu</td>
</tr>
<tr>
<td>*(si)-ida</td>
<td>*-ira</td>
</tr>
</tbody>
</table>

Table 35. From PMP to PBT absolutive pronouns

The only allowance we need to make is for the desyllabification of *u in the second person singular, namely *kahu > *kau > *kaw (from which PBT *ko then derives regularly). As Blust further noted, the second person plural forms *i-kamu and *ihu “seem to have been
equivalent, often being joined as a compound pronoun” (1977:11). Thus we may also suppose *kamu-ihu > *kamuiu > *kamuyu and presumably thence PBT *-komiu.\textsuperscript{76}

4.4 Basic free pronouns

Happily there exists a breadth of data (extending to every language and dialect) for the free pronouns, which is not available for the other pronoun sets. Despite the variety of forms found in the present-day languages, it is possible to reconstruct just two sets of free pronouns, the basic set of free pronouns discussed in this section and the emphatic free pronouns discussed in the following section. The basic free pronouns reconstructed for PBT are shown in Table 36. The free pronouns are very similar to the absolutive suffixes presented previously in Table 31, in most cases differing therefrom only in the presence of an initial formative, either *in-, *i- or *hi-:

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
 & *in-aku & *i-aku \\
1SG & *in-ko & *i-ko \\
2SG & *hi-a & *hi-a \\
3SG & *in-kami & *i-kami \\
IPLX & *in-kita & *i-kita \\
IPLN & *in-komiu & *i-komiu \\
2PL & *hi-ira & *hi-ira \\
3PL & & \\
\hline
\end{tabular}
\caption{PBT basic free pronouns}
\end{table}

Table 37 presents the independent pronoun sets for twelve Bungku-Tolaki languages.\textsuperscript{77} In eastern languages except Moronene (and also the Watu and Karunsi’e dialects of Mori Bawah), we also find certain other innovated forms which have partly or wholly supplanted the free pronouns inherited from Proto–Bungku-Tolaki. In order to

\textsuperscript{76}Correspondingly, the PBT genitive form *-miu would trace back to *(n)i-mu-iSu (Blust 1977:11).

\textsuperscript{77}As for the three languages not shown, no new patterns emerge. Bahonsuai pronouns are the same as the pronouns found in the Moiki dialect of Mori Bawah, Tomadino pronouns are the same as those of Mori Atas, and Waru free pronouns are the same as in Tolaki.
distinguish inherited from innovative forms, the former are given in italics and the latter in boldface. Only italicized forms are considered in this section; I return to boldfaced forms in § 4.5.

<table>
<thead>
<tr>
<th>Moronene</th>
<th>Taloki</th>
<th>Kulususu</th>
<th>Koroni</th>
<th>Wawonii</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i')aku</td>
<td>ingkude</td>
<td>ungkude</td>
<td>ingkude</td>
<td>ongkude</td>
</tr>
<tr>
<td>(i)co 'o</td>
<td>ingko 'o</td>
<td>ingko 'o</td>
<td>ingko 'o</td>
<td>iko 'o</td>
</tr>
<tr>
<td>iaa</td>
<td>inade</td>
<td>inade</td>
<td>inade</td>
<td>onade</td>
</tr>
<tr>
<td>(i)camii</td>
<td>ingkai</td>
<td>ingkai</td>
<td>ingkami</td>
<td>ikami</td>
</tr>
<tr>
<td>(i)cita</td>
<td>ingkita</td>
<td>ingkita</td>
<td>ingkita</td>
<td>ondata</td>
</tr>
<tr>
<td>(i)comiu</td>
<td>ingkomiu</td>
<td>(no data)</td>
<td>(no data)</td>
<td>ondata</td>
</tr>
<tr>
<td>(i')ira</td>
<td>i'ira</td>
<td>indade</td>
<td>onda</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bungku</th>
<th>Mori Bawah (Tinompo)</th>
<th>Mori Bawah (Moiki)</th>
<th>Mori Bawah (Tiu)</th>
<th>Mori Bawah (Watu)78</th>
</tr>
</thead>
<tbody>
<tr>
<td>nkude</td>
<td>ongkue</td>
<td>ongkude</td>
<td>ongkude</td>
<td>(a)inaku</td>
</tr>
<tr>
<td>munde</td>
<td>omue</td>
<td>omude</td>
<td>iiko</td>
<td>1SG</td>
</tr>
<tr>
<td>nade</td>
<td>onae</td>
<td>onade</td>
<td>ona'e</td>
<td>(a)inggo 'o</td>
</tr>
<tr>
<td>mami</td>
<td>omami</td>
<td>omami</td>
<td>omami</td>
<td>(a)iwono</td>
</tr>
<tr>
<td>ntae</td>
<td>ontae</td>
<td>ondata</td>
<td>onta'e</td>
<td>(a)inggai</td>
</tr>
<tr>
<td>miu</td>
<td>omiu</td>
<td>omiui</td>
<td>omiui</td>
<td>(a)inggomiu</td>
</tr>
<tr>
<td>ndade</td>
<td>ondaei</td>
<td>ondata</td>
<td>onda'e</td>
<td>(a)ihiro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Padoe</th>
<th>Mori Atas</th>
<th>Tolaki</th>
<th>Rahambuu</th>
<th>Kodeoha</th>
</tr>
</thead>
<tbody>
<tr>
<td>iaku</td>
<td>iaku</td>
<td>inaku</td>
<td>inaku</td>
<td>inahu</td>
</tr>
<tr>
<td>iiiko</td>
<td>iiiko</td>
<td>inggo 'o</td>
<td>inggo 'o</td>
<td>igoo</td>
</tr>
<tr>
<td>umono</td>
<td>iwono</td>
<td>ieen i ~ iee</td>
<td>ine 'e</td>
<td>iee</td>
</tr>
<tr>
<td>ikami</td>
<td>ikami</td>
<td>inggami</td>
<td>ingami</td>
<td>igomai</td>
</tr>
<tr>
<td>ikito</td>
<td>ikito</td>
<td>inggito</td>
<td>inggito</td>
<td>igito</td>
</tr>
<tr>
<td>ikomiu</td>
<td>ikomiu</td>
<td>inggomiu</td>
<td>(no data)</td>
<td>igomiu</td>
</tr>
<tr>
<td>umboro</td>
<td>iworoi</td>
<td>ihiro</td>
<td>iro 'o</td>
<td>ihiro</td>
</tr>
</tbody>
</table>

Table 37. Present-day Bungku-Tolaki basic free pronouns

78Karunsi'ê forms are identical except that in the first person plural exclusive Karunsi'ê has (a)inggami instead of (a)inggai.
As the first and second person pronouns have mostly had a straightforward development in the daughter languages, I deal with them first, followed by a treatment of the third person plural and finally a lengthy discussion of forms in the third person singular.

(a) Although both formatives *i- and *in- are reconstructible for PBT, there is no meaning difference associated with them. To the extent that a language has inherited these pronouns, it reflects only pronouns formed with *i-, or pronouns formed with *in-.

The distribution of *i- and *in- forms is unexplained, crosscutting any other basis by which these languages may be grouped together:

languages which reflect *i- forms: Moronene, Wawonii, Padoe, Mori Atas, Tomadino

languages which reflect *in- forms: Taloki, Kulisu, Koroni, Mori Bawah (Watu and Karuns’i’e dialects), Waru, Tolaki, Rahambuu, Kodeoha

(b) In Rahambuu the in- formative has even spread by contamination to the third singular pronoun to create ine’e.

(c) Moronene is a language which reflects only *i- forms: *iaku ‘1SG’, *ico’o ‘2SG’, *icami ‘1PLX’, *icit ‘1PLN’ and *icomiu ‘2PL’. In addition forms without i- are also used (respectively *aku, *co’o, *cam, *cita, *comiu) (S. Andersen 1995a:2), but in this case loss of i- has obviously followed palatalization (*k > c | *i__) and therefore must be a recent innovation.

(d) In the first person plural exclusive, Kodeoha has *igomai (for expected **igai or **igami); *igomai is doubtless an analogical formation based on the second person plural pronoun *igomiu.

(e) In the second person singular, PBT *i(n)-ko is reconstructible both on internal and external grounds. In every daughter language, however, it has undergone lengthening to conform to the canonical three-syllable shape of pronouns, namely iCVCV. In most languages, this has been accomplished by lengthening the final syllable (with an epenthetic
glottal stop usually inserted between the two vowels), e.g. *in-ko > *ingko > ingko' o (e.g. Kulisusu among others). In Padoe and Mori Atas, however, the pronoun *iiko was recombined with the i- formative, which is now twice-present in the contemporary form iiiko.

(f) The reconstructed PBT pronoun *hi-ira is the regular development of PMP *si-ira 3PL reconstructed by Blust (1977). In Moronene and Taloki initial *h was lost: *hi-ira > i'ira, but in Tolaki and other western languages *h metathesized to yield, after raising of *-a, ihiro. The Kodeoha form iro'o is irregular, but obviously formed after the historical change *-a > -o (§ 3.2.2).

(g) Padoe and Mori Atas have clearly innovated, respectively, umboro and iworo to replace older third person plural forms, and these languages also have third singular forms umono and iwono. Esser hypothesized about these forms:

"Iworo was perhaps formed by analogy with iwono at a time when iwono was no longer understood, and reinterpreted as iwo + no. Probably iwono is to be dissected as i and wono, where this last is identical with Tontemboan wana 'there, be there'... Iwono should thus actually mean 'the there, the one over there'. The i of iwono is probably not the definite article for persons, but the article [pronoun formative] in..." (Esser 1927:125) (my translation)

At any rate, it does seem that a root wo should be identified in all these pronouns. Compare the current Padoe and Mori Atas deictic formative wa or wo 'that down there' (Esser 1927:152).

(h) Leaving these innovations aside, it would seem then that we are left with Moronene iaa and Tolaki/Kodeoha ie'i ~ ieee as the basis for reconstructing a PBT third

---

79 These changes are precisely matched in the development of *si anu ‘whats-his-name’, reflected in western languages (Bungku, Mori Bawah) as i anu, but in western languages as Tolaki i hanu and Mori Atas as i henu.

80 We also recorded the form iwono as the response to 'he, she' in the villages of Huko-huko, Lamekongga and Wonuambuteo, that is, in regions of the Mekongga dialect area of Tolaki. The presence of iwono in this small southern enclave is presently unexplained, especially as here it goes paired with third person plural form ihiro—not iworo.
singular pronoun. However, iaa '3SG' is also found in the Landawe and Tulambatu dialects of Bungku. In addition, Esser (1927:116) cites a number of forms from the Mori area which are also likely cognate: iao (Mori Bawah, Moiki dialect); ie'e, iee (Mori Bawah, Watu dialect); iee (Mori Bawah, Karunsi’e dialect); hoio (Mori Atas, Molio’a dialect); ho’io (Mori Atas, other dialects); and oio (Padoe), to which may also be added Wawonii (Manyambeang, Mahmoed, et al. 1982/1983) iya. The Mori forms are limited in function, but according to Esser they are generally used when back-referencing a previous clause or section of discourse in the sense of ‘That’s (the reason) why…’, a function also mirrored by the Tolaki third singular pronoun. Some of his examples are (Esser 1927:116):

MRB (123)  

<table>
<thead>
<tr>
<th>3SG</th>
<th>then-1SG</th>
<th>say</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>lee</strong></td>
<td><strong>ma-ku</strong></td>
<td><strong>potae...</strong></td>
</tr>
</tbody>
</table>

‘That’s why I spoke…’

MRA (124)  

<table>
<thead>
<tr>
<th>3SG-(COMP)</th>
<th>and-3SG</th>
<th>ANTIPASS-name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hoio-(to)</strong></td>
<td><strong>ka-no</strong></td>
<td><strong>po-ngee...</strong></td>
</tr>
</tbody>
</table>

‘That’s why he said…’

(125)  

<table>
<thead>
<tr>
<th>3SG-(COMP)</th>
<th>and-3SG</th>
<th>ANTIPASS-name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ho’io-(to)</strong></td>
<td><strong>ka-no</strong></td>
<td><strong>po-ngee...</strong></td>
</tr>
</tbody>
</table>

‘That’s why he said…’

Compare also:

TOL (126)  

<table>
<thead>
<tr>
<th>3SG-COMP</th>
<th>those</th>
<th>people</th>
<th>at Mekongga</th>
<th>NEG-3SG</th>
<th>able</th>
</tr>
</thead>
<tbody>
<tr>
<td>lee-to</td>
<td>nggitu’o</td>
<td>toono</td>
<td>i Mekongga</td>
<td>ta-no</td>
<td>tewali</td>
</tr>
</tbody>
</table>

[m]e-al ○ [m]eohai...  
PART:MM-take ○ PART:be.siblings

‘That’s why those Mekongga people cannot marry if they are siblings…’  
(lit. ‘…cannot marry being siblings…’)  
(Sande, Sikki, et al. 1986:89)

---

81 Also in the same meaning (Esser 1927:116):

MRB  

<table>
<thead>
<tr>
<th>3SG</th>
<th>then-1SG</th>
<th>say</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Iwono</strong></td>
<td><strong>ma-ku</strong></td>
<td><strong>potae...</strong></td>
</tr>
</tbody>
</table>

‘That’s why I spoke…’
The Mori Atas form ho’io and the Mori Bawah form iao are also used as the positive response to a question containing a negative (Esser 1927:116), e.g. ‘Should you all not go?’ Ho’io! ‘Certainly!’. They are also found in certain fixed expressions, all of which need not be repeated here, but for example:

MRB (127)  
\[
\begin{align*}
\textit{Sine iao, omiu i-m-po-raha kati}. \quad \text{(Moiki dialect)} \\
\text{but} & \quad 3SG \quad 2PL \quad 2PL-\text{PLS-ANTIPASS-make basket} \\
\text{‘Only this, you all must make a carry basket.’} \quad \text{(Esser 1927:116)} 
\end{align*}
\]

The Wawonii, Mori Atas, Padoe and Tolaki forms may combine with the incompletive and completive suffixes, respectively -po and -to, to yield another range of meanings. For example all of these forms given in (128) have a meaning roughly translatable as ‘exactly, just now, just then’, but perhaps more literally ‘it (some previous action) was not yet finished, …’ (data from Manyambeang, Mahmoed, et al. 1982/1983:70; Esser 1933:212; Lara, Larobu, et al. 1991:49):

(128)  
\[
\begin{align*}
\text{Wawonii:} & \quad \textit{iya-po} \\
\text{Mori Atas (Molio’a dialect):} & \quad \textit{ho’i-po-} \, \rightarrow \, \textit{hoopo ~ hopo} \\
\text{Mori Atas (other dialects):} & \quad \textit{hoio-po} \, \rightarrow \, \textit{hoopo ~ hopo} \\
\text{Padoe:} & \quad \textit{oio-po} \, \rightarrow \, \textit{oofo} \\
\text{Tolaki:} & \quad \textit{ie’i-po} \, \rightarrow \, \textit{iepo} 
\end{align*}
\]

For example:

MRA (129)  
\[
\begin{align*}
\textit{Hoopo ku-tutulu-ake-o...} \\
3SG-\text{INCOMP} \quad 1SG-\text{say-BEN-3SG} \\
\text{‘And thereupon, I said to him…’} \quad \text{(Esser 1933:212)} 
\end{align*}
\]

When combined with the completive marker, the meaning is instead one of ‘let it be that’, ‘let it remain that’ (Esser 1933:212):

(130)  
\[
\begin{align*}
\text{Mori Atas (Molio’a dialect):} & \quad \textit{ho’i-to} \, \rightarrow \, \textit{hooto ~ hoto} \\
\text{Mori Atas (other dialects):} & \quad \textit{hoio-to} \, \rightarrow \, \textit{hooto ~ hoto} \\
\text{Padoe:} & \quad \textit{oio-to} \, \rightarrow \, \textit{oofo} 
\end{align*}
\]

Esser does not give any examples of actual usage, but it would appear that the corresponding Tolaki form is not ieto, but rather hioato. Compare these examples:
Whether *hia* in origin is a third singular pronoun is a tantalizing possibility. A hortative particle *hia* ‘Come on!’ (roughly equatable with Indonesian *ayo*) is also found in Moronene (D. Andersen 1997:pers.comm.). *Hia!* in the Tinompo dialect of Mori Bawah means ‘enough!’ (as would be said to somebody who is pouring) (Esser 1933:414), and in the Tambe’e dialect of Mori Atas one also hears *Hia’oto ‘Let it be that!’* (Esser 1933:212). However, *hia* is now also used in Tolaki as a regular transitive verb stem meaning ‘to invite’ (Muthalib, Alimuddin, Chalik, et al. 1985:38)—an unusual development indeed for a third singular pronoun.

Table 38 is a summary of the possible cognate forms reflecting the PBT third singular pronoun. For good reason I group the Watu and Karunsi’e forms with Tolaki:

<table>
<thead>
<tr>
<th>Moronene:</th>
<th>iaa</th>
<th>hia</th>
</tr>
</thead>
</table>
| Kulisu:
| Wawonii:
| Bungku (Landawe and Tulambatu):
| Mori Bawah (Moiki):
| Mori Bawah (Tinompo):
| ================== | ================== |
| Mori Atas (Molio’a): | hoio | hia’oto |
| Mori Atas (Tambe’e): | ho’io |
| Mori Atas (other dialects):
| Padoe:
| Mori Bawah (Karunsi’e):
| Mori Bawah (Watu):
| Tolaki: |

Table 38. Probable reflexes of the PBT third singular free pronoun
In the first column the Karunsi’e, Watu and Tolaki forms are very similar, differing only in their final syllable. In fact the pattern here suggests that the final syllable of these forms is nothing other than inflection with the third singular absolutive pronoun. Recall here the allomorphy previously discussed for these three isolects, namely that following a low vowel \(a, e\) or \(o\) Watu has third singular allomorphs \(-'e \sim -e\), while Karunsi’e and Tolaki have allomorphs \(-'i \sim -e\) (§ 4.3a; see especially Table 33). Where then does the base \(ie\) come from? The hypothesis I support is that this, too, continues an older third singular pronoun—nothing other than PBT *hia. In western languages, this form became affixed for third person singular to become *hia-io; consisting of four syllables, this form was then reduced by various phonological processes to become Mori Atas and Padoe ho’io, hoio and oio, as well as Tolaki \(ie'i \sim iee\) and the similar Karunsi’e and Watu forms.

That such a history needs to be posited for Bungku and Moronene iaa seems doubtful; this form could just as well have arisen via loss of *h, and lengthening to conform to the three syllable template common to other independent pronouns (specifically \(iCVCV\)). The form \(hia\) found in various languages may in fact directly continue the old PBT pronoun in a very specific pragmatic context where it came to no longer be recognized as a pronoun.

For the reaffixation of the third singular pronoun with another third singular form, I propose the following mechanism. In Proto–Bungku-Tolaki *hia was used in sentence initial position where it made reference to an entire clause or passage, also combining with the completive and incompletive markers—such markers not being restricted to verbal forms. In contexts where for example *hia-po ‘it not yet’ occurred, there was a tendency to view this discourse linker as a verb form and hence needing a pronoun marker, e.g. *hia-io-po ‘it was not yet’. Wherever reflexes of *hia-io are found, they are of course restricted to just such contexts except in Tolaki. Only in Tolaki was \(ie'i\) or its variant \(iee\) extended to become a more general third person independent pronoun.
4.5 **Emphatic free pronouns**

The term 'emphatic' may be a misnomer for these pronouns, as I know of no present-day language which contrasts these and the basic set of free pronouns described above. However, as these pronouns are clearly an innovation, and one thing languages do is evolve new, expressive forms to replace old, common ones (Meillet 1912), we may deduce on general principles that these pronouns had a more expressive, emphatic force than the original set.

As shown below, these free pronouns are reconstructed as consisting of an initial vowel formative *o-*, the appropriate genitive pronoun (drawn from the stressed or emphatic set, see § 4.1g); and the suffix *-de.*\(^2\) Reflexes of emphatic free pronouns are restricted to the East Coast branch of Bungku-Tolaki, in other words for all eastern languages excluding Moronene, which is therefore the level at which these pronouns can be reconstructed (the development of these emphatic free pronouns is in fact the innovation which defines the East Coast as a subgroup).

<table>
<thead>
<tr>
<th>1SG</th>
<th>*o-ngku-de</th>
</tr>
</thead>
<tbody>
<tr>
<td>2SG</td>
<td>*o-mu-de</td>
</tr>
<tr>
<td>3SG</td>
<td>*o-na-de</td>
</tr>
<tr>
<td>1PLX</td>
<td>*o-mami-de</td>
</tr>
<tr>
<td>1PLN</td>
<td>*o-nta-de</td>
</tr>
<tr>
<td>2PL</td>
<td>*o-miu-de</td>
</tr>
<tr>
<td>3PL</td>
<td>*o-nda-de</td>
</tr>
</tbody>
</table>

Table 39. Reconstructed emphatic free pronouns
(East Coast Bungku-Tolaki only)

Table 40 presents the free pronoun sets of six present-day Bungku-Tolaki languages. Although this table repeats some information already presented above in § 4.4, here data

---

\(^{2}\)The origin of this suffix is unknown, but compare the formative *-odi which Van den Berg reconstructs for three Proto-Muna free pronouns (*inodi '1sg', *incamoodi '1plx', and *intaodi '1pln') (1991:39–42).
are restricted to languages with reflexes of emphatic free pronouns, and greater detail is
given with respect to Bungku dialects.

<table>
<thead>
<tr>
<th>Taloki</th>
<th>Kulisu</th>
<th>Koroni</th>
<th>Wawonii</th>
<th>Bungku</th>
</tr>
</thead>
<tbody>
<tr>
<td>ingkude</td>
<td>unkgude</td>
<td>ingkude</td>
<td>onkgude</td>
<td>unkgude</td>
</tr>
<tr>
<td>ingko 'o'</td>
<td>ingko 'o'</td>
<td>ingko 'o'</td>
<td>iko 'o'</td>
<td>unmunde</td>
</tr>
<tr>
<td>inade</td>
<td>inade</td>
<td>inade</td>
<td>onade</td>
<td>iaa</td>
</tr>
<tr>
<td>ingkai</td>
<td>ingkai</td>
<td>ingkami</td>
<td>ikami</td>
<td>maide</td>
</tr>
<tr>
<td>ingkita</td>
<td>ingkita</td>
<td>ingkita</td>
<td>ontade</td>
<td>ontade</td>
</tr>
<tr>
<td>(no data)</td>
<td>(no data)</td>
<td>(no data)</td>
<td>ikomiu</td>
<td>(no data)</td>
</tr>
<tr>
<td>i'ira</td>
<td>indade</td>
<td>ondade</td>
<td>ondade</td>
<td>ondade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bungku (standard)</th>
<th>Bungku (Routa)</th>
<th>Mori Bawah (Tinompo)</th>
<th>Mori Bawah (Moiki)</th>
<th>Mori Bawah (Tiu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>onkgude</td>
<td>omude</td>
<td>onkgue</td>
<td>omkude</td>
<td>onkgude</td>
</tr>
<tr>
<td>munde</td>
<td>onae</td>
<td>omue</td>
<td>onade</td>
<td>iiko</td>
</tr>
<tr>
<td>nade</td>
<td>mami</td>
<td>ontade</td>
<td>onomami</td>
<td>ona'e</td>
</tr>
<tr>
<td>ntade</td>
<td>miu</td>
<td>omi</td>
<td>omi</td>
<td>omi</td>
</tr>
<tr>
<td>ndade</td>
<td>(no data)</td>
<td>onda</td>
<td>onda</td>
<td>onda'e</td>
</tr>
</tbody>
</table>

Table 40. Present-day Bungku-Tolaki emphatic free pronouns

(a) Despite the wide variety of forms found in the present-day languages, they are
derivable from the protoforms via one or more of the following changes:

- the weakening of *d to glottal or zero. Compare for instance the Mori Bawah dialectal
  forms Moiki onade ‘3SG’, Tiu ona’e and Tinompo onae.

- creeping nasalization of the final consonant, exhibited only in the second singular:
  
  *o-mu-de > omunde.

- reduction of four-syllable pronouns to three syllables, either by apheresis of the initial
  vowel (e.g. *o-mami-de > maide), or loss of the final syllable (e.g. o-mami-de >
In standard Bungku all pronouns have been further reduced to two syllables via the same processes.

- shift of the initial vowel. The change *o- > u is known to occur only when the following syllable also contains u, e.g. *o-ngku-de > ungkaude. The change *o- > i has occurred only in Taloki, Kulisu and Koroni, where presumably it was the result of contamination from other (i-initial) free pronouns.

(b) The same correspondence mami ~ mai ‘1PLX’ found in the genitive suffixes is also exhibited in the emphatic free pronouns. Combined with the kami ~ kai alternation found in the basic free pronouns, with the fuller set of data available in the free pronouns it is possible to fully view the distribution of these forms. The following refers properly only to the distribution of these forms in the free pronouns:

**isolects presently with kami, mami:** Moronene, Koroni, Wawonii, Bungku (Torete and standard dialects), Bahonsuai, Mori Bawah (Tinompo, Moiki, Tiu and Karunsi‘e dialects), Padoe, Mori Atas, Tomadino, Waru, Tolaki (Konawe, Mekongga and Laiwui dialects), Rahambuu.

**isolects presently with kai, mai:** Taloki, Kulisu, Koroni, Bungku (Landawe, Tulambatu, Waia and Routa dialects), Mori Bawah (Watu dialect), Tolaki (Wiwirano and Asera dialects), Kodeoha

This distribution strongly suggests that *kami and *mami are to be regarded as original, and that the shortening of *kami > kai and *mami > mai occurred as a drift-like tendency many times over in various daughter languages and dialects.

---

83 I reconstruct *o-miu-de ‘2PL’ on the basis of pattern symmetry, even though all known reflexes are without final -de. (The form omiude is in fact expected for the Routa dialect of Bungku, if data were available.)

84 Indeed, in Moronene there is currently found an alternation between ikami and ikai (likewise between the genitive pronoun -mami ~ -mai and the absolutive pronoun -kami ~ -kai), namely that “when any of these is followed by a clitic such as /-mol/, /-pol/, or /-si/, the medial /m/ is optionally deleted” (D. Andersen 1995:22), for example ikamimo ~ ikaimo /1PLX-COMPL/ ‘it’s us already’.
5 Active, Passive and Antipassive

This chapter is concerned with inflection that occurs with transitive predicates, specifically: suffixing with an object pronoun, which mark a verb as active; affixing with -in-, in- or ni- (schematically symbolized hereafter as \(<in>\)\), which marks a verb as passive; and prefixing with poN-, which marks a verb as antipassive. There are, of course, other issues which touch on transitivity such as cross-referencing a verb for agent or indirect object, derivation of transitive verb bases from other stems, and so-called reflexive, middle and accidental passive forms (all of which are syntactically intransitive in Bungku-Tolaki languages). However, these concerns lie outside the focus of this chapter.

As the term antipassive has a number of connotations, it may help the reader to understand at the outset that I employ this term in a pragmatic sense: antipassives are constructions in which the patient has lowered referentiality or topicality. There are, of course, morphosyntactic correlates: in Bungku-Tolaki languages the patient of an antipassive verb cannot be realized pronominally, though it may of course be realized as an NP (almost always without oblique marking in Bungku-Tolaki). And in terms of pronominal agreement, agents of antipassive verbs are treated in the same manner as subjects of intransitives (see Chapter 7).

5.1 Transitive verb bases

Before proceeding to a discussion of active, passive and antipassive in Bungku-Tolaki, however, it will be helpful first to define the concept TRANSITIVE VERB BASE. The following are examples of transitive verb bases drawn from a variety of Bungku-Tolaki languages:

TOL (133) a. kaa ‘eat’
   b. bindani ‘leave behind’

PAD (134) a. tanu ‘bury’
   b. kasipapa ‘carry under the arm’
MRB (135) a. tele 'swallow'
   b. pepate ‘kill’
BNG (136) a. baho ‘bathe’
   b. toepako ‘lift’
KUL (137) a. nahu ‘cook, boil’
   b. palingka ‘send off, expel’
MRN (138) a. ala ‘take’
   b. poko ’otolu ‘make (something) three’

A transitive verb base may be simple, composed of a single morpheme, as in all the (a) examples above, or it may be complex, composed of more than one morpheme, as in all the (b) examples. An important aspect of transitivity in Bungku-Tolaki, however, is that whether the transitive base is simple or complex in actual speech it is nearly always accompanied by some ‘extra’ bit of morphology. This accompanying morphology will either be a pronoun which indexes the object, the affix <in>, or the prefix poN-. For example:

KUL (139) a. Ari-mo to-tongo-ho, to-nahu-o-mo.
       finish-COMP 1PL-wrap-3SG 1PL-cook-3SG-COMP
       ‘After we finished wrapping it, we cooked it.’

   b. Gandu n[im]ahu-no a’iso i-motaha-mo.
       corn PASS-cook-3SG that 3SG-ready-COMP
       ‘The corn being cooked by him was ready.’

   c. I-ko ’uni-mo “Be-ku po-nahu gandu.”
       3SG-say-COMP FUT-1SG ANTIPASS-cook corn
       ‘He said, “I will cook corn.”’

or abstracted from context:

(140) a. nahu ‘cook it’          ACTIVE
   b. rinahu ‘be cooked (by someone)’ PASSIVE
   c. ponahu ‘cook, cook (something)’ ANTIPASSIVE

85 Compare respectively Tolaki binda ‘depart’; Padoe kasi ‘pinch’; Mori Bawah mate ‘die’; Bungku toe ‘lift’; Kulisu lingka ‘go, set off’; and Moronene otlu ‘three’, which constitute the respective roots of the derived forms listed here.
As the sentences of (139) illustrate, other bits of morphology may also accompany transitive verb bases. However, only object indexing, \(<\textit{in}>\) and \(poN\)- are specific to (and diagnostic of) transitive verbs. One may define a transitive verb base, then, as a stem which has the morphological potential of being indexed for object, passivized with \(<\textit{in}>\) or antipassivized with \(poN\).\(^{86}\) It is also generally true that bases which receive such morphological marking encode notions which are conceptually transitive, that is, they involve two distinguishable referents with one acting on or affecting the other.

However as is common throughout Austronesia, bases in and of themselves are not easily classified into different parts of speech, and whether a base should be considered even ‘verbal’ or ‘nominal’ frequently depends on context. Therefore we may conceive of, say, Bungku \(baho\) as a transitive verb base in that it is possible to create the formations bahoo ‘bathe him/her/it’, \(binaho\) ‘be bathed’, and \(pobaho\) ‘bathe (someone)’; however, \(baho\) also combines with \(pe\)- creating the middle (and syntactically intransitive) verb \(pebaho\) ‘bathe oneself’, while \(baho\) alone serves as the Bungku word for ‘water’ (Saro, Rahim, et al. 1982). This caveat notwithstanding, the concept of transitive verb base remains a useful notion for the following discussion.

5.2 Passive

The morpheme \(<\textit{in}>\) in Bungku-Tolaki serves as both a marker of passive voice and as a nominalizer which profiles the referent in patient role. This is not surprising as both functions are widely attested in cognates throughout Austronesia, and one or the other or both functions have been attributed to this morpheme in Proto-Austronesian.\(^{87}\)

\(^{86}\)Happily, this same constellation of morphological marking occurs over and over, and nearly any root which has the possibility of being, say, indexed for object may also be passivized or antipassivized and conversely. For some notable exceptions involving the applicative suffix \(-ako\), see Chapter 6.

\(^{87}\)Pawley and Reid (1980) noted simply that in many Philippine languages, passive constructions with \(-in/-ni\)- resemble nominals, the passive function having been lost (but the morpheme retained as a nominalizer) in Oceanic languages. Later Starosta, Pawley and Reid (1982) developed the notion that the nominalizing function was prior, from which developed the use of \(-in/-ni\)- as a (perfective) object focus
Furthermore, even as a passive marker <in> probably finds its widest use in relative clauses and content interrogatives when the patient role is relativized or questioned, where the passive verb may in some cases alternatively be interpreted syntactically as a nominalization (e.g. ‘what did you cook?’ = ‘what is your cooked thing?’).

In Proto-Bungku-Tolaki the passive marker *<in> likely had the following allomorphs: the infix /-in-/ placed before the first stem vowel when the initial consonant was voiceless; the prefix /in-/ when the stem was vowel initial; and the prefix /ni-/ when the initial consonant was voiced. This is in fact the pattern which is still retained in Tolaki, which thus may be used to illustrate this original allomorphy. First with initial voiceless consonants (bracketing indicates inflexion): 88

TOL (141) a. p[in]ahō ‘planted’ < paho ‘plant’
   b. t[en]ena ‘ordered’ < tena ‘order’
   c. k[ulisi ‘peeled’ < kulisi ‘peel or skin woody items using a blade’
   d. s[olongako ‘poured out’ < solongako ‘poured out’
   e. h[umu ‘burned’ < humu ‘burn’

with vowel initial stems: 89

   f. in-alo ‘taken’ < alo ‘take’
   g. in-ehe ‘desired, longed for’ < ehe ‘want’
   h. in-imi ‘drunk’ < imi ‘drink’
   i. in-oli ‘bought’ < oli ‘buy’
   j. in-usa ‘pounded’ < usa ‘pound with a pestle’

and with initial voiced consonants:

   k. ni-bahō ‘bathed’ < baho ‘bathe’
   l. ni-dago ‘guarded’ < daga ‘guard’
   m. ni-geru ‘scraped’ < geru ‘scrape’

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88The Tolaki data have been drawn from various sources, including Pattiasina, Muthalib, et al. (1979/1980), Muthalib, Alimuddin, Chalik, et al. (1985), Scott Youngman (1997:pers.comm.) and my own field notes. Pattiasina, Muthalib, et al. (1983:23) provide certain forms which fail to conform to the stated pattern—nihoto ‘cut’, ginogo ‘embraced’—but such data have not been confirmed by any of my other sources.

89Rarely one also hears ni- before vowel initial stems (Youngman 1997:pers.comm.).
n. *ni-mala* ‘trimmed’ < *mala* ‘trim (as wood by shaving off thin pieces)’
o. *ni-nahu* ‘cooked’ < *nahu* ‘cook’
p. *ni-ngangiti* ‘fussed over’ < *ngangiti* ‘fuss over’
q. *ni-wala* ‘fenced’ < *wala* ‘fence’
r. *ni-ruru* ‘gathered’ < *ruru* ‘gather’
s. *ni-luarako* ‘taken out’ < *luarako* ‘take out, put out, expel’

Because this is also the pattern found in Moronene, I attribute it to their common ancestor, Proto–Bungku–Tolaki—even though this pattern has disappeared in Kulisu, Wawonii, Bungku and Mori Bawah where apparently /-in/- has everywhere taken over the domain formerly held by /ni-/ (see respectively Asmi 1995:33, 61; Manyambeang, Mahmoed, et al. 1982/1983:32, 37; Hani 1969:32; and Esser 1933:352).  

5.2.1 Passive as nominalization

Two undergoer pivot morphemes have been reconstructed for Proto–Austronesian, the perfective (or past, or realized) infix *<in>* and the neutral (or non-past, or unrealized) suffix *-ən*. Both apparently also functioned as nominalizers, and the difference between them may be illustrated by examples from present-day languages. The following pairs are from, respectively, Paiwan (Ferrell 1982, cited in Ross 1995:752) and Tagalog (Reid 1992:68):

PAI (142) a. *k[ín]an* ‘consumed food, something eaten’
   b. *kan-ən* ‘food, something to be eaten’

TAG (143) a. *b[ín]ili* ‘something that was bought’
   b. *bilib-in* ‘something to be bought’

However, in the prehistory of the languages under study here, PAN *-ən* merged phonologically with the locative pivot morpheme *-an* (§ 2.5). Consequently by Proto–Bungku–Tolaki *<in>* had expanded in productivity and application, and was no

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90 Regarding other languages, there are no firm data. David Andersen (1997:pers.comm.) has informed me that Moronene stems which normally take the infix *-in-* can also take the prefix as a minor variant (e.g. *hinole* ‘fried, roasted’ var. *nihole*), but not vice versa. This may indicate that in Moronene—unlike elsewhere—it is the prefixed form which is becoming the more dominant pattern.
longer restricted to perfective contexts (a point which is abundantly illustrated in the examples below). On the other hand the present-day suffix -a, where it continues the older meaning of PAN *-an, exists only in certain frozen nominalizations.91

The following illustrates a Bungku-Tolaki passive nominalization with <in>. Syntactically this construction has all the earmarks of a noun phrase:92

KUL (144)  kinaa-no Wangkinamboro <in>:eat-3SG Wangkinamboro

But even with these simple data, certain ambiguities arise: should kinaa be viewed as semantically compositional and hence something to be treated in a syntactic component (suggesting the translation ‘that which Wangkinamboro ate/eats/will eat’), or is kinaa its own lexeme and hence something to be derived in a lexical component (suggesting the translation ‘Wangkinamboro’s food’)?

In order to avoid this dichotomous line of questioning, I prefer to adopt a Cognitive Grammar framework for treating and understanding nominalizations.93 In this view kinaa, along with other <in> forms, simply instantiates a broad pattern of <in> affixation which profiles the referent in patient role against the backrounded event. The cognitive salience of the backrounded event is a matter of degree, which may even vary from utterance to utterance depending on context. Also the more conventionalized the meaning, the more

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91Compare for example these forms originally meaning ‘that which will be X-ed’:

<table>
<thead>
<tr>
<th>PAD</th>
<th>kaanga ‘food’</th>
<th>cf. kaa ‘to eat’</th>
<th>(Lara, Larobu, et al. 1991:22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD</td>
<td>asa ‘merchandise’</td>
<td>cf. asa ‘to sell’</td>
<td>(Lara, Larobu, et al. 1991:5)</td>
</tr>
<tr>
<td>MRB</td>
<td>tunua ‘firewood’</td>
<td>cf. tunu ‘to burn’</td>
<td>(Adriani 1914:234)</td>
</tr>
<tr>
<td>MRB</td>
<td>pae pahoa ‘seed rice’</td>
<td>cf. paho ‘to plant’</td>
<td></td>
</tr>
</tbody>
</table>

Interestingly, Esser gives Mori Bawah asa-a ‘that which is to be sold’ and kaa-nga ‘that which is to be eaten’, but also notes in-asa and k[ina]a in the very same meanings (1933:370)—a pair of present-day examples which illustrates the old, yet continuing takeover of the function of *-an by *<in>.

92Compare raha-no Wangkinamboro ‘W.’s house’, gandu-no Wangkinamboro ‘W.’s corn’, etc.

93Regarding nominalizations, see especially Langacker (1991b:13 ff.). For more general and succinct introductions to cognitive grammar, see Langacker (1988, 1991a).
the backgrounded event may recede. For example, Kulisusu *kinna* is a term for food in general, but often refers more specifically to the main starch (e.g. rice or cassava); in other areas, *kinna* has come to mean exclusively ‘cooked rice’. Tolaki *pinisi* refers to not just anything which is pinched between the fingers (transitive base *pisi*), but specifically to the langsat fruit which is opened in this manner. One could imagine at the far end of this continuum *<in>* forms with which all reference to the underlying event has become obliterated, e.g. through phonological reshaping of the *<in>* form so as to be no longer recognized as such, or through the original transitive base falling into disuse. As an example of the former, one might cite Padoe *inehu* ‘vegetables’ which is at least two degrees removed phonologically from its original form *ninahu* ‘be boiled, cooked’. An example of the latter, cited by Adriani (1914:227), is Tolaki *kiniku* ‘carabao’, stem *kiku* unknown.

Although this viewpoint is now associated with modern Cognitive Grammar, similar thoughts were also expressed early this century. The following quote regarding Mori Bawah forms is revealing, even though Esser still desired to divide *<in>* forms into discrete categories:

Many -in- forms have become regular substantives, such as *imula* ‘cargo, load’; *imule* ‘descendant, progeny’ (from *mo’ule* ‘bring forth’ (of descendants)); *inahu* (from *ninahu* ‘vegetables, greens, flesh, fish’, but usually ‘greens’, in particular a certain ‘pea’ (namely, the plant, the fruit of which is called *wua inahu* and the leaves *lewe inahu*); *pinotuwu* ‘domesticated animal’; *pinopaho* ‘plantings’ (mompaho ‘to plant’; the reduplication could have originated by analogy with *pinotuwu*); *inomba* ‘dried meat’ (mo’omba ‘salt meat and dry it in the sun’); *inike* ‘beaten tree bark’; *minama* ‘areca nut’ also referring to the ‘areca palm’ (= *pu’u minama*), from *momama* ‘chew betel nut’. With these forms one no longer thinks of the action which is expressed by the root word, and the corresponding genitive or possessive pronoun refers then also not to the agent but to the (grammatical) possessor. (Esser 1933:354) (my translation)

Morphologically, *<in>* nominalizations are indexed for agent/possessor in the genitive, and fill the same syntactic slots as do regular nouns. Compare for example:
KUL (145) a. *Hiina i-da’a doi-ngku.*
   NEG 3SG-NEG.EXT money-1SG
   ‘I don’t have any money’ (lit. ‘my money does not exist’)

   NEG-COMP 3SG-NEG.EXT PASS:await-1PLN
   ‘There’s no longer anyone we’re waiting for.’ (lit. ‘our awaited one no longer exists’)  (Asmi 1995:86)

Compare further these noun phrase examples:

TOL (146) *ni-wowai-no Imba*
   PASS-do-3SG Imba
   ‘Imba’s work’  (Sande, Sikki, et al. 1986:88)

MRB (147) *in-ia-do To Molongkuni*
   PASS-reside-3PL To Molongkuni
   ‘a village of the To Molongkuni’  (Esser 1927:164)

(148) *k[in]aa asa n-tongo*
   PASS:eat one LKR-wrap
   ‘a wrapper of cooked rice’  (Esser 1933:271)

MRN (149) *yo ni-daga-no simbau-’u*
   ART PASS-take.care-3SG friend-2SG
   ‘the thing taken care of by your friend’  (S. Andersen 1994a:48)

and these sentence examples:

TOL (150) *Mo’ahi ni-nahu-miu.*
   salty PASS-cook-2PL
   ‘Your cooking is salty’  (Youngman 1991:pers.comm.)

   clear PASS:say-2SG that
   ‘What was said by you is true.’  (Karhunen 1994:22)

KUL (152) *C[in]atapi hina-po i-mocu’i.*
   PASS-wash NEG-INCOMP 3SG-dry
   ‘The wash (washed clothes) isn’t dry yet.’
(153)  \textit{Ndo-riso} \textit{sabara} \textit{giu-no} \text{\textsc{k[in]}aa},
\begin{tabular}{llll}
3PL-assemble & every & kind-3SG & PASS:eat \\
\end{tabular}
\textit{be-ndo} \textit{pom-pili} \textit{bo} \textit{apu-no} \textit{rajaki}.
\begin{tabular}{llll}
FUT-3PL & ANTIPASS-choose & for & lord-3SG \text{foodstuff} \\
\end{tabular}
‘Then every kind of eaten thing gathered together, in order to choose someone to be king of the foods.’ (Asmi 1995:86)

MRN (154) \textit{I’aku} \textit{mehawa-ku} \text{\textsc{[m]ong-kaa}} \text{\textsc{k[in]}aa}.
\begin{tabular}{llll}
1SG & like-1SG & PART:ANTIPASS-eat & PASS:eat \\
\end{tabular}
‘I like to eat rice.’ (S. Andersen 1994a:17)

(155) \textit{Nahina} \text{\textsc{t[in]}o’ori-no}.
\begin{tabular}{llll}
NEG:EXT & PASS:know-3SG \\
\end{tabular}
‘There was nothing he knew.’ (S. Andersen 1994a:48)

(156) \textit{Sawali} \textit{pera} \textit{in-awa-nto} \textit{to-pe-tia-orrwa’-o}.
\begin{tabular}{llllllllll}
but & all & PASS-get-1PLN & 1PLN-MM-divide-two-3SG \\
\end{tabular}
‘But everything we get we’ll divide in two’ (D. Andersen 1997:pers.comm.)

5.2.2 Passive in relative clauses and content interrogatives

Bungku-Tolaki languages follow a pattern common to other languages of Western Indonesia in that they allow a patient to be relativized only when it occurs as surface subject, in other words the verb of the relative clause must occur in passive form.\textsuperscript{94} For example:

KUL (157) \textit{pakea} \text{\textsc{[w[in]eewe-nto \text{\textsc{a’iso}}}}
clothing \begin{tabular}{llll}
PASS-make-3SG & that \\
\end{tabular}
‘that clothing which had been made by her’

From the discussion of \textit{<in>} as a nominalizer, it follows that example (157) might have an alternative interpretation, namely that \textit{wineewe-nto} is not a clause but rather a noun which stands in apposition to \textit{pakea}, something like ‘that clothing, her made thing’. Although it is possible that relative clauses originated in this way, present-day languages now generally distinguish relative clauses from nouns in apposition. In Kulisusu for instance, it

\textsuperscript{94}With certain exceptions; see further § 8.3.
is only non-restrictive relative clauses which may formally resemble appositives. Compare for example the true apposition construction in (158), as well as the non-restrictive relative clause of (159), both of which are distinguished from the construction of (157) by the position of the deictic (a'iso), phonetic pause (indicated by comma), and the article io:

KUL (158) mia a'iso, io [ laki-no lipu ]
person that ART chief-3SG settlement
‘that person, the Lakino Lipu’

(159) ana cina a'iso, io [ t[in]ako-ndo i
child female that ART PASS-hide-3PL at
  tangke-no Wansindoori-dori itonia ]
mountain-3SG Wansindori-dori near past
‘that girl child, the one who had earlier been hidden by them on Mount Wansindori-dori’

In the post-PBT period, other languages have developed relative markers which now formally distinguish relative clauses from apposition constructions, for example Pseudo henu, Mori Bawah and Bungku amu, Wawonii mia, and Moronene da (on the origin of these particles see § 8.1). Compare the following examples of relative clauses from across Bungku-Tolaki. In every case, it is the patient which has been relativized, and the verb occurs with <in>:

TOL (160) nggiro'o o wine ni-ruru-no
that ART rice PASS-collect-3SG
‘that rice which had been collected by him’

(161) o gandu s[in]olongako-ro i tonga m-bada
ART corn PASS:pour.out-3PL at middle LKR-field
‘the corn which had been poured out by them in the middle of the field’

PAD (162) galu henu tekonai p[in]ompaho-ako
rice.field REL at.the.moment PASS:plant-BEN
‘the rice field which is being planted’ (Karhunen 1994:39)

MRB (163) kondehora amu h[in]awe-ku hieno
animal REL PASS:encounter-1SG near past
‘the animal which I just now encountered’ (Esser 1927:164)
(164) *kinaa anu n[in]ahu-no*
cooked.rice REL PASS:cook-3SG
‘the rice which was cooked by him’ (Esser 1927:164)

(165) *punti p[in]aho-do*
banana PASS:plant-3PL
‘bananas which were planted by them’ (Esser 1927:164)

BNG (166) *susu anu in-imu-no i andi*
milk REL PASS-drink-3SG PN younger.sibling
‘the milk which was drunk by Younger Brother’
(Saro, Rahim, et al. 1982:76)

WAW (167) *lima tongo kinaa mia in-oli-no*
five wrap cooked.rice REL PASS-buy-3SG
‘five wrappers of cooked rice that were bought by him’
(Manyambeang, Mahmoed, et al. 1982/1983:82)

KUL (168) *kapala bo s[in]awiki-ndo*
boat FUT PASS:board-3PL
‘the boat which was going to be boarded by them’

(169) *ika n[in]aa-ngku i wawo-no pobumbu a’iso*
fish PASS-store-1SG at top.part-3SG ridge.pole that
‘that fish which I had stored above the ridge pole’

MRN (170) *yo ta’ate-no da ni-ungkaari-no*
ART knife-3SG REL PASS-hold-3SG
‘his knife that he was holding’ (S. Andersen 1994a:50)

(171) *luwu doi da p[in]o’ita*
all money REL PASS:ask
‘all the money that was asked for’ (S. Andersen 1994a:4)

(172) *masina da p[in]ake*
machine REL PASS:use
‘a machine which has been used’ (S. Andersen 1994a:49)

Apparently, a relative marker (*hemu, anu, mia, da*) need not be present, but its absence may signal a more conventionalized meaning. Compare example (172) with the following:

MRN (173) *masina p[in]ake*
machine PASS:use
‘a second-hand machine’ (S. Andersen 1994a:49)
In a similar way, in these languages headless relative clauses formally and semantically contrast with `<in>` nominalizations, for example Mori Bawah *kinaa-miu* ‘your eaten thing, your cooked rice’ versus *anu kinaa-miu* ‘that which is eaten by you’ (**‘that which is your cooked rice’**), as in:

**MRB (174)**

\[
\text{Amu-mo k[}i\text{n}]a\text{a-miu onae-mo ngkuda ku-pong-kaa}.
\]

thing-COMP PASS:eat-2PL 3SG-COMP 1SG:additive 1SG-ANTIPASS-eat

‘That which is eaten by you all, that’s what I’ll eat too.’ (Esser 1927:162)

Likewise in Moronene:

**MRN (175)**

\[
\text{Lima-no naamo wiri-no simbau-’u da k[}i\text{n}]a\text{a-u}.
\]

hand-3SG and ear-3SG friend-2SG REL PASS:eat-2SG

‘What was eaten by you were the hands and ears of your friend.’

(S. Andersen 1995a:48)

Just as when the patient is relativized, when one interrogates the patient, a passive form of the verb is used. The resulting interrogative sentence has the form of an equative clause with the word for ‘who?’ or ‘what?’ standing on one side and a construction with `<in>` on the other side. In this regard, the `<in>` form is morphosyntactically indistinguishable from a nominalization. Compare the following two questions:

**KUL (176)**

\[
\text{Inaio bo apu-ndo?}
\]

who FUT lord-1PL.COLL

‘Who will be our king?’ (Asmi 1995:86)

**KUL (177)**

\[
\text{Inaio bo in-engka-ndo?}
\]

who FUT PASS-lift-3PL

‘Who will be elevated by them?’ (‘Who is to be their elevated one?’)

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95 The form *inaio* ‘who?’ (historically *ina* + the third person singular pronoun *io*) is used only in equative sentences, further evidence that *in-engka-ndo* of example (177) is being treated as a nominalization. The form used to interrogate oblique cases is *ina*; as in:

**KUL**

\[
\text{Bo inai u-po-’oli pakuli?}
\]

for who 2SG-ANTIPASS-buy medicine

‘Who did you buy medicine for?’
The passive form can also be interpreted as a relative clause, thus 'who is it that will be elevated by them?’, but apparently a relative marker is not required. Compare further these examples:

TOL (178)  
\[ O \  hapo \ laa \ t[\text{in}]ekura'ako-no? \]  
\text{ART what be PASS-distressed.about-3SG}  
'What's being distressed about/over by him?' (Sande, Sikki, et al. 1986:111)

MRB (179)  
\[ Isema \ k[\text{in}]jita-mu? \]  
\text{who PASS:see-2SG}  
'Who was seen by you?' (Esser 1927:158)

BNG (180)  
\[ Hapa \ t[\text{in}]jewa-mu? \]  
\text{what PASS:carry.in.sarong-2SG}  
'What are you carrying in your sarong?' (Adriani 1900:271)

WAW (181)  
\[ Hapao \ mia \ b[\text{in}]jini-miu? \]  
\text{what REL PASS:carry-2PL}  
'What are you carrying?'  

KUL (182)  
\[ lo \ hapo \ k[\text{in}]jaa-miu? \]  
\text{ART what PASS:eat-2PL}  
'What are you eating?'

(183)  
\[ lo \ hapo \ k[\text{in}]jeni-miu? \]  
\text{ART what PASS:hold-2PL}  
'What are you holding?'

MRN (184)  
\[ Hapa \ nta \ ni-lagu-to? \]  
\text{what FUT PASS-sing-1PLN}  
'What are we going to sing?' (S. Andersen 1995b:60)

(185)  
\[ Hapa \ ni-wewe-u\text{-}u? \]  
\text{what PASS-do-2SG}  
'What are you doing?' (S. Andersen 1995b:62)

5.2.3 Passive in independent clauses

Across Bungku-Tolaki languages, when <in> passives occur as main clause predicates they are overwhelmingly agent-deleting, in other words they disallow any overt
expression of the agent. Such passive clauses are restricted to discourse contexts where
the agent is highly backgrounded or irrelevant. Compare the following examples from
Kulisusu, a language in which passives occurring in main clauses are always agent-
deleting:

KUL (186) \( I-[\text{p}][\text{in}]\text{ura-mo}. \)
3SG-PASS:finish-COMP
‘It’s used up.’

(187) \( \text{Mewangu mewangu, oloncudo} a'iso i-[\text{s}][\text{in}]/\text{ambure}. \)
morning morning yard that 3SG-PASS:sweep
‘Every morning that yard is swept.’

(188) \( \text{Gau-ndo be-ndo} k[\text{in}]\text{aa} \text{pokana-kana}. \)
speech-3PL FUT-3PL PASS:eat same
‘They said they will all be eaten the same’ (Asmi 1995:87)

Note the morphosyntactic contrast between main clause passives and passives which we
have seen used in other contexts. Here, as in examples (186) through (188), main clause
passives may be indexed for patient—what could hence also be termed the derived subject.
This is not possible with \(<\text{in}>\) forms found in nominalizations, relative clauses and
interrogatives, which may only be marked for the (demoted) agent. Compare further the
following examples of main clause passives. Pronominal indexing—when it occurs, as in
(191) through (195)—is restricted to the patient (= derived subject), with no agent
expressed whatsoever.

TOL (189) \( \text{Koa oleo hopulo kiniku ni-gere}. \)
every day ten carabao PASS-slaughter
‘Every day, ten carabao are slaughtered.’
(Muthallib, Alimuddin, Chalik, et al. 1985:34)

(190) \( \text{Ina-inae} \ [m]\text{e-alo} \ [m]\text{eohai} \ t[\text{in}]\text{ondu} \)
whoever PART:MM-take PART:be.siblings PASS-submerge
\( i \ i\text{woi}. \)
at water
‘Whoever marries being siblings is drowned in water.’
(Sande, Sikki, et al. 1986:89)
Although these languages certainly have the apparatus to express the agent when the verb is passive, apparently this rarely happens in main clauses. Moronene is one language which allows non-topical agents to be introduced following the preposition hai 'at' (S. Andersen 1995b:35), but even this strategy appears to be uncommon in Moronene, and similar strategies in other Bungku-Tolaki languages are unknown to me:

Instead, when the agent is expressed usually an active clause must be employed, even when a new agent is presented against a highly topical patient. Compare for example the Moronene sentence of (197) in which the verb onto 'see' in its second occurrence is active, 'they (people) saw him', not passive 'he was seen by people':
MRN (197)  
Saba nta [m]o-rako kadadi da
emerge FUT PART:ANTIPASS-catch animal REL
[in]onto-no, ka-ndo me-'onto-o miano.
PASS:see-3SG and-3PL PLS-see-3SG person

'(the tiger) emerged in order to catch any animal it saw and then people saw it.' (S. Andersen 1995b:28)

The same is also found in Tolaki. For example, in response to the question ‘What happened to this wooden spoon?’, only the active clause of (198) is acceptable, not its passive counterpart, even though the rat introduced in agent role is neither topical nor specific (S. Youngman 1990:pers.comm.):

TOL (198)  
No-kaa-'i doeye.
3SG\textsubscript{i}-eat-3SG\textsubscript{j} rat\textsubscript{i}

‘A rat ate it.’

In a similar vein, Esser (1933:352) gives the following Mori Bawah translation for ‘ten lepers were healed by Jesus’:

MRB (199)  
Hopulu ira mia melowe do-pokomadoo-ira Ue Isa.
ten 3PL person\textsubscript{i} leprous 3PL\textsubscript{j}-heal-3PL\textsubscript{i} Lord Jesus\textsubscript{j}

Apparently, the focus on the lepers achieved by using passive voice as in the English translation can only be approximated by word order in Mori Bawah, so that (199) translates literally ‘the ten lepers, he healed them Jesus’. When a passive construction is attempted, namely:

MRB (200)  
Hopulu ira mia melowe p[in]okomadoo-do Ue Isa.
ten 3PL person leprous PASS:heal-3PL\textsubscript{j} Lord Jesus\textsubscript{j}

the passive verb with agent indexing can only be interpreted as belonging to a relative clause, hence ‘ten lepers who were healed by Jesus’ (Esser 1933:352).

In general, then, passive main verbs do not allow expression of an agent. Exceptions (besides the Morcnene strategy using hai) are rare, but I have gleaned one example each
from Tolaki and Padoe, and two from Moronene. The Tolaki example is taken from a discourse context in which the agent is highly topical and the patient is introduced into the discourse, and the same apparently also holds true for the Moronene examples:

TOL (201) Opitu o’osu ni-lomba-no, a-no huarao-kee
seven mountain PASS-perforate-3SG and-3SG expel-3SG
i tahi...
at sea

‘Seven mountains were punched through by him, and he deposited them in the sea…’

PAD (202) n[jin]ahu-nggu inehu la’a
PASS-cook-1SG vegetable that
‘those vegetables were cooked by me’ (Vuorinen 1995:106)

MRN (203) Ko’ira yo wembe ni-pakani-no-mo koie i Ali.
those ART goat PASS-feed-3SG-COMP that PN Ali
‘Those goats were pastured by Ali.’ (S. Andersen 1995b:36)

(204) orua boto wawi ari ni-pando-ngku
two large.object pig finish PASS-spear-1SG
‘I’ve speared two pigs’ (S. Andersen 1994a:37)

96Upon further investigation, Wawonii may also prove to allow exceptions to this generalization. Although we do find examples with fronted object, as expected:

WAW dahu i-bebe-o i Ali
dog 3SG-hit-3SG PN Ali
‘the dog was hit by Ali’ (lit. ‘the dog, he hit it, Ali’)

as well as passive -in- verbs, presumably with indexing for the derived subject:

WAW puu ng-keu p[in]odo-o
trunk LKR-tree PASS:cut.down-3SG
‘the tree trunk was cut down’ (Manyambeang, Mahmood, et al. 1982/1983:89)

these authors also provide some intriguing examples such as the following. In this case, it appears that the demoted agent appears without any preposition or pronominal marking on the passive verb.

WAW salaha masuko iso s[in]ansi-o mia mahina
path narrow that PASS:traverse-3SG person many
‘that narrow pathway is traversed by many people’
However, a syntactic interpretation in which these <in> forms are considered to be nominalizations—that is ‘seven mountains were what was punched through by him...’; ‘what I cooked are those vegetables’, ‘those goats were what were pastured by Ali’, ‘two pigs is what I speared’—cannot immediately be ruled out. I have also come across one example from Mori Bawah; in this case the discourse context makes it less likely that \[l[in]alo-do\] is to be interpreted as a nominalization.

MRB (205)  
\[umari-no t[um]ele-o kimbohu nana’ote andio,\]  
finish-3SG PART:swallow-3SG iguana youth this

\[ka-i amba l[um]ako-ako-ira, osio inia l[in]alo-do,\]  
and-3SG next PART:go-BEN-3PL nine village PASS:pass.by-3PL

\[ka-i amba tetoro-ako-ira a n-toto si’e-do Datu\]  
and-3SG next sit-BEN-3PL at LKR-below rice.barn-3PL Datu

‘After the iguana had swallowed the youth, then he walked for them on the way (the iguana walked, but they were both on the move), nine villages they passed through, then he sat for them underneath the rice barn of Datu.’ (Esser 1933:376)

Because of their rarity, such agent-retaining passive constructions have resisted further investigation.

5.3 Active and antipassive

Wherever one goes in the Bungku-Tolaki area, there are two ways to invite someone to eat. For example in Kulisusu:

KUL (206) a.  
\[Pong-kaa!\]  
ANTIPASS-eat  
‘Eat!’

b.  
\[Kaa-ho!\]  
eat-3SG  
‘Eat it!’

The verb of (206a), which is an antipassive form, is the standard way to invite someone to eat, to ‘dig in!’ as it were, to help oneself to whatever food has been set out. The active verb of (206b) on the other hand has a much more specific intent and would only be used when some certain food is under consideration; maybe the hostess has set a special dish
before you and wants you to eat it. On a microcosmic scale these two verbs, pongkaa and kaaho, illustrate the difference between active and antipassive in Bungku-Tolaki. Whatever the associated morphosyntactic properties, the difference pragmatically lies in the definiteness of the referent in patient role, namely: active for patients on the high end of the definiteness scale, and antipassive for patients lower down.

Although traditional grammar recognizes the categories ‘definite’ and ‘indefinite’, degree of definiteness actually represents an interplay of different vectors, including whether or not the referent is a specific entity, aforementioned in the discourse, and present in long-term or focal memory. Accordingly, how ‘definite’ and ‘indefinite’ are defined may be played out differently from one language to the next. However, the correlation between active forms (with indexing for object) and ‘definite’ versus antipassive forms (with poN-) and ‘indefinite’, is found so many times over in present-day languages that the same correlation must be attributed to their common ancestor, PBT. Below, I examine data from four languages, Mori Bawah, Tolaki, Moronene and Kuliusu.

Although the underlying form of the antipassive marker is poN-, it coalesces with the participle marker -um- to appear in surface form as /moN-/. Since /moN-/ thus comprises two morphemes but in surface representation these morphemes are not linearly segmentable, I use a bracketing convention to represent this state of affairs, i.e. /m/oN- (glossed as PART:ANTIPASS). As may be observed below, participle forms are never used when immediately preceded by a nominative pronoun, though this restriction need only be noted here in passing. The significance of this co-occurrence restriction for historical reconstruction is taken up in Chapter 7. For a fuller discussion regarding the allomorphs and distribution of -um- see § 7.2; regarding the morphophonemics of the nasal coda of poN-/moN-, see § 3.1.4; regarding the use of poN- as a noun formative, see § 8.5.
5.3.1 Mori Bawah

In Mori Bawah, specific patients take an active form of the verb, but non-specific patients (especially in a partitive sense) require the antipassive:

Any object, namely, whether singular or plural, which is not human, individual, definite, but serves as part (without being further specified) of a whole, a group, a collective, is taken as indefinite and thus constructed with one of the above [poN-] forms. Thus in a sentence such as ‘Today we shall eat the cow which was slaughtered yesterday’, in Mori only a form with definite object can be used, if one’s intention is to refer to the entire animal. If one intends however to say that today one shall eat a portion of the flesh, and the rest keep until later (e.g. ‘we shall eat of the cow…’), then in Mori one can only use an indefinite object form, because in that case which part of the cow shall be eaten at the specified time, and which part not, is not indicated. (Esser 1933:182–183) (my translation)

Examples of the antipassive in Mori Bawah are (Esser 1933:183):

MRB (207)  

\[ \text{Onae-mo} \quad \text{ka-i} \quad \text{pon-tena} \quad \text{i} \quad \text{Numunuo} \]
\[ 3\text{SG-COMP} \quad \text{and-3SG} \quad \text{ANTIPASS-order} \quad \text{PN} \quad \text{Numunuo} \]
\[ \text{otolu} \quad \text{ira} \quad \text{mia} \quad \text{mota’u}. \]
three 3PL person old

‘Then Numunuo sent out three of the old people’

(208)  

\[ \text{Nahi} \quad \text{tehine} \quad \text{i-hawe-o-mo} \quad \text{umbele-do} \quad \text{bonti}, \]
\[ \text{NEG} \quad \text{long.time} \quad \text{3SG-meet-3SG-COMP} \quad \text{mudhole-3PL} \quad \text{pig} \]
\[ \text{onae-mo} \quad \text{i-po-imu}. \]
3SG-COMP 3SG-ANTIPASS-drink

‘Not long after, she came to a mudhole used by wild pigs, then she drank thereof.’

If Esser’s analysis is correct, then active forms are used so long as the patient is a specific (whole) entity, even if such a referent is new to the discourse and unknown to one’s audience—as for example the twigs, banyan tree and rice mortar in the following examples, which even at first mention receive pronominal indexing on a transitive verb (this also holds true for the mudhole of the example immediately above) (Esser 1933:184):
MRB (209)  

\[ l-ala-o \quad rani \quad andio \quad p[\emptyset]udu-o \quad ranka \]
\[ 3SG\text{-}take-3SG \quad gnome \quad this \quad PART\text{:}break\text{.}off\text{-}3SG \quad twig \]

\[ opaa, \quad ka-i \quad wee-ako-no \quad i \quad Rintago. \]
\[ four \quad and\text{-}3SG \quad give\text{-}COMM\text{-}3SG \quad PN \quad Rintago \]

‘The gnome took and broke off four twigs and gave them to Rintago.’

(210)  

\[ [m]elulu \quad i \quad Oleo \quad b[\emptyset]uta-o \quad apali, \quad ka-i \quad lako \]
\[ PART\text{:}leap \quad PN \quad Sun \quad PART\text{:}extract\text{-}3SG \quad banyan \quad and\text{-}3SG \quad go \]

\[ p[\emptyset]aho-ako-no \quad i \quad Wula \quad a \quad n-toro \quad ulu-no; \]
\[ PART\text{:}plant\text{-}BEN\text{-}3SG \quad PN \quad moon \quad at \quad LKR\text{-}crown \quad head\text{-}3SG \]

\[ [m]ombalo \quad i \quad Wula \quad [lum]ako \quad um-ala-o \]
\[ PART\text{:}take\text{.}revenge \quad PN \quad Moon \quad PART\text{:}go \quad PART\text{:}take\text{-}3SG \]

\[ nohu \quad langkai, \quad [m]elulu \quad p[\emptyset]aho-ako-no \quad i \quad Oleo \]
\[ rice\text{.}mortar \quad large \quad PART\text{:}leap \quad PART\text{:}plant\text{-}BEN\text{-}3SG \quad PN \quad Sun \]

\[ a \quad ntoro \quad ulu-no. \]
\[ at \quad crown \quad head\text{-}3SG \]

‘Sun leapt hard, pulled a banyan tree out of the ground, and planted it for Moon on the crown of her head; responding, Moon took a large rice mortar, leapt hard and planted it for Sun on the crown of her head.’

5.3.2 Tolaki

What we have seen in Mori Bawah does not necessarily hold for other Bungku-Tolaki languages. In Tolaki, for example, specific referents which are new to the discourse generally require an antipassive form of the verb when first mentioned (assuming of course they are introduced in patient role). Compare the use of an antipassive form of \textit{piara} ‘care for, tend’ in (211a), where the goat is introduced into the story:

TOL (211) a.  

\[ Laa-i-to \quad [m]\emptyset o\text{'ia} \quad i \quad Abunawas, \quad a-no \]
\[ be\text{-}3SG\text{-}COMP \quad PART\text{:}live \quad PN \quad Abunawas \quad and\text{-}3SG \]

\[ pom-biara \quad o \quad bee, \quad o\text{'aso-ikaa.} \]
\[ ANTIPASS\text{-}care\text{.}for \quad ART \quad goat \quad one\text{-}precisely \]

‘There used to live a man called Abunawas (lit., Abunawas was living), and he cared for a goat, a single one.’
Thereafter, the goat, which is very significant to the plot, more appropriately appears as the patient of an active verb. Compare this sentence which immediately follows (211a) in this story:

b. *Laa-i-to-kaa p[Ø]iara-i, a-no laa nggo mate.*  
   be-3SG-COMP-just PART:care.for-3SG and-3SG be FUT die  
   ‘He was just taking care of it, and it was going to die.’

Note also the following pairs, each of which contrasts a verb in antipassive and active form. Although antipassives allow an object to be expressed in nominal form (it cannot be expressed pronominally), in general modification by deictic, possessor, or relative clause is eschewed, as this further specification would increase the definiteness of the referent in patient role to where an active form would be required (data from S. Youngman 1990:pers.comm.).

TOL (212) a. ...*lako [m]o-lolaha o ambo*  
   go PART:ANTIPASS-search ART goodness  
   ‘...go look for goodness’

   b. ...*lako i[um]olaha-’i ina-no i Dapi*  
   go PART:search-3SG mother-3SG PN David  
   ‘...go look for David’s mother’

(213) a. *Ku-onggo [m]o-inu iwoi.*  
   1SG-want PART:ANTIPASS-drink water  
   ‘I want to drink some water’ (water in general, not any specific water)

   b. *Ku-onggo um-inu-’i iwoi ni’ino.*  
   1SG-want PART-drink-3SG water this  
   ‘I want to drink this (particular glass of) water’

(214) a. ...*a-no po-wohiki dadio ana dalo.*  
   and-3SG ANTIPASS-wash many child baby  
   ‘...and he washed many baby children’ (unspecified group)

   b. ...*a-no wohiki-’i ana-ndo.*  
   and-3SG wash-3SG child-IPLN  
   ‘...and he washed our child’ (a specific child)
When making a request, a Tolaki speaker may consciously employ a form implying that the object is indefinite, even when it is specific and known to both the speaker and his audience (S. Youngman 1990:pers.comm.). Therefore, although (215a) is a possible formation, sentence (215b) is considered more polite:

TOL (215) a. Tewali-‘i-ki ku-onggo s[um]aru-‘i la’usa-miu?
   be.possible-3SG-CERT 1SG-want PART:borrow-3SG ladder-2PL
   ‘May I certainly borrow your ladder?’

   b. Tewali-‘i-ki ku-onggo [m]o-saru la’usa-miu?
   be.possible-3SG-CERT 1SG-want PART:ANTIPASS-borrow ladder-2PL
   ‘May I certainly borrow a ladder of yours?’

5.3.3 Moronene

Moronene presents many of the s-me features of active and antipassive seen above in Tolaki and Mori Bawah. Some contexts in which antipassive forms are typically called for are when the patient is non-referential or non-specific:

MRN (216) I Sanudi merare-ho [m]o-benuti ni ‘i.
   PN Sanudi fast-3SG PART:ANTIPASS-husk coconut
   ‘Sanudi is very fast at husking coconuts.’ (S. Andersen 1995b:29)

(217) Ari-aku [m]ong-kaa nangka.
   finish-1SG PART:ANTIPASS-eat jackfruit
   ‘I have eaten jackfruit’ (S. Andersen 1995a:17)

(218) Na-n-do paisa [m]o-‘awa ihi e’e.
   NEG-3PL never PART:ANTIPASS-find meat water
   ‘They never found any prawns’ (S. Andersen 1995a:17)

A closely related use of antipassive forms is what may be termed ‘action-focus’. In such cases any overt reference to a highly backgrounded patient may simply be missing:

MRN (219) Ari-aku-mo [m]on-totapi.
   finish-1SG-COMP PART:ANTIPASS-wash
   ‘I’ve washed (clothes)’ (S. Andersen 1995a:16)

(220) Impia ka-i pom-po-‘engka?
   when.FUT and-3SG ANTIPASS-CAUS-rise
   ‘When will he build?’ (S. Andersen 1995b:30)
Active forms on the other hand usually imply an action carried out on a specific, known entity:

MRN (221)  *Me’asa tempo koe koe leu titia-ho dahu.*  
one time that stork come invite-3SG dog  
‘Once upon a time the stork came and invited the dog’  
(S. Andersen 1995a:12)

(222)  *Tampo-’o-mo yo kaumba; mokora-ho ngalu.*  
close-3SG-COMP ART window strong-3SG wind  
‘Please close the window; the wind is strong.’ (S. Andersen 1995a:13)

(223)  *Aha-’akita-’o pali, nta lako-kita mom-popodo keu.*  
sharpen-BEN:1PLN-3SG axe FUT go-1PLN ANTIPASS-cut wood  
‘Please sharpen the axe for us, we are going to cut wood’  
(S. Andersen 1995a:13)

(224)  *Ka-u ala-o die doi ka-u lako mo-’oli depa.*  
nand-2SG take-3SG this money and-3SG go ANTIPASS-buy biscuit  
‘Then you take this money and buy some biscuits.’  
(S. Andersen 1995a:13)

When an unknown referent is introduced into the discourse, whether it is specific or non-specific plays a role in the choice of verb form. For example, in (225) and (226), I assume that because the well and the hut are individual and specific (there was only one well, and only one hut in the orchard), they appear as the surface object of an active verb—even though the most natural translation is with the English indefinite article a:

MRN (225)  *Ka-i onto-o nangkia pinewawu, koie and-3SG see-3SG indeed well that  
po-’ala-a-no-mo miano e’e.*  
ANTIPASS-get-LOC-3SG-COMP person water  
‘Then indeed he saw a well, the place where people drew water.’  
(S. Andersen 1995a:12)
(226)  

\( \text{Ka-i lako koie [m]e-raro-m-punti ka-i} \)  
\( \text{and-3SG go that PART:MM-inside-LKR-banana and-3SG} \)  
\( \text{awa-a olumpu-‘ute.} \)  
\( \text{find-3SG hut-small} \)  

‘Then he went into the banana orchard and found a small hut.’  
(S. Andersen 1995a:12)

On the other hand, the bananas and the stake in examples (227) and (228) respectively are introduced as objects of antipassive verbs, not only because they are unknown but also non-specific (there were several bananas, of which some were picked, and—presumably, as neither the context nor Andersen’s free translation indicates this—several stakes of which one was sharpened). Once introduced, however, their definiteness is established and in subsequent mention, the bananas and stake appear as objects of active verb forms.\(^{97}\)

MRN (227)  
\( \text{Ni-lako-no-mo ndoke [m]omone; sa-teleu-no} \)  
\( \text{NI-go-3SG-COMP monkey PART:climb when-arrive-3SG} \)  
\( \text{hai otu m-punti laulau-no-mo totoro naamo} \)  
\( \text{at top LKR-banana go.directly-3SG-COMP sit and} \)  
\( \text{[m]o-‘upu ka-i kulisi-o ronga kaa-ho.} \)  
\( \text{PART:ANTIPASS-pick and-3SG peel-3SG with eat-3SG} \)  

‘Immediately the monkey climbed; when he arrived at the top of the banana (tree), immediately he sat down, picked (some fruit), then peeled and ate it.’  
(S. Andersen 1995a:21)

(228)  
\( \text{Ni-lako-no-mo kolopua lako [m]o-sembi} \)  
\( \text{NI-go-3SG-COMP turtle go PART:ANTIPASS-sharpen} \)  
\( \text{ampa, naamo ta’o-o hai raro ng-kapu.} \)  
\( \text{stake, and set-3SG at inside LKR-grass} \)  

‘Immediately the turtle went and sharpened a stake and set it in a clump of grass.’  
(S. Andersen 1995a:15)

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\(^{97}\)However, note also this sentence. Perhaps the gloss ‘…and ate thereof’ would be appropriate; compare also example (208) in the main text.

MRN  
\( \ldots \text{ka-i ala-a [m]ong-kaa tual-no.} \)  
\( \text{and-3SG take-3SG PART:ANTIPASS-eat younger.sibling-3SG} \)  

‘…then his sister took it and ate.’  
(S. Andersen 1995b:29)
Less certain is the analysis of sentences such as the following, where the English gloss indicates that the object is to be considered definite:

MRN (229) a. Daa-ko [m]o-wawa sica-’u?
be-2SG PART:ANTIPASS-bring brush-2SG
‘Have you brought your brush?’ (S. Andersen 1995a:19)

Furthermore, even in subsequent discourse, this brush failed to rise to the point where it became indexed by object pronoun, compare for example the following two sentences which occurred subsequently to that of (229a) (S. Andersen 1995a:19):

b. Nde’e nta [m]o-’ala-ko?
INTERROG FUT PART:ANTIPASS-take-2SG
‘will you take (it)’?

c. po-wee-haku ka-ku po-saru ’isala.
ANTIPASS-give-1SG and-1SG ANTIPASS-borrow first
‘give me so I can borrow (it) first’ (S. Andersen 1995a:19)

Andersen herself concludes that “here the full focus is on the possibility of ‘taking’, ‘giving’ and ‘borrowing’” (1995a:19), and that the brush—in that it is not overtly marked—is less thematic than some referent which receives, say, pronominal indexing on the verb. One should not rule out the possibility however that the use of antipassives in this context is simply a ‘politeness’ strategy which avoids as much as possible any overt reference to the actual object under discussion.

5.3.4 Kulusu

As the following examples illustrate, the same correlation between antipassive marking and indefiniteness of the referent in patient role is also to be found in Kulusu:

KUL (230) Sa-bucu-no i-po-wole-mo empe daida-no.
when-just-3SG 3SG-ANTIPASS-stretch.out-3SG mat father-3SG
‘Then her father stretched out a mat.’

(231) Ndo-pom-pewoo woo-no manusia.
3PL-ANTIPASS-smell scent-3SG human
‘They smelled human scent.’
(232)  
*Ungkude ku-po-wawa kabaku.*
1SG 1SG-ANTIPASS-bring gift
'(As for) me, I’ve brought a gift.'

(233)  
*Sa-ari-no a’iko, i-po-moni-mo raha...*
when-finish-3SG that 3SG-ANTIPASS-request-COMP house
'After that, she asked for a house…'

(234)  
[m]o-hapai inggomiu? [m]o-wuu ni’i.
PART:ANTIPASS-do.what 2PL PART:ANTIPASS-husk coconut
'What are you doing?'
'Husking coconuts.'

A major difference between Kulisu and the other languages looked at here is that
when the verb is active, pronominal indexing of the object sometimes lapses. First are
some examples which follow the ‘standard’ active pattern with pronominal indexing for
the patient. Even unknown referents as in (236) may be introduced into the discourse as
patient of an active clause provided they are specific:

KUL (235)  
*Mbalo c[fnjuda]pako-no itonia*
bamboo.container PASS:throw-3SG near.past
*i-’ala-o-mo tama-no, ka-i wungkahi-o.*
3SG-take-3SG-COMP father-3SG and-3SG open-3SG
'Her father took the bamboo container which she had just thrown
and he opened it.'

(236)  
*ari-no ka-i lingka, i-awa-’inda-mo mia, finish-3SG and-3SG go 3SG-meet-3PL-COMP person
indade kototoro i koro-no bawu.
3PL sit.around at trail-3SG wild.pig
' Afterwards he set off, and he met some people, they were sitting
around along a pig trail.’

(237)  
*I-parinta-’o-mo duka kincah-no*
3SG-command-3SG-COMP again kincah.bird-3SG
*be-i ko’uni-’ako “Kincah”...*  
FUT 3SG-say-COMM kincah
'Again he commanded his kincah bird to say “kincah”…'
The conditions under which the pronominal suffix may be omitted are not yet understood, especially as the same speaker under nearly identical circumstances may sometimes enunciate, sometimes not, the expected suffix. Compare especially (236) with (238) and (237) with (239).

KUL (238)\[\text{Ari-no } a'iso, \text{ ka-i lingka, i-awa-Ø-mo mia, finish-3SG that and-3SG go 3SG-meet-3PL-COMP person}\]
\[\text{Indade [m]o-'ala bake-no jumpaka. 3PL PART:ANTIPASS-get fruit-3SG plumeria}\]

‘After that he set off, and he met some people, they were collecting plumeria fruit.’

(239)\[\text{Maka Buragil i-tena-Ø-mo kincah-no then Buragil 3SG-order-3SG-COMP kincah.bird-3SG}\]
\[\text{be-i ko 'uni-'ako "Kincah"... FUT-3SG say-COMM kincah}\]

‘Then Buragil ordered his kincah bird to say “kincah”…’

(240)\[\text{Sa-tewandu-no munu a'iso, tena-Ø-mo tama-no when-leaning-3SG banyan that order-3SG-COMP father-3SG}\]
\[\text{“Sapu-Ø, Bintausu.” Lako-mo ka-i sapu-'o keu a'iso. catch-3SG Bintausu go-3SG and-3SG catch-3SG tree that}\]

‘When that banyan tree was leaning, his father ordered him, “Catch, Bintausu.” He went and he caught the tree.’

Another point of difference between Kulisu and the other Bungku-Tolaki languages investigated above is that while in general the patient of an antipassive verb (when expressed) shows up without any oblique marking, in Kulisu the noun in patient role has come to be preceded by an oblique marker. This pattern is rare in discourse, and has only been observed with certain verbs such as kuani ‘inform’. Compare the active construction of (241a) with the antipassive-cum-oblique-patient of (241b); in both cases the patient, the one informed, must be interpreted as definite:
KUL (241) a. *Sabucu-no mia a’iso i-kuani-o-mo potae...* after-3SG person that 3SG-inform-3SG-COMP that ‘Then that person informed him that…’
making the passive

b. *Ndo-bansule-mo ka-ndo pong-kuani i tama-no tae-no...* 3PL-return-COMP and-3PL ANTIPASS-inform at father-3SG say-3SG

‘They returned and they informed her father saying…’

This other use of the antipassive in Kulisu corresponds to what Cooreman (1988) described in Chamorro as a DEMOTING antipassive—in which the patient is coded with an oblique marker—versus the more usual INDEFINITE antipassive (corresponding to all other antipassive examples given above). Compare for example this active versus demoting antipassive pair in Chamorro:

CHM (242) a. *Un-hongge i lahi.* 2SG-belong to the man ‘you believe the man’

b. *Man-hongge hao mu i lahi.* ANTIPASS-belong 2SG OBLIQUE the man ‘you believe/have faith in the man’ (Cooreman 1988:575)

Chamorro demoting antipassives are used in contexts where (a) the patient is less affected (similar to English ‘he hacked the tree’ versus ‘he hacked at the tree’), (b) the given agent was not wholly responsible for the action, but rather “was involved in, took part in, or was one of those who performed the act described by the verb with respect to the definite object” (Cooreman 1988:580), or (c) the action is iterative or distributive. Although one might expect corresponding Kulisu constructions to be employed in similar contexts, this will have to be verified by future research.

5.4 Whence PBT *poN-

Present-day Bungku-Tolaki languages—to the extent that these languages are known—show such formal and functional agreement in regard to active, passive and
antipassive that it seems entirely reasonable to attribute this pattern to their common ancestor. Namely, we can say that: (a) PBT had a passive marker *<in> used primarily in nominalizations (meaning 'that which was/is/shall be X-ed'); in relative clauses and content interrogatives when the patient role was relativized or interrogated; and in main clauses. The agent if expressed was indexed by genitive pronoun on the passive form, though it may be that main clause passives were agent-deleting, that is, without any overt expression of agent. (b) In other contexts, a PBT transitive verb base either occurred with the prefix *poN-, if the object was 'indefinite', or else was followed by a pronoun clitic (of those described in § 4.3) which indexed a 'definite' object.98 How 'indefinite' and 'definite' were defined in the protolanguage is debatable to an extent, but certainly fell along the lines of specific versus non-specific, new versus aforementioned, and/or known versus unknown.

Undoubtedly the PBT passive marker *<in> originated from PAN *<in>, the reconstructed perfect tense marker; the pathway of this development is outlined in § 2.5. Likewise, I consider that the PBT antipassive marker *poN- originated from PMP *paN-, though making this correlation raises certain questions concerning both form and function which have yet to be adequately addressed.

On the formal side, there is a question regarding the effect which the nasal coda of PMP *paN- must have had on a following voiceless obstruent. When Wolff described the nasal coda of *paN- as "a morphophoneme of substitution of a stop or spirant by a homorganic nasal" (1973:72), he clearly had in mind a pattern such as is found in modern Indonesian:

---

98 This pattern appears to have been independent of whether or not the patient also appeared as a full noun phrase. In present-day languages, the co-expression of a patient as a nominal (along with either poN- or object indexing) depends on certain discourse considerations, the nature of which lay outside the scope of this investigation.
BI (243) a. *meN-pahat → memahat ‘chisel’
   b. *meN-tanem → menanem ‘plant’
   c. *meN-kenai → mengenai ‘hit, touch, concern’
   d. *meN-sambung → menyambung ‘connect, join’

However, although such a pattern of nasal substitution is widespread in the Philippines and
western Indonesia, no such prefix with a nasal or nasal substitution is found in Formosan
languages (Ross 1995:771), and it was on such a basis that Dahl (1976:127–128)
concluded the development of *paN- with nasal coda (in his view this coda was *ŋ) must
therefore have been a Proto–Malayo-Polynesian innovation. Adding to this picture,
however, are languages such as are found in the Bungku-Tolaki area which do not exhibit
‘nasal substitution’ with this morpheme but rather what might be called ‘nasal
assimilation’. Compare for example the Indonesian forms above with their Mori Bawah
cognates (concerning this pattern in other Bungku-Tolaki languages, see further § 3.1.4):

MRB (244) a. *moN-pa’o → momba’o ‘chisel’
   b. *moN-tano → montano ‘bury’
   c. *moN-kona → mongkona ‘hit, reach’
   d. *moN-sombu → monsombu ‘connect, join, lengthen’

Given the existence of these two patterns in present-day languages, logically there are
three possibilities: (a) their common ancestor exhibited a pattern of nasal assimilation,
from which developed a pattern of nasal substitution in Indonesian cum suis; (b) their
common ancestor exhibited a pattern of nasal substitution, from which developed a pattern
of nasal assimilation in Mori Bawah cum suis; (c) their common ancestor exhibited a
pattern which was neither (for example *N = /ŋ/), from which developed patterns of both
nasal assimilation and nasal substitution.

From the perspective of historical change, the first and third possibilities would
require nothing other than the application of regular sound change processes in a specific
context. The second possibility is more complex, however, in that it would require an oral
stop articulation to have been analogically restored in Bungku-Tolaki forms, e.g. PMP
*maN-paqet > *mamaqet > Mori Bawah mompa’o. This change, I believe, is unlikely, yet it is precisely this development which has most often been assumed in the literature (Wolff 1973; Ross 1994, 1995). As ‘nasal assimilation’ is itself a fairly widely attested pattern in Malayo-Polynesian languages—considering Sulawesi languages alone, nasal assimilation is found in at least the Bungku-Tolaki, Kaili-Pamona, South Sulawesi, and Saluan language groups—there arises a question of how many times over and in which subgroups one might wish to postulate this analogical restoration to have taken place. The answer will ultimately rest on a better understanding of subgrouping within (especially Western) Malayo-Polynesian.

On the functional side, there is a question of what meaning or role was played by *paN- in the PMP system of verbal affixation. Wolff reconstructed *paN-/maN- which he identified only as derivational morpheme (1973:72); Dahl considered *(pa)N-/((ma)N- to have indicated an “emphatic, intensive verbal form” which developed into a marker of actor focus partly replacing *-um- in this function (1976:128); Ross identified *paN-/maN- as a derivational morpheme which was used to “form verbs where the actor is the pivot from verbs where the undergoer is pivot and from other items” (1994:70). One question we might ask is, why would PMP have had two verbal actor-pivot morphemes, one derivational (*paN-) and the other inflectional (*-um-), and which furthermore—given that *maN- was underlyingly *-um- + *paN- (Wolff 1973:74, Ross 1994:70)—could co-occur? A second question is how to account for the antipassive function of *paN- found in a number of Malayo-Polynesian languages.

Both questions receive satisfactory answers if we assume the Bungku-Tolaki languages still reflect the original function of PMP *paN-, namely, that is it was used to mark the patient as non-specific, diffuse, indefinite. This morpheme was thus not an actor-pivot marker per se, but in a system which required focused elements to be definite, it became an actor-pivot morpheme perforce. Furthermore, by virtue of its role of
marking indefinite patients, *paN- was—from a functional perspective—already on its way to becoming an antipassive formative, if we broadly conceive of ‘antipassive‘ as a strategy for demoting the patient.

This hypothesis receives additional support from certain other Malayo-Polynesian languages. In the following sections, I look at data from three other Western Malayo-Polynesian languages: Chamorro, spoken on the islands of Guam and Saipan, approximately thirteen hundred miles east of the Philippines; Seko Padang, a member of the South Sulawesi language group, spoken in the isolated Betue-Karama river valley in the highlands of northern South Sulawesi; and Kapampangan, a well-known Philippine language spoken in Central Luzon. In all of these languages, as in Bungku-Tolaki, there is a clear correlation of *paN- reflexes with indefiniteness of the patient.

5.4.1 Chamorro

Despite the geographical distance separating Chamorro and Bungku-Tolaki, certain striking parallels are found here, including antipassive sentences marked with maN-, active sentences marked with -um- (or else preceded by an agent pronoun), and passive sentences marked with -in-. A Chamorro antipassive sentence is one which "backgrounds the direct object so that it becomes an Oblique NP or disappears altogether resulting in a syntactically intransitive clause" (Cooreman 1982b:351), though apparently no oblique marker need necessarily accompany the patient noun:

CHM (245)  
\[ I \ peskadot \ man-gonni' \ gwihan. \]
\[ the \ fisherman \ ANTI\PASS\-catch \ fish \]
\[ 'the fisherman catches/caught fish/a fish' \ (Cooreman 1982b:351) \]

---

99Despite the geographical proximity of the South Sulawesi languages with Bungku-Tolaki, these two groups give indication of being only distantly related. See Mill's comparison of the South Sulawesi languages with other languages of Sulawesi, wherein he concludes: "In sum, we can see that the island of Sulawesi contains documented representatives of at least three major subgroups, possibly four—or more, since we have not dealt with the poorly attested Tomini languages of N[orth] Sul[awesi]. No one group appears to be closely related to any other..." (1985:60). See also Sirk (1981, 1989).
(246) man-li 'e’ yo’ patgon.
ANTIPASS-see 1SG child
‘I saw a child’ (Topping 1980:78)

The form *faN- occurs in future tense (irrealis), in which case the verb is preceded by an agent agreement marker:

CHM (247) Para en fan-draiba.
FUT 2PL ANTIPASS-drive
‘You (two) will drive.’ (Topping 1980:116)

As example (247) also illustrates, an antipassive clause may also occur without any overt reference to the patient (compare the first two examples, in which the patient is realized as an NP). Cooreman herself concluded that antipassives are used in situations where the referent in patient role (what Cooreman labels the ‘affected participant’) is new, non-referential and non-specific:

The affected participant has the maximum value of 20 for referential distance indicating that it is new in the discourse. The additional fact that the affected participant has zero persistence reflects its non-referentiality, non-specificity... ...the oblique object of the Chamorro antipassive has the lowest possible degree of topicality. One would thus expect the informational value coded in these sentences to the rest of the discourse to be fairly low. This expectation is borne out by the fact that antipassives have a high tendency to occur in backgrounded clauses, i.e. in general they are not involved in the main line of the thematic development of the narrative. (Cooreman 1982b:362) (emphasis hers)

At the opposite end of the spectrum Chamorro has two passive constructions, one marked with the familiar -in- as in (248) and the other with *ma*- as in (249):

CHM (248) Si nana-hu ts[ım]atgi giäs tata-hu.
PN mother-1SG PASS:smile LOC father-1SG
‘My mother was smiled at by my father’ (Cooreman 1982b:350)

---

100 Cognates of Chamorro *ma-* are to be found in Bungku-Tolaki, compare for example the Tolaki stative prefix *me-* which indicates resultant states, e.g. *metano* ‘be buried’ (< *tano* ‘bury’), *meqondi* ‘be locked’ (< *qondi* ‘lock’), in which “the semantic agent is totally out of focus and cannot be expressed in the same clause” (Youngman 1995:3).
(249) *Todu i taotao nu man-gaigi Guam gwihi na tiempo*
all the people REL PLS-be Guam there LKR time

*man-ma-lakpari.*
PLS-PASS-baptize

‘All the people that were in Guam at the time were baptized’
(Cooreman 1982b:351)

Of these two passive constructions, “the *-in*-passive turns out to be primarily (80 percent) an agent-retaining passive construction, while the *ma*-passive is primarily (85 percent) an agent-deleting passive” (Cooreman, Fox & Givón 1984:10). Both are used in discourse situations where the topicality of the agent is low, “more so for the *ma*-passive than for the *in*-passive” (Cooreman, Fox & Givón 1984:11).

The Chamorro constructions which correspond to Bungku-Tolaki active clauses Cooreman divided into two groups, those taking indexing for agent (her so-called ‘ergative construction’) as in (250) and (251), versus those taking *-um-* (her so-called ‘*-um-construction*) as in (252) and (253):

**CHM (250)**

<table>
<thead>
<tr>
<th>Ha-konni’</th>
<th>si Orasima’</th>
<th>i hāggan...</th>
</tr>
</thead>
<tbody>
<tr>
<td>3SG-take</td>
<td>PN</td>
<td>Orasima the turtle</td>
</tr>
</tbody>
</table>
‘Orasima took the turtle…’ (Scancarelli 1985:338)

**(251)**

<table>
<thead>
<tr>
<th>Hu-gwaidzá</th>
<th>gwi’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG-love</td>
<td>3SG</td>
</tr>
</tbody>
</table>
‘I love him’ (Cooreman 1982b:347)

**(252)**

| Si Santa Maria h[um]a’tan i tano dzān i tsamorro |
|---|---|
| PN | Saint Mary UM-protect the land and the Chamorro |
‘The Virgin Mary protects/protected the land and the Chamorros’
(Cooreman 1982b:352)

**(253)**

<table>
<thead>
<tr>
<th>Guiya</th>
<th>l[um]i’i gui’</th>
</tr>
</thead>
<tbody>
<tr>
<td>3SG.INDEP</td>
<td>UM-scc 3SG</td>
</tr>
</tbody>
</table>
‘He saw him’ (Scancarelli 1985:338)

Typically, the ergative construction is used when the agent is highly topical and the patient less so, while the *-um-construction* is used when the agent and patient are relatively equal in topicality (Cooreman 1982b:365). In typical narrative discourse, ergative constructions
outnumber other transitive constructions (antipassive, -in-passive, etc.) together nearly two to one and thus may be considered the basic transitive type in Chamorro. As examples (250–253) also illustrate, in either case, the patient may be realized as a pronoun or a full NP, but not both. This is in contradistinction to Chamorro antipassive constructions, where the patient may not have a pronominal realization.

As summarized in Table 41, in terms of agent/patient relative topicality, the Chamorro ergative and -um-constructions occupy a middle position between the antipassive and the two passive construction types:

<table>
<thead>
<tr>
<th>CONSTRUCTION TYPE</th>
<th>DEGREE OF TOPICALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>maN-antipassive</td>
<td>agent » patient (the patient gets suppressed completely)</td>
</tr>
<tr>
<td>ergative</td>
<td>agent &gt; patient</td>
</tr>
<tr>
<td>-um-construction</td>
<td>agent = patient</td>
</tr>
<tr>
<td>-in-passive</td>
<td>agent &lt; patient</td>
</tr>
<tr>
<td>ma-passive</td>
<td>agent « patient (the agent prototypically gets suppressed)</td>
</tr>
</tbody>
</table>

Table 41. Chamorro transitive construction types, following Cooreman (1982a)

From a comparative perspective, I find it better to combine Cooreman’s so-called ergative and -um-constructions into one type, the ‘active’. As partial justification for my doing so, note that the same alternation found in the antipassive (namely, maN-, but faN- if preceded by an agent marker) would then also be found correspondingly in the active direct (namely, -um-, but bare stem if preceded by an agent marker).\(^{101}\)

\(^{101}\)Indeed, Cooreman herself later took this same tack—compare for example her dissertation in which she analyzed ‘transitive’ sentences as taking either ergative (agent) agreement markers or the infix -um- (1985:40–51). Other changes in terminology have been adopted over the years, as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>antipassive</td>
<td>antipassive</td>
<td>antipassive</td>
<td>antipassive</td>
<td>antipassive</td>
</tr>
<tr>
<td>ergative -um-construction</td>
<td>transitive</td>
<td>active</td>
<td>active/direct</td>
<td></td>
</tr>
<tr>
<td>-in-passive</td>
<td>-in-passive</td>
<td>IN passive</td>
<td>inverse</td>
<td></td>
</tr>
<tr>
<td>ma-passive</td>
<td>ma-passive</td>
<td>MA passive</td>
<td>passive</td>
<td></td>
</tr>
</tbody>
</table>
5.4.2 Seko Padang

Payne and Laskowske (1997) identify four formal construction types associated with Seko Padang transitive verbs: the passive, the active-transitive, the antipassive, and a fourth type which these authors label the super-antipassive.

Passive clauses are characterized by the presence of the verbal prefix ni-, object indexing with the standard set of proclitics, and absence of any reference to the agent. They are used in discourse contexts where the identity of the agent is unknown or simply irrelevant (Payne and Laskowske 1997:430):

SEK (254) olo’olo’ ung bebe ni-konai: kodo:
animal LKR foolish PASS-name monkey
‘the foolish animal is named “Monkey”’

and are also used when “the agent is known, but the patient is more central to the unfolding of the text” (Payne and Laskowske 1997:430):

SEK (255) Ø-ni-dòdo ’-mo
3-PASS-dump.out-PERF
‘it [the monkey] was dumped out’

As the authors explain, in example (255) the identity of the agent (the one dumping, who was a tarsier) was fully known from context, but what happened to the monkey was more central to the storyline. In addition, some speakers even extend the use of the passive construction into the domain where the agent is topical: in the following example “it cannot be said that the agent is non-topical, because the group is the main topic of the entire section of story of which this is an excerpt” (Payne & Laskowske 1997:431):

SEK (256) a. Oka’ ke se.
look.for 1PLN PL
‘Let’s look for him’
b. Ni-oka', ni-oka'.
   PASS-look.for PASS-look.for
   'He was looked for, looked for.' (i.e. 'they looked for him')

c. Ei, ni-lampi' one:
   well PASS-find there
   'Well, he was found there...' (i.e. 'they found him there')

It seems therefore the one being sought may be regarded as the local topic, and the ones
seeking as topical in a more global sense.

Active-transitive clauses on the other hand are characterized by required pronominal
indexing for both the agent and the patent, and there is no verbal prefix. Typically both
participants are topical (Payne & Laskowske 1997:429):

SEK (257) Õ-na-lola asu karao: nai Rere.
   3-3-chase dog far from Rere
   'The dog chased it far from Rere'

(258) piso teng ti Õ-ku-baha.
   machete just DET 3-1SG-carry
   'It was just a machete that I carried.'

Antipassive constructions, on the other hand, are considered by these authors to be
formally intransitive; these are characterized by the presence of the verbal prefix maN-,
required agent indexing and, perhaps unusually, the required expression of the patient as a
full noun phrase. A primary function of the antipassive construction is to introduce
participants into the discourse, i.e. the patient is non-topical (Payne & Laskowske
1997:432):

SEK (259) ku-mang-pehong ko, le, tai: kakommang
   1SG-ANTIPASS-cook 1SG of.course guts grasshopper
   'I am cooking grasshopper guts.'

When sentences occur apart from discourse context, it appears that the patient of an
antipassive verb is most naturally rendered as indefinite in the English free translation
(Payne & Laskowske 1997:431):
Fourth, there is a transitive clause type dubbed the ‘super-antipassive’, in which case a transitive verb stem is formally treated as if it were intransitive, taking regular intransitive morphology and, unlike the antipassive, allowing no expression of the patient. “The intransitive prefixes miN-/mu-/lm- and the infix -um- described [previously] normally occur on notionally intransitive verbs. However they may also occur on notionally transitive verbs when the object is omitted” (Payne & Laskowske 1997:432).

The difference between the super-antipassive construction in (261) and the regular intransitive construction in (262) is that the stem ula ‘follow’ may be used transitively in other contexts, but the stem lilong may not.

The presence of this super-antipassive construction—the likes of which have not been described for either Chamorro or Bungku-Tolaki—is a secondary development in Seko Padang. The associated morphology of course points to the historical origin of the super-antipassive clause type, it representing nothing other than the extension of intransitive affixation—along with some notion of the associated semantics—to transitive verb bases. Functionally:

...both [the maN- and miN- constructions] are antipassives since both downplay the centrality of the patient. However, the miN- construction is clearly a variant of the common intransitive construction type, and involves a more significant reduction in topicality of the patient than does the maN- construction. In fact the miN- antipassive can be thought of as the ‘mirror image’ of the passive
construction—whereas the passive does not allow expression of the agent, the *miN*-construction does not allow expression of the patient. (Payne & Laskowske 1997:433)

The four transitive construction types of Seko Padang may thus be summarized:

<table>
<thead>
<tr>
<th>Construction Type</th>
<th>Degree of Topicality</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>miN</em>-super-antipassive</td>
<td>agent &gt;&gt;&gt; patient</td>
</tr>
<tr>
<td><em>maN</em>-antipassive</td>
<td>agent &gt;&gt; patient</td>
</tr>
<tr>
<td>active-transitive</td>
<td>agent ≥ patient</td>
</tr>
<tr>
<td><em>ni</em>-passive</td>
<td>patient &lt;, &lt;&lt;, &lt;&lt;&lt; agent</td>
</tr>
</tbody>
</table>

Table 42. Seko Padang transitive construction types, following Payne and Laskowske (1997)

5.4.3 Kapampangan

When we limit our attention to semantic agents and patients, Kapampangan contrasts only two transitive clause types which, following traditional analyses, may be identified as actor focus and goal focus, or active and passive. Actor focus forms generally require the morpheme *pang*-. Roswell describes formal aspects of this marker thus:

The active form of *tumbuk* ['hit'] is formed by the active affix */m-*/ added to the stem consisting of the prefix */pang-*/ and the verb root *tumbuk* which, after assimilatory processes as described above, becomes *manumbuk*. The passive affixes [-*in*- and -*an*] are applied directly to the verb root *tumbuk*. Thus the basic (DO) passive shows less marking than the active. (Roswell 1983:27)

(Reasons for synchronically analyzing the form *mang*- as two morphemes may be found especially in De Guzman 1978, 1996.) Because of such features, Roswell herself adopted the analysis that Kapampangan clauses with goal focus morphology (-*in*, -*an*) as in the (a) examples below are actually basic transitive sentences, while those with actor focus morphology (*mang*-) as in the (b) examples are antipassive. According to Roswell (1983:54), the basic difference between the sentences below, as well as such pairs in
general, lies in the definiteness of the object, namely definite in (263a) and (264a) and indefinite in (263b) and (264b):

KPP (263) a. Ta-tagal-an  ne  ning  asu  ing  pusa.
    PRES-chase-GF  he+it  ERG  dog  ABS  cat
    ‘the dog is chasing the cat’

    b. Mänagal  /m- + päng + tagal/  ya-ng  pusa  ing  asu.
    AF-PRES:ANTIPASS-chase  he-GEN  cat  ABS  dog
    ‘the dog is chasing a cat’

(264) a. Bilbal  /b + in + albal/  nala-ng  Juan  ding  bote
    PAST:GF:knock.over  he+them-ERG  John  ABS  bottles
    ‘John knocked over the bottles’

    b. Memalbal  /m- + peng + balbal/  ya-ng  bote  y  Juan
    AF-PAST:ANTIPASS-knock.over  he-GEN  bottles  ABS  John
    ‘John knocked over some bottles’

As is typical in Philippine languages, Kapampangan makes use of so-called noun markers which distinguish the role of the noun phrase which follows (in a traditional focus analysis, the markers ing, ding, and y found above would be called topic markers, respectively common noun singular, common noun plural and personal noun singular). Also note the so-called copy pronouns, which are sometimes portmanteau, e.g. ne ‘he+it’ (< *na-ya) and which are extensively used in Kapampangan. In fact, only the pronouns need appear (Roswell 1983:71):

KPP (265) Ta-tagal-an  nala
    PRES-chase-GF  he+them
    ‘he is chasing them’

However, although the patient has a pronominal realization in goal focus constructions such as in (263a), (264a) and (265) above, when the verb is marked with mang- there is no copy pronoun for the patient, and it may be realized only as an NP or by zero. Compare the basic (goal focus) construction of example (266a) with the antipassive (actor focus) constructions which follow (Mirikitani 1971:338, 352, 515; Roswell’s glossing are conventions maintained for consistency):
KPP (266) a. Basan /basa + an/ ke ing dyaryu.
   read-GF I+it ABS newspaper
   ‘I’m going to read the newspaper’

b. mamasa /m- + pang + basa/ ku-ng dyaryo.
   AF-ANTIPASS-read I-GEN newspaper
   ‘I’m going to read a newspaper’

c. mamasa /m- + tang + basa/ ku pota.
   AF-ANTIPASS-read I later
   ‘I’m going to read later’

In some cases, the underlying prefix /pang-/ does not appear, in which case the active marker has instead the form /-um-/, as in sumulat kung kwentu ‘I’m going to write a story’ (stem sulat). Kapampangan verbs like sulat, which take just the infix -um-, however, are “comparatively rare and lexically determined” (Roswell 1983:52).

The actor focus and goal focus constructions described above are the only relevant transitive clause types of Kapampangan, with the former being the more restricted in terms of the range of voice which it may encode—another reason for considering goal focus to be the basic clause type of Kapampangan. For an indefinite but specific agent to be expressed, an existential followed by a relative clause may be required, e.g. the English sentence ‘a woman cooked the chicken’ would have to be rendered with the Kapampangan equivalent of ‘there was a woman who cooked the chicken’ (Kumashiro 1993). Sometimes it is also possible for an English non-agented passive to be rendered by a verb prefixed with ma- or maka- (Mirikitani 1971:683, 728):

KPP (267) me-kumbida ka king party
   PAST:STAT-invite you LOC party
   ‘you were invited to the party’

---

102 According to Kumashiro (1993:31, 36), Kapampangan does not allow indefinite, non-specific agents, regardless of the definiteness of the patient.
(268) maka-lutu ya ing manok
STAT-cook it ABS chicken
‘the chicken is cooked’

However, such Kapampangan forms in actuality profile states, and therefore are not transitive. Thus in the main, where Chamorro, Seko Padang and the Bungku-Tolaki languages contrast three transitive clause types, antipassive, active and passive, Kapampangan contrasts only two.

5.4.4 Comparison

The languages investigated above agree with Bungku-Tolaki languages on a number of points. For example, all these languages have a clause type marked by a reflex of *paN- which encodes functionally antipassive situations, i.e. ones in which the patient is lowered in referentiality or topicality. Furthermore, all four languages are consistent in that the patient can never be realized as a pronoun in such constructions. This would not necessarily follow if *paN- had simply been an actor focus marker, but it is completely in line with an hypothesis that *paN- was used to encode for non-specific, indefinite patients.

In all these languages, we also find reflexes of a clause type marked by *-in- (or in the case of Kapampangan, also *-en) which encode functionally passive situations, though considerable differences exist in the range of voice which may be encoded with this construction (Kapampangan gives indication of having the broadest use of -in- verbs, Bungku-Tolaki the most restricted). Formally, the -in-construction may be either agent-retaining (Chamorro, Kapampangan) or agent-deleting (Bungku-Tolaki, Seko Padang).

In addition, Chamorro, Seko Padang and the Bungku-Tolaki languages also have another clause type occupying the functional ground between passive and antipassive. Although we might consider historically the marker of this clause type to have been *-um-, the match is imprecise because this morpheme must have also occurred widely (as it still does) with intransitive verbs. Furthermore, we see in both Chamorro and the Bungku-
Tolaki languages a basic incompatibility between \(-um\)- and agent indexing (see further §§ 7.2 and 7.4), which incompatibility perhaps reached its zenith in Seko Padang where agent indexing is required on active-transitive verbs and \(-um\)- never occurs.

Unlike in the antipassive, the patient of this third clause type could appear pronominally. In Chamorro, a pronoun does not occur if the patient is realized as a full NP, but in both Bungku-Tolaki and Seko Padang object pronouns have grammaticalized to where they are now obligatory, regardless of whether or not the patient is realized elsewhere in the clause.

Kapampangan, however, has no construction corresponding to this clause type, unless we consider the few cases in which transitive verbs take \(-um\)- as the marker of actor focus. In other words, what is found as a pragmatic voice option between ‘active’ and ‘antipassive’ in these other languages, exists in Kapampangan only as a lexically determined alternation in verb form.

### 5.4.5 Summary

Having investigated the synchrony of *paN*- reflexes in four Western Malayo-Polynesian languages, let us look now at the place of *paN*- in the prehistory of Austronesian languages. Compare the following, which is the verbal paradigm reconstructed by Ross for Proto-Austronesian indicative mood (where ‘\(\checkmark\)’ stands for the verb stem and ‘C’ stands for a consonant identical to the root-initial consonant):

<table>
<thead>
<tr>
<th></th>
<th>Actor</th>
<th>Undergoer</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral</td>
<td>*(&lt;um&gt;\checkmark)</td>
<td>*(\checkmark-\text{an})</td>
<td>*(\checkmark-\text{an})</td>
</tr>
<tr>
<td>Durative</td>
<td>*(&lt;um&gt;\text{Ca-}\checkmark)</td>
<td>*(\text{Ca-}\checkmark-\text{an})</td>
<td>*(\text{Ca-}\checkmark-\text{an})</td>
</tr>
<tr>
<td>Perfective</td>
<td>*(&lt;\text{umin}&gt;\checkmark)</td>
<td>*(&lt;\text{in}&gt;\checkmark)</td>
<td>*(&lt;\text{in}&gt;\checkmark-\text{an})</td>
</tr>
</tbody>
</table>

Table 43. Proto-Austronesian verbal morphology, following Ross (1995)
Because reflexes of *paN- are apparently not to be found among Formosan languages, this morpheme has typically not been given a place in paradigms of Proto-Austronesian verb morphology (Wolff 1973; Starosta, Pawley & Reid 1982; Ross 1995). If indeed *paN- is one of the (grammatical) innovations which distinguishes Proto–Malayo-Polynesian from Proto-Austronesian, whence did it develop? Two views have been expressed.

One view is expressed by Dahl (1976), who links *paN- to the development of the so-called ‘optional nasal’ found widely outside of, but not inside Formosa:

“After the emigration of the Formosans a *ŋ came into being before the medial and before the initial consonant, perhaps in order to give the word an emphatic character. … the nasal accretion to the initial consonant developed into a verbal morpheme… The emphatic, intensive verbal form with *ŋ became A[ctor] F[ocus], and alone or combined with *ma- it has partly replaced *-um- in this function. In some western languages -um- is now mostly used in intransitive verbs, where focus differences are less in the picture.” (Dahl 1976:128)

Indeed, if one but compares Ross's reconstructed PAN system with a language such as Kapampangan, it appears that something like this development must have taken place (for purposes of comparison I use only selected portions of Ross's chart):

(269) PAN *kâRaw ‘scratch’ (Ross 1995:739)

<table>
<thead>
<tr>
<th>ACTOR PIVOT</th>
<th>UNDERGOER PIVOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUTRAL</td>
<td>*k&lt;um&gt;âRaw</td>
</tr>
<tr>
<td>PERFECTIVE</td>
<td>*k&lt;umin&gt;âRaw</td>
</tr>
</tbody>
</table>

(270) Kapampangan tumbuk ‘hit’ (Roswell 1983:27)\(^{103}\)

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>PASSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUTURE</td>
<td></td>
</tr>
<tr>
<td>manumbuk</td>
<td>tumbukan</td>
</tr>
<tr>
<td>/maN+tumbuk/</td>
<td>/tumbuk+an/</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAST</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>menumbuk</td>
<td>timbuk</td>
</tr>
<tr>
<td>/m&lt;in&gt;aN+tumbuk/</td>
<td>/t&lt;in&gt;umbuk/</td>
</tr>
</tbody>
</table>

\(^{103}\)The abstract Kapampangan representations here are my own. When <in> is followed by a back vowel, it is realized by a change in vowel quality, namely the back vowel is fronted. If the first stem syllable already contains a front vowel, then the infix -in- occurs in surface form, compare for example pinilit /p<in>ilit/, the past tense passive form of pilit ‘insist’ (Roswell 1983:18–19).
In other words, by comparing (269) with (270) the primary difference appears to be that where PAN employed *-um-, Kapampangan now employs maN-. Admittedly Dahl’s scheme contains a number of unsupported conjectures. One is left to wonder, for example, how *ma- came to fuse with *ŋ, or an emphatic marker turned into a marker of actor focus voice.

A second view is that *paN- was a derivational prefix. This is the view expressed by Wolff, when he labeled his reconstructed *paN- a “verbal derivative prefix” (1973:72) and echoed by Ross in statements such as “PMP *paN- and the portmanteau *maN- ... formed actor-pivot verbs from undergoer-pivot verbs and from other items” (1992:58). Compare for example the synchronic facts of the Kapampangan case presented in § 2.4, in which the active affix m- is added to the stem consisting of paN- plus the verb root, while passive affixes are added directly to the verb root—in other words we might say the function of Kapampangan paN- is to ‘derive’ actor focus verb stems. This second view tacitly assumes, then, that the function of *paN- as observed in present-day Kapampangan is the same or nearly so as its function as far back as we can trace the existence of this morpheme in prehistory.

My hypothesis regarding *paN- differs from the above accounts in that I assume not Kapampangan and its kind, but rather languages such as Bungku-Tolaki, Chamorro, Seko Padang have more faithfully retained this morpheme in its historical function. In the following diachronic scenario I propose three stages of development.

In the earliest stage, the protolanguage had two transitive construction types, active and passive. The active marker *<um> was also used with intransitive verbs.
Figure 5. Stage 1 in the development of *paN-

In the second stage, we see the innovation of a new transitive construction type, marked by *paN-. Because the patient of any verb so inflected was marked as new, non-specific, non-topical, these verb forms were perforce active and so also received regular active morphology (i.e. in the following chart *maN- = *<um>+paN-, *minaN- = *<um>+<in>+paN-):

Figure 6. Stage 2 in the development of *paN-

At this stage, the occurrence of *paN- was determined by the pragmatics of the situation being encoded. It is, of course, this second stage which may be found preserved with only slight modification in the Bungku-Tolaki languages, Chamorro, and Seko Padang. The Bungku-Tolaki languages, for example, differ from this second stage only in (a) the collapse of the neutral/perfective aspectual distinction, and (b) the development of agent agreement markers which came to stand in complementary distribution with *-um-
(§ 7.7.2), and (c) in active voice, the grammaticalization of patient pronouns as agreement markers. Similar processes also occurred in Chamorro and Seko Padang, but here we also see the development of additional transitive construction types. In Chamorro, *ma-stative resultative forms became pressed into service as new ‘passive’ forms alongside the inherited -in-passives. In Seko Padang, intransitive verb morphology became applied to transitive stems, here too resulting in another transitive construction type, the so-called super-antipassive.

Kapampangan provides evidence of a third stage of development in which active forms fell into disuse, the associated morphology now being found—as far as transitive verbs are concerned—only with certain lexically determined stems. Compare particularly Figure 7 below with the Kapampangan forms of example (270) above:

![Figure 7. Stage 3 in the development of *paN-](image)

Stage 3 thus appears to be a renewal of Stage 1, in that at both stages there are only two transitive construction types, and indeed the label ‘antipassive’ above could—from a synchronic viewpoint—be replaced in Kapampangan by ‘active’.\textsuperscript{104} However, there are

\textsuperscript{104}From a synchronic perspective the labels ‘antipassive’ and ‘passive’ are infelicitous (as Kapampangan would then be left without any basic transitive clause type), therefore other labeling schemes have been proposed. From the perspective of traditional grammar, these clause types could be labeled ‘active’ and ‘passive’; from a typical Philippine focus-type perspective, ‘actor focus’ and ‘goal focus’; from a relational grammar perspective, ‘antipassive’ and ‘basic’; and from a lexicase perspective, ‘antipassive’ and ‘transitive’.
significant differences between the old active forms with *<um> and the renewed ‘active’ forms in Kapampangan with maN-, in that the latter (a) have a narrower pragmatic function, being used only when the patient is low in topicality, and therefore have a marked status; and (b) are more complex morphologically, containing a remnant element paN-—which properties reflect of course their antipassive heritage. Doubtless it was the loss of the active clause type, concurrent with the expansion of the pragmatic function of passive clauses—that is, ones containing the old passive morphology—which has given rise to the notion of ‘primacy of patient’ not only in Kapampangan but also in many of its Philippine relatives.

The above hypothesis regarding function of *paN- in PMP raises several other issues worth pursuing. I state them here in the form of questions.

What was the ultimate source of *paN-? Given that grammatical morphemes do not appear ex nihilo, we would expect even the antipassive marker *paN- to trace back to some earlier, lexical or derivational source, but no such source is here identified. In part this reflects the great time depth involved; however there is also at present a gap in our understanding in general about the cross-linguistic sources of antipassive markers. Although such a study would be well worth undertaking, and would add to our understanding of *paN-, it lies beyond the scope of this work.

How are transitive construction types innovated and lost? Thrice in the above account we have seen new transitive construction types innovated—the *paN-antipassive

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105 Anderson (1977:348–350), in part following Braithwaite (1973), gives two possible sources of antipassives, that is, constructions in which a normally transitive verb is treated intransitively with corresponding demotion of the object: (a) constructions in which an object is demoted to an oblique case—compare English John shot Bill versus John shot at Bill and (b) certain progressive tenses formed with a copula and a non-finite participle form of the verb, i.e. cases in which I am reading the book would be structurally ‘I am at-reading (with respect to the book)’. Neither possibility, as far as I can see, holds promise for explaining the origin of the antipassive function of *paN-.

Erik Zobel (1997:pers.comm.) on the other hand has adduced evidence that *paN- was a plural marker, and hypothesizes it was the sense of ‘plural object’ which developed into that of a diffuse, non-specific or indefinite patient.
of the protolanguage, the *ma-passive of Chamorro and the *miN-antipassive of Seko Padang—and in each case the new construction type took up its functional role at an outer end of the pragmatic voice continuum.

How it is that the pragmatic antipassive/active voice distinction became lexicalized? The hypothesis presented herein entails that the lexicalization of the pragmatic *maN-/um- distinction occurred after the breakup of Proto–Malayo-Polynesian, and therefore may have proceeded along different lines in the different subgroups existent at that time. A subsidiary issue is the partial or complete merger of reflexes of (antipassive) *paN- and (reciprocal) *paR-\(^{106}\) which has occurred in a number of languages both inside and outside of the Philippines and how this has affected notions about the role of *paN-.

There are, to be sure, other relevant issues which have necessarily been glossed over in the above presentation, including detransitive (reciprocal, middle, etc.) and intransitive verb morphology, other foci (instrumental, locative), and the details of pronominal indexing for agent and patient. These notwithstanding, I hope the above outline presents not only a cogent view of the function and development of *paN- but will prove ultimately to be the correct framework for investigating these subsidiary issues.

\(^{106}\)Antipassives and reciprocals have in common that they are both situations in which basically transitive verbs occur as intransitives, typically without specification of an object NP (Dixon 1994:195).
6 *ako

PBT *ako derives historically from the morpheme *aken. This earlier morpheme, obviously of some antiquity, has presented certain puzzling aspects to researchers reconstructing the prehistory of Austronesian languages. Reflexes of *aken are found, among other places, in Toba Batak, Minangkabau, Bahasa Indonesia and Javanese, across much of Sulawesi, and throughout Oceania (where *aki(ni) is reconstructed for Proto-Oceanic), but it is notably absent from Formosa and the Philippines. If *aken is a retention from PAN, then its absence in Formosa and the Philippines is unexplained; if an innovation, then it “confounds most present subgrouping hypotheses by separating many Indo-Malaysian languages from their Philippine and other neighbors and placing them in a group with the Oceanic languages” (Ross 1995:772).

Furthermore, *aken has exhibited a strong tendency through time to become grammaticalized as a verb suffix with concomitant semantic bleaching; therefore present reflexes have provided a fertile ground for speculating what the earlier function and meaning of *aken might have been. The popular view is that *aken was a preposition/prepositional verb introducing various accessory roles such as instrument, accompaniment, beneficiary and cause, which became incorporated into a preceding verb (Pawley 1973, Pawley & Reid 1980, and Starosta, Pawley & Reid 1982). For example:

We suggest that both *i and *aken were present in PAN, at least as prepositions. Their function as prepositions was to mark location and accessory objects, respectively, when these were not subject. Now, prepositions are often “captured” by the verb to become a suffix or clitic, the necessary precondition being that the prepositional phrase immediately follow the verb. These conditions were probably met in PAN, as they are in contemporary Philippine languages and in Toba Batak. Such a capturing need not mean the end of their life as separable prepositions—the double use of *i and *aken has persisted widely in both Oceanic and Indonesian languages—though it frequently means a split into two distinct syntactic functions. (Pawley & Reid 1980:112–113)
Taking a close look primarily at Micronesian languages, however, Harrison (1982) found data which were inconsistent with this view, and concluded that POC *aki(ni) was not a preposition but rather must have been a lexical verb which appeared in a serial verb construction with a preceding verb. This view was also adopted by Donohue (1993) in his synchronic analysis of Tukang Besi (Southeast Sulawesi) -ako. As Harrison’s analysis is relevant to the Bungku-Tolaki languages, I return to it further in § 6.5.

Finally, in a 1978 paper Sirk reconstructed both *-ken and *-aken, but these, he noted then, probably merged everywhere outside of Central Sulawesi—compare for example Toba Batak -hon, Bahasa Indonesia -kan, POC *-aki(ni), but Pamona (Central Sulawesi) respectively -ka and -aka (1978:260). He later returned to the issue of why an initial a is present in some cases but not others, and, in contrast to his earlier hypothesis, developed a theory that the initial -a of Pamona -aka (and of corresponding forms in other languages) is in actuality the continuation of an older instrumental focus marker *-an in certain of its functions (Sirk 1996).

The Bungku-Tolaki data discussed forthwith bears on all these issues. Of necessity, the data are heavily weighted toward Mori Bawah and Kulisu, the only two languages for which solid data on the functions of ako exist (respectively, Esser 1933 and my own field notes), but supplemented when possible from the work of other researchers. I begin in § 6.1 by considering the coalescence of *ako with a following pronoun, which must have begun after the breakup of Proto–Bungku-Tolaki and which has occurred to varying degrees in the daughter languages. Furthermore, since some occurrences of *ako escaped coalescence and/or phonological reduction, this becomes the basis for recognizing there must have been not just one form *ako, but rather two, formally different *ako’s in the protolanguage. Understanding this formal difference is a prelude to looking at the different functions which are served by reflexes of *ako in present-day Kulisu and Mori Bawah, presented in § 6.2. The data of these two sections are then gathered in § 6.3 into
a likely historical account of the status of *ako in PBT and a scenario for its development in the daughter languages. Finally, § 6.4 takes a broader look showing that the same patterns found in Bungku-Tolaki are also characteristic of languages across a broad swath of Sulawesi, and discusses the implications this has for the early development of *aken.

6.1 Formal varieties of *ako

Understanding the prehistory of *ako in Bungku-Tolaki requires first of all that we recognize that reflexes of *ako come in two 'varieties', which can be distinguished on purely formal grounds. On the one hand, we find cases where *ako has merged with a following pronoun, which I therefore designate with the label *ako+PRONOUN. In other cases, *ako reflexes exhibit no merger with a following pronoun, and for reasons which will become apparent, I designate these as STEM+*ako.107

In the first case (*ako+PRONOUN), all present-day languages exhibit some degree of phonological coalescence of *ako with a following pronoun. Sometimes this coalescence has proceeded to such a degree as to render the old *ako unrecognizable; in some cases the phonological substance of *ako has completely disappeared, though of course it remains in function. Accordingly, the combination *ako+PRONOUN has in recent synchronic descriptions been described as a separate set of 'dative' or 'indirect object' pronouns, distinct from the nominative, absolutive, genitive and free pronouns (Scott Youngman 1990:pers.comm. for Tolaki; Vuorinen 1995:113 for Padoe; Barsel 1994:59–60 for Mori Bawah; and S. Andersen 1995a:63 ff. for Moronene).108 The function of this ako is to introduce another participant into the role structure of the

107 I refer to here as *ako+PRONOUN and STEM+ako are respectively termed by Esser (1933:372 ff.) I-ako and II-ako and by Sirk (1996:196) ako₁ and ako₂.

108 In this regard, compare also Harmon who reconstructs *kan- as the formative characteristic of Proto-Manobo oblique pronouns (1979:116).
predicate, typically a causer, beneficiary or instrument. In general this use of *ako is compatible with the view of *aken as a preposition.

At most, only three thematic consonants are known to precede reflexes of *ako+PRONOUN: h, ng, or glottal stop, with zero also being found with a number of cases. Some Bungku-Tolaki languages in fact do not allow any thematic consonants in this context. On this basis, one may suppose that the capture of *ako+PRONOUN as a verb suffix has been a recent phenomenon, either contemporaneous with, or subsequent to, the final stages of consonant loss in Bungku-Tolaki languages. Regarding the relationship of thematic consonants and final consonant loss, see further § 2.3.1.

As shown in Table 44, *ako precipitated with a following object pronoun.

<table>
<thead>
<tr>
<th></th>
<th>*ako-aku, *ako-(ko)na</th>
<th>*ako-ko</th>
<th>*akan-io</th>
<th>*ako-kami</th>
<th>*ako-kita</th>
<th>*ako-komiu</th>
<th>*ako-ira</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td></td>
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<tr>
<td>1PLX</td>
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<tr>
<td>1PLN</td>
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</tr>
<tr>
<td>2PL</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 44. PBT dative pronouns

Besides the presence of two first person singular forms, the paradigm is also asymmetric in that apparently the final *n of original *aken was preserved only in the third singular form *akan-io (as reflected in the eastern languages Moronene, Kulisusu and Mori Bawah
-akono), there being no evidence for postulating *n in any of the other persons. The following are so-called dative pronoun sets gleaned from the literature.

<table>
<thead>
<tr>
<th>Moronene</th>
<th>Kulisu (Tinomo)</th>
<th>Mori Bawah (Watu-Karunsi'e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-akuo</td>
<td>-aka'aku</td>
<td>-akune</td>
</tr>
<tr>
<td>-akoko</td>
<td>-akoko</td>
<td>-akomu</td>
</tr>
<tr>
<td>-akono</td>
<td>-akono</td>
<td>-akono</td>
</tr>
<tr>
<td>-akami</td>
<td>-akakai†</td>
<td>-akami</td>
</tr>
<tr>
<td>-akita</td>
<td>—</td>
<td>-akita</td>
</tr>
<tr>
<td>-akomiu</td>
<td>-akomiu</td>
<td>-akomiu</td>
</tr>
<tr>
<td>-akondo</td>
<td>-ako'inda</td>
<td>-ako ira</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Padoe</th>
<th>Mori Atas</th>
<th>Tolaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>-akune</td>
<td>-akune</td>
<td>-kona</td>
</tr>
<tr>
<td>-ako</td>
<td>-akoko</td>
<td>-ko'o</td>
</tr>
<tr>
<td>-akeo</td>
<td>-akeo</td>
<td>-kee</td>
</tr>
<tr>
<td>-akami</td>
<td>-akami</td>
<td>-komami</td>
</tr>
<tr>
<td>-akito</td>
<td>-akito</td>
<td>-keito</td>
</tr>
<tr>
<td>-akomiu</td>
<td>-akomiu</td>
<td>-komiu</td>
</tr>
<tr>
<td>-akero</td>
<td>-ako ira</td>
<td>-kehero, keero</td>
</tr>
</tbody>
</table>

Table 45. Present-day Bungku-Tolaki dative pronouns

Of these six languages, the Kulisu forms are the most conservative; here phonological coalescence is reflected only in two cases of the final *o of *ako harmonizing with the *a

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109Note also the absence of *n in third person reflexes in western languages (Tolaki *-kee, Watu-Karunsi'e *-ke'e, Padoe and Mori Atas *-akeo). If a final *n had been present in other persons and numbers, one would expect it to have shown up as prenasalization of a following *k, but this is not found in any of the Bungku-Tolaki languages for which data are available.

110According to S. Andersen (1995a:2), who is my source on Moronene dative pronouns, forms throughout the paradigm have allomorphs beginning with *h, glottal and zero, depending on the stem to which they attach. Likewise, the Padoe forms (which Vuorinen 1995:113 terms indirect object pronouns) have allomorphs beginning with ng, *h, glottal or zero. The Tolaki forms have allomorphs in which instead of initial k, prenasalized n*gg occurs. The Mori Bawah forms are affixed without any intervening consonant (Esser 1933:373).

111The final *o of this form may reflect a frozen third person singular pronoun.

112Kulisu *akakai is a generalized first person plural (inclusive and exclusive).
of a following syllable (*ako-aku > -aka’aku ‘1SG’ and *ako-ka(m)i > -akakai ‘1PL’). The Moronene, Mori Atas, Padoe and Mori Bawah forms (except Watu and Karuni’e) all reflect loss of *ko from *ako when the following syllable began with *k (but in Moronene and Mori Atas, irregularly preserved in -akoko ‘2SG’). Tolaki shares with Watu and Karuni’e the loss of initial *a, but in Tolaki the second of two consecutive *k’s always weakened to glottal, and sometimes further to zero, a change not reflected in Watu or Karuni’e. Tolaki, Watu and Karuni’e also share the fronting of the final *o of *ako when immediately followed by a front vowel (or only glottal intervening). All three changes, for example, are reflected in: *akokito > *kokito > *ko’ito > *koito > Tolaki -keito ‘1PLN’. Finally, the syllable given as (ko) in the Watu and Karuni’e forms may optionally be deleted when immediately following an object pronoun. As Esser noted, this leads to forms without any trace of -ako, leaving only a succession of two pronouns as in tiso-e-’aku /show-3SG-1SG/ ‘show it to me!’ (1933:374).

Besides these sound changes, analogy has also been at work in this pronoun set. The Mori and Tolaki first singular forms, respectively -akune and -kona, reflect an old form of unknown origin113 which based on internal evidence we may reconstruct for PBT as *ako-na or *ako-kona (in either case with a final consonant of unknown quality).114 Presumably in PBT or post-PBT this form was replaced by the analogical formation

113If we accept PBT *ako-kona to be correct, then the formative *kona bears some resemblance to the first singular pronoun *a(N)ken given by Dahl (1976:122) (though according to Blust (1977:12) “the only meaning that can securely be attributed to *a(N)ken on the Proto-Austonesian level is that of absolute possession (‘mine’)”). Esser, who reconstructs *ako+ne as the probable source of Mori -akune, finds support for his reconstruction in the Kaili-Pamona languages in the first singular forms Napu na and Tawaelia (endonym Sedoa) ne (Esser 1927:123; see also Adriani 1914:111, 122). As I know nothing further about these pronouns, I cannot comment on this hypothesis.

114If we start with the longer form, then in Tolaki *ako-kona > *kokona > *ko’ona > *kona > -kona by regular sound change in this pronoun set. In Mori presumably the form *akona (< *ako-kona by deletion of *ko) was reshaped to *akuna by analogy with other first singular object pronoun, -aku. Subsequently regular raising of *a > e following a high vowel (§ 3.2.3) yielded -akune. This chronology is also espoused by Esser (1927:122–123). Note that the first singular is the form which would be used for making requests for oneself—‘do this for me’—and politeness considerations may have dictated some unusual developments, whence *ako(ko)na.
*ako-aku (that is, *ako plus the first singular object pronoun *aku). It also appears that at a later stage, forms such as Moronene -akondo ‘3PL’ and Mori Bawah -akomu ‘2SG’ were analogized from the third singular form -akono, after this form had been reanalyzed as -ako plus the third singular genitive pronoun -no.

In contrast to *ako+PRONOUN is the second case, which I characterize as STEM+*ako. In these cases the suffix has in general retained its form into the present-day languages without loss of phonological substance. In Mori Bawah and Kulisusu, when the reflex of this *ako is followed by an object pronoun, the pronoun is always drawn from the regular set of object suffixes without exhibiting any of the phonological coalescence characteristic of *ako+PRONOUN. In other words, it is as if *ako is regarded as a verb derivational suffix; when *ako is combined with a preceding stem the result is a ‘normal’ verb.

Furthermore, and as will appear from the examples below, derivational -ako occurs with a far greater variety of thematic consonants than is found preceding the dative pronouns. In Mori Bawah, derivational -ako may be preceded by k, s, h, p, t, l, ng, m, r, w, n or glottal (Esser 1933:356, 386). In some cases, the thematic consonant may reflect what was originally a stem-final consonant (compare for example Tolaki peluarako ‘come out’ < PMP *luar ‘outside’; Mori Bawah korahako ‘carry through with (an intention or desire)’ < PMP *keras ‘strong’). In many instances, however, the thematic consonant fails to correspond in any regular way with what must have been the original stem-final consonant, indicating some kind of reshaping by semantic analogy, such as described by Arms (1973) in Fijian, and also hinted at by Esser in his description of Mori (1933:373). The lack of solid lexicographic work in the Bungku-Tolaki languages makes any further analysis of thematic consonants impractical at this time.

Notwithstanding that *aken has been characterized as a valence-increasing or applicative suffix, some verbs consisting of a stem plus derivational -ako are clearly
*intransitive.* Compare the examples in (271) which are transitive derivations and those in (272) which are intransitive.

KUL  (271) a. *teleu* ‘arrive’  
b. *teleusako* ‘bring s.th.’  
c. *poone* ‘ascend’  
d. *poonetako* ‘to ascend with s.th. or s.o.’

(272) a. *pentade* ‘to stand up’  
b. *pentadehako* ‘to stand up quickly’  
c. *cinci* ‘skim over the water (as a flying fish)’  
d. *cinciako* ‘skim straight and far’

### 6.2 Present-day functions of *ako*

In this section I take a closer look at the functions which are assignable to *ako* in present-day Kulisu and Mori Bawah, namely the intensive, the causative, the relicative, the communicative, the instrumental, the benefactive, the comparative, and the modal uses. Although I adopt semantic labels for these functions, each distinct function is identified with a unique set of morphosyntactic properties. Or to state it the other way around, if there are not contrastive morphosyntactic properties, then there are not contrastive functions.

Importantly, I am concerned with how the presence of *ako* affects the role structure of the predicate. As *ako* often introduces a new role or allows an existing role to be incorporated as a core argument of the predicate, a prime question throughout the following section is to ask, to what extent does the *ako*-introduced role take on object properties? Baker (1988:9) characterizes ‘applicative’ as a grammatical function changing process in which:

\[
\begin{align*}
\{ & \text{oblique} \\
& \text{indirect object} \\
& \text{or null} \} \\
\rightarrow & \text{object; object } \rightarrow \text{“2nd object” (or oblique)} \\
\end{align*}
\]

If *ako* is indeed to be considered an applicative suffix, then the role introduced by *ako* ought to be an object, or certainly object-like in many ways.
In the following discussion, I use three tests for objecthood. These criteria are specific to Bungku-Tolaki, and are met by ordinary objects. I do not elaborate on them here, but refer the reader to the extensive discussions included under Chapter 5:

(a) indexing by pronoun suffix on the verb when the object is definite;

(b) absence of pronominal indexing and the presence of the antipassive marker *poN*- (participle form *moN*-) to indicate that the object is somehow 'less than definite';

(c) presence of the passive infix -in- (that is, 'promotion' of the object to subject position) when the object is relativized or interrogated.

Finally, I acknowledge Esser (1933:372-391) as the source of all the Mori Bawah data on ako which appear below. Since the style at that time was to give example sentences with only sentence translations, I am primarily responsible for the morpheme breaks and morpheme-by-morpheme glosses. In addition, whereas Esser used the antipassive participle as the citation form for transitive verbs, for the following discussion I cite simply the transitive base (thereby removing the *moN*- prefix from various of Esser’s verbs).

6.2.1 **Intensive ako**

In certain cases, ako has no effect on the valency of the verb; instead, it implies a more intense, focused, violent or directed action. The difference between suffixed and unsuffixed forms is not always easy to capture in English. When the base is intransitive, the *ako* form is also intransitive:

MRB (273) a. *totoro* ‘sit, sit down’
   b. *totoropako* ‘sit down suddenly’

(274) a. *pe’ini* ‘hold oneself on’
   b. *pe’iniako* ‘hold oneself on tightly or strongly’

(275) a. *petonda* ‘go one after another’ (of two or more people)
   b. *petondarako* ‘go one after another’ (of a great number of people)
KUL (276) a. pemelu ‘throw up’ (spittle only)
   b. pemeluəako ‘throw up’ (contents of stomach)
(277) a. pentade ‘stand up’
   b. pentadehako ‘stand up quickly, spring to one’s feet’
(278) a. cinci ‘skim over the water’ (as of a flying fish)
   b. cinciəako ‘skim far and forcefully over the water’
(279) a. lola ‘fly’ (with wings)
   b. lolaəako ‘fly far and straight; whiz by’ (with wings)

When the base is transitive, the ako form is also transitive, with no change in role structure of the predicate:

MRB (280) a. kare ‘move or shift s.th.’
   b. karesako ‘move s.th. suddenly or rapidly’
(281) a. rawo ‘sow, scatter s.th.’
   b. rawosako ‘scatter s.th. in a rough wild manner, strew s.th. around’
   (as a child who makes a mess with his food)
KUL (282) a. lamo ‘bury s.th.’
   b. lamosako ‘bury s.th. forcefully, slam s.th. into the ground so that it is buried’
(283) a. sepa ‘kick s.th.’
   b. sepatako ‘kick s.th. violently or cruelly; attack s.th. by kicking’
(284) a. pa’u ‘pour out s.th.’ (as liquid from a bottle)
   b. pa’usako ‘dump out s.th.’ (contents break free and come out at once)
(285) a. keni ‘grasp, hold onto s.th.’
   b. keniəako ‘restrain, hold back s.th.’
(286) a. cuda ‘throw s.th. overhand’
   b. cudapako ‘throw s.th. overhand’
(287) a. cumbu ‘plant s.th.’
   b. cumbupako ‘thrust s.th. down so that it remains implanted’
(288) a. puru ‘take s.th. in the hand’ (for example, to inspect it)
   b. purutako ‘take s.th. with intent to steal; filch s.th.’
(289) a. sidu ‘spoon s.th.’ (for example, in order to taste it)
   b. sidupako ‘spoon s.th. away, flick s.th. away with a spoon’ (where the spooned away object is something disgusting)
(290) a. basi ‘exchange s.th.’
   b. basiəako ‘get rid of s.th., throw s.th. away’

These verbs fit in well with what Harrison calls an ‘act semantic’:

The act semantic is less frequently regarded as a function of causative structures because it does not involve an increase in valency... Causalization, under the act semantic, does not change the valency of a predication. It increases the
actorhood of the causer argument, indicated that that [sic] it is a more conscious, active, volitional participant. (Harrison 1982:196)

It is interesting to note, however, that some of these verbs have a directional (translocative) component of ‘away’, most notable in examples (288b), (289b), and (290b). Compare also Kulisusu transitive verb bases given in (291), in which there appears to be a continuum from ‘violent’ to ‘down’ and/or ‘away’. In all of these forms, ako is frozen, that is, there is no known corresponding base (transitive or intransitive) without ako:

KUL (291) a. pasalako ‘drop s.th. from the shoulder with a crash’
  b. wumisako ‘throw handfuls of s.th. overhand in anger’
  c. sakalako ‘fling s.th. down from chest high’
  d. cupelako ‘toss s.th. down (underhand) from waist high’
  e. rapisako ‘throw or drop s.th. down’
  f. tandapako ‘thrust s.th. down’ (also, tetandapako ‘fall on one’s butt’)
  g. tongkewako ‘thrust s.th. down so that it remains standing’
  h. susulako ‘push s.th. from behind’
  i. jijulako ‘push s.th. over’
  j. jumbanako ‘push s.th. over’
  k. taurako ‘lower s.th. down slowly’

To these, we can also add the following forms, which occur only with the agentless passive prefix te- (thus although formally intransitive appear to be formed from transitive verb bases):

l. te-saburako ‘to trip and fall’
  m. te-cuculako ‘to fall headlong’
  n. te-sindarako ‘to slip’ (may or may not fall down)

Esser (1933:388) noted in Mori several pairs of verbs which, though differing in the presence or absence of ako, appear to have the same meaning. It is possible that upon further investigation, these might be assignable to intensive ako.

---

115 Compare Wolio (Anceaux 1987:179, 180) which has both tau ‘bring down, lower’ and tauraka ‘put down, deposit, bring down, leave behind, leave (as a legacy)’, also tinau ‘payment’ versus tinauraka ‘inheritance, legacy’.
MRB (292) a. bangku, bangkuako ‘knock s.th. over, topple s.th.’
   b. lendo, lendoako ‘set s.th. down’
   c. pe-dontai, pe-dontaihako ‘let oneself fall’
   d. pe-paso, pe-pasako ‘plant or work oneself into the ground’
   e. pe-sule, pe-suleako ‘turn oneself round’ (by switching the place of
      the head and the feet)

In Kulisu, whether a transitive verb is suffixed with intensive ako or not, there is no
formal difference in the way in which the object is treated, except that in the third person
singular, intensive ako is followed by zero rather than the usual -o ‘3SG’ (probably the
result of phonological merger). Compare these examples:

KUL (293) "Ala-o ingko’o,” tae-no, ‘Rabungkowala,
take-3SG 2SG say-3SG Rabungkowala
ka-u sepa-’o.”  Lako ri’iso ka-i ala-o
and-2SG kick-3SG go there and-3SG take-3SG
Rabungkowala ka-i sepa-lako-Ø.
Rabungkowala and-3SG kick-INTS-3SG

"Take it, you, Rabungkowala,” he said, “and kick it.” Rabungkowala
went there and he took it and he kicked it mightily.’

(294) ...be-n-do basi-ako-Ø ana a’iso i tangke.
FUT-3PL dispose.of-INTS-3SG child that at mountain
‘...they are going to dispose of that child in the mountains.’

(295) I see mi-basi-ako-aku!
NEG.IMPV 2SG-get.rid-INTS-1SG
‘Don’t get rid of me!’

An indefinite patient argument requires the antipassive marker poN-:

PART:ANTIPASS-do.what 2PL PART:ANTIPASS-get.rid-INTS trash
‘What are you doing?’
‘Throwing out trash.’

And as expected, the patient argument of an intensive ako verb may be relativized or
interrogated, using the passive marker -in-:

KUL (297) ana-no b[ini]asi-ako-ndo itonia
child-3SG PASS:get.rid-INTS-3PL near.past
‘her child who had recently been disposed of by them’
6.2.2 Causative/confective *ako*

The term causative is well known. The term confective is borrowed from Harrison (1982), and I elaborate on it below.

When causative *ako* is added to an intransitive, stative or nominal stem, the result is a transitive verb base. The agent of the derived transitive verb is a causer who physically moves the causee (object). The following are some typical examples of causative *ako* combined with intransitive verbs:

**MRB** (298) a. *tii* ‘descend’
   b. *tiimako* ‘bring s.o. or s.th. down’
(299) a. *nangi* ‘swim’
   b. *nangisako* ‘swim with s.o. riding along’
**KUL** (300) a. *poone* ‘climb, ascend’
   b. *poonetako* ‘bring s.th. or s.o. up, escort s.o. up’
(301) a. *usu* ‘enter’
   b. *usupako* ‘bring s.o. or s.th. inside’
(302) a. *teleu* ‘arrive’
   b. *teleuhako* ‘bring s.th. or s.o.’
(303) a. *polai* ‘flee’
   b. *polaisako* ‘flee with s.o. or s.th., abduct s.o.’
(304) a. *leo* ‘dive, submerge, go underwater’
   b. *leopako* ‘dive with s.o. or s.th. riding along’

In these examples, the causer does not simply ‘make’ or ‘allow’ the causee to act, but effects the causation by carrying, escorting or accompanying the causee. It is thus close to the notion of comitative, but goes beyond it. For example, *nangisako* does not mean swim with someone in the sense of swimming together side by side (nor does it mean make someone swim by ordering them or by placing them in the water), but has the particular meaning of making someone swim by carrying them. Compare this text example, where one by one characters too tired to swim have been coming to the hero for help:
KUL (305)  "Ku-momale-mo\textquoteright, tae-no, \textit{Bintausu.} "Leu", tae-no, 1SG-tired-comp  say-3SG  Bintausu  come  say-3SG  "ka-u  pengkeni  i  mandapo-no  sala-ngku\textquoteright", and-2SG  grasp  at  waistband-3SG  pants-1SG  \textit{ka-i  nangi-sako-\textquoteleft inda, picu-ta\textquoteleft u  i-nangi.} and-3SG  swim-CAUS-3PL  seven-year  3SG-swim

\begin{quote}
\textquoteleft  I\textprime m tired, Bintausu\textquoteright , he said. \textquoteleft Come\textquoteright , he said, \textquoteleft and hold on to the waistband of my pants\textquoteright , and he swam with them, seven years he swam.\textquoteright
\end{quote}

With some verbs or in some contexts the causer cannot be viewed as an accompanier, for example the sentence of (306) does not imply that the people themselves entered the hole in the coconut tree, but merely that they placed the body there.

KUL (306)  \textit{Mate-no, ndo-lamo-ho  i  tonto-no  ni\textquoteleft i.} die-3SG  3PL-bury-3SG  at  base-3SG  coconut \textit{Nd\textquoteleft o-boro-\textquoteleft o  tonto-no  ni\textquoteleft i  ka-ndo  usu-pako-\textquoteleft O...} 3PL-bore-3SG  base-3SG  coconut  and-3PL  enter-CAUS-3SG

\begin{quote}
\textquoteleft When he had died, they buried him in the base of a coconut tree. They bored the base of the coconut tree, and they placed him inside…\textquoteright
\end{quote}

The same apparently also holds true of Kulisu\textsuperscript{su} \textit{uhupako, cuopako} \textquoteleft stick, insert\textquoteright  (such as a needle into a person\textquotesingle s arm or leg), as well as the \textit{ako} verbs given in (309) through (312) below. Harrison (1982:200) considers whether or not the causer is also an accompanier to be the criterion for distinguishing between \textquoteleft confective\textquoteright  and \textquoteleft cause\textquoteright  semantics (confective if the causer accompanies, cause if the causer does not). However, they are not contrastive morphosyntactically in Bungku-Tolaki. Semantically, the two are brought together because even when the causer does not accompany the causee, s/he is still the one who effects the translational motion (by lifting, carrying, pushing, etc. the causee).

Causative \textit{ako} is known to attach only to stems from a restricted semantic range, all having to do with location or motion. The most common case is for the stem to be an intransitive verb of motion, as in all of the above examples. In Mori Bawah (but apparently not in Kulisu\textsuperscript{su}), \textit{ako} may also derive a transitive base from a stative (the only
two examples given by Esser are Mori Bawah *tola* ‘free’ and *toe* ‘far’) or from a nominal which indicates a location, as in the other examples below. The Mori Bawah verb *tolahako* (307b) is the only known example of causative *ako* in which the agent does not physically manipulate the object:

MRB (307) a. *tola* ‘free, loose’
   b. *tolahako* ‘set at liberty’ (as a prisoner or captive bird, by opening
      the cage or prison door)

(308) a. *toe* ‘far’
   b. *toehako* ‘take s.th. away’

(309) a. *wavo* ‘top part, summit’
   b. *wavoako* ‘place s.th. on top’

(310) a. *toto* ‘bottom part, base’
   b. *totoako* ‘place s.th. underneath; place s.th. lower down’

(311) a. *api* ‘small opening or slit’
   b. *apiako* ‘put s.th. in a small opening or slit’ (as between the pages
      of a book)

(312) a. *sanga* ‘space between the branches/arms/tines of a forked object’
   b. *sangarako* ‘place s.th. in a fork’ (as in the fork of a tree)

In Kulisusu, objects of transitive verbs derived with causative *ako* (semantically, the causee) have all the ordinary object properties. Compare not only examples (305-306) above which show the causee indexed by pronoun suffix, but also the following which illustrate, respectively, the use of antipassive *poN*- when the causee is indefinite, and passive -in- when the causee argument is relativized:

KUL (313)  

\[
\begin{array}{llllll}
\text{Be-n} & \text{ndo} & \text{hule-mo} & (m) & \text{o-uhu-pako} & \text{bara-bar} \\
\text{FUT-3PL} & \text{go-COMP} & \text{PART:ANTIPASS-enter-CAUS} & \text{goods} \\
\end{array}
\]

\[
i \text{bangka-n} \text{do.} \\
\text{at boat-3PL}
\]

‘They are just about to go put goods into their boat.’

(314)  

\[
\begin{array}{lllllll}
\text{Da-i} & \text{main} & \text{mia} & p[i] & \text{one-tako-miu} & \text{itonia} \\
\text{be-at where person PASS:ascend-CAUS-2PL} & \text{near.past} & \text{Where is the person who was just escorted up by you all?’}
\end{array}
\]
6.2.3 Reflective ako

In its core meaning, reflective ako occurs with psychological state or activity verbs. The stem is an intransitive verb, the subject of which semantically is an experiencer or reactor. The suffix ako increases the valency of the predicate to allow expression of the semantic stimulus as a core argument. For example:

MRB (315) a. tekuda ‘angry’
   b. tekudako ‘angry about s.o. or s.th.’
(316) a. po‘ipi ‘dream’
   b. po‘ipikako ‘dream about s.o. or s.th.’
(317) a. bebee ‘cry’
   b. bebeeako ‘cry about s.o. or s.th.’
(318) a. memee ‘afraid’
   b. memeeako ‘afraid of s.o. or s.th.’
KUL (319) a. banga ‘astonished’
   b. bangahako ‘astonished at/by s.o. or s.th.’
(320) a. mengkiri ‘fretful, worried’
   b. mengkiriako ‘fretful, worried about s.o. or s.th.’
(321) a. maasi ‘loving, affectionate’
   b. maasiako ‘love s.o., show affection toward s.o.’
(322) a. soso ‘regretful’
   b. sosoko ‘feel regret in regard to s.o.’

In the absence of ako, the stimulus may still be expressed as an oblique as in (323a), but ako must be used if the stimulus argument is to be relativized (323c) or questioned (323d):

KUL (323) a. Ndo-maasi i ana-njo.
   3PL-love at child-3PL
   ‘they are loving toward their child.’

---

116 Besides with i ‘at’ as illustrated here, in Kulisu an oblique stimulus in some cases may be introduced using the preposition tee ‘with’ as in:

KUL i-masingki tee Lamisi-misikini
3sg-jealous with Lamisi-misikini
‘He was jealous of Lamisi-misikini’
b. *Ndo-maasi-ako ana-ndo.
   3PL-love-REF  child-3PL
   ‘they love their child.’

c.  ana-ndo  m[in]aasi-ako-ndo
    child-3PL  PASS:love-REF-3PL
    ‘their child who is loved by them’

d.  Inaio  m[in]aasi-ako-ndo?
    who  PASS:love-REF-3PL
    Who is loved by them?

Unlike with confactive and intensive ako discussed above—which when transitive are
followed by the ordinary object pronouns—refactive ako exhibits the phonological merger
with a following pronoun discussed above in § 6.1. In Kulisusu, this difference shows up
most clearly with first person objects:

KUL  (324) a.  Ndo-poone-tako-kai  *Ndo-poone-taka-kai
        3PL-ascend-CAUS-1PL
        ‘They escorted us up.’

    3PL-love-REF-1PL
    ‘They love us.’

    3PL-astonished-REF-1PL
    ‘They were astonished at us.’

This difference also shows up in the third person singular where in Kulisusu refactive ako
is followed by -no ‘3SG’ but causative and intensive ako always have zero marking for
third singular. 117  Compare:

117 However, it appears that in Kulisusu the object of a verb with intensive or causative ako is marked by
-no when the patient is coreferential with the subject of a preceding verb, i.e. to indicate switch-reference.
Compare for example:

KUL  l-poone  ka-i  lea-pako-no  i  puri  n-tahi.
      3SG-climb and-3SG  dive-CAUS-3SG  at  bottom  LKR-sea
      ‘Hei climbed on and he dived with himi to the bottom of the sea.’
KUL (325) \textit{Lako ri’iso ka-i ala-o Rabungkowala}
\hspace{1cm} go there and-3SG take-3SG Rabungkowala
\hspace{1cm} \textit{ka-i sepa-lako-Ø.}
\hspace{1cm} and-3SG kick-INTS-3SG
Rabungkowala went and he took it and he kicked it mightily.

(326) \textit{Isauri i-soso-ako-no.}
\hspace{1cm} very.much 3SG-regretful-REF-3SG
He was very regretful concerning her.

However, this pattern is partially obscured because marking with third person -\textit{no} usually lapses when the object is realized by a nominal, as in the following example and also as in example (323b) above. This same pattern is also largely found in Mori Bawah\textsuperscript{118}.

KUL (327) \textit{Isauri i-soso-ako ana-no.}
\hspace{1cm} very.much 3SG-regretful-REF child-3SG
‘He was very regretful concerning his child.’

The use of reflexive \textit{ako}, however, extends beyond psychological verbs. As the stimulus of a psychological verb may be regarded as a kind of goal toward which one

\begin{center}
\begin{tabular}{l}
\textit{i-mate-no,} \\
3SG-dead-COMP \\
\textit{i-basiako-no} \\
3SG-throw.away-3SG \\
\textit{kapten-no} \\
3SG-captain-3SG \\
\textit{kapala a’iso.} \\
3SG ship that
\end{tabular}
\end{center}

‘He\textsubscript{1} was dead, the captain of that ship had thrown him\textsubscript{1} away (overboard).’

\textsuperscript{118}The situation in Mori Bawah described by Esser is as follows (1933:382): (a) when the object is not indicated by a substantive or anything else corresponding to it, the object pronoun cannot be omitted; (b) when the verb is prefixed with a subject pronoun, and the object follows, the object pronoun cannot be omitted (Esser 1933:377):

MRB \textit{ku-momee-ako-no api-no i Elu-Elu}
\hspace{1cm} 1SG-afraid-REF-3SG fire-3SG PN Orphans
‘I am afraid of the fire of the Orphans’

(c) when the verb is prefixed for subject, and the object precedes, the object pronoun may be omitted (Esser 1933:382):

MRB \textit{api-no i Elu-Elu ku-momee-ako-(no)}
\hspace{1cm} fire-3SG PN Orphans 1SG-afraid-REF-(3SG)
‘I am afraid of the fire of the Orphans’

(d) when there is no subject indexing, and the object is otherwise present overtly, object indexing lapses. Therefore, although Esser does not provide the following example, I assume such is possible:

MRB \textit{aku momee-ako api-no i Elu-Elu}
\hspace{1cm} 1SG.FUT afraid-REF fire-3SG PN Orphans
‘I would be afraid of the fire of the Orphans’
directs anger, affection, love, desire, etc., so in Kulisu we find referential ako used both with niatiako ‘wish for’ (< niati ‘wish’) and by extension gorako ‘call out for, call out to’ (< gor ‘call out, cry out’) — even though in the latter the object argument is more akin to an addressee than a stimulus.

On the other hand, because the stimulus of a psychological event may be regarded as a kind of cause of that event (e.g., the cause of one’s anger, fear, pity, etc.), on this basis ako is has been extended to encode causes even when the event is not psychological. However, there is no indication that ako in this use is formally distinguished from ako used with psychological verbs, and both the stimulus and cause uses could profitably be brought under some more inclusive label such as ‘topic’ (translatable as ‘on account of’, ‘regarding’). \(^{119}\) Some examples are:

MRB (328)  
\textit{moturi-ako  po'inu-no}  
sleep-REF  drink-3SG  
‘he sleeps on account of his drinking’

(329)  
\textit{Hakino  andio  i-mate-ako.}  
sickness-3SG  this  3SG-dead-REF  
‘On account of this sickness of his he died.’

(330)  
\textit{Pau  andio  ku'aiwa-ako.}  
talk  this  1SG-come-REF  
‘I have come on account of this message’

(331)  
\textit{Io  padenge-do  mobea-ako  ringgi.}  
ART  baggage-3PL  heavy-REF  coin  
Their baggage was heavy with coins.

KUL (332)  
\textit{Pakuli-no  ke  to-molangu-ako  ondo...}  
medicine-3SG  if  1PL-dizzy-REF  wild yam  
‘The cure if we are dizzy on account of (eating) wild yam...’

(333)  
\textit{Hapa-'inda  [in]eu-hako-mu?}  
what-CONT  PASS:come-REF-2SG  
‘On account of what have you come? What brings you here?’

\(^{119}\)I am indebted to Suzanne Kemmer for this suggestion.
(334)  *Hiina ndo-tara ri'iso; hiina ndo-tara-ako pepi.*
NEG  3PL-endure there  NEG  3PL-endure-REF mosquito
'They couldn’t stand it there; they couldn’t endure the mosquitoes.'

(335)  *Io pepe sa-i t[fin]ara-ako-n[do].*
ART  mosquito  NEG.REL-3SG  PASS:endure-REF-3PL
'It was mosquitoes that couldn’t be endured by them.'

Of note in all the examples in this section concerning reative *ako*, however, is the absence of *ako* forms with antipassive *poN*- and as far as I know, such forms do not occur in Kulisusu or Mori Bawah. This restriction may partly be explained in functional terms. If one thinks of the antipassive in terms of ‘demoting’ or ‘getting rid’ of the object, then with these verbs the bare stem (that is, the stem without *ako*) serves quite well as a functional antipassive, rendering the use of *poN*- superfluous. In other words, regular *poN*- forms and *ako*-less reative forms share a certain functional similarity, illustrated in Table 46.

<table>
<thead>
<tr>
<th>TRANSITIVE</th>
<th>‘ANTIPASSIVE’</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>kaa</em> ‘eat s.th.’</td>
<td>: <em>pong-kaa</em> ‘eat’</td>
</tr>
<tr>
<td><em>sepa</em> ‘kick s.th.’</td>
<td>: <em>pon-sepa</em> ‘kick’</td>
</tr>
<tr>
<td><em>tara-ako</em> ‘endure s.th.’</td>
<td>: <em>tara</em> ‘endure’</td>
</tr>
<tr>
<td><em>memee-ako</em> ‘afraid of s.th.’</td>
<td>: <em>memee</em> ‘afraid’</td>
</tr>
</tbody>
</table>

Table 46. Functional alignment of regular *poN*- antipassive forms and *ako*-less reative forms in Kulisusu

From a diachronic perspective, however, the absence of antipassive forms reflects the fact that *ako* (in reative use) has only recently been captured as a verb suffix, therefore the role introduced by *ako* (the stimulus, cause, etc.) does not attain to the full set of object properties enumerated above in §6.2. A reative form with *moN*- would certainly be ‘interpretable’ within the rules of, say, Kulisusu grammar—e.g. one might expect a three-way contrast between *i-memee-ako-no* /3SG-afraid-REF-3SG/ ‘he is afraid of it’, versus
*i-po-memee-ako /3SG-ANTIPASS-afraid-REF/ 'he is afraid of something (indefinite)', versus i-memee /3SG-afraid/ 'he is afraid'—however, the starred form has not yet been created by Kulisusu speakers.\textsuperscript{119a}

Although reflexive and causative ako both involve the notion of 'cause', these two uses of ako remain formally and semantically distinct. The reflexive and causative functions overlap with intransitive verbs of motion, and the contrast is nicely illustrated by the following pair:

MRB (336) a. polai-sako beine  
    flee-CAUS woman  
    'flee with a woman, abduct a woman'

b. polai-ako api  
    flee-REF fire  
    'flee because of fire, flee from fire'

If we were to place a conceptual 'cause' framework over these predicates (Kemmer & Verhagen 1994), then in polaisako the subject aligns with the conceptual causer, and the object (in the above case the woman) with the causee. However just the opposite alignment is found with polaiako, where if anything the object (the fire) would have to be regarded as causer and the subject as causee. In this, the reflexive is not a causative in the usual sense.

6.2.4 Communicative ako

Communicative ako is used with verbs of communication. For example, Kulisusu pecukana 'ask', kogaugau 'talk, discuss', pealasa 'excuse, give an excuse' and Mori Bawah pesikeno 'place a question' are all intransitive verbs whose subjects are

\textsuperscript{119a}It has recently come to my attention—too late to integrate fully into the text—that this pattern is optionally found in Mori Bawah, for example one can say either lingkau-ako onitu /afraid-REF spirit/ 'fear, be afraid of ghosts', or mo-lingkau-ako onitu 'id.' (Esser 1933:199) (emphasis mine). As Esser himself noted about this variation, "In these forms the suffix and the stem have merged as a unit to such a small degree, that the linguistic instinct resists against prefixing ... mo-" (Esser 1933:198) (translation mine).
referentially the ones who speak. The suffix *ako*, when added, allows the expression of the content of the communication, e.g., what was asked about, what was talked about, what was given as an excuse (henceforth, the ‘message’) as a core argument. For example:

KUL (337) a. *Ndo-pecukana i mia a'iso.*
   3PL-ask at person that
   ‘They asked that person.’

b. *Ndo-pecukana-ako mia a’iso*
   3PL-ask-COMM person that
   ‘They asked about that person. (*They asked that person)*

c. *Ndo-pecukana-aka-kai.*
   3PL-ask-COMM-1PL
   ‘They asked about us. (*They asked us.)*’

d. *Ndo-pecukana-ako-no.*
   3PL-ask-COMM-3SG
   ‘They asked about him. (*They asked him)*’

The formal similarity between reflexive and communicative *ako* ought to be apparent from these sentences just given. For example we see the phonological merger of *ako* with a following pronoun (337b), and the same tendency for -no ‘3SG’ to be left out when the object is present as a nominal (337c). Similarly, the message may be questioned or relativized using the passive infix -in-:

e. *Hapa-'inda p[in]ecukana-ako-ndo?*
   what-CONT PASS:ask-COMM-3PL
   ‘What was asked about by them?’

f. *Hapa-'inda p[in]e'alasa-'ako-ndo?*
   what-CONT PASS:give.excuse-COMM-3PL
   ‘What excuse was given by them?’

Furthermore, both reflexive and communicative *ako* exhibit the same eschewal of the antipassive marker *poN*. The only formal difference between reflexive and communicative *ako* is that with the latter, a second relativization/interrogation strategy
exists, namely one in which -in- is not used and subjects (speakers) are indexed normally, that is by nominative (not genitive) pronoun. In other words, the referent introduced by ako is relativized without being promoted. Compare the (e) and (f) sentences above with the following:

g. Hapa-'inda ndo-pecukana-ako?
   what-CONT 3PL-ask-COMM
   ‘What did they ask about?’

h. Hapa-'inda ndo-pe 'alasa-ako?
   what-CONT 3PL-give.excuse-COMM
   ‘What excuse did they give?’

When a verb of communication is transitive, not only do we have a speaker and a message, but also an addressee. In this case the speaker maps onto the subject, the addressee onto the object, and ako is used to introduce a message as a core argument of the verb. However, regardless of whether ako is or is not present, the addressee remains the argument indexed by pronoun suffix on the verb. The difference between active sentences with and without ako is difficult to capture in English, and indeed it is usually difficult for Kulisu speakers themselves to ascribe any difference between sentences such as the following:

KUL (338) a. Tena-'o!
   order-3SG
   ‘Order him!’

   b. Tena-'ako-no!
      order-COMM-3SG
      ‘Order him (to do it)!”

(339) a. Kuani-'inda!
   inform-3PL
   ‘Inform them!’

   b. Kuani-'ako-'inda!
      inform-COMM-3PL
      ‘Inform them (about it)”

The difference, though, hinges on the saliency of the message (when ako is present, the message has greater local saliency in the discourse), and when we investigate passive forms the difference between ako and ako-less forms appears immediately:
KUL (340) a. Inai o k[i]nuani-ndo?
who PASS:inform-3PL
‘Who was informed by them?’

b. Hapa alasa-ndo k[i]nuani-ako-ndo?
what reason-3PL PASS:inform-COMM-3PL
‘What was their reason which was informed by them?’

That is, ako must be absent when the addressee is relativized or questioned, but it must be present when the message is relativized or questioned. The second type of relativization strategy described above is also available for transitive verbs of communication. Note that unlike relativization with -in-, which allows overt expression only of the speaker (340b), this second strategy allows both the speaker and addressee to be indexed on the verb.

c. Hapa alasa-ndo ndo-kuani-ako-no?
what reason-3PL 3PL-inform-COMM-3SG
‘What was their reason which they informed him of?’

The following are further examples of communicative ako.

KUL (341) P[in]o-janji-’ako-no raja itonia tee Buragil,
PASS:ANTIPASS-promise-COMM-3SG rajah near.past with Buragil
ndo-pakawi-’o-mo Buragil tee io ana-no raja.
3PL-marry-3SG-COMP Buragil with ART child-3SG rajah
‘(According to) that which had been promised by the king with Buragil earlier, they married Buragil with the rajah’s daughter.’

(342) Ndo-bansule [m]ong-kuani i tama-no Waode
3PL-return.home PART:ANTIPOSE-inform at father-3SG Waode
Gimunduri tee alasa-no k[i]nuani-ako-no.
Gimunduri with reason-3SG PASS:inform-COMM-3SG
‘They returned home and informed Waode Gimunduri’s father with her reason which had been informed (to them) by her.’

(343) Cumpecumpe-no Waode Gimunduri i-pe’alasa-’ako
datime-3SG Waode Gimunduri 3SG-give.excuse-COMM
da-po [m]o-ligisi
be-INCOMP PART:ANTIPOSE-gin
‘At first, Waode Ginunduri excused herself that she was still ginning (cotton).’

Interestingly, the Kulisu verb cia ‘give’ patterns exactly as do transitive verbs of communication, if we make the following equivalencies: giver = speaker, recipient = addressee, and gift = message. In active clauses, ako is present when the item given is highly salient, as is the egg in example (344) (previously in the discourse a goat and a woman were competing for its possession), but absent when not so as in example (345) (this clause actually introduces the grains of rice into the discourse):

KUL (344) Bio a’iso i-cia-ako-no-mo ka-i kopo-’o
egg that 3SG1-give-COMM-3SGj-COMP and-3SGj grasp-3SGk
bio a’iso.
egg that
‘That egg shei gave to herj and shej grasped that egkg.’

(345) Cina-no Sitti Maria i-cia-’o-mo opicu oliso pae.
mother-3SG Sitti Maria 3SG-give-3SG-COMP seven grain rice
‘Sitti Maria’s mother gave him seven grains of rice.’

But ako must be present whenever the thing given is relativized:

KUL (346) ...ka-i matai-ako-no opicu oliso pae
and-3SG set.with.jewel-INST-3SG seven grain rice
c[inja-’ako-no cina-no Sitti Maria
PASS;give-COMM-3SG mother-3SG Sitti Maria
‘...and he set it (the ring) with the seven grains of rice which had been given by Sitti Maria’s mother.’

(347) seu i-cia-’ako-’inda cina-n-do
needle 3SG-give-COMM-3PL mother-3PL
‘needles which their mother had given them’

If more such verbs were to be found, then this function of ako might better be characterized as one of conveyance, rather than pure communication.
6.2.5 Instrumental ako

Of all the uses of ako, the instrumental is perhaps the most curious in terms of associated morphosyntactic properties. I begin with a consideration of instrumental ako with transitive stems. Compared to the corresponding transitive, ako in this function allows the expression of an additional participant, the semantic instrument.

KUL (348) a. *I-temba-*inda.
   3SG-shoot-3PL
   'He shot them.'

b. *I-temba-*ako-*inda  pisitolo.
   3SG-shoot-INST-3PL  pistol
   'He shot them with a pistol.'

There are, however, few object properties which accrue to instruments. The instrument may be regarded as a non-oblique in that it is expressed without a preposition. However, the instrument is never indexed on the verb; instead, as the above two sentences illustrate, the same referent (patient) is indexed by pronoun suffix regardless of whether instrumental ako is or is not present. Furthermore, when this referent is indefinite, there is no pronominal indexing on the verb and the verb is preceded by the antipassive marker poN-, further evidence that it is the ones who are shot, and not the instrument of shooting, which is treated as the object:

c. *I-pon-temba-*ako  pisitolo
   3SG-ANTIPASS-shoot-INST  pistol
   'He shot someone/something with a pistol, he shot with a pistol.'

It is not even possible to promote the instrument to subject position using the passive infix -in-, even when instrumental ako is present. For example, following a statement such as 'He just shot someone with a pistol', (349a&b) would be normal questions in response, but (349c) is not possible:

KUL (349) a. **Maina i-pon-temba mia itonia?**
   where  3SG-ANTIPASS-shoot person near.past
   Where did he just shoot a person?
b. Maina mia ṭfinjemba-no itonia?
   where person shoot:PASS-3SG near.past
   Where is the person who was just shot by him?

c. *Maina pisitolo ṭfinjemba-‘ako-no itonia?
   where pistol shoot:pass-INST-3SG near.past
   The instrument can be relativized, but never with what might be termed promotion to
   subject or object position. Instead, ako appears as a kind of anaphoric marker:

d. Maina pisitolo i-temba-‘ako-no?
   where pistol 3SG-shoot-INST-3SG
   Where is the pistol he shot him with?

   These properties would make it very desirable to analyze ako as nothing other than a
   preposition. However, even when marking the instrument, ako must occur between the
   verb and the object marker. Compare the acceptability of (348b) with the unacceptability
   of:

   KUL (350)  *I-temba-‘inda ako pisitolo.
   3SG-shoot-3PL INST pistol

   Furthermore, in Kulisu, there is not even an option for realizing an instrument as an
   oblique argument, that is, as the object of a preposition. The only other option besides
   ako is to employ the transitive verb pake ‘use’ as in a serial verb chain, but in this case the
   thing used is no longer an instrument but an ordinary object (with the corresponding full
   complement of object properties). The following are other examples of instrumental ako

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120 This is not necessarily true of other Bungku-Tolaki languages. Compare for example Tolaki where ronga ‘with’, used to encode semantic accompaniment is also used for instruments (data from Scott Youngman 1990:pers.comm.):

TOL  Inaku lako i Manggasa ronga i Pue.
   1SG go at Makassar with PN grandparent
   ‘I went to Makassar with Grandmother.’

   No-laα [m]o-buri ronga o pilo.
   3SG-be PART:ANTIPASS-write with ART pen
   ‘He is writing with a pen.’
with fully transitive verbs. Note how the pronoun following ako always indexes the ordinary patient, not the instrument:

KUL (351) \[\text{To-roda-ho-mo} \quad \text{ka-to pando-hako-no} \quad \text{kantobu.}\]
1PL-surround-3SG-COMP and-3PL spear-INST-3SG bamboo.spear
We surrounded it, and we speared it with bamboo spears.

SRB (352) \[\text{Ng[iner]a-hako} \quad \text{Tambontahi a’iso sa-mata i-sidu-’ako-no} \]
PASS:name-INSTR Tambontahi that one-time 3SG-scoop-INST-3SG
\[\text{pele-no} \quad \text{tahi,} \quad \text{da-i lima-no} \quad \text{sa-luwuluwu-o.}\]
palm-3SG sea be-at hand-3SG one-all-3SG
‘That one who is named Tambontahi, at one time he can scoop up the sea with his palm, and all of it is in his hand.’

KUL (353) \[\ldots\text{ka-n}o \quad \text{hundawi-’ako-’inda} \quad \text{hulu,} \quad \text{io indade monona.}\]
and-3PL illuminate-INST-3PL lamp 3SG 3PL true
‘…and they illuminated them with lamps, it was really them!’

MRB (354) \[\text{Nggapu atuw} \quad \text{ku-wuno-ako-no} \quad \text{watu.}\]
cat that 1SG-pelt-INST-3SG stone
‘I pelted that cat with a stone.’

MRB (355) \[\text{Lauro andio te’ingka ku-oho-ako-miu.}\]
rattan this soon 1SG-tie-INST-2PL
‘With this rattan I’ll tie you up next.’

The following examples illustrate again that in both Kulisu and Mori Bawah antipassive marking is sensitive to the indefiniteness of the ordinary patient, not that of the instrument:

KUL (356) \[\text{Bo hapa guna-no?} \quad \text{Po-gili-hako} \quad \text{gandu.}\]
for what use-3SG ANTIPASS-grind-INST-3SG corn
‘What is this used for?’ ‘Grinding corn with.’

MRB (357) \[\text{Doi otolu ringgi andio aku}\]
money three coin this 1SG.FUT
\[\text{[m]o-oli-ako} \quad \text{pae.}\]
PART:ANTIPASS-buy-INST rice
‘With these three coins I will buy rice.’

Furthermore, even when ako is present, it is the ordinary patient which is relativized with -in-, not the instrument:
KUL (358)  
\[ \text{Daa-te mia ng\textit{f}i\textit{n}e-hako}^{121} \text{ Langkule.} \]
\begin{center}
be-with person PASS\textunderscore name-INSTR Langkule
\end{center}

‘Once there was a man named Langkule’

When the verb stem is intransitive, no pronoun ever follows instrumental \textit{ako}, thus confirming what we have seen above: the instrument argument is never indexed on the verb—though of course it may be expressed as nominal.

KUL (359)  
\[ \text{n\textit{d}o-po \textit{\textit{i}-po\textunderscore i-a-mo te apua-no i raha moiko}} \]
\begin{center}
3PL\textunderscore long-live\textunderscore COMP with grandparent\textunderscore 3SG at house good \textit{a\textunderscore iso, buuke-\textit{ako kasanaa te kakaeya moiko\textunderscore to\textunderscore u-no}.} 
\end{center}
that full-INSTR comforts with riches good\textunderscore very\textunderscore 3SG

‘She with her grandmother lived long in that nice house, filled with comforts and riches which were very nice indeed.’

\[ \ldots \text{ka-i pe-baho-\textit{ako w}alaka\textunderscore no karanda mobosi.} \]
\begin{center}
and\textunderscore 3SG MM\textunderscore bathe\textunderscore INSTR dirty\textunderscore water\textunderscore 3SG animal\textunderscore pen rotten \‘...and he bathed himself with the dirty water of the filthy animal pen.’ \end{center}

\[ \text{Daa\texthbox{-}ho saade sinsi bulawa komata\textunderscore \textit{ako opicu oliso pae}.} \]
\begin{center}
be\textunderscore 3SG one ring gold bejeweled\textunderscore INSTR seven grain rice \‘There was one gold ring bejeweled with seven grains of rice.’ \end{center}

A special use of instrumental \textit{ako} occurs with intransitive stems consisting of a nominal prefixed with the middle voice marker \textit{pe\textunderscore}. Alone, such stems mean ‘have an X, use an X, provide oneself with an X’ (where ‘X’ is a nonreferential object), e.g. Mori Bawah \textit{pesongko} ‘have a hat, use a hat, wear a hat, etc.’ (from \textit{songko} ‘hat’). Compare this to when such verbs are followed by \textit{ako}:

MRB (362)  
\[ \text{Ku\textunderscore pe\textunderscore songko\textunderscore \textit{ako songko\textunderscore no uai\textunderscore ku}} \]
\begin{center}
1SG\textunderscore MM\textunderscore hat\textunderscore INSTR hat\textunderscore 3SG younger\textunderscore sibling\textunderscore 1SG \‘I used my younger brother’s hat as a hat’ \end{center}

(lit. ‘I hatted myself with my brother’s hat’)

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\textsuperscript{121}From transitive verb root \textit{nee} ‘name (someone)’, hence \textit{neahako} ‘name (someone) with (name)’. The namer is encoded as agent and the one named as the ordinary patient. The appellation, when supplied, must be encoded as instrument.
(363) **pe-kuro-ako** belee
MM-cook.pot-INSTR tin
‘use a tin for a cookpot’ (lit. ‘to cookpot with a tin’)

(364) **pe-bangka-ako** wata punti
MM-boat-INSTR stalk banana
‘use a banana stalk as a boat’ (lit. ‘to boat with a banana stalk’)

KUL (365) **Ndo-pe-borungi-ako** io sawu.
3PL-MM-sunshade-INSTR ART sarong
‘They used sarongs as a sunshade.’
(lit. ‘they sunshaded themselves with sarongs’)

It seems that verbs such as Kulisu pealasa’ako ‘excuse, give an excuse’ could just as well be brought under this analysis, which thereby shows a point of overlap between instrumental and communicative ako. Compare this analysis with (337h) above:

KUL (366) **Hapa-inda ndo-pe-alasa-ako?**
what-CONT 3PL-MM-excuse-INSTR
‘What excuse did they give?’
(lit. ‘What did they excuse themselves with?’)

Only if the stem is intransitive can the instrument be relativized or questioned using the passive marker -in-.

MRB (367) **p[in]e-nea-ako**
PASS:MM-name-INSTR
‘that which one has as a name’ (that which one names oneself with)

(368) **anu p[in]e-inahu-ako** lewe-no
REL PASS:MM-vegetable-INSTR leaf-3SG
‘that which the leaves of which are used as a vegetable’

KUL (369) **Io m[in]orungkoko-’ako-no a ‘iso io Waode**
ART PASS:pregnant-INSTR-3SG that ART Waode

|Gimunduri | arumai. |
|Gimunduri | that   |

‘The one with whom she was pregnant was that Waode Gimunduri.’
6.2.6 Benefactive *ako

The following sentences illustrate the basic pattern found with transitive verbs, described previously in Chapter 5: either the object is definite and is indexed on the verb (370a), or else the object is indefinite and the verb takes the antipassive prefix poN- (370b):

KUL (370) a. *i-wawa-o keu a'iso
    3SG-fetch-3SG wood that
    ‘He brought that wood.’

    b. *i-po-wawa keu
    3SG-ANTIPASS-fetch wood
    ‘He brought wood.’

Note how, when benefactive *ako is added to the verb, in Kulisu the normal object indexing lapses, as in (371a). However the antipassive marker still signals the indefiniteness of the normal object, not the introduced beneficiary, as in (371b).

KUL (371) a. *i-wawa-'aka-'aku keu a'iso (*i-wawa-o-aka-aku keu a'iso)
    3SG-fetch-BEN-1SG wood that
    ‘He brought that wood for me.’

    b. *i-po-wawa-’aka-’aku keu
    3SG-ANTIPASS-fetch-BEN-1SG wood
    ‘He brought wood for me.’

The property that normal object indexing lapses sometimes leads to ambiguity, and the intended meaning must be derived from context. Example (372) illustrates for instance two possible interpretations of *tena 'aka-'aku.

KUL (372) a. Tena-'aka-'aku!
    order-COMM-1SG
    ‘Order it to me!’

    b. Tena-'aka-'aku!
    order-BEN-1SG
    ‘Order him for me!’

On the other hand, the third singular pronoun -no following benefactive *ako does not lapse as it does with reflective and communicative *ako, as can be seen in (373). More examples of benefactive *ako follow:
MRB (373)  
*Ku-aiwa-ako-no ana-ku mahaki*  
1SG-come-BEN-3SG child-1PL sick  
‘I have come on behalf of my sick child.’

(374)  
*Omue aku [m]epate-ako-ira mokole.*  
2SG 1SG.FUT PART:kill-BEN-3PL prince  
‘I shall kill you for the prince.’

(375)  
*kinaa  anu i-binta-ako-ira*  
cooked.rice REL 3SG-leave-BEN-3PL  
‘the cooked rice which he left for them’

KUL (376)  
...ka-i *po-lemba-*ako-*inda* baku, sa-pikulu.  
and-3SG ANTIPASS-carry.on.shoulder-BEN-3PL provision one-137.lb  
‘...and he carried provisions for them on his shoulder, one pikul-weight’

(377)  
*Ndo-po-nahu-ako-no-mo ka-ndo cia-*’o  
3PL-ANTIPASS-cook-BEN-3SG-COMP and-3PL give-3SG  
*[m]ong-kaa.*  
PART:ANTIPASS-eat  
‘They cooked for her and they gave her to eat.’

(378)  
...ka-i *naa-ako-no dupa kalembahi-no picu minggu*  
and-3SG place-BEN-3SG incense duration-3SG seven week  
‘...and she put out the incense for her for a duration of seven weeks.’

Besides this strategy, a beneficiary may also be expressed as an oblique, in which case *ako* does not occur on the verb. In Tolaki, the preposition which introduces beneficiaries is *ke*, a reduced form of *ako*. In Kulisusu, however, the preposition is the unrelated *bo* ‘for’\(^\text{123}\) as in (379b):

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\(^{122}\) The prince is referentially singular; use of the third person plural suffix *-ira* in this case indicates respect.

\(^{123}\) In other contexts, *bo* serves as a marker of (near) future time. The two uses are linked, and are parallel with the double use of Bahasa Indonesia *akan* such as in the following sentences (Donohue 1993:3):

**BI**  
*dia beri nasi itu akan anak-nya* (archaic)  
s/he give rice that *DAT* child-3.GEN  
‘s/he give the rice to her child’

*dia akan masak nasi.*  
s/he *FUT* cook rice  
‘s/he is going to cook some rice.’
KUL (379) a. Ku-po-'oli-ako-no ana-ngku paku.  
1SG-ANTIPASS-buy-BEN-3SG child-1SG medicine  
'I bought my child medicine'

1SG-ANTIPASS-buy medicine for child-1SG  
'I bought medicine for my child.'

There is no indication that ako-marked beneficiaries can be relativized or questioned. In Kulisu only oblique beneficiaries can be questioned:

c. Bo inai ka-u po-'oli paku?  
for who and-2SG ANTIPASS-buy medicine?  
'For whom did you buy medicine?'

d. *Inai o u-po-'oli-ako paku?  
who 2SG-ANTIPASS-buy-BEN medicine?

Benefactive ako readily co-occurs with intensive or causative ako; in this case the former is always 'outer' and the latter is always 'inner'. The co-occurrence of benefactive ako with other senses of ako, however, is not known to me in Kulisu.

KUL (380)  Usu-pako-'aka-'aku!  
enter-CAUS-BEN-1SG  
'Put it in for me, place it inside for me!'

(381)  Ka-i sakulako-'ako-no-mo duka torompu-no,  
and-3SG fling.down:INTS-BEN-3SG-COMP also short.sword-3SG  
tae-no, 'Ha, engka-'o torompu-ku a'iso.'  
say-3SG hah lift-3SG short.sword-1SG that  
'And he flung down his short sword for him also, saying, "Hah, pick up that short sword of mine."'

In Mori Bawah, when ako is twice present, elision may occur, for example luarakune 'bring it outside for me' from luar-rako-akune /come.out-CAUS-BEN:1SG/ (Esser 1933:374).

Besides what may be regarded as the 'standard' use, benefactive ako is sometimes also employed to index the possessor of the object. Practically, this results in the same
The referent being indexed twice—once by benefactive pronoun on the verb, and again by genitive pronoun on the object noun:

MRB (382)  Si pole-akune kae-ku!
            NEG.IMPV cut.off-BEN:1SG hand-1SG
            ‘Don’t cut my hand off!’

In Tolaki, this use of ako has been elevated to a virtual requirement of the grammar: possessors of objects are also indexed by benefactive pronouns, unless the possessor and the subject are coreferential. In other words, if X does something to Y’s kinsman, Y’s body part, or something which Y owns, then Y is also cross-referenced as beneficiary; if on the other hand X does something to his own kinsman, body, or owned item, then X is not cross-referenced as beneficiary. Compare these examples:

            1SG-take-3SG banana-1SG
            ‘I took my bananas.’

            1SG-take-3SG-BEN:3PL banana-3PL
            ‘I took their bananas.’

(384) Sa-no karu-karu-i-kee woroko-no bee-no,
      when-3SG REDP-scratch-3SG-BEN:3SG neck-3SG goat-3SG
tehokongo bee-no...
cough goat-3SG
      ‘When he scratched his goat’s neck, his goat coughed...’

(385) Oheo, peeka kabusasi-keito ana-ndo, tewuta-i-to.
      Oheo ascend clean-3SG-BEN:1PLN child-1PLN defecate-3SG-COMP
      ‘Oheo, come up and clean our child (for us), he’s dirty.’

(386) Lako-no-to lako ale r[um]abu-i-kee posoki-no...
      go-3SG-COMP go take PART:pull.out-3SG-BEN:3SG stopper-3SG
      ‘Then she went and took and pulled out its stopper...’

A special use of benefactive ako is also found with reciprocal verbs. Just as in English one finds pairs of sentences such as we fought and I fought with him, John and Mary met
and John met with Mary, these languages exhibit similar encoding possibilities. For example Kulisusu baawa ‘meet’ (from the combination of awa ‘get, find’ plus reciprocal marker ba-) is an intransitive verb which may occur with the actants encoded as a plural subject:

KUL (387) a. To-baawa-mo i dao.  
IPL-meet-COMP at market  
‘We met at the market.’

Or it may occur with some actants encoded as subject and the others expressed as a beneficiary:

b. Sa-huwu-komiu mi-baawa-’aka-’aku.  
one-many-2PL 2PL-meet-BEN-1SG  
‘All of you meet with me.’

Other examples of this use with reciprocal verbs are:

MRB (388) pe’iwali-ako-ira  
wage.war-BEN-3PL  
‘wage war with them’

(389) pengkena-ako-no i Wula  
resemble-BEN-3SG PN Moon  
‘like Moon, similar to Moon’

(390) ku-pesambe’e-ako-no mia arau  
1SG-be.friends-BEN-3SG person this  
‘I am friends with this man’

(391) tembio ka-i m-pe’u’ua-akune?  
why and-2PL PLS-quarrel-BEN:1SG  
‘why do you all have a quarrel with me?’

6.2.7 Comparative ako

There is yet another use of ako which I call here the comparative. The morphosyntax associated with this function of ako is not well understood because of a lack of data, and it may well be that ‘comparative’ ako could be merged under one of the preceding functions. For now I discuss it separately. This use of ako may be translated into English as ‘more
... with respect to X’. The pronoun suffix may be omitted when ‘X’ is known from context, in some cases allowing ako to be interpreted as a marker of superlative degree:

MRB (392) a. lembui ‘in back’
   b. lembuiaiko-no ‘come in back with respect to him, come in back of him’
   c. lembuiaiko ‘come last, come at the rear’

(393) a. se’elu ‘in front’
   b. se’eluiaiko-no ‘go in front with respect to him, go in front of him’
   c. se’eluiaiko ‘go at the very front, lead’

(394) a. uai ‘younger sibling’
   b. uaiiaiko-ira ‘be the younger with respect to them, be younger than them’
   c. uaiiaiko ‘be the younger, be the youngest’

(395) a. aka ‘older sibling’
   b. akaiaiko-ira ‘be the older with respect to them, be older than them’
   c. akaiaiko ‘be the older, be the oldest’

(396) a. ompeda ‘close’
   b. ompedaakune ‘come closer to me’
   c. ompedaako-no ‘come closer to him’
   d. ompedaako ‘move closer’ (either to the speaker, or to someone or something else known from context)

Apparently in Mori Bawah when the root is a deictic, the need for a pronoun suffix is obviated:

MRB (397) a. ira’ai ‘there’
   b. ira’aiiaiko ‘more toward there’

(398) a. indi’ai ‘here’
   b. indi’aiiaiko ‘more toward here’

Compare also this longish text example from Kulisu.
KUL (399)  

I-pogau-no  Pae, “Sa-monona-no ungkude a’ai nahina  
3SG-speak-COMP Padi one-true-3SG 1SG this NEG
ku-kona’-ako-no,  hina  ku-laenga’-ako-no,  nahina  
1SG-fitting-CMPV-3SG NEG 1SG-genuine-CMPV-3SG NEG
ku-santaonga’-ako-no  be-ku  membali  apu-no  rajaki...  
1SG-proper-CMPV-3SG FUT-1SG become lord-3SG foodstuff
Bo  k[um]ona-ako-no,  l[um]aenga’-ako-no,  
FUT PART:fitting-CMPV-REL PART:genuine-CMPV-REL
s[um]antaonga’-ako-no,  tabea-no  io  Ondo  tee  Bene.”  
PART:proper-CMPV-REL not.unless-3SG ART Ondo with Bene

‘Then Padi spoke, “The truth is as for me here, I am not more fitting, I
am not more genuine, I am not more proper, that I should become king
of the foods... The ones for being the most (more?) fitting, the most
(more?) genuine, the most (more?) proper, none unless it is Ondo and
Bene.”’

6.2.8 Modal ako

Sometimes instead of introducing a new argument, ako instead indicates a relationship
between two clauses. The following data are drawn exclusively from Kulisusu, as I am
not aware of this use of ako in any other Bungku-Tolaki language. When ako occurs on
the verb of the second clause, it indicates something which may happen as the result of the
action presented in the first (main) clause.

KUL (400)  
Pusalako-Ø  manu-manu  a’iko  i-lola’-ako!  
release-3SG bird that 3SG-fly.with.wings-MODAL
‘Release that bird so that it might fly!’

(401)  
Rusa i  Kolensusu,  to-laha-ako-no  dahu  
deer at Kulisusu 1PL-follow-INSTR-3SG dog
ka-i  hopa-o  momale’-ako  [m]olai...  
and-3SG bark-3SG exhausted-MODAL PART:flee

‘As for the deer in Kulisusu, we chase it with dogs and they hound it
so that it might be exhausted from fleeing...’

This and the following two verbs function here as relative clauses (§ 8.1.4), and have the same
structure as for example k[um]awasa-no ‘the one who is mighty, the mighty (one), the Almighty’ derived
from kawasa ‘mighty’.
The one named La Engu sought around for a way for him that he might die.

I consider that this use of *ako* developed from instances in which *ako*—originally in causal use—referred to the preceding verb or clause as a whole. In other words, two clauses of the form, say, *X, Y-ako* originally meant ‘do X, Y-because of (X)’ which then naturally developed into the meaning ‘do X, as a result Y’, ‘do X, so that Y’. In addition, though, this use of *ako* also carries with it a certain epistemic value, in that the second action is only a hypothetical, unrealized or possible outcome. It is for this reason that I label *ako* a ‘modal’ particle. For situations where the consequence is known to have happened, the consecutive linker *ka*- ‘and, so that’ (§ 7.4.1) is more appropriate. Compare especially sentence (402) above, with this sentence:

KUL (403) *Mia ompole ndo-lua-hako-no-mo wacu, ka-i mate.*

people many 3PL-dump-BEN-3SG-COMP rock and-3SG die

‘Many people dumped out rocks on him, and so he died.’

In certain cases, *ako* is used to imply an immediacy of action. This is particularly true following the imperative *leumo* ‘come!’.

KUL (404) *Leu-mo, to-pongkaa-ako!*

come-COMP 1PL-ANTIPASS-eat-MODAL

‘Come on, we’re going to eat soon!’

(405) *Leu-mo, to-hule-ako!*

come-COMP 1PL-go-MODAL

‘Come on, we’re going out soon!’

However, what I consider to be the original meaning of these sentences, e.g. ‘Come, so that we might eat’ is still relatively transparent. On the other hand this use of *ako* has developed to where *ako* alone carries the sense of immediacy, without any preceding
clause (but ako still indicates a potential, not yet carried out event). In such cases, ako comes close to being a marker of near future action.

KUL (406)  Ku-hule-ako.
1SG-go-MODAL
'I'm going out soon, I'm about to leave.'

At some point in its history, ako shifted from being a marker on clauses in final position, to marking clauses in initial position. Here it loosely translates as English 'if', 'whenever' or 'when', but without the certainty that this last may imply:

KUL (407)  Ke-u-mate-ako ungkude be-ku mate-mo duka.
if-2SG-die-MODAL 1SG FUT-1SG die-COMP also
'If you should die, then as for me, I will die too.'

(408)  Pisi-pisilaa-o io tabako. Ku-too-o-ako tabako
REDP-inspect-3SG 3SG cigarette 1SG-smoke-3SG-MODAL cigarette
mi-cundo-ho-mo lipu inade a'ai
2PL-heel-3SG-COMP country 3SG this
'Take a good look at the cigarette. When I inhale on the cigarette, then all of you strike this land with your heels!'

(409)  Hiina-ako ndo-pehawaki-o, be-i mosio e'e arua.
NEG-MODAL 3PL-remember-3SG FUT-3SG dry water: that
'should they not remember it, then that water will dry up.'

(410)  Sampe oleo a'ai tolu-ta'u-ako ndo-pehawaki-o-mo.
until day this three-year-MODAL 3PL-remember-3SG-COMP
'Until today, whenever it has been three years, they remembered it.'

As a modal particle, ako has no effect on transitivity. In (408) it occurs outside of any object pronoun. It is not even required that modal ako attach to a verb. In (409) it follows the negative term; in (410) it follows an adverbial time phrase.

6.3  On understanding the prehistory of *ako

Having investigated in the previous section the different functions served by present-day ako, it is now possible to return to the formal split described in § 6.1 with greater insight. As was discussed there *aken is exhibits a formal split in Bungku-To'ai, which
we may now align with the following functions.\footnote{I leave comparative ako (§ 6.2.7) out of the following discussion.} Technically this alignment applies only to Kulisusu and Mori Bawah:

<table>
<thead>
<tr>
<th>$STEM^+\star ako$</th>
<th>$\star ako+PRONOUN$</th>
</tr>
</thead>
<tbody>
<tr>
<td>causative/confective intensive</td>
<td>refective communicative instrumental benefactive</td>
</tr>
</tbody>
</table>

Table 47. Formal and functional split of $\star ako$ in PBT

Furthermore, when we look at object properties, we see that in the present languages the 'causee' of a verb with causative $ako$ or the 'patient' of a verb with intensive $ako$ is always a full-fledged, well-behaved object in terms of the three object properties enumerated in § 6.2:

<table>
<thead>
<tr>
<th>$ako$-function ROLE</th>
<th>indexed by verbal suffix</th>
<th>'indefinite' marked w/ antipassive poN-</th>
<th>reflexivized or interrogated with $-in-$</th>
</tr>
</thead>
<tbody>
<tr>
<td>causative CAUSEE</td>
<td>$\checkmark$</td>
<td>$\checkmark$</td>
<td>$\checkmark$</td>
</tr>
<tr>
<td>intensive (if transitive) PATIENT</td>
<td>$\checkmark$</td>
<td>$\checkmark$</td>
<td>$\checkmark$</td>
</tr>
</tbody>
</table>

Table 48. Object properties in the case of $STEM^+\star ako$

On the other hand, roles introduced by $\star ako+PRONOUN$ are always defective objects in some respect:
In other words, these roles under consideration appear to be Johnny-come-latelies to the object position. Taking all these factors into consideration, I propose the following historical scenario:

(a) At the stage of PBT, there was a verbal suffix *-ako with intensive and confactive functions.

(b) At the stage of PBT, there was also an *ako, not a suffix, used to introduce arguments including the stimulus/goal/cause of psychological events, the message or content of communicative events, and instruments and beneficiaries. Furthermore, it seems likely that this *ako was followed by a pronoun when the referent was human and/or discourse salient (for example a prototypical beneficiary) and not followed by a pronoun when the referent was non-human and/or low in discourse saliency (for example, a prototypical instrument).
(c) The presence in the language of suffixal *-ako created an analogical model for
other instances of *ako to be incorporated into the verb. This tendency, though it
may have already begun at the stage of PBT, continued through time as a drift in
daughter languages.

(d) Presumably this incorporation occurred first and most easily when the preceding
verb was intransitive, because in these instances there would have been no object
pronoun separating *ako from the verb. In this case, *ako was simply reanalyzed
as part of the verb stem. The evidence for such a reanalysis, of course, is the
development of object properties for the thereby stranded nominal. I assume for
instance that incorporation of *ako occurred first with intransitive verbs of
communication and only later, by analogy, with transitive verbs of communication.

(e) Instrumental and benefactive *ako have only lately been incorporated into the
verb, if at all, and consequently the instrument and beneficiary roles attain to few if
any object properties. For example, in Kulisusu when the verb is transitive, the
instrument introduced by ako has no object properties, even though ako occurs
between the verb and an object suffix. In Tolaki, because benefactive ako and its
associated pronoun or nominal always occur outside of the normal object suffix, it
appears that benefactive ako has yet to be incorporated—though it does occur
regularly in immediate post-verbal position.\textsuperscript{126}

A question which was not addressed in the above discussion is whether non-suffixal *ako
was a preposition or a (serial) verb, and I believe the evidence supports considering non-
suffixal *ako to have been a preposition or oblique case marker. The strongest evidence is

\textsuperscript{126}Certain co-occurrence restrictions apply, however, for example a third person singular beneficiary
collocates only with a third singular object, e.g. \textit{*ku-baho-iro-kee /1SG-bathe-3PL-3SG/} is not a possible
formation (S. Youngman 1998:pers.comm.). In that the selection of pronouns is not entirely
independently variable, this indicates some measure of grammaticalization. See Lehmann (1985) on
'obligatorification'.
simply that where a reflex of *ako exists as independent (unincorporated) particle in the present-day languages, it is a preposition. For example, Padoe has retained what is clearly an unincorporated form in sentence initial position:

PAD (411) a. Ako petulura-mu ka-no mai. because invitation-2SG and-3SG come.hither ‘He came because of your invitation.’ (Lara, Larobu, et al. 1991:2)

b. Ako manga’u-no ka-no petonda. with pleasure-3SG and-3SG follow ‘He followed with pleasure.’ (Lara, Larobu, et al. 1991:2)

Tolaki as well has a reduced form, ke, which need not follow the verb, and as shown in (412) is distinct from the set of benefactive pronouns.

TOL (412) Poko-dunggu-i-kona salamu-nggu ke i Amir. CAUS-arrive-3SG-BEN:1SG greetings-1SG to PN Amir ‘Convey my greetings for me to Amir.’

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127Kulisu'su also has a conjunction ako, roughly translatable as 'but' or 'except'. It is unclear whether this ako derives ultimately from *aken or whether it has a different historical source. Some examples are:

KUL Wangkinamboro omia ngkana ingkita, ako i-owose, Wangkinamboro person same 1PL.COLL except 3SG-big ako i-pong-kaa mia. except 3SG-ANTIPASS-eat person ‘Wangkinamboro was the person the same as us, except he was big, except he ate people.’

KUL Wowo a’ai i-moea, ako ke-o pekalaha. load this 3SG-heavy except if-3SG unanimity ‘This responsibility is very heavy, unless there is unanimity.’

KUL Bawu-hako itonia ndo-teleu-mo duka i wivi-no tahi, pig-COLL near.past 3SP-arrive-COMP also at edge-3SG sea ako hina-mo ndo-telimba ri’asoa. except NEG-COMP 3PL-able.to.cross over.there ‘The aforementioned pigs also arrived at the edge of the sea, but they didn’t cross to over there (the other side of the sea).’

128These authors consider ako in the first instance to be a conjunction, and in the second instance a preposition, but clearly it is the same part of speech in both cases.

129Given by these authors as kei, but which I analyze as ke plus the person marker i. If this is not its synchronic analysis, it appears to be its historical source.
(413) Tambuoki otuo-no nggiro’o indio-no ke i Ama.
NEG.EXT use-3SG that work-3SG for PN Father
‘That work doesn’t have a use for Father.’
(Muthalib, Alimuddin, Pattiasina, et al. 1985:47)

(414) Ohapo sinalaki-nggu ke inggomiu?
what fault-1SG for 2PL
‘What is my fault before you?’
(Muthalib, Alimuddin, Chalik, et al. 1985:115)

One argument which Harrison adduced in support of the verbal nature of POC *aki(ni) is that in its present form, in various languages it is followed by object suffixes (1982:186). However, prepositions also take objects, and I am not sure that it can be demonstrated that the pronouns which followed prepositions were different than the pronouns which followed verbs to indicate the object, especially given that only two pronoun sets—genitive and personal pronouns—are reconstructed for Proto-Austronesian. Furthermore, even in languages in which ako exists independently as a transitive verb (such as Tukang Besi where Donohue (1993) glosses it as ‘do for’), it seems reasonable to suppose this results from a later reanalysis.\footnote{Harrison (1982:224) suggests in the Ponapeic languages which have ki (*akini) as a main verb that this too may have been a local innovation.}

Another argument which Harrison (1982) advanced for the verbal nature of *aken is that it must have occurred—just as its reflexes still do in many Oceanic languages—in immediate post-verbal position, just where we would expect a serial verb to occur. However, this argument can be turned over in Bungku-Tolaki: only *ako which occurred in immediate post-verbal position was ever incorporated into the verb, furthermore it is precisely where it did not occur in immediate post-verbal position that we still find it functioning as a preposition—not a verb—today.\footnote{The use of ako as a (main) verb, or of ako taking indexing for subject/agent, is not known to me in any Bungku-Tolaki language.} See examples (411) and (412).
The patterns described above for Kulisu and Mori Bawah are in fact not limited to Bungku-Tolaki, but have clear parallels in other languages of central and southeastern Sulawesi. When we look further afield, it becomes apparent that the same formal-functional division which I propose for Proto-Bungku-Tolaki must be even older. It is to this other evidence which I now turn.

6.4 Reflexes of *aken elsewhere in Sulawesi

In this section I look at data from five languages, representing three other language groups of Sulawesi. Three languages—Kaili, Uma and Pamona—belong to the Kaili-Pamona group, located in Central Sulawesi to the north of the Bungku-Tolaki area. Muna belongs to the Muna-Buton group whose member languages are spoken across the two islands off the southeastern peninsula which bear these names. Wolio, though also spoken on Buton Island, has recently been shown to belong to a separate group now named Wotu-Wolio; Donohue (forthcoming) supposes that the Wotu-Wolio languages—spoken in scattered areas around the Bone Bay of Sulawesi—may constitute a sister group to Kaili-Pamona. All five of these languages exhibit a formal-functional split similar to what we have already seen in Bungku-Tolaki, and which I believe similarly traces back to suffixal and non-suffixal varieties of *aken.

The treatment of *aken reflexes in these languages is brief compared to the lengthy discussion above devoted to -ako in Kulisu and Mori Bawah. Furthermore, given the nature of the available data, in most cases it has not been possible to maintain a concern for the ‘object properties’ associated with the different semantic roles of the introduced referent. Still, certain parallels between all these languages are evident. A summary comparison of these five languages with Bungku-Tolaki is to be found in § 6.4.6; especially the reader may find the tables on pages 272 and 273 useful for tracking the following discussion.
Finally, note that while I have chosen to refer to the Sulawesi protoform as *aken, present-day Kaili-Pamona, Bungku-Tolaki and Muna-Buton languages all lack final consonants and therefore provide little internal evidence for reconstructing final *-n. As far as I am aware, neither Wolio nor any of the Kaili-Pamona languages provide evidence for a final nasal; the case for reconstructing *-n in these languages rests entirely on five forms wherein *aken merged with a following pronoun, namely -akono ‘3SG’ as found in Moronene, Kulisusu and Mori Bawah, and the Muna forms -kanau ‘1SG’, -angko ‘2SG’, -ane ‘3SG’, and -anda ‘3PL’.132

6.4.1 Kaili

The Kaili language of Central Sulawesi consists of at least seven closely related languages or dialects, of which I have drawn information from the Da’a and Ledo dialects. Here we find evidence for both a benefactive preposition ka, and a verbal derivational suffix -aka. This later is usually preceded by a thematic consonant—in Da’a at least r, s, t, or n (Barr 1988a) and in Ledo r, s, t, n, l, b, or m (Evans 1996)—but no meaning difference is to be ascribed to the different thematic consonants. Both authors describe this suffix as no longer productive, and usually serving a causative function. For example (Barr 1988a:16, Evans 1988:182):

**DAA**

(415) a. navu ‘fall’
    b. navusaka ‘drop’

(416) a. sua ‘enter’
    b. suuraka ‘insert’

(417) a. ga’a ‘separate’
    b. ga’anaka ‘divorce’

**LED**

(418) a. navu ‘fall’
    b. navusaka ‘make fall’

---

132This assumes that Muna -kanau ‘1SG’ derives from earlier *aken-aku.

Furthermore, given that the third person forms of the benefactive pronoun are -kee in Tolaki, -keo in Mori Bawah and Padoe, and ki in Uma (Martens 1988:203), Sirk’s (1996:203) hypothesis seems likely that in prehistory *-n was not original but rather this morpheme was always followed by one of two particles, either *i (if the following nominal was personal) or *n (if non-personal).
(419) a. suvu ‘go out’
   b. suvuraka ‘make leave’
(420) a. tabuni ‘hide’ (INTR)
   b. tabuniaka ‘hide s.th.’ (TRANS)

Besides this causative function, Evans describes in Ledo certain instances in which this suffix “[does] not have a semantic element of causation, but only of motion ... an argument is added, but it is usually a direct object that is added and it clearly is the undergoer” (1996:182). In her examples, however, the presence of extra verbal morphology prevents directly comparing the -aka and -aka-less forms (Evans 1988:182, 183):

LED (421) a. Uwe nang-ga-buntu dako ri karonta
   water REAL-NOM-flood from at river
   ‘The water flooded from the river.’
   b. Ni-buntu-laka-mo mu uwe walesu pangane.
      PASS.REAL-flood-AKA-COMP GEN water rat that
      ‘The rat was overwhelmed by the water.’

(422) a. I Rina no-veulu.
       PN Rina REAL-spit
       ‘Rina spits.’
   b. I Rina no-mba-veulu-saka pakuli.
      PN Rina REAL-DEFOC-spit-AKA medicine
      ‘Rina spat out the medicine.’

I have been able to glean only a small amount of information concerning the Kaili preposition ka, which Barr and Evans usually gloss as ‘to’. From their examples, we can surmise at the very least it is used to introduce addressees and recipients (Barr 1988b:87, 106; Evans 1996:186):

DAA (423) nang-uli-mo singa ka tawewe
       AF/REAL-say-PERF lion to cat
       ‘The lion said to the cat....’
(424) *pomorenga* nomba-wai petulungi-na ka purapura ngata.
   government AF/REAL-give help-3SG to all villages
   ‘the government gives its help to all villages’

**LED** (425) *I Ni no-tulis sura ka tina-na.*
   FN Ni REAL-write letter to mother-3SG
   ‘Ni wrote a letter to her mother.’

### 6.4.2 Uma

Martens provides considerably more information about the benefactive marker in nearby Uma. Here, the clitic *ka*¹³³ is less preposition-like, and also exhibits vowel harmony and in some cases merger with its accompanying pronoun, as shown in Table 50.

In both the third person plural and the first person plural inclusive, the pronoun precedes rather than follows the benefactive marker (Martens 1988:203-204).

<table>
<thead>
<tr>
<th>Clitic</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ka</td>
<td>1SG</td>
</tr>
<tr>
<td>-ko-ko</td>
<td>2SG</td>
</tr>
<tr>
<td>-ki</td>
<td>3SG</td>
</tr>
<tr>
<td>-ka-kai</td>
<td>1PLX</td>
</tr>
<tr>
<td>-ta-ka</td>
<td>1PLN</td>
</tr>
<tr>
<td>-ko-koi</td>
<td>2PL</td>
</tr>
<tr>
<td>-ra-ka</td>
<td>3PL</td>
</tr>
</tbody>
</table>

Table 50. Uma benefactive pronouns

The most frequent use of this clitic/pronoun set is, according to Martens (1988:211), to mark inner benefactives such as addressees and recipients as well as outer benefactives, that is, the one for whom an action is performed. Although Martens provides no examples of outer beneficiaries, examples of inner beneficiaries are the following (1988:211):

**UMA** (426) *Hiapa buku to mu-wai 'ra-ka?*
   where book REL 2SG:GF-give-3PL-BEN
   ‘Where is the book that you gave to them?’

¹³³Martens prefers to identify the benefactive marker as *ki*, after the most commonly encountered (third singular) member of the paradigm.
In addition, *ka* can also be used to encode instruments and causes. Note that in both of his examples, however, it appears that the pronoun associated with *ka* does not index the instrument or cause, but rather the ordinary patient (1988:211):

**UMA (428)**

Na-wute' piho-'na na-time-ki hadua batua.

3SG:GF-draw sword-3SG 3SG:GF-cut-BEN:3SG one slave

'He drew his sword and cut a slave with it.'

**(429)**

Ngkai have'ea pobago-ku tohe'e, to 'uma to doko'

from all deed-1SG that which REL want

ni-patehi-ka?

2SG:GF-kill-BEN:1SG

'Of all my deeds, which do you want to kill me because of?'

In addition, Martens notes benefactive *ka* is also sometimes used to mark "what loosely might be called ‘concomitant’" (1988:211). Judging by his examples, though, this function parallels the use of *ako* with reciprocal verbs described above for Kulisu and Mori Bawah (§ 6.2.6).

**UMA (430)**

Hilou japi m-po-hirua-'ki kebe'.

go cow AF-TRANS-meet-BEN:3SG goat

'The cow went to meet with the goat.'

**(431)**

Na-pogaa'-mi-ra-ka.

3SG:GF-separate-PERF-3PL-BEN

'He departed from them.'

**(432)**

Hilou-i hi to Yahwdi to mo-si-galo-ra-ka

go-3SG to people Jew REL INTR-RECIP-mix-3PL-BEN

to Yunani.

people Greek

'He is going to the Jews that are mixed in with the Greeks.'

Martens also gives a pair of examples in which, according to him, the force of the benefactive marker is not easily translated into English (1988:211):
UMA (433)  *Mo-ronto we’o-mi-ki sapatu’-na.*
INTR-lost also-PERF-BEN:3SG shoe-3SG
‘His shoes got lost.’

(434)  *Ra-’ala’-ma-ka pue’-ku.*
3PL:GF-take-PERF-BEN:1SG master-1SG
‘They have taken my master away.’

Again, this parallels the special use of the benefactive marker to index the possessor of object. Originally, this strategy must have had expressive content but, at least in Tolaki, is now largely grammaticalized (§ 6.2.6). As Martens also supplies the possible translations *His shoes got lost on him* and *They took my master away on me/to my detriment*, it appears that this use of benefactive *ka* still carries some expressive content in Uma.

Martens has affirmed personally to me that the suffix -*aka* in Uma is extremely rare, and in only one case is a corresponding stem without -*aka* also to be found. Because both *sapu* and *sapuaka* are equally transitive, this appears to be a case where the suffix was an intensifier:

UMA (435) a. *sapu* ‘deny’
   b. *sapuaka* ‘repudiate, reject’

Other potential candidates for frozen instances of -*aka* are (Martens 1997:pers.comm.):

UMA (436) a. *sarumaka* ‘hope’ (transitive)
   b. *totoaka* ‘head towards, approach’ (compare synonyms *toa’*, *totopa*)
   b. *todohaka* ‘suffer, groan’

6.4.3 Pamona

Pamona, formerly called Bare’e after the negative term in this language, has two suffixes which are relevant to the present discussion, -*ka* and -*aka* (the latter always preceded by a thematic consonant). These two suffixes have complementary uses. Functions well attested for -*ka* include the following, of which the given examples are only a small sample:
• benefactive (Adiani 1931:294):

PAM (437)  
**popaende-ka ananggondi**  
sing.lullaby-KA child  
‘sing lullabies for the child’

(438)  
**da ku-totoraka-ka siko**  
FUT 1SG-clarify-KA 2SG  
‘I will make it clear for you’

• cause or reason (Adiani 1931:294, 295):

PAM (439)  
**njaa mu-kama’i-ka**  
what 2SG-come-KA  
‘what did you come here for?’

(440)  
**bare’e re’e amu da nda-pepate-ka**  
NEG exist REL FUT PASS-kill-KA  
‘there is nothing for which he must be killed’  
(lit. ‘there does not exist that for which he must be killed’)

• instrument. Note that Pamona lacks a series of pronoun suffixes to mark ‘object’, whether patient or instrument (Adiani 1931:298, 299):

PAM (441)  
**watu ku-wumu-ka asu**  
stone 1SG-pelt-KA dog  
‘I pelted the dog with a stone’

(442)  
**siko da ku-tinti-ka woyo**  
2SG FUT 1SG-strike-KA bamboo  
‘I shall hit you with a bamboo’

(443)  
**ne’e mu-polega-ka topi-mu**  
NEG:IMPV 2SG-play-KA sarong-2SG  
‘don’t play with your sarong!’

• comitative. It appears that a comitative function has developed from the instrumental.

Compare especially examples (443) and (444) (Adiani 1931:295):

PAM (444)  
**polega-ka ananggodi setu**  
play-KA child that  
‘play with that child!’
(445)  *na-ponangu-ka lauro*
s 3SG-swim-KA rattan
‘he swam with a rattan line’ (e.g. in order to bring it across the river)

(446)  *da ku-pelele-ka ananggodi ri yondo*
FUT 1SG-go-KA child at mountain
‘I shall go with the child over the mountain’

(447)  *masapi nda-koni-ka kina’a*
eel PASS-eat-KA rice
‘eels were eaten with the rice’

The reflexive and communicative functions of -ka are not well attested in Adriani’s
writing, though the following may be regarded as an example of -ka used to encode the
stimulus of a psychological event (Adriani 1931:295):

PAM (448)  *tau mate i wengi ku-pangipi-ka*
person dead at night 1SG-dream-KA
‘I dreamed of the person who died yesterday’

And the following sentence illustrates the use of -ka when the content/message is
relativized (Adriani 1931:295):

PAM (449)  *muntu amu da ku-pomuntu-ka ri tau*
issue REL FUT 1SG-speak-KA to person
‘the issue I shall speak to the people about’

Although Adriani gives a few cases in which -ka appears to have a causative function, he
notes that this developed from what was originally an instrumental use (1931:300):

PAM (450)  *nyara-mu da mu-pomparojo-ka*
horse-2SG FUT 2SG-stand.still-KA
1. ‘stand still with your horse’ (instrumental)
2. ‘you must make your horse stand still’ (causative)

(451)  *tabo setu ne’e mu-poenggo-ka*
bowl that NEG:IMPV 2SG-swing-KA
1. ‘don’t swing around with that bowl’ (instrumental)
2. ‘don’t let that bowl swing around’ (causative)

As we turn to the suffix -aka, according to Adriani (1931:303) it never attaches to a
stem without an inserted consonant preceding it. In the following examples, we see again
the intensive function when the stem is transitive. Two different poles of the ‘intensive’ need to be recognized: that of repetitive action and/or multiple patients, and that of sudden action or perception—but note in some cases it is hard to discern a meaning difference (Adriani 1928:s.v., 1931:304, 305, 307):\textsuperscript{134}

PAM (452) a. mombesoko ‘grip each other’
   b. mombesokowaka ‘embrace each other’
(453) a. mantale ‘spread out something’
   b. mantalesaka ‘spread out, set out a length, display (for sale)’
(454) a. mawawa ‘bring’ (as food or betelnut)
   b. mawawanaka ‘guide’ (person)
(455) a. lulu ‘follow, go behind’
   b. maluluwaka ‘follow after, go behind (someone who is no longer to be seen)’
(456) a. madonco ‘press down, cram in’
   b. madoncomaka ‘press down, cram in’ (as food into a child’s mouth)
(457) a. maata ‘bring or accompany part of the way’
   b. maatamaka ‘bring or accompany part of the way’
(458) a. mabisi ‘shove to the side, push out of the way’
   b. mabisilaka ‘push to the side’ (as of many people)
(459) a. mantonto ‘pour out’ (of wet and dry matter)
   b. mantontosaka ‘pour out’ (of a number of things)
   c. tetontosaka ‘poured out in great quantity or amount’
(460) a. mawewe ‘wrap around’
   b. mawewesaka ‘wrap around again and again’
(461) a. no’o ‘draw, pull’
   b. no’osaka ‘draw out, stretch out, give a pull on’
(462) a. maole ‘look at’
   b. maolesaka ‘involuntarily turn one’s eyes toward’
(463) a. mandonge ‘hear’
   b. mandongesaka ‘hear suddenly, without listening for’ (as an unexpected sound)
(464) a. maepe ‘sense, perceive, become aware of’
   b. maepesaka ‘all at once sense something’
(465) a. mangkita ‘see’
   b. mangkitasaka ‘perceive, see (s.th.) without being on the lookout for it’

\textsuperscript{134}I have preferred to follow Adriani’s dictionary (1928) rather than his grammar (1931) where definitions differ somewhat.
For the last example, however, compare also *mangkitanaka* 'watch something, pay attention to something, bring something into account' (Adriani 1928:286). Adriani also notes that -*aka* sometimes imparts a meaning of 'more or less, provisionally, superficially' as observed in these examples (though perhaps originally meaning 'hurriedly, quickly') (Adriani 1928:34, 399; 1931:304):

PAM (466) a. *mampoapu* 'cook'
   b. *mampoapusaka* 'recook, warm up'

(467) a. *malupi* 'fold, make packets, fold up rice in leaves'
   b. *malupisaka* 'more or less pack up, fold away' (for example by bringing the edges next to each other)

Compare for example (Adriani 1931:304):

PAM (468) *ntongo* *mangkonj* *jak*, *ma* *tau* *marendo*,
         middle eat 1SG to.here person disturb

*mewali* *ku-lupi-saka-mo* *riunya* *kina-a-ku*.
become 1SG-fold-*AKA*-PERF beforehand cooked.rice-3SG

'While I was eating, a person came disturbing me, so that I first folded away my rice (in the leaf in which it lay)'

Whether an intensive meaning is found with intransitive verbs is not known to me from Adriani's examples. Instead, with intransitives, this suffix is invariably given as a causative marker (though apparently not in a confactive sense) (Adriani 1928:109, 410, 453, 608, 801, 926):

PAM (469) a. *madindi* 'stretched tight, taut'
   b. *madindiwaka* 'pull tight, pull straight, make taut'

(470) a. *manawan* 'fall down'
   b. *manawusaka* 'make fall, let fall, make plunge or crash to below'

(471) a. *marampi* 'flat, even, pushed on'
   b. *marampitaka* 'push on, push down, push flat'

(472) a. *longko* 'wide, roomy, loose'
   b. *malongkowaka* 'make wide, roomy, loose'

(473) a. *lapa* 'loose, free, escaped, released'
   b. *malapasaka* 'let loose, set free, let run'

(474) a. *tampu* 'concealed, covered under something else' (as under the surface of the water)
   b. *mantampulaka* 'immerse, hold under water'
Both -aka and -ka may occur on the same stem, but only in that order (Adriani 1931:293):

PAM (475)  
na-nawu-saka-ka   kami   babuno  
3SG-fall-CAUS-BEN   1PLX   langsat  
‘he has dropped langsat (out of the tree) for us’

Here, it should be mentioned that twenty years ago when Úlo Sirk investigated the very same Pamona data, he also noted the different semantic functions served by -ka and -aka, and then used this observation as partial evidence for reconstructing two different etyma, *-ken and *-aken:

In particular, *-ken is the source of Malay and Minangkabau -kan, Karo -ken, Toba -hon, Sundanese -keun, Kroe and Banggai -kon; most likely the suffix -ka visible in most of the Toraja [= Kaili-Pamona] languages also stems from it. -aka of the greater part of the Toraja languages and Wolio, -ako/-akon- of Mori and -aken of Javanese and Bawean Madurese constitute evidence permitting the reconstruction *-aken (cf. also the Malay preposition akan).

As far as I can judge the South Sunda area, it is only in the majority of the Toraja languages that both the suffixes under discussion coexist side by side, retaining special meanings. In these languages, the suffix -ka exhibits considerable semantic analogy with the Philippine ‘instrumental passive’, the most typical shades of meaning being the following: ‘for (somebody)’, ‘in connection with (somebody, something)’, ‘with (somebody, something)’, ‘using (something) as the means, instrument’. The meaning expressed by -aka most often seems to be factitive (also called ‘weak causative’). (Sirk 1978:260)

However, I consider it unlikely that Kaili-Pamona inherited two different morphemes, *-aken and *-ken. Instead, I would claim they inherited respectively suffixed and non-suffixed forms of *aken. The latter underwent apheresis becoming *ka in Proto–Kaili-Pamona, and only its subsequent incorporation into the verb has led to the contrast found presently (as in Pamona) between -aka and -ka. Indeed, much the same process of vowel apheresis must have also occurred independently in pre-Tolaki. Recall here that Tolaki and the Watu and Karunsi’e dialects of Mori Bawah also exhibit loss of initial *a from *ako when merged with a following pronoun (§ 6.1).
6.4.4 Wolio

Harrison, following Anceaux, cites the following Wolio forms, about which he makes the following astute observation:

WOL (476) a. *tumbu* 'come up'
   b. *tumbulaka* 'set something in the ground'
(477) a. *mendeu* 'unwilling'
   b. *mendeusaka* 'forbid'
(478) a. *aba* 'ask'
   b. *abaaka* 'inquire about something'
(479) a. *tangi* 'cry'
   b. *tangiaaka* 'bewail something'
(480) a. *tutu* 'pulverize something'
   b. *tuttaka* 'pound for someone'

Though Anceaux (1952) considers WOL -aka to be a suffix in all its occurrences, it appears that PAN final consonants are preserved before -aka only in a minority of cases... The most obvious account of the failure of PAN final consonants to be preserved before -aka in these forms is that -aka was not a suffix, in most of its uses, at the period at which final consonant deletion took place in Wolio. (Harrison 1982:89)

I am, of course, in complete agreement with Harrison's statement. What remains is to explicate what the uses of -aka are when it is preceded by a thematic consonant as in examples (476) and (477), versus what its uses are when -aka stands without a thematic consonant as in (478–480). I begin by considering instances in which -aka is not preceded by a thematic consonant. All but one function has been discussed earlier.

Unlike any of the other languages looked at, Wolio aka does not exhibit phonological reduction or phonological coalescence with a following pronoun,135 and in this regard, it accurately reflects what must have been the state in the protolanguage. According to

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135 Correspondingly there is no separate set of 'dative' or 'indirect object' pronouns described for Wolio. Although the second vowel of aka raises to e when followed by the third person object pronoun -a (as in baca-ake-a/read-BEN-3/ 'read for him/her/them' from baca-aka 'read for'), this change is not limited to aka per se but occurs with any stem ending in the phonological shape -aCa (see Anceaux 1988:27–28). Compare for instance ku-kamate-a /1sg-see-3/ 'I see him/her/them' from the stem kamata 'see'.
Ancexaux, two of the most frequent meanings of Wolio -aka are 'for, in behalf of, intended for' and 'with, by help of' as in the following examples (1988:22-23):

WOL (481) a. kokariaa 'hold feast'
   b. kokariaaka 'hold feast for'

(482) a. baca 'read'
   b. bacaaka 'read for'

(483) a. taburaka 'drop'
   b. taburakaaka 'drop for'

(484) a. bebe 'hit'
   b. bebeaka 'hit with'

(485) a. bubu 'cover'
   b. bubuaka 'cover with'

(486) a. taanaka 'catch'
   b. taanakaaka 'catch with'

Furthermore, as in Kulisuusu, Mori Bawah and Uma, it appears that an object pronoun following benefactive aka indexes the beneficiary, as in examples (487) and (488), but an object pronoun following instrumental aka does not index the instrument but rather the ordinary patient as in examples (489) and (490) (Ancexaux 1988:23, 25, 28):

WOL (487) mo-baca-ake-a
PARTICIPLE-read-BEN-3

'reading for him'

(488) taburaka-aka-aku
drop-BEN-1SG

'drop for me'

(489) rambi-ake-a keu
hit-INSTREF-3 wood

'hit him with wood'

(490) pa-sumpu-ake-a uwe!
CAUS-drink-INSTREF-3 water

'make him drink water!'

Following are further examples (Ancexaux 1987:s.v., 1988:20, 22, 26), in which -aka might be said to have a reflexive/communicative function and where the introduced argument is semantically a stimulus, goal (often bordering on addressee), content/message or cause.
WOL (491) a. maasi ‘feel compassion’
   b. maasiaka ‘love’

(492) a. tangi ‘weep’
   b. tangiaka ‘bewail’

(493) a. potawa ‘laugh’
   b. potawaaka ‘laugh at’

(494) a. gora ‘exclaim’
   b. goraka ‘call to’

(495) a. gaugau ‘lie’
   b. gaugauaka ‘lie to’

(496) a. aba ‘ask’
   b. abaaka ‘inquire about’

(497) a. paumba ‘tell (somebody), inform’
   b. paumbaaka ‘tell (something)’

(498) a. polele ‘give information, make a statement, report’
   b. poleleaka ‘report, give an account of’

(499) a. batua ‘slave’
   b. batuaaka ‘be enslaved because of’

(500) a. kobulu ‘having feathers’
   b. i-kobulu-aka-na ‘the cause of having feathers’\(^{136}\)

(501) a. lingka ‘go’
   b. toi-lingka-aka-na ‘that which causes (someone or something) to go’

In at least two cases, -aka occurs with a reciprocal verb (the Wolio reciprocal marker is po-) where it translates as ‘with’ (Anceaux 1987:141, 146, 151; 1988:20):

WOL (502) a. kawa ‘come to’
   b. po-kawa ‘meet, encounter’
   b. po-kawaaka ‘meet with, find’

(503) a. rakana ‘companion, mate, partner, spouse’
   b. po-rakana ‘live together, be married’
   b. po-rakanaaka ‘live together with, be married to’

Comparative degree may also be encoded using -aka. Comparative aka collocates only with stative ma-stems and certain roots (Anceaux 1988:29):

\(^{136}\)In Anceaux’s terms, ikobuluaka of this example and toilingkaaka of the following example are causative participles, derived with the prefix toi- (or i-) combined with suffix -aka (1988:26).
WOL (504) a. *maoge* ‘be great’
   b. *maogeaka* ‘be greater’

(505) a. *matau* ‘know’
   b. *matauaka* ‘know more, know better’

(506) a. *mandaria* ‘be little’
   b. *mandariaka* ‘be less’

(507) a. *cilaka* ‘be unlucky’
   b. *cilakaaka* ‘be more unlucky’

As in Kulisu, Wolio *-aka* has also developed into a modal element which is no longer strictly a verbal suffix. If the *-aka*-form precedes the main clause predicate, then it translates temporally as ‘when’ interpretable as either past or future depending on context; but if the *-aka*-form follows the main clause predicate as in (511) then it indicates final cause ‘so that, in order that’ (Anceaux 1988:47, 68):

WOL (508)  \[a-buke-aka\ldots\]
            \[3\text{-full-MODAL}\]

(509)  \[i\ banua-aka\ldots\]
at house-MODAL
            \[3\text{-many-MODAL}\]
            ‘when (he is) at home…’

(510)  \[a-bari-aka\ mia i\ dao\ldots\]
            \[3\text{-CAUS-sleep-3 at banana.leaf.sheath}\]
           \[kooni\ in\ daa\ldots\]
           \[it.is.said\ NEG-MODAL\]
            ‘When there were many people at the market…’

(511)  \[a-pa-kole-\alpha\ i\ kumba\ kooni\ in\ daa\ldots\]
            \[3\text{-visit-3 Pull-throat}\]
            ‘…it is put to sleep in a young leaf-sheath of a banana tree, it is said,
in order that it may not be visited by a Pull-throat (a kind of demon).’

Given the history of contact and close geographical proximity between Kulisu and Wolio, one would suspect the development of *aken* as a modal particle not to have been independent in these two languages.

In Wolio, *aka* also occurs with numerals or numeral phrases as an ordinal marker, for example (Anceaux 1988:24):
WOL (512) a. 'ise ‘one’
   b. 'iseaka ‘be first’
(513) a. rua-anu ‘two things’
   b. ruaamaka ‘be the second (thing)’
(514) a. lima-mia ‘five-person’
   b. limamiaaka ‘be the fifth (person)’

In all of these uses, one will note, no thematic consonant is ever found before -aka.

Other instances of -aka occur preceded by a thematic consonant and therefore contrast formally (and semantically) with the above instances, sometimes even on the same stem (compare for example tau-raka ‘put down’ versus tau-aka ‘bring down for’, Anceaux 1988:23). Furthermore, in cases where a double occurrence of aka is to be found, as above in examples (486b) and (488), the aka with thematic consonant is always ‘inner’ while aka without thematic consonant is always ‘outer’.\textsuperscript{137} I regard the following instances of -Caka to have (or have had) an intensive function, though in some cases with semantic bleaching so that there no longer remains a clear contrast between the -Caka and Caka-less forms (this is more so of the last four examples) (Anceaux 1987:s.v.):

WOL (515) a. tumbu ‘punch, hit with fist’
   b. tumbulaka ‘put (a person) upside-down’
(516) a. punda ‘hop, move on buttocks’ (as a child who has not learnt to walk)
   b. pundasaka ‘beat buttocks against the floor’ (as a child in a tantrum)
(517) a. tonto ‘look, watch’
   b. tontomaka ‘observe, watch closely, call up (a memory), try to evoke’
(518) a. uma ‘come, arrive’
   b. umbalaka ‘turn up, appear, occur’
(519) a. tolua ‘vomit’
   b. toluaaka ‘vomit, spew out’
(520) a. rambi ‘strike, beat’ (compare also rambiaaka ‘beat with, beat for’)
   b. rambitaka ‘make beating movements with, flinging down’
(521) a. tampe-si ‘water, sprinkle’
   b. tampesaka ‘pour away (water), splash’
(522) a. tabu-ri ‘fall on’
   b. taburaka ‘drop, throw down’

\textsuperscript{137}Specifically, in all of Anceaux’s examples, the ‘outer’ of two occurrences of aka has either benefactive or instrumental meaning.
(523) a. * tapi ‘put one on top of the other, put together’
b. * tapisaka ‘stack, put together, arrange, compose’

(524) a. * saku ‘take or hold in one’s hands or arms, embrace’
b. * sakulaka ‘embrace, fold in one’s arms’

(525) a. * bewe ‘wind round, tie round, bind round’
b. bewetaka ‘roll up, roll over, wrap oneself in, wind round oneself’

(526) a. keni ‘seize, grasp, grasp, grip, catch, take hold of’
b. keniaka ‘seize, hold, maintain, keep up’

(527) a. * po-romu ‘gather, be united’ (reciprocal form)
b. romusaka ‘gather, collect’

In the following, one may also suppose that -Caka had intensive function, though apparently no independent, related form without -Caka now exists (Anceaux 1987:49, 154, 181)

WOL (528) a. kamburaka ‘strew, spread, disperse’
b. tobusaka ‘flow away, drain off’
c. jujulaka ‘push, push forward, push away’

Only two clear examples of -Caka with confactive/causative function are known to me from Anceaux’s data (1987:122–123, 189):

WOL (529) a. palai ‘flee, run away’
b. palaisaka ‘run away with, abduct’

(530) a. umba ‘come, arrive’
b. umbaaka ‘bring along’

It was noted above that the confactive meaning lies close to that of the comitative, and indeed there are several examples of -aka used comitatively but all without any inserted consonant (Anceaux 1987:83, 99, 109):

WOL (531) a. magasia ‘play, romp’
b. magasiaaka ‘play with’

(532) a. mbeli ‘walk about’
b. mbeliaka ‘walk about with’

(533) a. kole ‘sleep’
b. koleaka ‘sleep with, have intercourse with’

This leads one to suspect that these comitative forms are actually more recent formations, possibly by extension from instrumental -aka or from reciprocal verbs in -aka (see
Furthermore, with certain stative stems -aka serves as an ordinary causative marker meaning 'cause (object) to enter into the state described by the stem'. As far as I can see, no confective notion is involved such examples, and again no thematic consonant occurs suggesting that these verbs have been formed more recently (Anceaux 1987:s.v.):

WOL (534) a. matamo 'heavy'
    b. matamoaka 'make heavy, weigh, load'
(535) a. malape ‘good, beautiful, right, correct’
    b. malapeaka ‘improve, mend, beautify’
(536) a. handa ‘loud, severe’
    b. handaka ‘make loud’
(537) a. unde ‘glad’
    b. undeaka ‘gladden, comfort’

Finally, there are some Wolio verbs and nouns where -aka is preceded by a thematic consonant, but the original function of -aka, however, remains obscure (Anceaux 1987:s.v.):

WOL (538) a. toga ‘accustom oneself’ (intransitive)
    b. togaaka ‘leave alone, not interfere with, ignore, take little notice of’
    c. togasaka ‘agree to, be unconcerned about’
(539) a. ose ‘follow, go with, accompany, keep (a promise)’
    b. pooseosaka ‘always follow (e.g. one’s tendencies), always be governed by’
(540) a. laulau ‘go on, continue, incessant’
    b. laulausaka ‘straight on, directly, immediately’
(541) a. mendeu ‘be unwilling, refuse’
    b. mendeusaka ‘forbid’
(542) a. punto ‘wrap up, envelop’
    b. puntoraka ‘unpack, produce’
(543) a. tumbasaka ‘put up tamely with everything, accept one’s lot with acquiescence’
    b. rambasaka ‘let loose, set free’
    c. saronaka ‘trust, believe’
6.4.5 Muna

In Muna, spoken just to the south of the Bungku-Tolaki area, Van den Berg discusses both a non-productive verb suffix -Cao (1989:291-292), which I consider to be the Muna reflex of suffixal *aken, as well as a set of indirect object pronouns (1989:68-71, 179 ff.), which I assume results from the fusion of non-suffixal *aken with a following pronoun.138 Furthermore, when an indirect object is realized by a full noun phrase, no indirect object pronoun occurs on the verb, instead it “is suffixed with -ghoo, a suffix that signals the presence of an IO” (Van den Berg 1989:175). Indirect object inflection (either an indirect object pronoun or -ghoo followed by a full noun phrase) is used to encode various semantic roles. In Van den Berg’s terms, these include:

- beneficiary. As the (b) example illustrates, it is possible to have both an indirect and direct object pronoun on the verb, but in such cases the object is limited to the third singular.

MUN (544) a. *æ-gholi-ghoo ina-ku o pae
1SG:REAL-buy-IO mother-1SG ART rice
‘I buy rice for my mother’ (Van den Berg 1989:176)

b. a-[m]oni-si-angko-e
1SG:IRREAL-climb-IO:2SG-3SG
‘I will climb it for you’ (Van den Berg 1989:70)

---

138 The Muna direct and indirect object pronouns are as follows (Van den Berg 1989:68). The two pronoun sets have mostly been leveled by analogy, but where they differ, the partial ang-/-an- found only with the indirect object pronouns attests to a derivation from *aken. Furthermore it would appear that the first singular form -kanau derives from earlier *aken-aku with loss of the second *k (e.g. *aken-aku > *akenau > -kanau); if so, then -kanau must have originally been an indirect object form which subsequently made its way into the set of direct object pronouns.

<table>
<thead>
<tr>
<th></th>
<th>DIRECT</th>
<th>INDIRECT</th>
<th>DIRECT</th>
<th>INDIRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>-kanau</td>
<td>-kanau</td>
<td>1PLX</td>
<td>-kasami</td>
</tr>
<tr>
<td>2SG</td>
<td>-ko</td>
<td>-angko</td>
<td>2PL</td>
<td>-ko-omu</td>
</tr>
<tr>
<td>2SG:POLITE</td>
<td>-kaeta</td>
<td>-kaeta</td>
<td>2PL:POLITE</td>
<td>-kaeta-amu</td>
</tr>
<tr>
<td>3SG</td>
<td>-e</td>
<td>-ane</td>
<td>3PL</td>
<td>-da</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-anda</td>
</tr>
</tbody>
</table>
• recipient:

MUN (545)  ne-owa-ghoo ama-ku kenta
3SG:REAL-bring-IO father-1SG fish
‘she brought my father some fish’ (Van den Berg 1989:176)

• instrument:

MUN (546)  a. ae-ghome-ghoo sabo
1SG:REAL-wash-IO soap
‘I wash with soap’ (Van den Berg 1989:176)

b. de-buri-ane sura
3PL:REAL-write-IO:3SG letter
‘they write a letter with it’ (Van den Berg 1989:70)

• reason:

MUN (547)  do-mate-ghoo kagharo
3PL:REAL-die-IO hunger
‘They died of hunger’ (Van den Berg 1989:176)

• referent, corresponding to what I term content/message:

MUN (548)  a. do-bisara-ghoo anahi-hindo
3PL:REAL-speak-IO child-PL-3PL
‘they were talking about their children’ (Van den Berg 1989:177)

b. ae-tula-tula-ghoo monifi-ku
1SG:REAL-REDP-tell-IO dream-1SG
‘I will tell about my dream’ (Van den Berg 1989:177)

• comitative:

MUN (549)  a. no-suli-ghoo Wa Ode Ana we lambu-do
3SG:REAL-return-IO Wa Ode Ana LOC house-3PL
‘he returned with Wa Ode Ana to their house’
(Van den Berg 1989:179)

b. no-rate-ane-mo
3SG:REAL-arrive-IO:3SG
‘he arrived with her’ (Van den Berg 1989:177)

In addition, the peculiar use of indirect object marking with reciprocal verbs (§ 6.2.6) is also to be found in Muna:
MUN (550) a. *a-po-ghawa-ghoo* anoa
    1SG:REAL-RECIP-get-IO  3SG
'I met him' (Van den Berg 1989:177)

b. *do-po-sobo-ghoo* oe-no *Wulamoni*
    3PL:REAL-RECIP-mix-IO  water-3SG  Wulamoni

   *bhe*  oe  sigaahano
with  water  other

' they mixed the water from Wulamoni with other water'
(Van den Berg 1989:177)

Furthermore, Muna cases in which "there is an equative relationship between the base
noun in the ko-derivation and the oblique indirect object" (Van den Berg 1989:178) are
strikingly parallel to the Bungku-Tolaki special use of instrumental ako with intransitive
pe-derivations (§ 6.2.5):

MUN (551) a. *do-ko-ana-ghoo-mo* *La Patola*
    3PL:REAL-HAVE-child-IO-COMP  La Patola
'La Patola was also one of their children'
(lit. 'they were also childed with La Patola') (Van den Berg 1989:178)

b. *inodi-mo*  ini  *isa-mu*  *ko-nea-ghoo-no* *Sihafari.*
    1SG-COMP  this  older.sibling-2SG  HAVE-name-IO-REL  Sihafari
'I am your brother, whose name is Sihafari.'
(lit. 'I am your brother, who is named with Sihafari')
(Van den Berg 1989:178)

What we haven't considered yet is the Muna derivational affix *-Cao* (in my analysis,
provides only a large number of examples without any specific characterization of its
function, therefore the following groupings are my own. In the great majority of his
examples, *-Cao* has what may be characterized as an intensive function, as in the
following:

MUN (552) a. *dhudhu* 'push'

b. *ne-dhudhu-tao* 'push forcefully (in one big push)'

(553) a. *ule* 'turn, shake the head'

b. *ne-ule-tao* 'spin round vehemently'
(554) a. kitu ‘wipe’
   b. ne-kitu-rao ‘wipe intensely’
(555) a. tumbu ‘pound, hit’
   b. ne-tumbu-lao ‘plant (firmly) in the ground; hit firmly’

In one instance, -Cao clearly has confactive/causative function:

MUN (556) a. horo ‘fly’
   b. ne-horo-pao ‘fly off with’

But in the following cases, although one may hypothesize -Cao originally had intensive function, this semantic connection is no longer clear:

MUN (557) a. pande ‘know, clever’
   b. ne-pande-hao ‘know’
(558) a. ghondo ‘look (at)’
   b. ne-ghondo-fao ‘take care of’
(559) a. limpu ‘forget’
   b. ne-limpu-hao ‘forget all about’
(560) a. angka ‘appoint’
   b. ne-angka-tao ‘respect, be sensitive’

These verbs have the further peculiarity in that—at least with the verbs pandehao and ghondofao—when the ‘object’ is expressed, the final o of -Cao is deleted, and one uses not a direct object pronoun, but rather an indirect object pronoun:

139 The relationship between these two forms becomes more clear when we consider their Wolio cognates, respectively angka ‘lift up’ and angkataka ‘hold in high esteem’.

140 A parallel but independent development is also found in Tolaki. Compare the following (partial) verbal paradigms, where -kee or a variant thereof is found in the active instead of the ordinary third singular object pronoun -i. Other persons and numbers are similar. Two regular transitive stems, ‘eat’ and ‘open’, are given by way of comparison (data from S. Youngman 1990:pers.comm.).

<table>
<thead>
<tr>
<th>BASE</th>
<th>ANTIPASSIVE</th>
<th>ACTIVE (with 3SG object)</th>
</tr>
</thead>
<tbody>
<tr>
<td>luurako</td>
<td>moluarako</td>
<td>lumuaraokee</td>
</tr>
<tr>
<td>pumbusako</td>
<td>mombumbusako</td>
<td>pumbusaokee</td>
</tr>
<tr>
<td>taangako</td>
<td>mondaangako</td>
<td>tumaanggee</td>
</tr>
<tr>
<td>solongako</td>
<td>mosolongako</td>
<td>sumolonggee</td>
</tr>
<tr>
<td>hiiako</td>
<td>mohiiako</td>
<td>humiikee</td>
</tr>
<tr>
<td>kaa</td>
<td>mongkaa</td>
<td>kumaa'i</td>
</tr>
<tr>
<td>hunggai</td>
<td>mohunggai</td>
<td>humunggai'i</td>
</tr>
</tbody>
</table>

‘take, put something out’
‘gather lots of something’
‘raise, lift’
‘pour out’
‘hide’
‘eat’
‘open’
MUN (561) a. \textit{a-pande-ha-ane}
\begin{itemize}
\item 1SG:REAL-know-CAO-IO:3SG
\end{itemize}
‘I know it’ (Van den Berg 1989:70)

b. \textit{ghondo-fa-anda}
\begin{itemize}
\item look-CAO-IO:3PL
\end{itemize}
‘take care of them!’ (Van den Berg 1989:70)

6.4.6 Comparison of *aken reflexes

At the end of the discussion regarding \textit{ako} in Kulisu and Mori Bawah, it was proposed (§ 6.3) on internal evidence that in the prehistory of these two languages there must have been two varieties of *ako, a suffixal form and a non-suffixal (most likely a preposition) form, which had contrastive functions. From this just-completed survey of five languages outside of Bungku-Tolaki, it should be clear that traces of the same formal/functional split can be found across central and southeastern Sulawesi.

On the formal side, the data lead us to reconstruct both (a) a suffixal *-aken which is characterized in present-day languages by the presence of preceding thematic consonants, preservation of the initial vowel *a, no phonological merger with a following pronoun, and—with respect to non-suffixal *aken—is always ‘inner’; and (b) a non-suffixal (prepositional) *aken which in present-day languages is formally characterized by few or no preceding thematic consonants, in some cases apheresis of the initial vowel, frequent merger with a following pronoun to create a ‘new’ set of indirect object pronouns, and—with respect to suffixal *aken—is always ‘outer’, sometimes not even a suffix but a clitic or still a preposition.

Table 51 on the following page summarizes the reflexes of these two morphemes. Where phonological merger has occurred between *aken and a following pronoun, this is indicated by giving the first, second and third person singular forms of the paradigm. A capital $C$ indicates that form is frequently if not always preceded by a thematic consonant.
<table>
<thead>
<tr>
<th>Language</th>
<th>*-aken SUFFIX</th>
<th>*aken PREP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaili</td>
<td>-Caka</td>
<td>ka (preposition)</td>
</tr>
<tr>
<td>Uma</td>
<td>-Caka</td>
<td>ka 1SG (^{(a)})\n</td>
</tr>
<tr>
<td>Pamona</td>
<td>-Caka</td>
<td>-ka</td>
</tr>
<tr>
<td>Wolio</td>
<td>-Caka</td>
<td>-aka</td>
</tr>
<tr>
<td>Tolaki</td>
<td>-Cako</td>
<td>-kona 1SG \n</td>
</tr>
<tr>
<td>Mori Bawah</td>
<td>-Cako</td>
<td>-akune 1SG \n</td>
</tr>
<tr>
<td>Kulisusu</td>
<td>-Cako</td>
<td>-aka’aku 1SG (^{(b)}) \n</td>
</tr>
<tr>
<td>Muna</td>
<td>-Cao</td>
<td>-ghoo + NP else \n</td>
</tr>
</tbody>
</table>

\(^{(a)}\) Martens (1988) regards these forms as verbal clitics
\(^{(b)}\) these Kulisusu forms may be preceded by thematic consonants glottal stop or \(h\).

Table 51. Reflexes of suffixal and prepositional *aken across central and southeastern Sulawesi
<table>
<thead>
<tr>
<th>Function</th>
<th>Kaili</th>
<th>Uma</th>
<th>Pamon</th>
<th>Wolio</th>
<th>Kulisu</th>
<th>Mori Bawah</th>
<th>Muna</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTENSIVE (break vs. smash)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CAUSATIVE/CONFECTIVE (make flee, flee with...)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BENEFICIARY (do for...)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CAUSE/REASON (flee because...)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>STIMULUS (be angry about...)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CONTENT/MESSAGE (inform about…)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>INSTRUMENT (shoot with…)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NATURALLY RECIPROCAL (meet/fight with…)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COMPARATIVE (older than…)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>INSTRUMENT (with ‘have’ verbs)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COMITATIVE (arrive with…)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>RECIPIENT (give to…)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ADDRESSEE (say to…)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>POSSESSOR OF OBJECT</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MODAL</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ORDINAL MARKER (first, second…)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

(Shaded areas: reflexes of suffixal *-aken; not shaded: reflexes of prepositional *aken)

Table 52. Functions of suffixal and prepositional *aken in languages across central and southeastern Sulawesi
Table 52, on the other hand, summarizes the functions associated with suffixal and non-suffixal *aken found in present-day languages. It is a summary of the available data, and as such it is subject to change as more data become known.

Clearly the reflexive, instrumental and benefactive functions of prepositional *aken must be very old, because of their wide attestation. I do not speculate here as to which of these might have been the original source use, although it does seem that the instrumental and the benefactive meanings are bridged through the reflexive. As far as suffixal *aken is concerned, both a confective/causative function and an intensive function can be ascribed to this morpheme, though certainly the semantic relationship between these uses bears further investigation. However in support of this reconstruction note that the same functions are found conflated in a single form in other languages, for example the Korean verbal suffix -ttuli and the Piel verbs of Biblical Hebrew.¹⁴¹ Furthermore, it seems likely

¹⁴¹In Korean, when the event is transitive, -ttuli has an intensifying effect (Korean data are from Mihyun Baek 1997:pers.comm.):

KRN  
\begin{align*}
  \text{John-i} & \quad \text{ywuli-lul} & \quad \text{kkay-ss-ta}. \\
  \text{John-NOM} & \quad \text{glass-ACC} & \quad \text{break-PAST-DECL} \\
  \text{\textquoteleft John broke the window.\textquoteright} \\
  \text{John-i} & \quad \text{ywuli-lul} & \quad \text{kkay-ttuli-ess-ta}. \\
  \text{John-NOM} & \quad \text{glass-ACC} & \quad \text{break-TTULI-PAST-DECL} \\
  \text{\textquoteleft John smashed the window.\textquoteright} \\
\end{align*}

But when -ttuli is combined with certain intransitives, it serves as a causative marker. With -ttuli the causation must be direct and physical:

KRN  
\begin{align*}
  \text{Pyek-i} & \quad \text{mwuneci-ess-ta}. \\
  \text{wall-NOM} & \quad \text{collapsed-PAST-DECL} \\
  \text{\textquoteleft The wall was/got collapsed.\textquoteright} \\
\end{align*}

KRN  
\begin{align*}
  \text{Kangphwung-i} & \quad \text{pyek-ul} & \quad \text{mwune-ttuli-ess-ta}. \\
  \text{strong wind-NOM} & \quad \text{wall-ACC} & \quad \text{collapsed-TTULI-PAST-DECL} \\
  \text{\textquoteleft A strong wind collapsed the wall.\textquoteright} \\
\end{align*}

In Biblical Hebrew, when the root of a Piel verb also occurs as a Qal verb it is possible to observe two different functions of the Piel. With both intransitive and transitive stems, the Piel has a causative meaning (Lambdin 1971:194):
that *-aken as a ‘causativizer’ may have originally been restricted to intransitive verbs of motion (in Harrison’s terms, a confective function), in that it is easier to think of it spreading to other verb types such as has occurred particularly in Kaili-Pamona and Wolio, than to imagine how its meaning and distribution would have become narrowed as, for example, in Kulisusu, Mori Bawah and Muna.

There still remain, however, certain verb forms which—though they formally appear to be instances of suffixal *aken—are not brought under the current analysis; indeed the suffix sometimes appears instead to have a reflexive meaning such as in Kulisusu and Mori Bawah ehesako ‘permit, allow, consent to’ (compare ehe ‘want, desire’), in the semantically parallel Wolio form mendeusaka ‘forbid’ (compare the intransitive stem mendeu ‘be unwilling’) and in Uma, Pamona sarumako, Kulisusu sarunako, Wolio saronaka ‘believe, trust’. Has semantic change obscured the original function of the suffix in these forms? Do they represent ‘early’ captures of prepositional *aken? Are these cases of ‘thematic consonant excrecence’? Such questions bear further investigation.

<table>
<thead>
<tr>
<th>QAL</th>
<th>PIEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>qadjëš</td>
<td>qiddaš</td>
</tr>
<tr>
<td>‘be holy’</td>
<td>‘sanctify’</td>
</tr>
<tr>
<td>kālah</td>
<td>killāh</td>
</tr>
<tr>
<td>‘be at an end’</td>
<td>‘finish, complete, bring to an end’</td>
</tr>
<tr>
<td>lāmad</td>
<td>limmad</td>
</tr>
<tr>
<td>‘learn’</td>
<td>‘teach’</td>
</tr>
</tbody>
</table>

But with other stems the Piel also has an intensive function. Sometimes a pluralization of the action is indicated; in other cases it is difficult to discern a meaning difference (Lambdin 1971:194). Compare these examples taken from Holladay (1988):

<table>
<thead>
<tr>
<th>QAL</th>
<th>PIEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>šbabar</td>
<td>šibber</td>
</tr>
<tr>
<td>‘break’</td>
<td>‘smash’</td>
</tr>
<tr>
<td>kābbar</td>
<td>kibber</td>
</tr>
<tr>
<td>‘bury’</td>
<td>‘bury (many at once, mass burial)’</td>
</tr>
<tr>
<td>‘aqar</td>
<td>iqquer</td>
</tr>
<tr>
<td>‘weed, pull up by roots’</td>
<td>‘hamstring, cripple’</td>
</tr>
<tr>
<td>nāggaq</td>
<td>niggaq</td>
</tr>
<tr>
<td>‘touch, reach, hurt’</td>
<td>‘afflict’</td>
</tr>
<tr>
<td>nāhag</td>
<td>nihag</td>
</tr>
<tr>
<td>‘lead, guide, drive’</td>
<td>‘lead, guide, lead away, carry off’</td>
</tr>
<tr>
<td>gālāh</td>
<td>gillāh</td>
</tr>
<tr>
<td>‘uncover, reveal’</td>
<td>‘uncover, reveal’</td>
</tr>
</tbody>
</table>

In cases where there is little or no difference in meaning between Qal and Piel forms, “many of the so-called intensive Pies seem more to be stylistic variants of the Qal verb ... used in poetry, probably for variation rather than intensification” (Lambdin 1971:194). This distribution of Piel forms in poetry however is probably a remnant from—and indicative of—an earlier intensive/expressive content.
6.5 Summary

In the previous sections I have argued that (a) at the PBT stage there existed both a suffixed form *-ako (a verb derivational affix) and non-suffixed form *ako (most likely a preposition), that (b) the suffixed and non-suffixed forms were associated with complementary semantic functions, and furthermore that (c) this same formal-functional split was characteristic not only of PBT, but also of its ancestor which Bungku-Tolaki has in common with Kaili-Pamona, Wotu-Wolio and Muna-Buton. How does this view compare with other views about the early development of *aken?

To hypothesize a split of *aken into suffixed and non-suffixed varieties is not a new hypothesis, and in fact such an analysis has been favored since the earliest discussions about the prehistory of this morpheme (Pawley 1973, Pawley & Reid 1980, Starosta, Pawley & Reid 1982). However, these discussions usually assume a straightforward correlation of the function of *aken as a preposition and its function when incorporated as a verbal element. The following statement exemplifies this view:

The suffix and preposition *akin is reconstructable for Proto-Oceanic (Pawley & Reid 1980) and it has cognates for example in Wolio (Anceaux 1952) and Bahasa Indonesia. This element marked a general terminus Locative case form, and when captured in a recentralizing derivation, it added a terminus component of meaning to the derived verb. As a preposition, *aken probably marked Agent/Instrument as well as (comitative) Locus case relations. (Starosta, Pawley & Reid 1982:155)

The difference between this view and what I propose for Proto-Bungku-Tolaki, however, is in the functional alignment of the suffixed and non-suffixed varieties of *ako. For Proto-Bungku-Tolaki, the evidence allows us to be much more specific, namely, that as a suffix *-ako had an intensive-confective function, but as an independent form *ako had a reective-communicative-instrumental-benefactive function. On the other hand, the view that non-suffixal *ako has undergone a process of preposition capture which has proceeded as a drift-like tendency in the daughter languages does find support in the
Bungku-Tolaki data. In some languages, the life of *ako as a separable preposition has ended (this is apparently true of Kulisusu), while in other languages reflexes of *ako still exist as prepositions—compare for instance Padoe ako and Tolaki ke as in examples (411) and (412).

There are also certain similarities between my proposals and Harrison’s view of POC *aki(ni). Harrison is one of the few authors to discuss the confective function of this morpheme, and certainly his view of the earliest functions of POC *aki(ni) dovetails with the Bungku-Tolaki data:

The most widespread functions, of POC *aki(ni) and its reflexes, and the only one reconstructable for all the lower order subgroups of Oceanic recognized here, is the one described by Arms (1974) as confective/refective. The present study claims this to have been the primary function of POC *aki(ni). (Harrison 1982:189)

However, his hypothesis that “the POC source was not a suffix but a verb, in all its uses, and has developed suffixal reflexes in the post-POC period” (Harrison 1982:215) finds no parallel support from the Bungku-Tolaki data. Instead, it appears that in central and southeastern Sulawesi, *aken with confective (and intensive) function is reconstructable only as a suffix, while *aken with reective (and instrumental and benefactive) function was originally a preposition which only later has tended to be captured as a verb suffix. That *aken was a verb in Proto-Oceanic and a suffix and a preposition in Sulawesi are, of course, not mutually exclusive claims, especially given the well attested grammaticalization pathway from serial verb to case marking preposition (see for example Blake 1994:163 ff.). The question still remains, however, which verb might this have been? Harrison hypothesized that *aken was a verb “with the somewhat grammaticalized interpretation ‘to act on/with respect to’ … though it is likely that this sense is a result of a ‘semantic bleaching’ from an earlier, less grammatical, interpretation” (1982:181). However, if we round up the usual suspects of lexical verbs, e.g. ‘give’ (which would yield
a benefactive case marker), 'take', 'use' (instrumental), 'follow' (comitative), 'go' (goal), 'come' (source), 'pass' (comparative), there is none to my awareness that stands out as a more likely original meaning of *aken than the others.

Another point of difference between the two studies is that Harrison proposes a common, single (verbal) source for the confective/refective senses of *aken. Although reducing variation to a single-form, single-meaning is both a valuable heuristic and worthy goal of historical reconstruction, I do not attempt this further step here as—besides being speculative—primarily it is not warranted by the data at hand. The Sulawesi data itself would be fully compatible with, say, any analysis which claimed one historical source for suffixal *aken and a different source for non-suffixal *aken.\textsuperscript{142} In this respect, my analysis bears a certain affinity to Sirk (1978), albeit he proposed *aken and *ken.

I will not comment on Sirk's later (1996) hypothesis, except to say there are irreconcilable differences between my proposal and his newer theory. In languages of central and southeastern Sulawesi it seems evident to me that a primary distinction must be made between, on the one hand, *aken reflexes which are preceded by thematic consonants and have not coalesced phonologically with a following pronoun, versus on the other hand reflexes which are not preceded by thematic consonants (or only a very limited number) and in the typical case exhibit coalescence with an accompanying pronoun. Sirk (1996), however, does not treat thematic consonants at all, and instead makes a primary distinction between whether or not the suffix contains an initial α- (respectively his AK and K types). Furthermore he postulates that in languages where an initial α- is present this morpheme owes its shape to the fusion of an old instrumental focus

\textsuperscript{142}For a cautionary tale one need not look far in the study of grammatical change. Consider for example the case in English of gerundive -ing (e.g. his smoking cigars bothered me) versus participial -ing (e.g. I saw him smoking cigars). Despite their formal and even functional similarity the two are different in origin, coming from respectively Old English -ing and -ende. For an account of how over the past six hundred years the gerundive construction has been on an inexorable march toward becoming more like the participial construction, see Jespersen (1926:147 ff.).
suffix *-an and the oblique marker *ka. As already stated above (§ 6.4.3), I consider whether an a- is present or not to be a surface phenomenon: non-suffixal *aken is original, and the occasional absence of *a- from present-day forms is the result of phonological apheresis.

Finally, when we consider all the functions of ako in Kulisu, we are presented with a continuum from fully incorporated (confactive) to barely incorporated (instrumental, benefactive), and this ought to inform our theoretical understanding of the nature of incorporation and how it develops historically. Consider, for example, this statement by Baker:

> Applicatives are the result of moving the preposition out of a PP and incorporating it into the verb that governs it. ... this movement automatically changes government and Case assignment relationships, such that the NP stranded by the P behaves like a standard direct object in many ways, in particular those which are dependent on government and on case theory. (Baker 1988:288) (emphasis mine)

However, that case assignment is automatically changed by preposition capture is contradicted by the Bungku-Tolaki data. As I have shown, there is no single object property to which the new ‘objects’ (the referents introduced by ako) attain. Furthermore, constructions such as the Kulisu instrumental ku-temba-ako-no pistolo /1SG-shoot-INSTR-3SG pistol/ ‘I shot him with a pistol’ provide evidence for the formal incorporation of ako without the stranded NP (e.g. the pistol) being treated as an object in any of the normal ways. Clearly, formal incorporation may precede the development of object properties.
7 Subject Agreement

Bungku-Tolaki languages do not have case markers, that is, there are no markers which occur with nouns or noun phrases to indicate the syntactic role (subject, object, topic, etc.) which they have in the clause. Nominal constituents which function in core roles such as subject or object are, however, indexed on the verb with an agreement marker, that is, a pronoun which agrees with the nominal in person and number and which also indicates its syntactic role.\textsuperscript{143} As is typical in languages which employ agreement markers, it is also possible for this marker to constitute the sole realization of an argument within a clause.

Although this chapter is concerned with agreement markers in general, particular attention is paid to subject agreement markers and the various pronoun sets which can be used in this function. A maximum in this regard is found in Padoe, Mori Atas, Mori Bawah and Bungku, where four different pronoun sets are employed as subject agreement markers. This is illustrated for Mori Bawah in example (562), where each clause contains

\textsuperscript{143}In Bungku-Tolaki languages, usually only humans or personified referents are marked as plural, with inanimate objects, plants, and animals indexed as singular regardless of referential number. Since nouns in their usual occurrence are unmarked for number, in most cases the pronominal marker cannot properly be said to agree with the noun, rather it cross-references or indexes it (see Lichtenberk 1983:107). For example:

\begin{verbatim}
TOL a. mbule-'i-to ana-mu
    return-3SG-COMP child-2SG
    'your child has returned'

b. mbule-'iro-to ana-mu
    return-3PL-COMP child-2SG
    'your children have returned'
\end{verbatim}

Only when the noun is specifically marked for plural, as in the following example, can the indexing pronoun be said to be a true agreement marker.

\begin{verbatim}
TOL i-ien- 'iro-to ana-hako-no
    3SG-command-3PL-COMP child-PL-3SG
    'he commanded (sent out) his children'
\end{verbatim}

Nevertheless, whether an indexing pronoun actually agrees with its corresponding nominal constituent in these terms or not, I refer to these pronouns here as 'agreement markers'.

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a first singular pronoun drawn from a different pronoun set (in the interim, these sets are identified with the numerals I through IV):

**MRB (562)**

a. *pe-tii-ku a uwoi*...

   MM-descend-1SG at water

   'when I had gone down into the water…' (Esser 1927:190)

b. *nahi ku-hawe*

   NEG 1SG-arrive

   'I didn’t come' (Esser 1927:182)

c. *...nde [m]olai-aku*

   because PART:flee-1SG

   '…because I was fleeing' (Esser 1933:377)

d. *tisomo da mo’oru aku [um]ako...*

   tomorrow still morning 1SG PART:go

   'tomorrow while it is still morning I will go…' (Esser 1933:375)

Historically, Sets I and II have one source, reflected for example in the fact that the first person singular form for both sets is *ku*. However, this original set became differentiated distributionally, in some contexts occurring preverbally, in other contexts postverbally, which distribution later became reinforced by a formal differentiation in some persons and numbers. Sets III and IV have a parallel history; these two pronoun sets also have one source, but a difference in distribution—again preverbal versus postverbal—was later accompanied by a formal differentiation in some persons and numbers. Compare for example second person singular forms, which in Mori Bawah run respectively: 144

**MRB (563)**

a. *pe-tii-mu a uwoi*...

   MM-descend-2SG at water

   'when you had gone down into the water…'

---

144Unlike the sentences of example (562), the sentences of example (563) are not actually attested, though they are supported by numerous similar Mori Bawah examples. I have constructed them according to Esser’s description of Mori grammar (1927, 1933) in order to contrast sentences which vary in only one degree.
b. **nahu** /nahi + u/ **hawe**
   NEG-2SG arrive
   ‘you didn’t come’

   **(II)**

c. ...**nde** [m]olai-ko
   because **PART:flee-2SG**
   ‘...because you were fleeing’

   **(III)**

d. **tisomo** da **mo’oru** **iko** [um]ako...
   tomorrow still morning **2SG** **PART:go**
   ‘tomorrow while it is still morning you will go...’

   **(IV)**

There is good reason to suppose that the differentiation of Sets I and II was well underway prior to Proto–Bungku-Tolaki. On the other hand, a differentiation of Sets III and IV can only to be ascribed to the post-PBT era. In Tolaki and Moronene, in fact, there are only three pronoun sets which can be used to mark subjects, corresponding to Sets I, II and III above, while in Kulisusu only Sets I and II are used to mark subjects.

Two questions are of primary importance in the remainder of this chapter. The first is, what are the contexts which call for subject marking via a Set I, Set II, etc. pronoun? In other words, if different pronoun sets could be used to mark subjects, what was the division of labor between them which can be assigned to Proto–Bungku-Tolaki? Although it is fairly easy to establish the ‘fact’ that different pronoun sets are used to mark subjects, determining the contexts in which they are appropriately used is a major undertaking for one language, let alone describing the situation which obtained in PBT. Therefore, in the discussions found in §§ 7.3 through 7.6 I have aimed to present a picture of subject marking across Bungku-Tolaki in broad outline, capturing those areas where similarities are most apparent. To proceed in a more detailed way has proved impractical, especially as many synchronic details are still waiting to be brought to light.

The second question is, how did this system arise historically? The facts of how these pronouns are distributed in the present-day languages then becomes the basis for
developing a plausible historical scenario of how the different pronoun sets arose from what were originally only two pronoun sets.

Before addressing these questions, however, there are two other issues which must be covered in order to gain a complete picture of subject agreement in Bungku-Tolaki languages. The first concerns verb chaining, agreement markers for non-subjects, and the interaction between subject and non-subject agreement markers; here (§ 7.1) I also define the notion of ‘subject’ for Bungku-Tolaki languages. Second, in § 7.2 I describe a morpheme which bears on the issue of subject marking, the participle marker -um- (and its various allomorphs). Although this morpheme is often present on active verbs, it is absent when a verb is marked for subject with a Set I or Set II pronoun.

In both cases the descriptions of these subsidiary issues has been kept as brief as practical. Verb chaining for example is illustrated only with Tolaki data, and the participle marker primarily with Kulisusu data. What is said here concerning these languages is stated so as to apply mutatis mutandis to other Bungku-Tolaki languages; the demonstration of this point however is left to the numerous examples supplied in the sections which follow.

7.1 Verb chaining and agreement markers for non-subjects

To a greater or lesser extent, all Bungku-Tolaki languages allow verb chaining within the scope of a clause.\textsuperscript{145} A verb chain consists of two or more verbs related by virtue of having coreferential subjects. For example, in the following clause, the ones who flee, the ones who go, and the ones who live in the forest are one and the same:

\textsuperscript{145}Some of the criteria which establish verb chains as coherent structures in Bungku-Tolaki languages include (a) the subject is marked only once per verb chain; (b) the subject may appear as an NP at most only once per verb chain; (c) a negative particle may occur only once per verb chain; and (d) conjunctions such as ke ‘if’, a, ka ‘so that, and’ always introduce new clauses/verb chains which require the subject to be marked again. Nevertheless, these structures are not to be entirely identified with serial verb chains such as described by Sebba (1987) and others.
TOL (564)  lako-ro-to \( [m] olasu \) lako \( [m] o'ia \)
go-3PL-COMP PART:flee go PART:reside
\( i \) \( lalo \) ngg-gasu
at inside LKR-wood

‘then they fled and went and lived in the forest’

The locus of subject marking is always the first verb, in other words a subject agreement marker will occur on or next to\(^{146}\) the first verb of a chain. Any subsequent verb will occur in its participle form, its subject left implicit—which in almost any case can be assumed to be coreferential with the subject of the preceding verb,\(^{147}\) and ultimately coreferential with the subject marked explicitly on the initial verb. The clause of example (564) was chosen because it contains only intransitive verbs, where the notion of ‘subject’

\[\]

I adopt the theoretical position that a verb chain occurs within the span of a single clause, rather than that each verb constitutes its own clause, in order to capture the structural similarity between pairs such as:

TOL  ro-lako \( [m] e-hiako \) \( 3^{PL}-go \) PART:MM-hide
        \( ro-laan \) \( [m] e-baho \) \( 3^{PL}-be \) PART:MM-bathe

‘they went and hid’
‘they were bathing’

To consider the first to be two separate clauses, and the second only a single clause, would do injustice to the structure of these languages.

\(^{146}\) Whether agreement markers constitute true verbal inflection (prefixes and suffixes), or whether they are clitics which are attracted to the initial verb, is mostly irrelevant to the discussion at hand. Agreement markers may sometimes be separated from the verb, for example:

TOL  pono-\( mbendua \)-\( 'i-to-kaa o lepa \) \( full again-3SG-COMP just ART basket \)

PAD  komiu-po \h[\textsc{in}j]enu ai sala \( 2^{PL}-FUT-\textsc{incomp} \) \( PASS:hit \) \( \text{on road} \)

MRN  mohali to 'u-o \( \text{expensive very-3SG} \)

‘again the basket was just full’
‘if you are hit on the road...’ (Vuorinen 1995:104)
‘it’s very expensive’ (S. Andersen 1995a:5)

but usually only a very limited number of particles (above: Tolaki \( mbendua \), Padoe \( -po \), Moronene \( to 'u \)) can come in this position.

\(^{147}\) On rare occasions I have come across examples of an unmarked change of subject, that is, the implicit subject of one verb is coreferential not with the subject but rather the object of the preceding verb. For example:

TOL  a-no luarako- 'i i tahi tewali opio o pulo...
        and-3SG expel-3SG at sea become several ART island

‘and he deposited it [the refuse of his digging] in the sea, and it became several islands...’
is unproblematic. However, in terms of coreference within verb chains, and hence in terms of subject agreement marking, Bungku-Tolaki languages treat all of the following as subjects:

- the subject of an intransitive or stative verb
- the subject/agent of an antipassive verb
- the agent of a transitive (active-direct) verb
- the derived subject of a passive verb

These are illustrated, respectively, in the following examples:

**TOL (565)**  
\[
\text{lau-lau-ro-to} \quad \text{m-beluu-wako} \\
\text{do.immediately-3PL-COMP} \quad \text{PLS-take.off} \\
\text{immediately they flew off}
\]

**TOL (566)**  
\[
\text{lako-no-to} \quad \text{Sangia} \quad \text{Mbu'u} \quad \text{ina'u} \\
\text{go-3SG-COMP} \quad \text{Sangia} \quad \text{Mbuu} \quad \text{descend} \\
\text{[m]o-wawo-kee} \quad \text{powule-'a} \quad \text{opitu} \quad \text{palako...} \\
\text{PART:ANTIPASS-bring-BEN:3SG} \quad \text{chew.betel-LOC} \quad \text{seven} \quad \text{brass.box}
\text{then Sangia Mbuu came down bringing seven brass boxes of betel-nut chewing ingredients for him...}
\]

**TOL (567)**  
\[
\text{lako-no-to} \quad \text{ale} \quad \text{su[m]aira-’i} \quad \text{pombahora-no} \\
\text{go-3SG-COMP} \quad \text{take} \quad \text{PART:sickle-3SG} \quad \text{garden-3SG}
\text{then he went, took and sickled his garden plot}
\]

**TOL (568)**  
\[
\text{lau-lau-no-to-kaa} \quad \text{k[in]aputi} \\
\text{do.immediately-3SG-COMP-just} \quad \text{PASS:tie} \\
\text{baki} \quad \text{landaka} \quad \text{nggiro’o} \\
\text{sago.filter.basket} \quad \text{that}
\text{immediately that sago filter basket was tied}
\]

Other agreement markers are also illustrated in the above sentences. Compare, for example, the benefactive marker -ke ‘for him’ found in (566) and the object marker -i ‘it’ in (567). As can be seen, however, these other markers do not necessarily occur on the first verb; object markers in fact are restricted to the transitive verb, regardless of the
position which the transitive verb occupies within a verb chain. For further examples of benefactive markers, which have resulted from the fusion of PBT *ako with a following pronoun, see Chapter 6; for further examples of object agreement markers, see especially § 5.3.

Because of the ubiquity of verb chaining, subject and object agreement markers are often kept apart. The first, intransitive verb is the locus of subject marking, while the transitive, active-direct verb, usually somewhere further down the chain, is the locus of object marking. But what if the first verb is transitive? In this case, subject marking is restricted to preverbal position. Recall that object agreement markers are required on transitive verbs, and while it is possible to say in Tolaki, for example, ku-baho-'i /1SG-bathe-3SG/ ‘I bathe(d) him, her, it’, it is not possible to combine the object agreement marker with any postverbal subject agreement marker:

TOL (569) a. *baho-nggu-'i, *baho-'i-nggu (Set I + OBJECT)  
   b. *baho-aku-'i, *baho-'i-aku (Set III + OBJECT)

The same also holds true in Tolaki when a verb is followed by a benefactive marker. Therefore, a construction such as ku-pewiso-kee /1SG-enter-BEN:3SG/ ‘I go/went in for him’ is possible, but not any of:

TOL (570) a. *pewiso-nggu-kee, *pewiso-kee-nggu (Set I + BEN)  
   b. *pewiso-aku-kee, *pewiso-kee-aku (Set III + BEN)

A subject agreement marker thus cannot occur in postverbal position if that slot is already occupied by some other agreement marker. The only commonly encountered situations where two postverbal agreement markers occur on the same verb is when an object marker is combined with a benefactive marker, for example Tolaki ku-baho-'i-kehero /1SG-bathe-3SG-BEN:3PL/ ‘I bathe(d) him, her for them’.148 Regarding the peculiar

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148: Languages where this pattern is found include Tolaki, the Watu dialect of Mori Bawah (Esser 1933:373–374), and Moronene (S. Andersen 1995a:66). In Kulisu, Mori Bawah and apparently also in
Moronene constructions of the pattern *moe-be-ku-o /heavy-1SG-3SG/ ‘it is heavy for me’; see further § 7.3.3.

Above, it was noted that up to four pronoun sets are employed as subject agreement markers. Of these, two sets have additional functions beyond marking subjects. Set I pronouns also have the function, in other contexts, of marking the possessor in possessive (noun phrase) constructions as well as marking the demoted agent on passive verbs; these pronouns could thus be identified as possessive or genitive pronouns. Set III pronouns also have the function of marking the object on transitive verbs. As these pronouns are postverbal and therefore cannot have the function of marking the agent of a transitive verb, these pronouns could therefore be identified as absolutive pronouns. Provided that a transitive verb does not occur as the initial verb of a clause, however, then it becomes possible for an absolutive pronoun to appear twice, in its first occurrence marking the subject of the intransitive verb, and in its second occurrence marking the object of the transitive verb. For example:

TOL (571)  
\[
\begin{array}{ll}
\text{l\text{-}a-\text{a}^\text{\text{-}i}^\text{\text{-}to}} & \text{k\text{\text{-}f\text{\text{-}um\text{\text{-}j\text{\text{-}ini}}}^\text{\text{-}i\text{...}}}} \\
\text{be-3SG}_i^\text{\text{-}COMP} & \text{PART:\text{delouse-3SG}_j} \\
\text{‘he}_i\text{ was delousing him}_j\text{...’}
\end{array}
\]

Similarly, one might expect to find two occurrences of a genitive pronoun: once on the first verb marking the subject of the clause, and again on the passive verb marking the demoted agent. However, apart from a handful of possible exceptions (§ 5.2.3), main clause passives are strictly agent-deleting in Bungku-Tolaki languages. Consequently this

Padoe (Vuorinen 1995:113), otherwise required object marking lapses in the presence of a benefactive marker; see § 6.2.6.

Even where this pattern is possible, some restrictions apply, for example in Tolaki a third singular beneficiary collocates only with a third singular object, e.g. *\text{k\text{-}u\text{-ba\text{-ho\text{-iero\text{-kee}}} /1SG-bathe-3PL\text{-BEN:3SG/}} is not a possible construction (S. Youngman 1998:pers.comm.)
pattern does not occur. In point of fact, even when a passive verb occurs initially in the clause it cannot be marked even for its *derived subject* with a genitive pronoun.

On the other hand, the two sets of preposed subject markers, identified above as Set II and Set IV, never index objects. Instead, they precede transitive and intransitive verbs, indexing, respectively, the agent or subject thereof. Both sets can therefore be identified as nominative pronouns. In order to avoid ambiguity, however, I use the label NOMINATIVE henceforth to refer only to the Set II pronouns; I follow Esser in designating Set IV pronouns as FUTURE pronouns. Set II or nominative pronouns are found in all Bungku-Tolaki languages; Set IV or future pronouns, as already noted, are known to occur only in Padoe, Mori Atas, Mori Bawah and Bungku.

The following chart summarizes what has been said thus far concerning these pronoun sets. By ‘initial verb’ I mean a verb which occurs as the first verb in a chain.

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149 Even when such a clause is attempted, say for example *laulau-no-to k[inj]aputi-ndo* /do.immediately-3SG-COMP PASS:tie-3PL/ in parallel to example (568), this cannot mean in Tolaki *‘immediately it was lashed by them’ but only ‘immediately that which was lashed by them...’*, i.e. *k[inj]aputi-ndo* (with genitive pronoun) in this context can only be interpreted as a nominal constituent.

150 I have encountered one Bungku example which appears to be an exception to this claim:

**BNG**  
*[(in)ekura-no Lutu, d[um]ontani-o punti asa pole hai ta’i asa pole]*  
PASS:angry-3SG Ape PART:drop-3SG banana one cut with feces one cut

‘The Ape being angered, he dropped a bit of banana with a bit of stool’
<table>
<thead>
<tr>
<th>POSITION</th>
<th>SET I Genitive</th>
<th>SET II Nominative</th>
<th>SET III Absolutive</th>
<th>SET IV Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNCTION</td>
<td>postposed</td>
<td>preposed</td>
<td>postposed</td>
<td>preposed</td>
</tr>
<tr>
<td></td>
<td>on a nominal constituent marks the POSSESSOR, on an initial (necessarily non-transitive) verb marks the SUBJECT, and on a passive verb (relative clauses, interrogatives only) marks the DEMOTED AGENT</td>
<td>on an initial verb marks the SUBJECT (if verb is intransitive) otherwise the AGENT (if verb is transitive)</td>
<td>on a transitive verb marks the OBJECT, on an initial (necessarily non-transitive) verb marks the SUBJECT</td>
<td>on an initial verb marks the SUBJECT (if verb is intransitive) otherwise the AGENT (if verb is transitive). Occur only with future semantics.</td>
</tr>
</tbody>
</table>

Table 53. Functions of pronoun sets I through IV

7.2 <um> and its allomorphs: primary versus participle forms of active verbs

In Bungku-Tolaki languages, an active verb will make its appearance in one of two ways, either in its primary, underlying form or in its participle form. Formally, the difference between a primary form of a verb and its corresponding participle is that the participle contains an additional morpheme <um> not present in the primary form. Angled brackets are used to indicate that this is an abstract representation of a morpheme which has various allomorphs, including the infix -um- (placed after the first stem consonant), the prefix um- (if the stem is vowel initial), and, in the case of p-initial prefixes, replacement of p by m. These allomorphs are illustrated with the following Kulisusu data:
<table>
<thead>
<tr>
<th>PRIMARY</th>
<th>PARTICIPLE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>KUL (572)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. kawi</td>
<td>k[um]awi</td>
<td>‘marry’</td>
</tr>
<tr>
<td>b. leu</td>
<td>l[um]eu</td>
<td>‘come’</td>
</tr>
<tr>
<td>c. lingka</td>
<td>l[um]ingka</td>
<td>‘set off’</td>
</tr>
<tr>
<td>d. gora</td>
<td>g[um]ora</td>
<td>‘cry out’</td>
</tr>
<tr>
<td>e. kaa-’inda</td>
<td>k[um]aa-’inda</td>
<td>‘eat them’</td>
</tr>
<tr>
<td>f. sikori-o</td>
<td>s[um]fikori-o</td>
<td>‘await him, her, it’</td>
</tr>
<tr>
<td>g. usu</td>
<td>u[mp]usu</td>
<td>‘enter’</td>
</tr>
<tr>
<td>h. onto-ho</td>
<td>u[mp]onto-ho</td>
<td>‘see it’</td>
</tr>
<tr>
<td>i. engka-’o</td>
<td>u[mp]engka-’o</td>
<td>‘lift it’</td>
</tr>
<tr>
<td>j. akala-’inda</td>
<td>u[mp]akala-’inda</td>
<td>‘deceive them’</td>
</tr>
<tr>
<td>k. pebaho</td>
<td>[m]ebaho</td>
<td>‘bathe oneself’</td>
</tr>
<tr>
<td>l. po’ai</td>
<td>[m]ai’ia</td>
<td>‘stay, reside, live’</td>
</tr>
<tr>
<td>m. pocuri</td>
<td>[m]ocuri</td>
<td>‘sleep’</td>
</tr>
<tr>
<td>n. pongkaa</td>
<td>[m]ongkaa</td>
<td>‘eat’</td>
</tr>
<tr>
<td>o. po’onto</td>
<td>[m]o’onto</td>
<td>‘see (something)’</td>
</tr>
<tr>
<td>p. pokosoro-ho</td>
<td>[m]okosoro-ho</td>
<td>‘able to push it’</td>
</tr>
</tbody>
</table>

The pattern found in Kulisu is readily observable in other Bungku-Tolaki languages, as is illustrated by data throughout this chapter. In many Bungku-Tolaki languages, <um> also appears to have a phonologically conditioned zero allomorph (in an abstract analysis), namely, in cases where the stem begins with a bilabial consonant but excluding cases where, as above, the p belongs to the prefix. Because this situation obtains in Tolaki (Scott Youngman 1990:pers.comm.), Padoe (Karahunen 1991:194) and Mori Bawah (Esser 1927:84), it seems reasonable to assume in the protolanguage *<um> also had a zero allomorph.

<table>
<thead>
<tr>
<th>PRIMARY</th>
<th>PARTICIPLE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOL (573)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. piara-’i</td>
<td>p[Ø]iara-’i</td>
<td>‘tend, care for it’</td>
</tr>
<tr>
<td>b. bindani-’i</td>
<td>b[Ø]indani-’i</td>
<td>‘leave him, her, it’</td>
</tr>
<tr>
<td>c. wavo-’aku</td>
<td>w[Ø]awo-’aku</td>
<td>‘carry me’</td>
</tr>
<tr>
<td>d. musu-’i</td>
<td>m[Ø]usu-’i</td>
<td>‘form it from clay’</td>
</tr>
<tr>
<td>PAD (574)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. paho-’o</td>
<td>p[Ø]aho-’o</td>
<td>‘plant it’</td>
</tr>
<tr>
<td>b. wusu-’o</td>
<td>w[Ø]usu-’o</td>
<td>‘look for it’</td>
</tr>
<tr>
<td>MRB (575)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. pdudu-’o</td>
<td>p[Ø]udu-’o</td>
<td>‘break it off’</td>
</tr>
<tr>
<td>b. buta-’o</td>
<td>b[Ø]buta-’o</td>
<td>‘extract it’</td>
</tr>
<tr>
<td>c. bongo-’aku</td>
<td>b[Ø]ongo-’aku</td>
<td>‘thrash me’</td>
</tr>
</tbody>
</table>
This is not the case in Kulisu, where *p*-initial stems usually take the nasal replacement allomorph, with the infix *-um-* found in other cases—though some *p*-initial stems take instead the infix *-um-*. For example:

<table>
<thead>
<tr>
<th>PRIMARY</th>
<th>PARTICIPLE</th>
<th>Sense</th>
</tr>
</thead>
<tbody>
<tr>
<td>KUL (576)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. pina’i</td>
<td>[m]ina’i</td>
<td>‘descend’</td>
</tr>
<tr>
<td>b. poone</td>
<td>[m]oone</td>
<td>‘climb, ascend’</td>
</tr>
<tr>
<td>c. pangka</td>
<td>[m]angka</td>
<td>‘cry’</td>
</tr>
<tr>
<td>d. pisilaa-’o</td>
<td>[m]isilaa-’o</td>
<td>‘inspect it’</td>
</tr>
<tr>
<td>e. pakuli-’o</td>
<td>[um]akuli-’o</td>
<td>‘medicate, treat him, her, it’</td>
</tr>
<tr>
<td>e. pikiri</td>
<td>[um]ikiri</td>
<td>‘think’</td>
</tr>
<tr>
<td>f. boboi-ho</td>
<td>[um]oboi-ho</td>
<td>‘call him’</td>
</tr>
<tr>
<td>g. bansule</td>
<td>[um]ansule</td>
<td>‘return home’</td>
</tr>
<tr>
<td>h. wungkahi-’o</td>
<td>[um]wungkahi-’o</td>
<td>‘open it’</td>
</tr>
<tr>
<td>i. wuu-ho</td>
<td>[um]wuu-ho</td>
<td>‘husk it’</td>
</tr>
</tbody>
</table>

In the two subsections which follow, I outline the major contexts in which primary and participle forms of verbs are used. This should not necessarily be taken as an exhaustive account—further refinements are probably needed for individual languages—however, as far as I know the generalizations given below hold true across most if not all Bungku-Tolaki languages. These contexts are illustrated briefly with Kulisu data.

Only active verbs exhibit a difference between primary and participle forms, therefore *<um>* may be more correctly described as an active participle marker. In §7.2.3 I describe classes of verbs which have invariant forms in all contexts.

7.2.1 **Contexts in which primary forms are used**

Primary forms of verbs are used in the following contexts:

(a) when a verb is used imperatively, for example *Poone i raha!* ‘Come up to the house!’, *Leu-mo pong-kaa!* ‘Come eat!’.

(b) when a verb is used as a nominalization. Either the primary form of a verb itself is used as a nominalization as in example (577), or else the primary form may be combined
with the locative suffix -a as in example (578). Regarding such nominalizations, see respectively §§ 8.4 and 8.5.

KUL (577)  
ndo-kogaugau-’ako  po’ia-no  i  tangke-no  
3PL-have.discussion-COMM  reside-3SG  at  mountain-3SG

Wansindo-dori  arumai  
Wansindori-dori  that

‘they had a discussion about her stay on Mount Wansindo-dori’

KUL (578)  
sa  tebungku-ndo  i  po’ia-ha-ndo...  
when  arrive.back-3PL  at  reside-LOC-3PL

‘when they had arrived back at their residence…’

(c) when a verb is followed by a genitive (Set I) subject marker or preceded by a nominative (Set II) subject marker, as in respectively:

KUL (579)  
sa  bansule-no  tama-’awo-ndo...  
when  return.home-3SG  father-step-3PL

‘when their step-father had returned home…’

(580)  
Waode  Sirinakamba  i-pangka-mo  
Waode  Sirinakamba  3SG-cry-COMP

‘Waode Sirinakamba cried’

See §§ 7.3 and 7.4. The similarity between verb forms with genitive markers and the nominalizations described above under (b) is not coincidental; historically the former derive from what were originally nominalizations, and still share many similarities therewith.

(d) when a verb serves as the stem to which further derivational prefixes are added. Compare, for example, the Kulisusu accidental passive verb tepoone ‘climbed, climbable’ from poone ‘climb, ascend’ (the form *temoone does not occur); the transitive verb base palingka ‘send off, expel’ from the causative prefix pa- plus lingka ‘go, set off’ (*palumingka does not occur); and the transitive verb base poko’engka ‘able to lift’ from the aptative prefix poko- plus engka ‘lift’ (*pokoumengka does not occur). Said simply,
<um> is a verbal inflectional affix, and occurs ‘outside’ with respect to any derivational affixation.

7.2.2 Contexts in which participle forms are used

Participle forms, on the other hand, are used in the following contexts:

(a) when a verb modifies a noun, e.g. Kulisusu tondo t[um]ade ‘standing fence, a fence (tondo) make of sticks stuck straight into the ground’. Participles are also used in relative clauses; see further Chapter 8.

(b) when the verb occurs as the second or subsequent verb in a clause.

KUL (581)

<table>
<thead>
<tr>
<th>Wangkinamboro</th>
<th>a`iso</th>
<th>nahina-mo</th>
<th>i-sida</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wangkinamboro</td>
<td>that</td>
<td>NEG-COMP</td>
<td>3SG-succeed</td>
</tr>
</tbody>
</table>

[m]ina`i  i  lia  k[um]aa`inda  ana-hako  a`iso

PART:descend to cave PART:eat-3PL child-COLL that

‘Wangkinamboro never managed to go down to the cave and eat those children’

(c) when a verb occurs as the first verb of a main clause, either followed by an absolutive (Set III) subject marker or preceded by a future (Set IV) subject marker. These pronoun sets do not occur as subject markers in Kulisusu, but compare the following examples from Padoe. See further §§ 7.5 and 7.6.

PAD (582)

[m]e-wuni-iro-to  ai  te`olo

PART:MM-hide-3PL-COMP at woods

‘they hid in the woods’ (Vuorinen 1995:106)

(583)

iro  l[um]eko  ai  Tomata

3PL PART:go to Tomata

‘they will go to Tomata’ (Vuorinen 1995:103)

(d) when a verb is elicited or is uttered apart from context. It appears that from a psychological perspective, a form containing an allomorph of <um> is conceived of as more ‘verbal’ than its corresponding primary form, therefore native speakers of Bungku-Tolaki languages typically respond with participle forms when requested to translate a
verbal concept. Similarly, in compiling dictionaries for Tolaki and Moronene, participles have also turned out to be the preferred citation form for verbs. Synchronously, then, there is a definite sense in which participles could be viewed as more ‘basic’ than corresponding primary forms. For the purpose of historical reconstruction, however, I have found it more expedient to adopt the perspective that <um> forms are more complex.

7.2.3 Verbs without a primary versus participle distinction

What has been said above concerning basic and participle forms is irrelevant to certain other classes of verbs which cannot be supplied with <um>. One could say, therefore, either that these other verbs have an invariant form, or that the primary and participle forms of these verbs are identical. Typically, these verbs encode states or non-controlled actions; included hereunder are passive verbs with <in>, so-called accidental passive verbs with te-, and the large class of stative stems, both underived and derived. To take a concrete example, compare the Kulisu form pocuri ‘sleep’, which has differing primary and participle forms, with the verb mocu’i ‘dry’, which has an invariant form in all contexts. As expected, pocuri occurs in its primary form in (584a), and in its participle form in (584b) (which happens to be in a relative clause):

KUL (584) a. \textit{ana a’iso i-pocuri-mo}  
child that 3SG-sleep-COMP  
‘that child is already sleeping’

             b. \textit{ana [m]ocuri-no a’iso}  
child PART:sleep-REL that  
‘that child who is sleeping’

In equivalent contexts, however, the stative verb mocu’i ‘dry’ has an invariant form, e.g.:

\[\text{In other Bungku-Tolaki languages, this situation is more common.}\]
KUL (585) a. cinatapi a’iso i-mocu’i-mo
washed.clothes that 3SG-dry-COMP
‘that wash of clothes is already dry’

b. cinatapi mocu’i-no a’iso
washed.clothes dry-REL that
‘that wash of clothes which is dry’

These examples also illustrate another important feature about Bungku-Tolaki verbal prefixes: the same surface form (namely an m-initial prefix) may have two different underlying analyses. For example, at a more abstract level, the /mo-/ of mocuri can be analyzed as <um> + po-; however the homophonous /mo-/ of mocu’i is better considered to be monomorphemic, namely, nothing other than the common Bungku-Tolaki stative prefix mo- (<PMP *ma>). Youngman (1995) presents a number of examples of this kind of ambiguity in Tolaki verb prefixes, which ambiguity is resolved, of course, by observing the form which a verb takes in other contexts. In this chapter and elsewhere, I have done my best to resolve this potential ambiguity for the reader, namely if PART (for ‘participle’) appears in the gloss line under a verb, then one may assume at a more abstract level it contains an allomorph of <um>; but if PART does not occur, then <um> is not present.

Probably all Bungku-Tolaki languages have a small subset of intransitive stems containing -um- as a frozen infix, i.e. -um- occurs in contexts where one would expect only the primary form to occur. In these cases, it is better simply to regard -um- as part of the root, for example, Kulisusu dumaa ‘arise, come into existence’ (compare i-dumaa-mo /3SG-arise-COMP/ ‘he was born’; causative padumaa ‘bring about, establish’, etc.); Mori Bawah lumele ‘gone around everywhere, spread out’, umolo ‘suffer hunger’ (Esser 1933:351), and Wawonii sumoo ‘enter’ (Manyamebeang, Mahmoed, et al. 1982/1983:87).

In Tolaki, most intransitive verbs with -um- or um- now retain this morpheme even when used imperatively or when preceded by a nominative pronoun, therefore it appears that in
Tolaki -um- is in the process of becoming a fixed constituent of intransitive verbs. In Moronene, -um- is at present found only as a frozen infix in a dozen or so intransitive verbs, including sumoo ‘enter’, lumoso ‘jump’ and humopa ‘bark’, and not at all with transitive stems (D. Anderson 1998:pers.comm.)—though the nasal replacement morpheme remains productive.

On the other hand, it is common across Bungku-Tolaki languages to find certain motion verbs occurring in their primary form, even where the participle form is expected. For example, Tolaki leu ‘come’, and lako ‘go’, and Mori Bawah hawe ‘arrive’ all have invariant forms (in Mori Bawah the participle form lumako ‘go’ is often—but not

152 I am indebted to Youngman (1991:pers.comm.) for this explanation of the behavior of Tolaki intransitive verbs. The following is my summary of his account:

With transitive verbs and certain intransitives such as loloia ‘run’ and totarea ‘crow’, <um> occurs only in the expected contexts. However, -um-lum- operates more as a fixed constituent in most intransitives, e.g. lumango ‘swim’, humongo ‘cough involuntarily’, umi ‘ia ‘cry’, tumoko ‘perch’. In some cases both an intransitive and a transitive stem may be formed from the same root, which therefore contrast in the behavior of -um-. Compare for example the intransitive stem umusa ‘pound’ which has an invariant form as seen in:

TOL a. no-ndee umusa koa-koa oleo
   3SG-habitually pound REDP-each day
   ‘he usually pounds every day’

   b. ihawi no-umusa
      yesterday 3SG-pound
      ‘yesterday he pounded’

   c. umusa!
      pound
      ‘pound’!

The transitive stem, however, which may take a definite object, has contrastive participle and primary forms.

TOL a. ari-aku-to um-usa-’i pae-miu
   finish-1SG-COMP PART-pound-3SG rice-2PL
   ‘I have already finished pounding your rice.’

   b. ihawi ku-usa-’i pae-miu
      yesterday 1SG-pound-3SG rice-2PL
      ‘yesterday I pounded your rice’

   c. usa-’i pae-nggu!
      pound-3SG rice-1SG
      ‘pound my rice!’
always—shortened to lako; Esser 1927:103). In addition, Scott Youngman (1995:pers.comm.) has noted there are a number of intransitive stems in Tolaki beginning with the prefix pe- to which <um> is never added, in other words these stems also have invariant forms; included in this set are certain verbs of motion such as pe'eka ‘ascend’, petuha ‘descend’, pewiso ‘enter’, the verbs of production pe'ana ‘give birth’ and pe'ua ‘vomit’ as well as certain statives such as pe'iwoi ‘have water’ and pe'ihi ‘have contents’. Further research must determine the extent to which these patterns can be attributed to PBT.

In summary, at some earlier stage *<um> must have been fully productive with transitive and active intransitive verbs. However, its productivity has been in decline in the case of intransitive verbs, which in a number of Bungku-Tolaki languages are coming to have invariant forms, i.e. either a reflex of *<um> has come to be present in all contexts, or else it is absent in all contexts. In Moronene, however, we find a different pattern: stems previously taking the um- or -um- allomorphs as a productive prefix now have invariant forms, be they intransitive or transitive. In most cases the participle marker was simply lost, though it still appears as a frozen affix in a handful of intransitive stems.

Finally, the primary versus participle contrast normally found with active verbs is neutralized when the verb is inflected for plurality of its subject, where plural in this case is defined as ‘three or more’. In Mori Bawah and Padoe, the plural subject morpheme is either N- or meN-, attached to the primary form of the verb (where capital N is the morphophoneme described in § 3.1.4 which results in the prenasalization of a following p, t, or k). In general, but not exclusively, stems which take the nasal replacement allomorph of the participle marker <um> also take the N- allomorph of the plural subject marker—compare particularly (586e-i) and (587a-c)—while the allomorph meN- is used in
other contexts. Even verbs which have identical primary and participle forms still have
distinct plural subject forms. For example:

<table>
<thead>
<tr>
<th>PRIMARY</th>
<th>PARTICIPLE</th>
<th>PLURAL SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRB (586) a.</td>
<td>lako [um]ako</td>
<td>me-lako</td>
</tr>
<tr>
<td>b. dontai-o</td>
<td>d[um]ontai-o</td>
<td>me-dontai-o</td>
</tr>
<tr>
<td>c. somba</td>
<td>s[um]omba</td>
<td>men-somba</td>
</tr>
<tr>
<td>d. tonda-o</td>
<td>t[um]onda-o</td>
<td>men-tonda-o</td>
</tr>
<tr>
<td>e. potii-o</td>
<td>m[otii-o</td>
<td>(me)m-potii-o</td>
</tr>
<tr>
<td>f. pepate-o</td>
<td>m[epate-o</td>
<td>m-pepate-o</td>
</tr>
<tr>
<td>g. pompopepe</td>
<td>[m]ompepe</td>
<td>m-pompopepe</td>
</tr>
<tr>
<td>h. poturi</td>
<td>m[oturi</td>
<td>m-poturi</td>
</tr>
<tr>
<td>i. pekule</td>
<td>m[ekule</td>
<td>m-pekule</td>
</tr>
<tr>
<td>j. baba-o</td>
<td>b[Ø]aba-o</td>
<td>me-baba-o</td>
</tr>
<tr>
<td>k. oli-o</td>
<td>um-’oli-o</td>
<td>me-’oli-o</td>
</tr>
<tr>
<td>l. mate</td>
<td>mate</td>
<td>me-mate</td>
</tr>
<tr>
<td>m. tekuda</td>
<td>tekuda</td>
<td>(me)n-tekuda</td>
</tr>
<tr>
<td>n. mapari</td>
<td>mapari</td>
<td>me-mapari</td>
</tr>
<tr>
<td>PAD (587) a.</td>
<td>pelimba</td>
<td>m-pelimba</td>
</tr>
<tr>
<td>b. powowau</td>
<td>[m]owowau</td>
<td>m-powowau</td>
</tr>
<tr>
<td>c. po’ema</td>
<td>[m]o’ema</td>
<td>m-po’ema</td>
</tr>
<tr>
<td>d. umari</td>
<td>umari</td>
<td>me-umari</td>
</tr>
<tr>
<td>e. hawe</td>
<td>hawe</td>
<td>me-hawe</td>
</tr>
</tbody>
</table>

That the primary/participle distinction is neutralized with plural subject verbs is
illustrated in the contrast between (588) and (589). In (588a) the Mori Bawah verb ‘to
return’ is illustrated occurring in its primary form pekule, while (588b) illustrates this same
verb in its participle form mekule:

MRB (588) a. onae-no ka-i pekule i inia-no
3SG-COMP and-3SG return to village-3SG
‘afterward, he returned to his village’ (lit. ‘it was that, and...’)
(Van Eelen & Ritsema 1918–1919:325)

b. mansa-no [m]ekule i raha...
as.soon.as-3SG PART: return to house
‘when he had returned home...’ (Esser 1927:99)
As can be seen in the sentences of (589), however, even in parallel contexts the plural subject verb has only one form, namely mpekule:\(^{153}\)

**MRB** (589) a. onae-mo ka-do m-pekule
   3SG-COMP and-3PL PLS-return
   ‘afterward they returned’ (Esser 1927:186)
   
   b. mansa-do m-pekule ... i inia-do...
   as.soon.as-3PL PLS-return to village-3PL
   ‘when they had returned ... to their village...’ (Esser 1927:187)

Because the plural subject marker \(N/-meN-\) refers to three or more, while a plural pronoun refers to two or more (in polite speech it can also refer to the singular), in effect these languages can distinguish between singular, dual and plural subjects, for example ka-i pekule /and-3SG return/ ‘and he/she/it returned’ (singular) vs. ka-do pekule /and-3PL return/ ‘and they returned’ (dual) vs. ka-do m-pekule /and-3PL PLS-return/ ‘and they returned’ (three or more).

A plural subject marker \(meN-\) (meaning three or more) is also found in Moronene—see for example (724) below—but it is unknown to me under what circumstances this marker has other allomorphs. Back in Tolaki, we again find two allomorphs, \(N-\) and mbeN-; Youngman prefers to gloss this morpheme as collective, “all having the same attribute or doing the same action as a group”, said of a group of three or more (1995:pers.comm.).

<table>
<thead>
<tr>
<th>PRIMARY</th>
<th>PARTICIPLE</th>
<th>PLURAL SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. buri-'i</td>
<td>b[Ø]uri-'i</td>
<td>mbe-buri-'i</td>
</tr>
<tr>
<td>b. kaa-'i</td>
<td>ksumjaa-'i</td>
<td>mbeng-gaa-'i</td>
</tr>
<tr>
<td>c. ponggaa</td>
<td>mongga</td>
<td>m-bonggaa</td>
</tr>
<tr>
<td>d. petuha</td>
<td>petuha</td>
<td>m-betuha</td>
</tr>
<tr>
<td>e. tumotaha</td>
<td>tumotaha</td>
<td>mbem-dumotaha</td>
</tr>
<tr>
<td>f. motaku</td>
<td>motaku</td>
<td>mbe-motaku</td>
</tr>
<tr>
<td>g. lako</td>
<td>lako</td>
<td>mbe-lako</td>
</tr>
</tbody>
</table>

\(^{153}\)An abstract analysis, which I do not pursue here, would be to consider the primary form to be mpekule, and the participle form to be mp[Ø]ekule, in keeping with the forms illustrated in (573) through (575).
For Proto-Bungku-Tolaki I reconstruct *(me)N- ‘plural subject (three or more)’. In Tolaki prehistory, plural subject forms must have come to be viewed as canonically having a prenasalized bilabial stop onset, whence the pressure for *meN- > mbeN-, observe how the forms in the third column of (590) all begin with /mb/.

Reflexes of PBT *(me)N- are found only vestigially in Kulisu, if at all. For example, the prefix of me-mate-lako ‘die suddenly or in rapid succession’ (said of a great number of people) may reflect this etymon. Occasionally, the nominative pronouns to-'1PL’ and mi- ‘2PL’ are followed by prenasalization of a following stem, which may also reflect what was earlier the plural subject morpheme.

KUL (591) hiina mi-m-pocuri, ingkomiu?
NEG 2PL-?-sleep 2PL
‘have you not slept, you?’

Even if this etymology is correct, such prenasalization is no longer connected with the notion ‘plural subject (three or more)’; Kulisu speakers whom I queried identified the use of prenasalization as in (591) as simply a more polite way of speaking, relative to utterances where prenasalization is absent.

7.3 Genitive pronouns as subject agreement markers

Having investigated two subsidiary issues, verb chaining and the participle marker <um>, I now return to the subject at hand: subject agreement markers. I begin with genitive pronouns used as subject agreement markers; by turn I look at genitive, nominative, future and absolutive pronouns.

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154 Curiously, Youngman describes yet another prefix in Tolaki, peN-, used for indicating plural (three or more) subjects having the same attribute or performing the same action individually, i.e. at different times. Compare ro-motaku ‘they were afraid’; ro-mbe-motaku ‘they were all afraid (all together)’; and ro-pe-motaku ‘they were all afraid (individually, one at a time)’ (1995:pers.comm.). Verbs prefixed with peN- have different primary versus participle forms, e.g. pemotaku versus metotaku.
Table 54 below sets forth the genitive pronouns which have been reconstructed for Proto-Bungku-Tolaki, along with their reflexes in five selected languages. For further information concerning the form of these pronouns, see § 4.1.

<table>
<thead>
<tr>
<th>PBT</th>
<th>Moronene</th>
<th>Kulususu</th>
<th>Mori Bawah</th>
<th>Padoe</th>
<th>Tolaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-ngku</td>
<td>-ngku, -ku</td>
<td>-ngku, -ku</td>
<td>-ku</td>
<td>-nggu</td>
<td>-nggu</td>
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<tr>
<td>*-mu, -u</td>
<td>-u, -'u</td>
<td>-u</td>
<td>-mu</td>
<td>-mu</td>
<td>-mu</td>
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<td>-mai</td>
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<td>-nto, -to</td>
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<td>-to</td>
<td>-ndo</td>
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</tr>
<tr>
<td>*-miu</td>
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<td>-miu</td>
<td>-miu</td>
<td>-miu</td>
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</tr>
<tr>
<td>*-ndo</td>
<td>-ndo, -do</td>
<td>-ndo</td>
<td>-do</td>
<td>-ro</td>
<td>-ro</td>
</tr>
</tbody>
</table>

Table 54. Genitive pronouns in selected Bungku-Tolaki languages

As subject markers, genitive pronouns are principally found in preposed subordinate temporal clauses, and also in certain independent clauses which I label ‘heightened action’ clauses. A minor use of genitive pronouns, found in at least Tolaki and Moronene, is to index the referent with respect to whom a state exists or holds true, e.g. ‘it is heavy for you’.

7.3.1 Genitive subjects in preposed, subordinate clauses

Subordinate, preposed temporal clauses are marked for their subject in the genitive. A common use of this kind of clause—as exemplified in several of the examples below—is to provide a cohesive, tail-head link between successive sentences or parts of the discourse. The verb is always a primary form; it may be preceded by the morpheme sa (sometimes lengthened to saa), glossed here as ‘when’.155

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155Esser (1933:276) considers sa-, saa in such contexts to be nothing other than a special use of the numeral ‘one’. A more accurate translation of Mori Bawah sa hawe-no (one arrive-3SG) would thus be ‘once he arrived…’, with the same applying mutatis mutandis to the other examples given here. Instead of sa, the prefix ko- is also sometimes used in Mori Bawah in preposed subordinate clauses, compare ko-hawe-no of example (618). Although Esser equates the meanings of sa- and ko- (1933:333), they
TOL (592) mowatu-no boro-nggu, lako-‘i-to b[Ø]aho-‘aku
dry-3SG ulcer-1SG go-3SG-COMP PART:bathe-1SG
‘as soon as my ulcer was dry, he went and bathed me’
(S. Youngman 1990:pers.comm.)

MRB (593) sa have-no kandawari andio,
when arrive-3SG k.o.basket this
[m]e-ula-o-mo i Sinongi
PART:MM-load-3SG-COMP PN Sinongi
‘when the carry-basket arrived, Sinongi got in’ (Esser 1933:277)

PAD (594) Have-ro ai raha, [m]olao-o-to Elu-elu.
arrive-3PL at house PART:flee-3SG-COMP Orphan
Polao-no ai Elu-elu, ro-lulu-‘o
flee-3SG PN Orphan 3PL-chase-3SG
‘When they got home, the orphan had already fled. The orphan having fled, they chased him.’ (Vuorinen 1995:107)

KUL (595) Kua‘iko Waode Bilahi-mo [m]ina‘i-no
in.reality Waode Bilahi-COMP PART:descend-REL
[um]ense. Pina‘i-no a‘iso, ka-i lense...
PART:dance descend-3SG that and-3SG dance
‘In reality it was Waode Bilahi who was coming down to dance. When she had come down, she danced…’

MRN (596) ...ka-mi pewiso; sa-pewiso-miu, ka-ku tagili-‘o
and-2PL enter when-enter-2PL and-1SG key-3SG
‘then you go in; after you have gone in, I will lock it (the window)’
(S. Andersen 1995a:53)

Stemming from this use of the genitive pronoun, there have come to appear certain elements in clause-initial position which usually attract a genitive subject marker.

Although synchronically these forms could be considered verbs (one would suspect this to be their historical origin), they are most naturally rendered in English as conjunctions or

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clearly contrast in Tolaki, where the latter signals an interrupted activity, e.g. saa lako-no ‘when he had left…’, versus ko-lako-no ‘while he was going…’ (S. Youngman 1998:pers.comm.).
adverbs. In Mori Bawah, these include *boro* ‘then, at that time’, *mansa* ‘as soon as, when, after’ and *te'inso*,156 sometimes shortened to *inso*, ‘since, from’:

MRB (597)  

*boro-do m-polai*  
then-3PL PLS-flee  
‘then they fled’ (Esser 1927:102)

(598)  

*mansa-no k'[um]ita-o i Lare'a tahi*  
as.soon.as-3SG PART:see-3SG PN Turtle sea  
‘as soon as, when turtle saw the sea…’ (Esser 1927:102)

(599)  

*inso-mu kode-kodei*...  
since-2SG REDP-small  
‘since when you were small…’ (Esser 1927:102)

Parallel forms are found in other Bungku-Tolaki languages. Of particularly widespread occurrence are *ari* ‘after…’ (from an original meaning of ‘finish’) and *sabutu* ‘thereupon, just then, just as…’ (in this meaning never occurring without *sa*; in Tolaki and Wawonii *butu* is also found as a verb meaning ‘go toward’). For example:

TOL (600)  

*ari-no [t]um]uwi'-i, no-ale [t]um]indimi'-i.*  
finish-3SG PART:oil-3SG 3SG-take PART:stretch-3SG  
*Saa ari-no [t]um]indimi'-i, a-no amb...*  
when finish-3SG PART:stretch-3SG and-3SG begin  
‘after she oiled it, she took and stretched it. After she had finished stretching it, she began…’

(601)  

*ikohoatu oleo sa-butu-no laa loloso oleo...*  
eighth day when-just-3SG be appear sun  
‘on the eighth day, just as the sun was rising…’  
(Sande, Sikki, et al. 1985:88)

MRB (602)  

*sa umari-no [m]e-'ula, do-m-po-tii-o-mo*  
when finish-3SG PART:MM-load 3PL-PL-CAUS-descend-3SG-COMP  
*kandawari*  
k.o.basket  
‘after she had gotten in, they lowered the carry-basket’ (Esser 1933:277)

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156 According to Adriani, *te'inso* is cognate with Pamona *teencu* ‘moved, changed location’, accidental passive form of *encu* ‘move’ (Van Eelen & Ritsema 1918–1919:291).
BNG (603) sa-ari-no Kolopuha t[um]a'o-o labari ai...
when-after-3SG Tortoise PART: set-3SG mantrap this
`after the Tortoise had set the mantrap...’ (Saro, Rahim, et al. 1982:94)

(604) sa-butungu-no Lutu l[um]onso le pada-no...
when-just-3SG Ape PART: jump to below-3SG
the thereupon the Ape jumped down...’ (Saro, Rahim, et al. 1982:94)

KUL (605) sa-ari-ndo [m]ong-kaa, tora-no
when-finish-3PL PART: ANTI PASS-eat leftovers-3SG
ndo-po-naa-ako-no pandita
3PL-ANTI PASS-put-BEN-3SG poison
`after they had eaten, as for the leftovers, they put poison (in it) for him’

(606) sa-bucu-no a'iko, ndo-poone-mo i pea-no...
when-just-3SG that 3PL-climb-COMP to attic-3SG
`just after that, they climbed up to the attic...’ (Esser 1927:102)

When the first verb of the dependent clause is fully transitive, thus with an object
marker, the subject cannot occur on the verb marked in the genitive. In this case, it
appears instead that a nominative pronoun is appropriate, and the transitive verb is without
<um>. In the following examples, the nominative pronoun has been highlighted.

TOL (607) sa-ku karu-karu-’i-kee woroko-no...
when-1SG REDP-scratch-3SG-BEN:3SG neck-3SG
`when I scratch his neck...’

MRB (608) sa do-hawe-o...
when 3PL-encounter-3SG
`when they encountered it...’ (Esser 1933:276)

BNG (609) sa-ndo podea-o lutu mendadi nani-no...
when-3PL hear-3SG ape many song-3SG
`when the apes heard her song...’ (Saro, Rahim, et al. 1982:95)

\[157\] In Mori Bawah, it is also possible for a genitive pronoun to immediately follow sa. In this case the
transitive verb occurs in its participle form:

MRB sa-no r[um]onge-o mia anido motae...
when-3SG PART: hear-3SG person this that
`scarcely had the man heard that...’
KUL (610) sa-i ronge-o ka'oliwi-no kaaka-no a'iso...
when-3SG hear-3SG advice-3SG older.sibling-3SG that
'when she had heard the advice of her older brother…'

MRN (611) sa-i podea-ho uni-no hopa-no dahu koie...
when-3SG hear-3SG sound-3SG bark-3SG dog that
'when he heard the sound of a dog barking…' (S. Andersen 1995a:33)

Although in most cases clauses with genitive subjects can be regarded as subordinate, there are found in both Tolaki and Mori Bawah correlative constructions, wherewith the simultaneity of two events is emphasized:

TOL (612) tudu-no ine horo nggiro'o anadalo,
arrive.from.above-3SG at floor that small.child

opu-no penao-no Imba
use.up-3SG breath-3SG Imba

'as soon as that baby landed on the floor, Imba expired (died)'
(Sande, Sikki, et al. 1986:88)

(613) mate-no Imba, tudu-no usa rapo
die-3SG Imba arrive.from.above-3SG rain dense
‘when Imba died, there came a heavy rain’
(Sande, Sikki, et al. 1986:89)

MRB (614) ko-mate-no, ko-tano-no
when-die-3SG when-bury-3SG
‘as soon as he was dead, he was buried’ (Esser 1933:334)

7.3.2 Genitive subjects in heightened action clauses

Heightened action clauses share some formal similarities with the subordinate clauses discussed above, in that they take a primary form of verb followed by a genitive pronoun. However, the genitive subject in a heightened action clause is further followed by the completive marker (in Eastern Bungku-Tolaki languages -mo, in Western languages -to). Heightened action clauses are also not introduced by sa or saa.
TOL (615) Sa-batu-no hae nggo r[um]ako-’i,
when-just-3SG in.addition FUT PART:catch-3SG
pedapasako-no-to tudu tumoko i mumu inea
glide-3SG-COMP arrive.from.above perch at peak areca
‘just as he was about to catch her (the parrot goddess), off she glided,
landed and perched on the peak of an areca palm’

(616) lako-nggu-to mbule mbendua i sikola,
go-1SG-COMP return again to school
pombekaahako-nggu-to
awaken-1SG-COMP
‘then I returned again to the school (in my dream), right when I woke
up’ (S. Youngman 1998:pers.comm.)

MRB (617) mansa-no l[um]ako i asambali-no wala, polai-no-mo
as soon as-3SG PART:go at other.side-3SG fence flee-3SG-COMP
‘when he had come to the other side of the fence, away he ran’
(Esser 1933:190)

(618) ko-hawe-no mentororo a meda, pong-kaa-no-mo
just-arrive-3SG PART:sit at table TRI-eat-3SG-COMP
‘no sooner had he come sat at the table than in he delved’
(Esser 1933:190)

MRN (619) sa-lumoso-no koie ndoke, laulau-no-mo
when-jump-3SG that monkey immediately-3SG-COMP
terahi hai ampa
skewered at stake
‘when that monkey jumped down, he was immediately skewered on the
stake’ (S. Andersen 1995a:53)

In narrative texts, heightened action clauses encode happenings on the event line, in
other words, salient events which move the story forward in time. Syntactically, they
occur as main clauses; for example, if in (619) sa-lumoso-no ‘when he jumped...’ is
analyzed as a dependent temporal clause, then there is little choice left but to consider
laulau-no-mo terahi... ‘immediately he was skewered...’ to be the independent clause.158

158 A correlative interpretation, however, might also be suggested.
However, it is likely that such clauses arose from what were originally postposed, dependent temporal clauses. Compare, for example, English where postposed (but not preposed) *when* clauses may be used for dramatic surprise, as in *He was up in the tree, picking apples, when the wolf came along* (Hwang 1990:68). Additionally, parallel constructions still occur as postposed clauses in neighboring languages, for example Pamona:

PAM (620) ku-pedasi nyara-ku, polonco-nya-mo
1SG-strike.with.object horse-1SG go.fast-3SG-COMP
‘I struck my horse, off he went trotting’ (Adriani 1931:476)

In Tolaki, and apparently also in Moronene, the verb *lako* ‘go’ has come to be used so frequently in this context (viz., followed by a genitive subject pronoun and the completive marker, respectively -to, -mo), that it has lost much of its lexical force and translates best into English simply as ‘then’. Note particularly the double use of *lako* in (621a), which is both a consequence of and evidence for the semantic bleaching which has occurred with *lako* in its first occurrence:

TOL (621) a. Ingoni-ako-no-kaa nggiro’o, lako-no-to lako
near.present-INTS-3SG-just that go-3SG-COMP go

[m]o-salei.
PART:ANTIPASS-clear
‘right after that, he went and cleared’

b. Saa ari-no [m]o-salei, lako-no-to
when finish-3SG PART:ANTIPASS-clear go-3SG-COMP

*tfum*uehi-’i.
PART:clearcut-3SG
‘after he had finished clearing, he clearcut it’

c. Saa ari-no *tfum*uehi-’i, lako-no-to
when finish-3SG PART:clearcut-3SG go-3SG-COMP

*h[um]umw-’i
PART:burn-3SG
‘after he had finished clearcutting it, he burned it’
Although clauses introduced by *lako-no-to* encode mainline events, they are not necessarily pivotal or dramatic but can be of a more routine nature; indeed the sentences of (621) were taken from a description of the main character carrying out (in script-like fashion) the steps of swidden agriculture. When a Tolaki speaker wishes to emphasize that an event is highly important to the unfolding of the story, the prefix *ni-* may further accompany the verb. Although some texts may simply be lacking in any such verbs, when they do occur they are used by masterful story-tellers to highlight pivotal events. For example, the ‘Story of Konawehea and Lasolo’ as told to me by Arsamid (Konawehea and Lasolo are both rivers, personified in myth) consisted of nineteen sentences, three of them with verbs preceded by *ni-* and followed by a genitive subject marker. In order of occurrence they were:

**TOL** (622) a. *Dunggu-no oleo injedandi’ako-ro nggo pebinda-’a-ro,*

arrive-3SG day PASS:promise.about-3PL FUT leave-LOC-3PL

\[ni-lako-ro-to \ [m]ebinda, \ [m]eronga \ lako.\]

NI-go-3PL-COMP PART:depart PART:together go

‘When the promised day of their departure arrived, they set off going together.’

b. *Ni-laulau-no Konawe’eha [m]ombepaepae lako*

NI-do.immediately-3SG Konawehea PART:do.unhurriedly go

\[b [Ø] indani-’i aa Laasolo.\]

PART:leave-3SG river Lasolo.

‘Directly Konawehea slowly went, leaving Lasolo behind.’

c. *Ni-lako-no-to itoo-no aa Laasolo [m]oburu*

NI-go-3SG-COMP self-3SG river Laasolo PART:gather.strength

\[l[um]oloia \ [lum]eterahi-’i Konawe’eha.\]

PART:run PART:chase-3SG Konawehea.

‘Then Lasolo himself gathered his strength and ran chasing Konawehea.’

These three sentences alone provide us with a synopsis of the entire story, what in Van Dijk’s (1977) terms could be labeled the macrostructure of the text. The importance of
these clauses can also be seen in that the intent of this myth is to explain why the Konaweha river flows slowly, while the Lasolo flows swiftly. Parallel verb forms are also found in Moronene, though here I have less information about their discourse function:

MRN (623)  
\[
\begin{align*}
\text{Ni-} & \text{lako-do-mo} & \text{koie} & \text{lako} & [m]eronga \\
\text{NI-go-3PL-COMP} & & \text{that} & \text{go} & \text{PART:together} \\
[m]eroro & haI & laa & e'e. \\
\text{PART:catch.fish} & & \text{at} & \text{river} & \text{water} \\
\end{align*}
\]

‘Immediately they went together to catch fish at the river.’
(S. Andersen 1995a:49)

These verbal constructions possibly maintain a very old pattern; particularly if this *ni- has as its source PMP *<in>, then it would seem that the *ni-+STEM+GEN+(COMP) verb construction must go back to a time when *<in> was still a marker of completive or realized aspect,\(^{159}\) before it developed (in the Bungku-Tolaki languages) into primarily a marker of passive voice (§ 2.5).

\(^{159}\) A prefix *in- ‘realized’ must also be reconstructed in the PBT word *in-ipiaN ‘when (past time)?’. The following data are from D. Andersen (1994:20), Esser (1927:167), Lara, Larobu, et al. (1991:22, 74), and S. Youngman (1997:pers.comm.). Note d exscescence in Mori Bawah and Padoe.

\[
\begin{array}{c|cc}
\text{PBT} & \text{‘when’ (past)} & \text{‘when’ (future)} \\
\hline
\text{Moronene} & *\text{in-ipiaN} & *\text{te-ipiaN} \\
\text{Kulisusu} & \text{nimpia} & \text{impia} \\
\text{Mori Bawah} & \text{nimpia} & \text{impia} \\
\text{Tinompo} & \text{indi’ipia} & \text{te’ipia} \\
\text{Tiu} & \text{inipia} & \text{te’impia} \\
\text{Moiki} & \text{indi’ipia} & \text{te’ipia} \\
\text{Watu} & \text{inipia} & \text{te’ipia} \\
\text{Mori Atas} & \text{nimpia, inepie} & \text{te’ipie} \\
\text{Molio’a} & \text{nimpia} & \text{te’epie} \\
\text{Molongkuni} & \text{inipie} & \text{te’ipie} \\
\text{other dialects} & \text{inipie} & \text{te’ipie} \\
\text{Padoe} & \text{indepie} & \text{te’epie} \\
\text{Tolaki} & \text{inipia} & \text{te’ipia} \\
\end{array}
\]

The same morpheme is also to be reconstructed in the word for ‘day before yesterday’ (D. Andersen 1994:20; Esser 1927:21; Adriani 1900:283; S. Youngman 1997:pers.comm.):
7.3.3 Genitive subjects in other contexts

Besides the use genitive marking outlined in §§ 7.3.1 and 7.3.2, genitive pronouns are also used in certain cases to signal that a referent is an experiencer, specifically the one with respect to whom or relative to whom a state exists or holds true. For example:

TOL (624) momeni-nggu
    heavy-1SG
    ‘I find it heavy’ (Gouweloos 1936:15)

(625) te'esi-nggu-to
    insufficient-1SG-COMP
    ‘I find it little, not enough’ (Gouweloos 1936:15)

(626) no-owose-mu
    3SG-large-2SG
    ‘it is (too) big for you’ (S. Youngman 1998:pers.comm.)

(627) sabutu-nggu o babu ni’inə
    exact-1SG ART shirt this
    ‘this shirt is exactly the right size for me’ (lit., ‘this shirt is exact for me’)
    (S. Youngman 1998:pers.comm.)

<table>
<thead>
<tr>
<th></th>
<th>‘two days ago’</th>
<th>‘two days hence’</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT</td>
<td>*in-ipuao</td>
<td>*te-ipuao</td>
</tr>
<tr>
<td>Moronene</td>
<td>nipua</td>
<td>ipua</td>
</tr>
<tr>
<td>KulisuSu</td>
<td>nipua</td>
<td>ipua</td>
</tr>
<tr>
<td>Mori Bawah</td>
<td>indi’upua</td>
<td>te’upua</td>
</tr>
<tr>
<td>Mori Atas</td>
<td>nipua</td>
<td>te’upua</td>
</tr>
<tr>
<td>Tolaki</td>
<td>nipua</td>
<td>te’ipua</td>
</tr>
</tbody>
</table>

However, the only language known to me where a reflex of *<in> continues to be used productively in this meaning is Moronene, where it is found with other temporal adverbs as well as with measure compounds denoting periods of time. For example:

MRN ni-halu ta’u ka-ku leu.
    PAST-eight years then-1SG come
    ‘I came eight years ago’ (D. Andersen 1994:26)

ni-rua malo ka-i ari kawi miano hai Laabaiu.
    PAST-two night and-3SG finish marry person at Laabaiu
    ‘two nights ago some people were married in Laabaiu’ (D. Andersen 1994:26)
tende mopoe-ku-o-mo
very painful-1SG-3SG-COMP
‘it was very painful for me’ (S. Andersen 1995a:51)<sup>160</sup>

mobea-ku-o co’o
heavy-1SG-3SG 2SG
‘you are heavy for me’ (S. Andersen 1995a:46)

mohali-mami-o [m]o-gau tomonene
heavy-1SG-3SG PART:ANTIPASS-speak Moronene
‘it is hard for us to speak Moronene’ (S. Andersen 1995b:18)<sup>161</sup>

moico-no-o
good-3SG-3SG
‘he likes it (lit., it’s good according to him)’ (S. Andersen 1995b:16)

Although I include these examples under the general heading ‘genitive subject’, it remains to be seen whether there is any sense in which the referents indexed by genitive pronoun in these cases could be termed true subjects. Apparently related to the above use of genitive pronouns, there are also a small number of stative predicates in both Tolaki and Moronene which take marking for their subject only in the genitive. These include in Tolaki moko’uo ‘thirsty’, mokome’aro ‘hungry’,<sup>162</sup> mokombo’iso ‘sleepy’, mo’ehe’ehe ‘glad’, mosa’iune ‘angry’,<sup>163</sup> and in Moronene mehawa ‘glad, like’, po’ehe ‘like’ and mokea ‘wish’ (S. Andersen 1995b:19 ff.).

Whether this use of genitive agreement marking is to be ascribed to PBT remains an open question, though there is some indication this pattern is also to be found in Mori Bawah. For example, when Esser gives maka’ali ‘impressive, imposing’, then following it

<sup>160</sup>Compare mopoe-’o karu-ku /painful-3SG foot-1SG/ ‘my foot is painful’ (S. Andersen 1995a:45)

<sup>161</sup>Compare:

MRN mohali-o mo-’urusu ana-’ete da sa-i ehe te’urusu
difficult-3SG PART:ANTIPASS-arrange child-small REL NEG-3SG want arranged
‘it is difficult to mind a child who does not want to be minded’ (S. Andersen 1995b:18)

<sup>162</sup>Compare pe’aro ‘be hungry’ which can occur with either a nominative subject, ku-pe’aro /1SG-hungry/, or an absolutive subject, [m]e’aro-aku-to /PART:hunger-1SG-COMP/.

<sup>163</sup>From mosa’a ‘ugly, bad’ plus une ‘insides, interior’.
maka’ali-ku ‘I was impressed, timid, surprised, at a loss, etc.’ (1933:339) (my translation). This suggests an underlying, or at least an historical meaning of ‘it was impressive, imposing relative to me’.

7.4 Nominative pronouns as subject agreement markers

At this point I leave genitive pronouns, and turn to nominative pronouns. Across Bungku-Tolaki languages, a nominative subject agreement marker is required following the consecutive linker ka- and certain other conjunctions, in negative contexts, and in imperatives—in other words, these are contexts which might be said to ‘trigger’ the occurrence of a nominative agreement marker. Nominative agreement markers are used in other contexts as well, but beyond these three contexts BT languages differ on specifics. The verb following a nominative agreement marker is a primary form.

Table 55 below sets forth the nominative pronouns which have been reconstructed for Proto–Bungku-Tolaki, along with their reflexes in five selected languages. For further information concerning the form of these pronouns, see § 4.2.

<table>
<thead>
<tr>
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<td>do</td>
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</tr>
</tbody>
</table>

Table 55. Nominative pronouns in selected Bungku-Tolaki languages

7.4.1 Nominative subjects following various conjunctions

The common Bungku-Tolaki consecutive linker ka ‘as a result, so that, and’—in Tolaki a via consonant loss (see § 4.2c)—is a prime example of a particle which both
requires a nominative subject agreement marker, and which attracts that agreement marker
to itself as an enclitic. The semantics of ka varies. In some contexts it expresses a causal
relationship between two events; in other cases it is probably best treated as simply
indicating temporal progression. Consecutive clauses have no inherent tense or mood;
rather this also is determined from context.

TOL (632) Lako-no-to ona w[Ø]ee-i-kee pasapu-no,
go-3SG-COMP EMPH PART:give-3SG-BEN:3SG headcloth-3SG
a-no petandapuo-'i, a-ro lako i laika-no...
and-3SG tie.on-3SG and-3PL go to house-3SG

‘Then he gave his headcloth to her, and she tied it on, then they went to
his house…’

(633) Oheo, tema-'i-to ona ana-mu
Oheo carry.at.chest-3SG-COMP EMPH child-2SG
moro-mororo, a-u leu [m]ereurehu i
REDP-strong and-2SG come PART:sit at
pu'u n-dawa-nggu, a-u pekopu mope-mopee
base LKR-leaf-1SG and-2SG clasp REDP-tight

‘Oheo, hold your child very tightly to your chest, come and sit at the
base of my leaves, and clutch very tightly’ (words spoken by the rattan)

PAD (634) o-to [m]ewangu io ine-no
3SG.FUT-COMP PART:arise ART mother-3SG
ka-no po-nahu
and-3SG ANTIPASS-cook

‘his mother wakes up to cook’ (Vuorinen 1995:109)

MRB (635) po-tswu-aku, ka-ku po-wee-ko pakuli
CAUS-live-1SG and-1SG ANTIPASS-give-2SG medicine
[m]elerere ka-i hadio koa pae-mu
PART:have.garden and-3SG many just field.rice-2SG

‘let me live, and I will give you the magic spells for agriculture, so that
your rice will be abundant’ (Esser 1927:172)
KUL (636)  

ah, ari-no ndo-lingka-mo, ka-i cuka-cukana-'inda
ah finish-3SG 3PL-set.off-COMP and-3SG REDP-ask-3PL

Bintausu

Bintausu

‘ah, after that, they set off, then Bintausu put questions to them’

MRN (637)  

da-hoo me’asa tempo, ka-i pewangu koie ntei
be-3SG one time and-3SG arise that owner
dara nta lako hai womua da mentala...
horse FUT go to region REL far

‘once the owner of the horse got up to go to a far place...’
(S. Andersen 1995a:30)

(638)  

ka-u robusi-o, ka-i mowua
and-2SG weed-3SG and-3SG clean

‘you weed it until it is clean’ (S. Andersen 1995a:29)

The resultative force of the consecutive linker is seen in that it appears in sentences which ask ‘why?’:

TOL (639)  

mbaako-e-to ona kapala a-no telalo
do.what-3SG-COMP EMPH head and-3SG passed.by

s/[in]oda ingoni?
PASS:bear near.present

‘what is it with the village head apparently, that he was just now carried past here?’ (Gouweloos 1933:26)

(640)  

mbaako-’i a-u ta ehe lako sikola?
mbaako-what and-2SG NEG want go school

‘why is it that you don’t want to go to school?’
(Muthalib, Alimuddin, Pattiasina, et al. 1985:89)

PAD (641)  

ba-mbio kee ka-i pe’iwi?
INTERROG-what INTERROG and-2PL cry

‘why are you crying?’ (Vuorinen 1995:109)

MRB (642)  

kanaumpe ka na-hu po-wawa doi?
how and NEG:2SG ANTIPASS-bring money

‘why didn’t you bring any money along?’ (Esser 1927:161)
BNG (643) *mohumpai ka na-i momea pinanga ai?*  
PART:ANTIPASS-do.what and NEG:3SG red betel.nut this  
‘why isn’t this betel-nut chew red?’ (Saro, Rahim, et al. 1982:95)

KUL (644) *hapai ka-i pangka?*  
do.what and-3SG cry  
‘why is he crying?’ (lit. ‘what happened so that he is crying?’)

MRN (645) *hapa, kia, ka-u daa [m]oka-iince?*  
what friend and-2SG be PART:repeat-hop  
‘Friend, why do you keep hopping?’ (S. Andersen 1995b:65)

Another conjunction of wide occurrence, which likewise requires a subject agreement marker in the nominative, is *ke* ‘if’ (in Moronene ki).  
164 For example:

TOL (646) *ambo-no-po [m]esangginaa ke-no po-sua*  
later-3SG-COMP PART:marry if-3SG ANTIPASS-find  
o more hende Imba momaehe-no  
PN female like Imba beautiful-3SG  
‘later he would marry, if he found a woman like Imba in beauty’  
(Sande, Sikki, et al. 1986:88)

BNG (647) *ke-i hopa dahu le faso-no, lonso*  
if-3SG bark dog at above-3SG jump  
le pada-no  
to below-3SG  
‘if dogs bark from above, jump to below’ (Saro, Rahim, et al. 1982:94)

KUL (648) *ke-to pemeke, ke-to o’ai, i-cuculu-kita*  
if-1PL cough if-1PL shout 3SG-echo-1PL.COLL  
ng[in]ea-hako jini-hako a’iso  
PASS:name-INSTR jinn-COLL that  
‘if we coughed, if we shouted, those ones called jinns would echo us people’

164 I have no clear examples of *ke* used in the Mori area as a conjunction introducing conditional clauses; it appears to be used here instead as clause level particle which indicates (specifically, questions) possibility. For example:

MRB *p[IN]aho-mu-no ke pae arau*  
PASS:plant-2SG-COMP INTERROG field.rice that  
‘is that rice what was planted by you?’ (Esser 1933:352)
MRN  (649) \[\text{\textit{ki-u}} \quad \text{\textit{daa}} \quad \text{\textit{nta}} \quad \text{\textit{[m]o-bero}} \quad \text{\textit{labu}}\]
\[\text{if-2SG} \quad \text{be} \quad \text{FUT} \quad \text{PART:ANTIPASS-pour} \quad \text{flour}\]

\[\text{\textit{osie}} \quad \text{\textit{[m]o-bero-'ako}} \quad \text{\textit{e'e}} \quad \text{\textit{ng-[k]injula}}\]
\[\text{NEG.IMPV} \quad \text{PART:ANTIPASS-pour-INSTR} \quad \text{water} \quad \text{LKR-PASS:heat}\]

'if you are going to pour water on flour, don’t use boiled water'  
(S. Andersen 1995a:32)

For a listing of other conjunctive elements which attract a nominative agreement marker, see further § 4.2a.

7.4.2 Nominative subjects in negated clauses

A negative marker usually precedes any verb of the clause. When a negative is present, the subject is marked by a nominative pronoun. With some particles the agreement marker is attracted to the negative marker itself (enclitic position), but with others it attaches directly to the following verb (proclitic position). Negation is not easily treated in Bungku-Tolaki languages—compare for example the complicated situations described for both the Mori area (Esser 1933:205–214, 246–258) and Moronene (S. Andersen 1994b)—therefore the following data are only cursory.

TOL  (650) \[\text{\textit{ta-u}} \quad \text{\textit{onggo}} \quad \text{\textit{[m]okowowai-'i-kona}}\]
\[\text{NEG-2SG} \quad \text{FUT} \quad \text{PART:able.to.do-3SG-BEN:1SG}\]

’you will not be able to do it for me’

(651) \[\text{\textit{ni'ino}} \quad \text{\textit{bee-nggu}} \quad \text{\textit{kioki}} \quad \text{\textit{no-penggena}} \quad \text{\textit{bee-mu}}\]
\[\text{this} \quad \text{goat-1SG} \quad \text{NEG} \quad \text{3SG-resemble} \quad \text{goat-2SG}\]

‘this goat of mine is not like your goat’

PAD  (652) \[\text{\textit{la-u}} \quad \text{\textit{huru}} \quad \text{\textit{kee}} \quad \text{\textit{l/[um]/eko}} \quad \text{\textit{ndi}} \quad \text{\textit{dotoro}}\]
\[\text{NEG-2SG} \quad \text{ever} \quad \text{INTERROG} \quad \text{PART:go to} \quad \text{doctor}\]

‘have you not gone to a doctor?’ (Vuorinen 1995:109)

MRB  (653) \[\text{\textit{nami}}^{165} \quad \text{\textit{do-men-tuwu}}\]
\[\text{NEG:COMP} \quad \text{3PL-PLS-live}\]

‘they are no longer living’ (Esser 1933:253)

---

165 The form nami is from na + mo + i, respectively negative marker, completive marker, and (frozen) third person singular nominative pronoun (Esser 1933:252).
7.4.3 Nominative subjects in imperative mood

An imperative sentence may occur without any subject marker, the one or ones commanded being understood from context. A verb used imperatively occurs in its primary form, even if it is non-initial in a verb chain. For example:

TOL (660) ...mano iamo-kaa ndee penohonoho maa-maatu
        but NEG.IMPV-just habitual regret later
     ‘...but don’t you go around regretting (things) later’

MRB (661) lako-mo po’ia ira’ai
go-COMP reside there
‘go stay there’ (Esser 1933:206)

MRN (662) leu-mo onto-o diie adalo
come-COMP see-3SG this child
‘come and look at this boy’ (S. Andersen 1995b:51)
When the subject is referred to overtly, however, the agreement marker is a nominative pronoun. Compare the following (formally the imperative includes the hortative):

TOL (663)  i-pewiso-to ona i une baki landaka!
2PL-enter-COMP EMPH at inside sago.filter.basket --
you two get into the basket!

(664)  iamo i Oeoe no-tekoni pe’eka
NEG.IMPV PN Oeoe 3SG-suddenly ascend
‘Ooeoe is not to come up right away’

MRB (665)  lako-mo i-po’ia ira’ai
go-COMP 2PL-stay there
‘You two go stay there!’ (Esser 1933:206)166

(666)  si to-me-lako
NEG.IMPV 1PLN-PLS-go
‘Let’s go’ (Esser 1933:209)

KUL (667)  mi-leu-mo, to-pong-kaa’-ako
2PL-come-COMP 1PL-ANTIPASS-eat-MODAL
‘come on, we’re about to eat!’

MRN (668)  to-tepo-singka-mo isala...
1PLN-RECIPE-separate-COMP  first
‘let’s go our separate ways first…’ (S. Andersen 1995a:39)

(669)  hia u-pom-panga-mo
please 2SG-ANTIPASS-chew.betel-COMP
‘please have some betel nut’ (S. Andersen 1995a:40)

The converse—that a clause with a nominative subject marker on the verb must be an imperative—is decidedly untrue. One could say for example:

KUL (670)  to-pesala i wiia
1PL-travel at earth

either as a cohortative ‘let’s go by land’ or alternatively as a description offered to oneself or to someone else: ‘we’re going by land’.

166 Also i-lako-mo [mo’ia ira’ai] 2PL-go-COMP PART:live there/ in the same meaning (Esser 1933:206),
thus with the second verb mo’ia occurring in its participle form.
7.4.4 Nominative subjects in other contexts

In order to ascertain how well the contexts described above might 'account' for the use of nominative subject agreement markers, I have tabulated the instances of nominative pronouns from the five Mori Bawah texts recorded in Van Eelen and Ritsema (1918–1919). The results are shown in Table 56. The first column gives figures for non-transitive verbs, that is, verbs not followed by an object (or benefactive) marker and which thus could potentially be cross-referenced for their subject with an absolutive or genitive agreement marker. The second column lists the figures for transitive verbs, that is, verbs which were followed by an object (or benefactive) agreement marker. As can be seen, out of 172 total occurrences of nominative subject agreement markers, the three contexts outlined above account for roughly two-thirds of all occurrences.

<table>
<thead>
<tr>
<th></th>
<th>INTRANSITIVE</th>
<th>TRANSITIVE</th>
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<td>5</td>
</tr>
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<td>0</td>
</tr>
<tr>
<td>other</td>
<td>20</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 56. Occurrences of nominative subject markers in Mori Bawah by context

Of the twenty instances of nominative marking on non-transitive verbs, the following additional comments can be made.

One context where nominative agreement marking is called for (six examples) appears to be when the action is specifically marked as durative or habitual, for example:

MRB (671)  *Tehe-tehine*  *do-pekombia*  *(m)e 'ana-ira-mo...*
REDP-long.time 3PL-have.spouse PART:have.child-3PL-COMP
'They had been married a very long time, then they had a child...'
(Van Eelen & Ritsema 1918–1919:312)
In four other cases, an intransitive verb with nominative agreement marking follows *borono* ‘then’, for example:

MRB (673)  *Borono do-m-pentoa meng-kadudui-o wali-do.*
then 3PL-PLS-spring.down PLS-assist-3SG companion-3SG
‘Then they sprang down to assist their companion.’
(Van Eelen & Ritsema 1918–1919:325)

These occurrences represent the spread of nominative agreement marking into contexts where traditionally genitive agreement marking was required (Esser 1927:102). Consider, for example, the following two sentences. Example (674a) reflects the older pattern, with genitive agreement; but in (674b) the third singular genitive pronoun -no has come to serve as a fixed constituent of *mansano*, with the following verb taking nominative agreement marking (Esser 1927:102, 1933:276–277, 412):

MRB (674) a. *mansa-do h[um]awe-o, do-rako-o*  
as.soon.as-3PL.GEN PART:encounter-3SG 3PL-catch-3SG
‘as soon as they found him, they grabbed him’

b. *mansano do-hawe-o, do-rako-o*  
as.soon.as 3PL.NOM-encounter-3SG 3PL-catch-3SG
‘as soon as they found him, they grabbed him’

The same two patterns are also found with *boro* ‘then’, as well as certain other stems. The effect of this development is to turn a verb with grammaticalized meaning into a full-fledged conjunction, i.e. a clause-introducing particle which no longer takes agreement marking (Esser 1927:102).

MRB (675) a. *boro-mami m-polai*  
then-1PLX.GEN PLS-flee
‘then we fled’
b. *borono**  **ki-m-polai**
   then  **1PLX.NOM-PLS-flee**
   ‘then we fled’

Finally, in eight other cases, a nominative subject agreement marker occurs preceding
*pota* ‘say’ when introducing quoted material. This use of nominative agreement marking
appears to be formulaic. For example:

**MRB (676)**

**Do-m-potae,**  **“Opia ke, Nggasi, oli-no?”**

**3PL-PLS-say how.much INTERROG Tarsier buy-3SG**

‘They said, “How much, Tarsier, is the price?”’

(Van Eelen & Ritsema 1918–1919:287)

With a high degree of reliability, we can therefore predict in Mori Bawah the contexts
in which a nominative agreement marker will occur, at least on non-transitive verbs,
namely: following *ka* ‘and, so that’; following a negative; in imperative clauses; when the
clause is specifically marked as durative; following certain conjunctions with frozen -no
such as *mansano* ‘as soon as’ and *borono* ‘then’; and with the verb *pota* ‘say’ when
introducing quoted material. Only the following two examples from Van Eelen and
Ritsema’s texts remain unaccounted for under any of the above conditions:

**MRB (677)**

**Pohona do-lako [m]om-paho punti, i Bange**

**once 3PL-go PART:ANTIPASS-plant banana PN Ape**

**ka i Re’a.**

and PN Tortoise

‘Once, the Ape and the Tortoise went to plant bananas.’

(Van Eelen & Ritsema 1918–1919:276)

(678)  

...**ka-do-lako, do-hawe-mo keu langkai.**

and-3Pl-go **3PL-arrive-COMP tree big**

‘...and they went, and they came to a big tree.’

(Van Eelen & Ritsema 1918–1919:289)

As one might suspect, transitive verbs are a different matter. With a transitive verb, there
are only two ways of marking its subject in Mori Bawah, either with a nominative pronoun
or with one of the future pronouns described below. (Placing the transitive verb in a verb
chain where it is preceded by an intransitive verb could be thought of as a third strategy, which avoids subject marking on the transitive verb altogether.) In fact, twenty-seven out of eighty-five transitive verbs—roughly three out of every ten—occurred in contexts such as the following, without any of the 'triggers' outlined above for its occurrence:

MRB (679) a. *Ndii-ira me-rolai, i-booli-ira-mo i Re'a,*
here-3PL PLS-far 3SG-call-3PL-COMP PN Tortoise

"do-meng-kaa-no-mo tawuku-ro wali-do!"
1PLN-PLS-eat-3SG-COMP bone-3PL companion-1PLN

'When they had gone so far, Tortoise called out to them, "You ate your companions' bones!"' (Van Eelen & Ritsema 1918–1919:213)

(680) *Do-me-dontai-o-mo a uwoi, [m]engingisi-o-mo...
3PL-PLS-drop-3SG-COMP into water PART:laugh-3SG-COMP

'They dropped her into the water, and she laughed…'
(Van Eelen & Ritsema 1918–1919:214)

Moving on to Tolaki, in this language nominative agreement marking is characteristic of clauses in which there is specific indication that the action occurred over a period of time.

TOL (681) *Opitu o wingi opitu oleo no-tudu o usa.*
seven ART night seven day 3SG-descend ART rain

'For seven nights and seven days the rain fell.'
(Sande, Sikki, et al. 1986:89)

Nominative agreement marking is also characteristic of certain complement clauses, particularly ones which encode indirect speech or cognition:167

167Complement clauses may also lack subject agreement marking, as for example:

TOL

*maa ehe-‘i-to ona oleo nggo k[um]aa-iro ano-‘ako-no*
then want-3SG-COMP EMPH sun FUT PART:eat-3PL child-PL-3SG

'then the sun wanted to go eat her children'

... *ano tekoni [m]oedea-iro mbe-moharo*
and-3SG suddenly PART:hear-3PL PLS-noisy

'...and suddenly he heard them being noisy'
TOL (682)  ...a-ro  pe-sambepe  ro-onggo  [m]olakolako
        and-3PL  MM-discuss  3PL-FUT  PART:travel
     i  tahi  [m]e 'oti'oti
    to sea  PART:hunt.at.low.tide
‘and they discussed they would travel to the sea to hunt at low tide’

(683)  Lako-no-to  i  Oheo  s[um]aru-'i-kee  ieto
     go-3SG-COMP  PN  Oheo  PART:tell-3SG-BEN:3SG  that.is
    no-laal  t[in]ena  r[um]uru-mbendua-'i  o  wine...
   3SG-be  PASS:order  PART:collect-again-3SG  ART  unhulled.paddy
‘then Oheo explained it to him that he was under orders to collect the
unhulled paddy again...’

(684)  no-kii-'i  no-teko'iso-to  aa  Laasolo...
  3SG-see-3SG  3SG-fall.asleep-COMP  river  Lasolo
‘he saw that Lasolo had fallen asleep...’\footnote{Possibly to be interpreted instead as juxtaposition, ‘he saw him; Lasolo had fallen asleep...’}

In Tolaki some instances of nominative subject agreement marking are found at the
beginning of texts, where the scene is being established. Conceivably, this could also be
the explanation of the nominative agreement marking noted above in the Mori Bawah
clause of (677); however, I do not have sufficient examples to establish this as a clear
pattern in Mori Bawah.

TOL (685) a.  Iso'iso,  ro-po'ia  aala=no  Konawe'eha  a-no
     long.ago  3PL-live  river-3SG  Konaweha  and-3SG
    aala=a-no  Lasolo,  hende-hende  [m]eohai-ro
      river-3SG  Lasolo  REDP-same  PART:besiblings-3PL
‘Long ago, there lived the Konaweha and Lasolo rivers, they were like
siblings’

b.  No-tebu'a  mata  iwoi-ro  o'aso-ikaa  o  beko.
  3SG-appear  eye  water-3PL  one-precisely  ART  source
‘Their (respective) springs emerged from one source of water’
Nevertheless, in texts there remain a small number of intransitives, and a larger number of transitive verbs, which take nominative subject agreement marking and which are not explained under any of the above circumstances. For example:

TOL (687) no-kii-’i-to sarungga-no laa mewiso i 3SG-see-3SG-COMP sheath-3SG be entered at
aa ng-gowuna inside LKR-k.o.bamboo

‘she saw her sheath which was entered inside a bamboo’

I have less information about the use of nominative pronouns in Padoe and Moronene, but both Vuorinen (1995:108) and S. Andersen (1995a:35) mention a connection between a fronted constituent and nominative subject agreement. Some of their examples include:

PAD (688) hiewi ku-nahu-o inehu la’a yesterday 1SG-cook-3SG vegetables that

‘YESTERDAY I cooked those vegetables’ (Vuorinen 1995:108)

(689) ai pamatu la’a ku-po-nahu inehu in wok.pan that 1SG-ANTIPASS-cook vegetables

‘IN THAT WOK PAN I cook vegetables’ (Vuorinen 1995:108)

(690) inderio ro-poturi ana-ana la’a where 3PL-sleep REDP-child that

‘WHERE will those children sleep?’ (Vuorinen 1995:109)

MRN (691) opia-mo wotiti ndo-pe-’u-’ungke how.many-COMP month 3PL-MM-REDP-seek

‘for already a few months they have searched’ (S. Andersen 1995a:36)

(692) koie adalo ku-tena-’o daitako die gambara koraa that child 1SG-order-3SG stick this picture there

‘I ordered that child to stick the pictures over there’
(S. Andersen 1995a:37)
If this connection can be established, then it is a decidedly different pattern than in Tolaki. As noted above, in Tolaki fronted temporal constituents which specifically mark an action as durative as in example (681) are consistently followed by a verb with nominative subject agreement, but otherwise subject marking appears to depend on other contextual factors. For example, a fronted constituent may be followed by a verb with genitive subject agreement as in (693), alternatively with absolutive subject agreement as in (694):

TOL (693) *iko*hoalu oléo sa-*butu*-no laa lolosó oléo, eighth day when-just-3SG be come.out sun

*lako-no-to* tesolo o beli hende-kaa iwoi...
go-3SG-COMP flow ART blood like-just water

‘on the eighth day just as the sun was rising, the blood poured forth just like water…’ (Sande, Sikki, et al. 1986:88)

(694) *i* tado horo-ro loso-‘i-to mata iwoi...
at under floor-3SG come.out-3SG-COMP eye water

‘underneath the floor, there emerged a spring of water…’
(Sande, Sikki, et al. 1986:89)

Even in Padoe and Moronene nominative pronouns may occur without any preceding constituent, therefore some other factor must be governing their occurrence in this context:

PAD (695) *ro*-m-potaе *humbee*
3PL-PLS-say yes
‘they said "yes"’ (Vuorinen 1995:115)

MRN (696) *ko-leu* *boboi-komiu*
1PLX-come call-2PL
‘we come to call upon you’ (S. Andersen 1995a:38)

The question of which other contexts call for nominative agreement marking is irrelevant for Kulisu. In this language, a subject can be indexed with only either a genitive pronoun (in subordinate temporal clauses as described above), or with a nominative pronoun. In Kulisu, nominative agreement markers have clearly developed into the unmarked set.
7.5 Future pronouns as subject agreement markers

Future forms are known to occur only in Padoe, Mori Atas, Mori Bawah and Bungku. The forms which these pronouns take are shown in Table 57 (Vuorinen 1995:104; Esser 1927:95, 119, 122–123). When a future pronoun is used, it is followed by a participle form of the verb.

<table>
<thead>
<tr>
<th>PBT</th>
<th>Padoe</th>
<th>Mori Atas</th>
<th>Mori Bawah</th>
</tr>
</thead>
<tbody>
<tr>
<td>*aku</td>
<td>*aku</td>
<td>*aku</td>
<td>*(a)ku</td>
</tr>
<tr>
<td>*ko</td>
<td>*iko</td>
<td>*(i)ko</td>
<td>*(i)ko</td>
</tr>
<tr>
<td>*io</td>
<td>*lo’o, ono¹⁷⁰</td>
<td>*olo, ino¹⁷¹</td>
<td>*(i)ta</td>
</tr>
<tr>
<td>*kami</td>
<td>*kami</td>
<td>*kami</td>
<td>*(i)kami</td>
</tr>
<tr>
<td>*kita</td>
<td>*kito</td>
<td>*kito</td>
<td>*kita</td>
</tr>
<tr>
<td>*komiu</td>
<td>*komiu</td>
<td>*(i)komiu</td>
<td>*(i)komiu</td>
</tr>
<tr>
<td>*ira</td>
<td>*lo’iro, iro</td>
<td>*iro</td>
<td>*iro</td>
</tr>
</tbody>
</table>

Table 57. Future pronouns in selected Bungku-Tolaki languages

Future pronouns may indicate future with respect to the present, that is, at the time of being uttered, for example:

---

¹⁶⁹ The known Bungku forms are *aku ‘1SG’, *ira ‘3PL’, and possibly *ta ‘3SG’; the complete paradigm is unknown.

¹⁷⁰ In Padoe future pronouns may be suffixed with the aspectual marker -to to indicate that the action is already underway, but not yet completed (present continuous), or with -po to indicate that the action is merely contemplated or hypothetical (future conditional) (Vuorinen 1995:103), as in respectively:

**PAD**

<table>
<thead>
<tr>
<th>lo’o-to</th>
<th>[m]o-nahu</th>
<th>ine-hu</th>
</tr>
</thead>
<tbody>
<tr>
<td>3SG:FUT-COMP PART:ANTIPASS-cook vegetables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘she is cooking vegetables’ (Vuorinen 1995:103)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aku-po</th>
<th>[l]umjeko</th>
<th>ai</th>
<th>Tomata</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG:FUT-INCOMP PART:go to Tomata</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘(later) if I go to Tomata’ (Vuorinen 1995:103)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The forms *ono-to, *ono-po however are never encountered, only o-to and o-po.

¹⁷¹ The form *olo is standard; Esser regarded *ino, found only in the Molio’a dialect, to be an analogical formation, i.e. ro:no::iro:ino (1933:202).
They may also indicate future relatively, that is with respect to some other event. In the following examples, taken from narrative, the future is with respect to the story time established up to that moment. Clauses with future pronouns often encode intention or purpose, as in examples (701) through (705). However this is not a necessary implication; compare example (706):

MRB (697)  
Po'ia'ia-mo  indi'ai,  aku-po  t[um]alo'i-ko.  
stay-COMP here  1SG.FUT-INCOMP PART:protect-2SG  
'Stay here, I will still defend you (even though others are unwilling)'  
(Esser 1933:219)

MRA (698)  
Hoio,  kami  koa  m-po-'oli.  
certainly  1PLX.FUT just  PLS-ANTIPASS-buy  
'Sure, we’ll buy some.'  (Van Eelen & Ritsema 1918–1919:289)

PAD (699)  
Lo'iro  [m]o-nahu  inehu  
3PL.FUT PART:ANTIPASSIVE-cook vegetables  
'They will cook vegetables'  (Vuorinen 1995:103)

BNG (700)  
maupo  na-ku  tesende,  aku  l[um]elengai-o  
although NEG-1SG climbable  1SG.FUT PART:try-3SG

[m]on-sende.  
PART:ANTIPASS-climb  
'even though I cannot climb, I will try to climb'  
(Saro, Rahim, et al. 1982:94)

MRB (701)  
onae-mo  ka  do-me-lulu-o  i  Tanggasi,  
3SG-COMP and  3PL-PLS-chase-3SG PN Tarsier  
ira  m-pepate-o  
3PL.FUT  PLS-kill-3SG  
'thereupon they chased Tarsier, they were going to kill him'  
(Esser 1933:201)

(702)  
borono  i-pe-kule  ta  l[um]ako  [m]onga'e  
then  3SG-MM-return  3SG.FUT PART:go PART:head.hunt

i  inia  susua  
at village different  
'then he returned, he was going to go head hunting in some other village'  (Van Eelen & Ritsema 1918–1919:325)
(703) umari-do m-pebaku, ira m-po-mama, finish-3PL PLS-have.provisions 3PL.FUT PLS-ANTIPASS-chew
na-hina ensea NEG-exist lime
‘when they had finished partaking of their provisions, they were going to chew (betel-nut), but there was no lime’ (Van Eelen & Ritsema 1918–1919:213)

(704) borono i-hawe, [m]epau-ako-'ira then 3SG-come PART:speak-COMM-3PL ta 3SG.FUT
k[um]ombia-'ira PART:marry-3PL
‘then he arrived, and they discussed that he was going to marry them’ (Van Eelen & Ritsema 1918–1919:325)

BNG (705) ...ka-ndo ala-o r[um]ako-o Kolupuha and-3PL fetch-3SG PART:seize-3SG Tortoise
ira [m]epate-o 3PL.FUT PART:kill-3SG
‘they took and seized the Tortoise, they were going to kill her’ (Saro, Rahim, et al. 1982:94)

MRB (706) m-po'unde-'ira-mo bange nde ta-mo PLS-rejoice-3PL-COMP ape because 3SG.FUT-COMP
mate i Re'a die PN Tortoise
‘the apes rejoiced, because Tortoise was going to die’ (Van Eelen & Ritsema 1918–1919:278)

In Mori Bawah future pronouns also occur in the apodosis of counterfactual conditional sentences:¹⁷²

¹⁷²Whether future pronouns are required in this context, I have not been able to ascertain from Esser’s writings on Mori. Compare the following hypothetical conditional sentence, where no future pronoun occurs:

MRB mate-ko-mo isa'a ba ku-bongo-ko die-2SG-COMP actually if 1SG-thrash-2SG
‘you would actually die if I beat you’ (Esser 1933:200)
MRB (707)  
\[ ba\ ongkue\ atuu\ h[um]awe-o,\ aku\  
\text{if}\ 1SG\ \text{that}\ \text{PART:encounter-3SG}\ 1SG.FUT\  
\text{um-ala-o}\ \text{lulu}\  
\text{PART-take-3SG} \text{all}\  
\text{‘if I had been the one that found them (instead of you), I would have taken them all’} \text{ (Esser 1933:201)}\]

The above examples illustrate future pronouns in main clauses. Future pronouns may also occur in relative clauses, even though subject agreement markers are not otherwise found in this context (see § 8.1):

MRB (708)  
\[ napi\ do-me-hawe\ mia\ \text{ira}\ me-’aiwa\  
\text{NEG.INCOMP} 3PL-PLS-arrive\ \text{person} 3PL.FUT\ PLS-come\  
\text{‘the people who are to come haven’t yet arrived’} \text{ (Esser 1933:201)}\]

(709)  
\[ onae-mo\ amu\ ta\ k[in]aa-ku\  
\text{3SG-COMP} \text{REL} 3SG.FUT\ \text{PASS:eat-1SG}\  
\text{‘he is the one who shall be eaten by me’} \text{ (Esser 1927:165)}\]

MRA (710)  
\[ mia\ henu\ \text{iro}\ me-leko\ men-tamu-’o\ na\ n-suai…\  
\text{person} \text{REL} 3PL.FUT\ PLS-go\ PLS-bury-3SG\ ART\ LKR-cucumber\  
\text{‘the people who were to bury the cucumber…’} \text{ (Esser 1933:201)}\]

In the following example, a future marker is found in a temporal subordinate clause, alongside the expected genitive subject marker:

MRB (711)  
\[ mansa-do\ \text{ira}\ m-pon-siwu…\  
\text{as.soon.as-3PLGEN} 3PL.FUT\ PLS-ANTIPASS-make.sago.of\  
\text{‘when they were going to make sago…’} \text{ (Esser 1933:201)}\]

In standard Mori Bawah, future pronouns may be used in place of the nominative pronouns in contexts where nominative agreement marking is otherwise required, e.g. following the consecutive linker \textit{ka-} or a negative particle; compare the following with examples (635) and (653) above:
MRB (712) umari me-wewe-akane koro-no ka aku
finish PLS-do-BEN:1SG body-3SG and 1SG.FUT

[m]epate-komiu?
PART:kill-2PL

‘having finished doing my body for me (armoring it), consequently I will kill you all?’ (Van Eelen & Ritsema 1918–1919:325)

(713) onae-mo pu’u-no ka ta l[um]ako
3SG-COMP base-3SG and 3SG.FUT PART:go
‘that’s the reason that he shall go’ (Esser 1927:173)

(714) nahi kita m-pokompe ‘iwali-ako-ira
NEG 1PLN.FUT PLS-able.to.wage.war-BEN-3PL
‘we will not be able to wage war against them’ (Esser 1927:186)

(715) nahi komiu me-’oli-o baru-ku alou?
NEG 2PL.FUT PLS-buy-3SG palm.wine-1SG that.down
‘you all will not buy that palm wine of mine down there?’
(Van Eelen & Ritsema 1918–1919:288)

Likewise, in Mori Atas a future pronoun usually supplants nominative marking following the consecutive linker ka-:

MRA (716) ...ka olo l[um]eko
and 3SG.FUT PART:go
‘...so that, and he goes’ (Esser 1933:203)

However, unlike in standard Mori Bawah, future pronouns are not used in negative future contexts. Instead in both Mori Atas and the Watu dialect of Mori Bawah the negative particle is followed by a nominative pronoun, which is further followed by the future marker lo:174

---

173This is a rhetorical question which expects a negative answer; see also example (715).

174Outside of negative contexts, the future particle lo is also used to express hypotheticality, for example to-lo [m]elere /[PLN-FUT PART:cultivate.dry.field/ ‘if, supposing that we cultivate a dry rice field, whenever one cultivates a dry field...’ (Esser 1933:202).

The nominative pronoun and lo may also occur in reversed order, e.g. ka u-lo haweako /NEG 2SG-FUT approach/ ‘you shall not approach’, also ka lu (< lo + u) haweako ‘id.’ (Esser 1933:202). One also encounters in Mori Atas the pattern negative particle, followed by frozen third person singular nominative pronoun no, followed by a future pronoun:
MRA (717)  
\[ ka-i \] lo \( l[um]eko \)  
NEG-2PL FUT PART:go  
‘you (two) will not go’  (Esser 1933:202)

MRB (718)  
\[ a-mo \ ro-lo \ men-tuwu \]  
NEG-COMP 3PL-FUT PLS-live  
(Watu dialect)  
‘they shall no longer live’  (Esser 1933:202)

In Padoe, the future marker is \( olo \), but otherwise the structure is the same:

PAD (719)  
\[ la-ku \ olo \ [m]ong-gaa \]  
NEG-1SG FUT PART:ANTIPASS-eat  
‘I will not eat’  (Esser 1933:203)

(720)  
\[ la-no \ olo \ [m]um]eko \]  
NEG-3SG FUT PART:go  
‘he will not go’  (Esser 1933:203)

Also in the Karunsie’ dialect of Mori Bawah, a nominative pronoun is used in negative future contexts; as in Padoe the future marker is \( olo \), but the negative particle follows:

MRB (721)  
\[ ku-'olo \ leu \ [m]ong-gaa \]  
1SG-FUT NEG PART:ANTIPASS-eat  
(Karunsie’ dialect)  
‘I will not eat’  (Esser 1933:203)

In Tolaki, Kulisu and Moronene, there is no pronoun set dedicated to marking futurity. Instead, these languages employ future markers, respectively \( onggo \) (nggo, nggoo), \( bo \) (be), and \( nta \). Compare the following with examples (701) through (706) above.

MRA  
\[ ka-no \ iko \ l[um]ako \]  
NEG-3SG 2SG-FUT PART:go  
‘you will not go’  (Esser 1933:202)

Compare also the following example from Mori Atas (Malongkuni dialect), where the same pattern is found with the consecutive linker \( ka- \):

MRA  
\[ tembio \ ka-no \ iko \ k[um]ansai-'aku? \]  
why and-3SG 2SG-FUT PART:lanse-1SG  
‘why do you want to spear me with a lance?’  (Esser 1933:201)

\(^{175}\) The Mori Atas negative particle \( ka \) is a shortened form of what appears in other contexts as \( aika \), \( ika \), and \( aka \); it is not to be equated with the homophonous consecutive linker \( ka- \).
TOL (722) sabutu-no laa ene nggo r[um]/ako-‘i...
exactly-3SG be go FUT PART:catch-3SG
‘just as he was going to catch her...’

KUL (723) i-bintani-Ø desa be-i lako k[um]/araja i kota
3SG-leave-3SG village FUT-3SG go PART:work in city
‘he left the village to go work in the city’

MRN (724) ndo-men-tekompulu miano nta mem-pando-o
3PL-PLS-gathered person FUT PLS-spear-3SG
‘people gathered together to spear it’ (S. Andersen 1995a:77)

7.6 Absolutive pronouns as subject agreement markers

Absolutive pronouns have two functions: (a) indexing the subject on antipassive, intransitive, stative, and passive verbs; and (b) indexing the object on fully transitive, active verbs. The position adopted here is that absolutive pronouns were historically the unmarked set for indexing subjects on non-transitive verbs. They are therefore used in contexts which do not call for any of the other pronoun sets.

Although in most Bungku-Tolaki languages it is possible to talk about a single set of absolutive pronouns, in Padoe and reportedly also in the Impo dialect of Mori Atas these two functions have become associated with a difference in form. In Padoe, vowel initial pronoun suffixes which index the object are in some cases preceded by a thematic consonant, either glottal, h or ng; pronouns which index the subject, however, are always attached without any thematic consonant (Vuorinen 1995). In other words, object suffixes occur in four allomorphic sets which are stem determined, but subject markers occur in only one set (Vuorinen 1995:104, 110):
Object markers | Subject markers
---|---
-aku | -aku | 1SG
-ko | -iko | 2SG
-o | -o, -lo'o | 3SG
-kami | -kami | 1PLX
-kito | -kito | 1PLN
-komiu | -komiu | 2PL
-iro | -iro, -lo'iro | 3PL
-nganggu | -nggo | -nggami | -nggito | -nggomiu | -ngiro

Table 58. Differentiation of absolutive pronouns in Padoe

Similarly in the Impo dialect, one finds thematic consonants glottal and ng occurring with object agreement markers, but not with subject agreement markers (Esser 1927:97; 1933:410). These facts suggest that object agreement markers were captured on the verb at an earlier stage of the language than subject agreement markers. On the other hand, one cannot argue from this, as does Van den Berg (1996:108), that the subject marking function of these markers is therefore an innovation in Padoe; this function is of widespread occurrence across Bungku-Tolaki languages, and must clearly be reconstructed for Proto-Bungku-Tolaki.

Despite the terminological difficulties which attend this formal differentiation, as a matter of convenience I continue to refer to the sets shown above in Table 58 collectively as absolutive pronouns. The forms which the absolutive pronouns take—when functioning as subject agreement markers—are presented in Table 59 for the four languages principally investigated below. Although cognate pronouns are also found in Kulisusu, they only have the function of indexing objects;\(^{176}\) consequently in this language they are better considered to be accusative pronouns.

\(^{176}\)The only context known to me where one of these pronouns still functions to mark the subject is following the existential particle daa:

KUL
daad-ho    kinaa    ni-nahu-no
be-3SG      food     PASS-COOK-3SG
'there was some food which had been cooked by him'
Table 59. Absolutive pronouns in selected Bungku-Tolaki languages

<table>
<thead>
<tr>
<th>PBT</th>
<th>Moronene</th>
<th>Mori Bawah</th>
<th>Padoc</th>
<th>Tolaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>*aku</td>
<td>-aku</td>
<td>-'aku</td>
<td>-aku</td>
<td>-'aku</td>
</tr>
<tr>
<td>*ko</td>
<td>-ko</td>
<td>-ko</td>
<td>-iko</td>
<td>-ko</td>
</tr>
<tr>
<td>*io</td>
<td>-o</td>
<td>-o</td>
<td>-o, -lo'o</td>
<td>-'i, -e, -o</td>
</tr>
<tr>
<td>*kami</td>
<td>-kami, -kai</td>
<td>-kami</td>
<td>-kami</td>
<td>-komami</td>
</tr>
<tr>
<td>*kita</td>
<td>-kita</td>
<td>-kita</td>
<td>-kito</td>
<td>-keito</td>
</tr>
<tr>
<td>*komi</td>
<td>-komi</td>
<td>-komi</td>
<td>-komi</td>
<td>-komi</td>
</tr>
<tr>
<td>*ira</td>
<td>-ira</td>
<td>-'ira</td>
<td>-iro, -lo'iro</td>
<td>-'iro</td>
</tr>
</tbody>
</table>

The following sentences illustrate absolutive pronouns used as subject agreement markers. As outlined above, these markers are restricted to non-transitive verbs which are initial in their clause. The verb to which they are attached occurs with <um>, insofar as it is amenable to receiving this affix.

**TOL** (725)

Oheo, pe 'eka kabusa-'i-keito ana-ndo,
Oheo ascend wash.off-3SG-BEN:1PLN child-1PLN
tewuta-'i-to.
defecate-3SG-COMP

'Oheo, come up and wash off our child for us, he has defecated'

(726)

Te 'eni-o-to une-no, "Manasa lakoe-to
say-3SG-COMP inside-3SG clearly go-3SG-COMP
b[Ø]ndani-'aku, nia-kaa-to mina'u peruku-'a-no."
PART:leave-1SG exist-just-COMP down.there pass.by-LOC-3SG

'He said to himself, "Plainly he has gone and left me, down there is the way he went."

**PAD** (727)

hfinjemu-komiu-to kee ai sala
PASS:hit-2PL-COMP INTERROG on road

'were you hit on the road?' (Vuorinen 1995:105)

(728)

[m]e-wuni-iro-to ai te'olo
PART:MM-hide-3PL-COMP in woods

'they hid in the woods' (Vuorinen 1995:106)
MRB (729)  
Mawongko-o-mo  aroa-do  nde
pleased-3SG-COMP  insides-3PL  because
m-po-hawe-ira-mo  kinoa-ndo
PLS-ANTIPASS-encounter-3PL-COMP  food-3PL

‘their hearts became glad, because they had found some food for themselves’ (Esser 1927:98)

(730)  omue  mia  koa  [m]e ‘ana-ako-mu;  ongkue
2SG  person  just  PART:have.child-INSTR-2SG  1SG
tebosi–’aku  a  n-tulambatu
burst.out-1SG  at  LKR-k.o.bamboo

‘you, it was merely a person who gave birth to you; me, I burst out of a bamboo’ (Esser 1927:99)

MRN (731)  ari-aku-mo  [m]on-totapi
finish-1SG-COMP  PART:ANTIPASS-wash
‘I have washed (clothes)’ (S. Andersen 1995a:16)

(732)  nde ‘e  nta  [m]o-’ala-ko?
INTERROG  FUT  PART:ANTIPASS-take-2SG
‘will you not take (it)?’ (S. Andersen 1995a:19)

The position adopted here is that absolutive pronouns are—or at least historically were—the unmarked set for indexing subjects on non-transitive verbs, and consequently are used in contexts which do not call for any of the other pronoun sets. In narrative texts, they typically encode past happenings, reflected by the fact that these pronouns are often followed by the completemarker, in Western languages -to, in Eastern languages -mo. For example, one could naturally say in Tolaki using the absolutive pronoun -aku:

TOL (733) a. ari-aku-to  [m]ong-gaa
finish-1SG.ABS-COMP  PART:ANTIPASS-eat
‘I’ve already eaten’

One could also use the genitive pronoun, -nggu, but this would imply the clause is being used as a subordinate temporal modifier (§ 7.3.1), and thus stands incomplete on its own:

b. ari-nggu  [m]ong-gaa
finish-1SG.GEN  PART:ANTIPASS-eat
‘when I had finished eating, my having finished eating…’
The nominative pronoun, *ku*, could also be used following, say, a conjunction such as the consecutive linker *a*- or the conditional *ke*:-

c.  
\[
\begin{align*}
  & \text{ke-ku} & \text{ari-to} & \text{[m]ong-gaa} \\
  & \text{if-1SG.NOM} & \text{finish-COMP} & \text{PART:ANTIPASS-eat} \\
  & \text{‘if I’ve finished eating...’} 
\end{align*}
\]

Compare how in the following section of text the same verb appears thrice, indexed for its subject with respectively a nominative, a genitive and an absolutive pronoun:

TOL (734)  
\[
\begin{align*}
  & \ldots i & \text{Oheo} & \text{ona} & \text{lako} & \text{ale} & \text{[m]ebusunggee} \\
  & \text{PN} & \text{Oheo} & \text{EMPH} & \text{go} & \text{take} & \text{PART:push:3SG} \\
  & \text{nggiro’o} & \text{watu} & \text{n-dumade} & \text{a-no} & \text{terumba.} \\
  & \text{that} & \text{rock} & \text{LKR-standing} & \text{and-3SG.NOM} & \text{toppled} \\
  & \text{Saa} & \text{terumba-no,} & \text{lako-no-to} & \text{i} & \text{Oheo} \\
  & \text{when} & \text{toppled-3SG.GEN} & \text{go-3SG-COMP} & \text{PN} & \text{Oheo} \\
  & \text{mbule} & \text{te’eni,} & “\text{Terumba-’i-to o watu.”} \\
  & \text{return} & \text{say} & \text{toppled-3SG.ABS-COMP} & \text{ART} & \text{rock} \\
  & \ldots \text{Oheo went, took and pushed that standing rock, and it fell over.} \\
  & \text{When it had fallen over, then Oheo returned and said “The rock has} \\
  & \text{fallen over” } \\
\end{align*}
\]

The same holds true for other Bungku-Tolaki languages. Compare these two sentences from Moronene; in the first Eka’s father is indexed with the third singular absolutive pronoun, in the second with the corresponding nominative pronoun:

MRN (735) a.  
\[
\begin{align*}
  & \text{nta} & \text{[m]om-po’engka’-e-mo} & \text{tama-no} & \text{Eka,} \\
  & \text{FUT} & \text{PART:ANTIPASS-erect-3SG-COMP} & \text{father-3SG} & \text{Eka} \\
  & \text{io} & \text{laica-no} \\
  & \text{ART} & \text{house-3SG} \\
  & \text{‘Eka’s father is going to build a house for himself’} \\
\end{align*}
\]

b.  
\[
\begin{align*}
  & \text{impiia} & \text{ka-i} & \text{pom-po’engka?} \\
  & \text{when} & \text{and-3SG} & \text{ANTIPASS-erect} \\
  & \text{‘when will he build?’ (S. Andersen 1995a:18)} \\
\end{align*}
\]

The contexts in which one finds a true contrast between nominative and absolutive subject marking are therefore limited, but are revealing. Compare the following:
TOL (736) a. No-tebua mata iwoi-ro o'aso-ikaa o beko.
3SG-appear eye water-3PL one-precisely ART source
‘Their (respective) springs emerged from one source of water’

b. Tebua-’i-to-kaa ona oleo, no-kii-’iro-to
appear-3SG-COMP-JUST EMPH sun 3SG-see-3PL-COMP
ona ana-’ako-no o wula...
EMPH child-PL-3SG ART moon
‘The sun appeared, and she saw the moon’s children…’

As noted above, (736a) was used to set the scene of the narrative; the emergence of the springs is thus to be interpreted in a timeless sense, or at least ongoing at the time the narrator brings his audience on stage. The same verb with absolutive pronoun in (736b) however, presents a punctual action which is clearly on the event line. Similarly in the following pair ro-mototaku /3PL-afraid/ ‘they were afraid’ presents us with the fact of their being afraid; the verb encodes reason, and is to be interpreted as a continuing state. Contrast this with mototaku-’i-to /afraid-3SG-COMP/ of (737b) which emphasizes the commencement of people becoming afraid:

TOL (737) a. ko-ro ndee tebua ine toono dadio,
NEG-3PL habitually appear among people many
te’embe ro-mototaku
because 3PL-afraid
‘They avoided being seen among large groups of people, because they were afraid’

b. No-ari kadadia nggiro’o, mototaku-’i-to toono
3SG-after event that afraid-3SG-COMP people
[m]e-’alo [m]eohai serekombo
PART:MM-take PART:be.siblings womb
‘After that event, people became afraid to marry being siblings’
7.7 Pronoun sets: from PMP to PBT

Only two pronoun sets have been reconstructed for Proto–Malayo-Polynesian. Taking both of these sets in turn, I discuss their development into the four sets of agreement markers which are here reconstructed for Proto–Bungku-Tolaki.

7.7.1 PMP personal pronouns

As reconstructed by Blust (1977), Proto–Malayo-Polynesian personal pronouns, which he termed nominative pronouns, had the following forms:

* i-aku 1SG
* i-kahu 2SG
* si-ia 3SG
* i-karni 1PLX
* i-kita 1PLN
* i-kamu, ihu 2PL
* si-iDa 3PL

Table 60. PMP nominative pronouns, following Blust (1977)

Long forms, that is, personal pronouns affixed with the article *i (third person *si), developed into the PBT free pronouns described in § 4.4. Of relevance to agreement marking are the short forms which occurred without the separable article *i/*si.

In an historical account of the precipitation of short forms into future and absolutive pronouns, there are three aspects which need to be accounted for, propounded here in the form of questions. One, how did preverbal pronouns become associated with the notion of futurity? This may be illustrated for example by Mori Bawah aku l[um]ako /1SG.FUT PART:go/ ‘I will go’ versus l[um]ako-aku /PART:go-1SG.ABS/ ‘I go, I went’. Second, in regard to transitive forms, how did preverbal pronouns come to index the agent, but postverbal forms the patient? Again this may be illustrated with Mori Bawah data:
MRB (738) a. **aku** \(k'[um]a-a-no\)
1SG.FUT PART:eat-3SG
‘I will eat it’ (Esser 1927:165)

b. **i-lulu-aku** \(i\) **Tantadu ta** \(k'[um]a-a-aku\)
3SG-chase-1SG.ABS PN Caterpillar 3SG.FUT PART:eat-1SG.ABS
‘Caterpillar is chasing me in order to eat me’ (Esser 1927:159)

Third, how did the formal differences found between the preverbal and postverbal pronouns arise?

One possible explanation would be to assume that short forms, reflecting their history as reduced independent forms, could appear in either preverbal or postverbal position. Compare for example the following data from Da’a, a Kaili-Pamona language in which reflexes of short forms may occur preceding or following the verb:

DAA (739) **mo-rongo-mo** \(i'a\)
IRREAL-spouse-PERF 3SG
‘she is going to marry soon’ (Barr 1988b:79)

(740) **naupa** \(i'a\) **no-ngowa**
though 3SG REAL-run
‘even though he ran...’ (Barr 1988b:86)

(741) **aku** **mang-geni** **sambulu** **Yule**
1SG AF/IRREAL-bring betel Yule
‘I’m bringing Yule’s betel nut’ (Barr 1988b:95)

Furthermore, given the noted cross-linguistic tendency for subjects to precede objects, one might even propose that the association between agent indexing and preverbal position, conversely object indexing and postverbal position, developed from the ‘grammaticalization of discourse’. In this account, however, there is no logical connection between preverbal position and futurity, or postverbal position and non-futurity—indeed the opposite correlation is illustrated in examples (739) and (740).

An alternative possibility is that short pronouns were primarily postverbal, but in limited contexts could occur before the verb. The hypothesis which I find most plausible
is that future pronouns arose contexts where an absolutive pronoun followed a future-oriented verb such as 'go, desire, able, be obligated to',\(^{177}\) for example in pre-Mori Bawah:

\[(742) \quad \ast \text{ta-aku k[um]aan-o} \quad \text{want-1SG PART:eat-3SG} \]

'I want to eat it'

Although the particular construction shown in (742) is no longer attested, it has clear parallels in the present-day language, for example with the verb behe ‘want’. Note that example (743) illustrates a double use of absolutive pronouns, once following behe ‘want’ to index the subject thereof, and again following tulungi ‘help’ to index the object thereof.

\[\text{MRB (743)} \quad \text{ba behe-komiu men-tulungi-aku...} \quad \text{if want-2PL.ABS PLS-help-1SG.ABS} \]

'if you all are willing to help me…' (Saro, Kadir & Hamid 1993:53)

Table 61 illustrates—with both transitive and intransitive verbs—the further steps necessary to get from (742) to the present-day. In stage one there is a shift in the alignment of the pronoun, to where it becomes more closely linked with the following verb. This step may have also been aided by a loss of lexical content for \(*\text{ta}\) as it developed into a future marker. At the second stage, the occurrence of \(*\text{ta}\) becomes optional, and when it has disappeared (stage 4), we are left with the present-day system.

\[
\begin{array}{llll}
\text{want-1SG} & \text{PART:eat-3SG} & \text{want-1SG} & \text{PART:go} \\
\text{stage 0:} & \ast \text{ta = aku k[um]aan-i} & \ast \text{ta = aku l[um]ako} \\
\text{stage 1:} & \ast \text{ta aku = k[um]aan-i} & \ast \text{ta aku = l[um]ako} \\
\text{stage 2:} & \ast \text{(ta) aku = k[um]aan-i} & \ast \text{(ta) aku = l[um]ako} \\
\text{stage 3:} & \text{aku k[um]aan-no} & \text{aku l[um]ako} \\
\end{array}
\]

Table 61. Stages in the development of future pronouns: first person

\(^{177}\)I am indebted to Erik Zobel for initially suggesting developments along these lines.
This development not only accounts for the distribution of pronominal forms (future pronouns preverbal, absolutive pronouns postverbal), but also naturally accounts for why future forms came to index the agent—rather than the patient—of transitive verbs. In Mori Bawah, it would appear that a different development occurred in the third person, namely here the pronoun lapsed, and *ta remained.

<table>
<thead>
<tr>
<th>Stage</th>
<th>*ta = io</th>
<th>k[um]aaN-io</th>
<th>*ta = io</th>
<th>l[um]ako</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1</td>
<td>*ta  =  io</td>
<td>k[um]aaN-io</td>
<td></td>
<td>l[um]ako</td>
</tr>
<tr>
<td>Stage 2</td>
<td>*ta  =  (io)</td>
<td>k[um]aaN-io</td>
<td>*ta  = (io)</td>
<td>l[um]ako</td>
</tr>
<tr>
<td>Stage 3</td>
<td>*ta</td>
<td>k[um]aa-no</td>
<td>*ta</td>
<td>l[um]ako</td>
</tr>
</tbody>
</table>

Table 62. Stages in the development of future pronouns: third person

Why in Mori Bawah *ta does not appear with all persons and numbers, but came to be restricted to third person singular contexts, requires further investigation. Compare Moronene *na ‘FUT’ and Pamona *da ‘FUT’ (Adriani 1931:463), both of which are used with all persons and numbers. However, a notable feature about future pronouns (other than third singular *ta) is that they clearly continue PMP short pronouns without phonological addition; therefore, in any account the development of these pronouns into future markers must have been via their becoming well established in future contexts. In Padoe the third person future forms are *lo’o (singular) and *lo’iro (plural), and here in the initial syllable *lo we may indeed be dealing with the remnant of some future-oriented verb or particle which fused with the pronoun (nonetheless, even in Padoe *lo only occurs in third person, not with first or second person).

Although future pronouns are found in languages of both the Eastern and Western branches of Bungku-Tolaki, they are not known to occur outside of a geographically

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178 Esser (1927:103) considers Malay hendak ‘wish, desire, intend, be going to’ to be cognate.
contiguous area including Mori Atas, Padoe, Mori Bawah and Bungku. This, plus the different forms which arose in the third person (compare Padoe lo'o, Mori Atas olo, versus Mori Atas ta, ‘3SG’), suggests that the development of future pronouns occurred as a drift-like tendency after the breakup of Proto–Bungku–Tolaki.

After the formal divergence of preverbal (future) forms from postverbal (absolutive) forms, in Padoe alone there has occurred a more recent convergence between preverbal forms and postverbal subject forms. Compare first Mori Bawah forms:

<table>
<thead>
<tr>
<th>Preverbal</th>
<th>Postverbal (subject)</th>
<th>Postverbal (patient)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)ku</td>
<td>-aku</td>
<td>-aku</td>
</tr>
<tr>
<td>(i)ko</td>
<td>-ko</td>
<td>-ko</td>
</tr>
<tr>
<td>(i)ta</td>
<td>-o</td>
<td>-o</td>
</tr>
<tr>
<td>kami</td>
<td>-kami</td>
<td>-kami</td>
</tr>
<tr>
<td>kita</td>
<td>-kita</td>
<td>-kita</td>
</tr>
<tr>
<td>(i)komiu</td>
<td>-komiu</td>
<td>-komiu</td>
</tr>
<tr>
<td>ira</td>
<td>-ira</td>
<td>-ira</td>
</tr>
</tbody>
</table>

Table 63. Mori Bawah future and absolutive pronouns

As can be seen in Table 63, there is no distinction in Mori Bawah postverbal forms; they are the same whether used to index a subject or a patient. But in Padoe, new postverbal subject forms have emerged by analogy with the preverbal forms. In Table 64 these analogical formations are highlighted in bold:179

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179 The forms shown in bold were in fact unrecognized by Esser (1927–1933), whom I have otherwise found to be very thorough and in agreement with Vuorinen’s data. Whether this was an oversight on Esser’s part, or whether it means these forms should be considered very recent innovations (in the past half century or so), I have not been able to ascertain.
Unfortunately, Vuorinen (1995:104), who is my source for these forms, gives no examples of their use in context. Whether there exists any difference in meaning between, say, $l'[um]eko-iero$ ‘they went’ versus (a supposed) $l'[um]eko-lo'iro$ is therefore unknown.

### 7.7.2 PMP genitive pronouns

In contrast to the development of absolutive pronouns into future pronouns, which appears to have occurred as a post-PBT process, the split of genitive pronouns into two sets is attested in every Bungku-Tolaki language—indeed in many other Austronesian languages outside of Bungku-Tolaki—and must be given a greater time depth.

Table 65 gives Blust’s (1977) reconstructions of Proto–Malayo-Polynesian genitive pronouns; forms with *n occurred postvocalically, forms without *n occurred postconsonantally.

| *(n)i-ku       | 1SG |
| *(n)i-hu, (n)i-mu | 2SG |
| *(n)i-a        | 3SG |
| *(n)i-mi       | 1PLX |
| *(n)i-ta       | 1PLN |
| *(n)i-mu, (n)ihu | 2PL |
| *(n)i-da       | 3PL |

Table 65. PMP genitive pronouns, following Blust (1977)
A complete account of the split of Proto–Malayo–Polynesian genitive pronouns into a genitive and a nominative set in PBT is not given here. However, some observations are in order, and chief among these observations it must be mentioned that a parallel split into two pronoun sets has also been widely noted in other Austronesian languages from western Austronesia to Oceania, but notably not to be found in Formosa, the Philippines, northern Sulawesi and parts of Borneo (and on this basis are not reconstructible for PMP). The newer, emergent pronouns have been discussed under various labels, including nominative pronouns, subject pronouns, agent pronouns, and—in order to have a generic label suitable for cross-linguistic comparison—‘Set A’ pronouns (compare Van den Berg 1996 who employs this term). In the Dutch tradition it was the fashion to refer simply to *vervoegde werkwoorden* ‘conjugated verbs’, meaning thereby verbs preceded by a subject, agent, etc. pronoun.

When we look a verbs preceded by nominative pronouns in Bungku-Tolaki languages, formally and functionally they resemble what have been termed ‘dependent verbs’ or ‘atemporals’ in the reconstruction of Proto–Austronesian verbal morphology (respectively Wolff 1973, 1996; Ross 1995). As Ross has noted about the distribution of these verbs:

Atemporal forms have three basic functions in daughter languages (and often all three functions in the same language). Firstly, they function as plain imperatives. Secondly, they express events in sequence in narrative. Thirdly they are the forms which occur subordinate to some auxiliaries. (Ross 1995:743)

If we understand ‘some auxiliaries’ to include negative auxiliaries—comparative evidence in fact supports this understanding—then we see here the same three primary contexts where nominative subject marking is found in Bungku-Tolaki languages, namely following reflexes of the consecutive clause linker *ka or certain other conjunctions, following negatives, and in imperative mood (§§ 7.4.1 through 7.4.3) Formally, so-called dependent or atemporal forms consisted (at least in actor focus, possibly also in goal focus) of the
bare verbal stem minus any inflection, which again accords with the fact that in Bungku-Tolaki languages, verbs preceded by nominative inflection must be primary forms. Compare for example the following sentences from respectively Maranao, Paiwan, Samar-Loyte Visayan and Atayal; the dependent form is bolded:

MAR (744)  **tabas**  *ka*  *sa*  **dinas**
cut  2SG  GOAL  cloth
‘You must cut the cloth’ (McKaughan 1958:25)

PAI (745)  **ribu-in**  *sa*  **pa-dyunlu-i**
defeat-GF  CONJ  CAUS-be.simple-GF:ATEMPORAL
‘he defeated and pacified it (the village)’

SLV (746)  **wara?**  **lakaw**  *qa*  **bata?**
NEG  go  TOP  child
‘the child did not go away’ (Wolff 1973:75)

ATY (747) a.  **maki?**  **mkut**  *uzi*  **maki?**  **ini?**  **pkut**
there.are  kill:AF:NONPAST  and  there.are  NEG  kill
‘There are those who kill and those who do not kill.’ (Wolff 1973:75)

b.  **ini?-saku?**  **hnju?**  **qsiua?**  **lukus**
NEG-1SG  soak  water  clothes
‘I have not soaked the clothes in water’
(Egerod 1965, cited in Ross 1995:744)

However, in these languages atemporal forms operate as part of the verbal focus system, that is, in actor focus the agent is marked with a personal pronoun, while it occurs in the genitive only in some other focus (goal, locative, instrument). Compare examples (748) and (749). In these clauses the atemporal verb is a locative focus form; correspondingly the agent, respectively realized by  **na?**  **mqu?**  ‘the snakes’ and  **ku**  ‘I’, occurs in the genitive:

ATY (748)  **ini?-sami**  **kae-i**  **na?**  **mqu?**
NEG-1PLX  bite-LF:ATEMPORAL  GEN  snake
‘we have not been bitten by snakes’
On this basis, Wolff (1996) argued that it must have been the fronting of genitive pronouns in non-actor focus constructions—in particular, constructions containing dependent verbs—which gave rise to a new set of subject markers. This entails that subject markers, derived from genitive pronouns, must have first made their appearance in transitive contexts.

A number of languages of western Indonesia provide support for Wolff’s hypothesis, in that in the language as a whole, or in certain contexts, we find the newer pronouns used to mark only agents of transitive verbs. This is the situation which one still finds, for example, in Seko Padang negative clauses, and at this point a brief comparison with Bungku-Tolaki languages may be helpful. The two Seko Padang pronoun sets of relevance are those which Laskowske (1994) labels respectively Set A and Set B, shown in Table 66.\(^{180}\) Set A pronouns derive ultimately from PMP genitive pronouns, but always occur in preverbal position; they correspond to PBT nominative pronouns. Set B pronouns derive from PMP personal pronouns and correspond formally to PBT absolutive pronouns. Both sets distinguish only five persons and numbers:

<table>
<thead>
<tr>
<th>Set A</th>
<th>Set B</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ku-</code></td>
<td><code>-ka'</code></td>
</tr>
<tr>
<td><code>u-</code></td>
<td><code>-ko</code></td>
</tr>
<tr>
<td><code>∅-, na-</code></td>
<td><code>-i</code></td>
</tr>
<tr>
<td><code>ki-</code></td>
<td><code>-kang</code></td>
</tr>
<tr>
<td><code>ta-</code></td>
<td><code>-ke</code></td>
</tr>
</tbody>
</table>

Table 66. Seko Padang Set A and Set B pronouns

\(^{180}\) I ignore here certain alternate forms of the Set A pronouns which occur only in inverse alignment, and which are not relevant to the discussion at hand. For a brief description of these alternate forms and their use, see especially Payne and Laskowske (1997:428–429).
Example (750) illustrates the pattern of pronominal indexing found after the negative marker *ha*. Set A pronouns are found only in transitive contexts, and only marking agents. Set B pronouns occur elsewhere (Laskowske 1994:57):

SEK  (750) a. *ha-na-kini 'ka'*
      NEG-3-pinch-1SG  'He didn’t pinch me'

      b. *ha-ku-kini 'i*
         NEG-1SG-pinch-3  'I didn’t pinch him'

      c. *ha-mu-tole 'ka'*
         NEG-INTR-smoke-1SG  'I don’t smoke'

In transitive contexts the Seko Padang constructions are mirrored exactly in Bungku-Tolaki languages, with a difference emerging only with intransitives. Compare the Seko Padang constructions of (750) with corresponding clauses from Tolaki (data from S. Youngman 1998:pers.comm.)

TOL  (751) a. *kioki no-kasi-aku*
      NEG 3SG-pinch-1SG  'He didn’t pinch me'

      b. *kioki ku-kasi-'i*
         NEG 1SG-pinch-3SG  'I didn’t pinch him'

      c. *kioki ku-po- 'ombi*
         NEG 1SG-ANTIPASS-smoke  'I don’t smoke'

      d. *kioki ku-lako*
         NEG 1SG-go  'I didn’t go'

As can be seen by comparing (750c) with (751c&d), Seko Padang and Tolaki differ in respect to which pronoun set is used to mark the subject of an intransitive, but presumably Seko Padang maintains the older pattern, and the spread of nominative pronouns to intransitive contexts represents an innovation in Bungku-Tolaki. A similar difference also shows up on intransitive verbs used imperatively, where again presumably Seko Padang represents the older pattern:
SEK  (752)  polai-ko  nai  i-anti
          leave-2  from  at-that.place
       ‘Get away from there!’ (Laskowske 1994:99)

MRB  (753)  u-pekule-mo  ari
          2PL-return-COMP  first
       ‘you return first’ (Esser 1933:204)

Interestingly, these (presumably conservative) patterns in Seko Padang have been retained
in only in a few places in the language, including negative clauses, conditional clauses and
imperatives. Marking with Set A pronouns predominates in ordinary declarative clauses,
where these pronouns index not only subjects of intransitives, but both agents and objects
of transitives; compare for example  ku-na-ki’i  /1SG-3-pinched/ ‘he pinched me’ and
ku-mu-tole’ /1SG-INTR-smoke/ ‘I smoke’ (Laskowske 1994:56), corresponding,
respectively, to (750a) and (750c). This is in contrast to Bungku-Tolaki languages, where
nominative pronouns are still found primarily in negative and imperative contexts, and
following certain clause level conjunctions.

Finally a word must be added about the use of genitive pronouns as subject agreement
markers in preposed temporal clauses. This is illustrated for example in (754) (further
examples are provided in § 7.3.1).

TOL  (754)  Saa  dunggu-no  i  wowa-no  aalaa...
          when  arrive-3SG  at  mouth-3SG  river
          1. ‘when he had arrived at the mouth of the river…’
          2. ‘once his having arrived at the mouth of the river…’

However in such cases a question of analysis arises: is  dunggu-no  really a verbal form,
or—as suggested by the second translation—is it simply instead a gerund form?
Considering  dunggu-no  to be a gerund does in fact find wide cross-linguistic support.
O’Dowd (1992) for example recognized in her study of thirty-four broadly chosen
languages a significant tendency for subordinate temporal clauses to be nominalized.
Gerunds as temporal modifiers are also well-known in Austronesian languages, for
example Tagalog *pag-alis niya* /GERUND-leave 3SG.GEN/ ‘when he leaves, upon his leaving...’ (Schachter & Otanes 1972:445). However, compared to the case in Tagalog and certain other Philippine languages where *pag-* has developed into a gerundive marker, in Bungku-Tolaki languages there is no special marker of the gerund. Instead the form of the gerund is identical to the primary form of the verb.

Although this might appear to leave no basis for deciding whether *dunggu-no* of example (754) is verbal or nominal, I propose the following small amount of evidence for considering such constructions to be verbal. First, forms which are clearly verbal may fill the same paradigmatic slot. For example, when the verb of the preposed temporal clause is fully transitive, that is, it occurs with object agreement, no gerund construction is possible as far as I am aware.

```
TOL (755)  sa-ku    karu-karu-’i-kee       woroko-no...
           when-1SG    REDP-scratch-3SG-BEN:3SG    neck-3SG
      ‘when I scratch his neck...’
```

Compare also examples (608) through (611) above. Second, in some Bungku-Tolaki languages nominative indexing has spread by analogy even to cases where the verb of the preposed clause is intransitive; compare for example the genitive subject marking in *saas dunggu-no*... of example (754), versus the nominative subject marking found in (756):

```
TOL (756)  sa-no     leu...
           when-3SG    come
      ‘when he came...’ (Youngman 1996:13)
```

In this case of (756) an interpretation as verbal is clearly preferable. However, one could further argue that the source construction *saas leu-no*... must itself be regarded as verbal, in order to lend itself to nominative indexing as an alternative subject agreement strategy. I have found evidence for the spread of nominative subject agreement in preposed temporal clauses in two other Bungku-Tolaki languages as well, Padoe and Kulisusu. Compare this Padoe example:
PAD (757)  *Pesikeno la’a ro-wungge-ho irowai. Ro-me-umari*
brideprice that 3PL-open-3SG woman 3PL-PLS-finish
*me-wungge-ho, no-sikeno-’iro io petia irowai...*
PLS-open-3SG 3SG-ask-3PL ART sibling woman
‘The bride price was opened by the girl’s side. After they had opened it, one of them asked the girl’s relatives...’ (Vuorinen 1995:115)

and the following near minimal pair from Kulisusu. Example (758a) illustrates the expected pattern with genitive subject agreement, example (758b) the innovative pattern: 181

KUL (758) a.  *sa teuraa-no i raha-no raja...*
when arrive.up.there-3SG at house-3SG rajah
‘when he had arrived at the rajah’s house...’

b.  *sa-ndo teusoa i laro ng-keu...*
when-3PL arrive.there at inside LKR-wood
‘when they had arrived at the forest...’

I do not attribute this second pattern PBT. Rather it appears that in these examples we are witnessing the spread of nominative subject agreement into yet another context—a process which has been occurring in drift-like fashion for over the past two millennia.

Not all has been said yet concerning gerunds. I return to the topic of gerunds again in the next chapter; see especially §§ 8.4 and 8.5.

181Because of limited data (and homophony), there exists a possibility that *ndo ‘3PL’ here is not a nominative pronoun but rather a fronted genitive pronoun. Under either condition, however, the verbal nature of (758b) is still argued for.
8 Relative Clauses

Cross-linguistic studies of relative clauses (Downing 1978; Comrie 1981; Nichols 1984; Lehmann 1986; *inter alia*) have identified no less than two fundamental ways that languages differ in regard to relativization. First, languages differ in regard to the syntactic positions which are accessible to relativization (subject, object, oblique, possessor). Second, languages also differ in their strategy for indicating which position has been relativized (non-reduction, pronoun retention, relative pronoun, or gapping). For example following Comrie (1981:133) the English sentence *the man whom I saw yesterday left today* contains a relative clause (*whom I saw yesterday*), the object of which has been relativized; and that it is the object and not some other argument which has been relativized is signaled by the (fronted) relative pronoun *whom*.

In this chapter, I focus these two concerns on Bungku-Tolaki languages. These languages are consistent with a number of other Western Austronesian languages in allowing only subjects and possessors to be relativized. With rare exceptions, objects cannot be relativized. However, underlying patients are relativizable provided they are realized in ('promoted to') subject position; correspondingly the verb of the relative clause must occur in passive form. Neither can obliques be relativized, if by 'oblique' one understands an argument introduced by a preposition. However, a discussion of relative clauses would be incomplete without mentioning two 'pseudo-relativization' strategies for oblique arguments. First, if an oblique argument can be incorporated into the verb using an applicative suffix—primarily -i and -ako—it may in some cases thereby also become accessible to relativization. Second, a nominalized form of a verb which profiles the location, instrument, etc. of an event may be employed as a noun modifier. This results in constructions which translate literally as, for instance, ‘the house, their place-of-living’, or
‘the money of our-buying-rice’—but which constitute near functional equivalents to relative clauses (e.g. ‘the house in which they lived’, ‘the money with which we bought rice’). Nevertheless, the evidence falls on the side of regarding these constructions as nominal, not verbal.

In Proto–Bungku-Tolaki, a gap strategy must have been used to form relative clauses. The verb of the relative clause was a participle form (§ 7.2), and there was no overt realization of the coreferential argument within the span of the relative clause. This pattern has been maintained in all daughter languages. Compare for example:

TOL (759) Laa-i-to lako, a-no leu mune t[um]ambeli-i be-3SG-COMP go and-3SG arrive there PART:meet-3SG o wonggi [ laa [m]epotapa i wawo watu ]. ART snail be PART:be.resting.on at above rock

‘he (the deer) was going, and he came there and met the snail who was sitting on top of a rock’ (Sande, Sikki, et al. 1986:124)

Because participle forms are used in other contexts, there sometimes arises structural ambiguity as to whether or not a particular construction is to be treated as a relative clause. For example it appears that the participle form sumuko ‘ask him’ in the following sentence could be interpreted either as belonging to a relative clause or to a verb chain.

TOL (760) a-no tekoni tehua tiitiisu s[um]uko-‘i teeni ‘...’ and-3SG suddenly appear thrush PART:ask-3SG say ‘suddenly there appeared a thrush who asked him, saying “...” ’ ‘suddenly a thrush appeared asking him saying “...” ’

In point of fact, a number of Bungku-Tolaki languages have developed markers which specifically indicate the presence of a relative clause. However, as these markers vary from language to language—Mori Bawah and Bungku employ amu while Padoe and Mori Atas use the cognate form henu, in Wawonii the relative marker is mia, in Moronene it is da, in Kulisu the verb of a relative clause receives the suffix -no, while in Tolaki relative
clauses are signaled by reduplication—there is none which can be reconstructed at the level of Proto-Bungku-Tolaki.

Below I discuss in turn the relativization of subjects (§ 8.1), the relativization of possessors (§ 8.2), and the rare cases of relativization of objects (§ 8.3). In the section devoted to relativization of subjects, I also discuss the historical origins of the various relative markers found across Bungku-Tolaki languages. In the final two sections I turn to strategies involving nominalizations. First, I investigate nominalizations which are formed by adding the suffix -a to the primary form of a verb, and which in general profile the location where a happening occurs (§ 8.4). There following, I treat nominalizations which do not take the suffix -a—in other words which are identical to the primary form of the verb—and which in general profile the manner, the means or the instrument by which a happening occurs (§ 8.5).

8.1 Relativization of Subject

All Bungku-Tolaki languages allow relativization of subjects, by means of a gap strategy. Languages differ, however, in regard to the (non-pronominal) markers which signal the presence of a relative clause, and on this basis they receive separate treatment below. In Padoe, Mori Atas, Mori Bawah, Bungku, Wawonii and Moronene, the relative marker occurs clause initially; in Kulisusu the relative marker is a verb suffix; in Tolaki it is a reduplicating verb prefix. Although Downing noted a number of cases in which relative markers developed historically from demonstrative elements (1978:385), this is not true of any of the relative markers found in these languages.

8.1.1 Padoe and Mori Atas *henu*, Mori Bawah and Bungku *anu*

The relative markers found in the northern Bungku-Tolaki area are *henu* (Padoe and Mori Atas), *hanu* (Mori Bawah, Watu and Karunsi'e dialects), and *anu* (Bungku and standard Mori Bawah) (Karhunen 1994; Saro, Rahim, et al. 1982:75–76; Esser 1927:167).
Although I have not been able to glean examples from either the Watu or Karunsi’e dialects illustrating the use of hamu, examples from other languages include:

**PAD (761)**  
\[ ikiito, \ henu \ m-pe\'eka \]  
1PLN REL PLS-ascend  
‘we, who go up’ (Karhunen 1994:24)

**MRB (762)**  
\[ beine \ anu \ [m]o\'ia \ i \ raha \ andio \]  
woman REL PART:stay at house this  
‘the woman who lived in the house’ (Esser 1933:326)

**BNG (763)**  
\[ ana \ anu \ mokua \]  
child REL diligent  
‘the child who is diligent’ (Saro, Rahim, et al. 1982:76)

As described in § 7.5, Mori languages indicate future tense through the use of future pronoun forms. Insofar as this results in the pronominal indication of the head within the span of the relative clause, properly speaking in future contexts these languages employ a pronoun retention strategy rather than pure gapping. For example:

**MRA (764)**  
\[ na \ mia \ henu \ iro \ me-leko \ men-tamu\'o \]  
ART person REL 3PL.FUT PLS-go PLS-bury-3SG  
\[ na \ n-suai... \]  
ART LKR-cucumber  
‘the people who were to go bury the cucumber…’ (Esser 1933:201)

**MRB (765)**  
\[ napi \ do-me-hawe \ mia \ iro \ me-\'aiwa \]  
NEG.INCOMP 3PL-PLS-arrive person 3PL.FUT PLS-come  
‘the people who are to come haven’t yet arrived’ (Esser 1933:201)

In the past tense, the pronoun would presumably be omitted, i.e. \[ na \ mia \ henu \ meleko \ mentamu\'o \ na \ nsuai \] ‘the people who went to bury/and buried the cucumber’, etc.

In some cases, the relative marker appears to be optional, or is simply absent. The conditions under which the relative marker is omitted have not been described for these languages:
PAD (766) *piso (henu) montasu la’a tetadi
knife REL sharp that disappeared
‘that sharp knife/that knife which is sharp has disappeared’
(Karhunen 1994:40)

MRB (767) *na-hina (mia anu) t[um]o’ori-o
NEG-exist person REL PART:know-3SG
‘there isn’t (anyone) who know it’ (Esser 1927:161)

A relative clause may also be used without any head noun present.

PAD (768) henu [m]elulu la’a
REL PART:run that
‘those running’ (Karhunen 1994:31)

MRB (769) anu motaha
REL red
‘the bay, a bay (horse, etc.)’ (Esser 1927:162)

(770) anu da m-po’ia i raha
REL still PLS-stay at house
‘the ones who are still in the house’ (Esser 1927:162)

The forms *henu, *hanu and *anu all derive from PMP *anu,\(^\text{182}\) with an earlier meaning
of ‘thing, something, whatsit’ or in reference to humans ‘someone, what’s-his-name’
(compare Indonesian *anu and *si anu). The form *anu still occurs in these meanings for
example in Mori Bawah:\(^\text{183}\)

\(^{182}\)The development into Padoe henu may be traced as follows (Watu and Karunsi’e share in these
changes except for raising of *a):

<table>
<thead>
<tr>
<th>PMP</th>
<th>*anu ‘thing, whatsit’</th>
<th>*si anu ‘whats-his-name’</th>
</tr>
</thead>
<tbody>
<tr>
<td>*anu</td>
<td>*hnu</td>
<td>*s &gt; *h</td>
</tr>
<tr>
<td>*anu</td>
<td>*i hanu</td>
<td>metathesis</td>
</tr>
<tr>
<td>*anu</td>
<td>*i henu</td>
<td>raising of *a following high vowel</td>
</tr>
<tr>
<td>*henu</td>
<td>*i henu</td>
<td>analogical levelling</td>
</tr>
</tbody>
</table>

Padoe: henu i henu

\(^{183}\)Presumably this is also true of henu and hanu—see Adriani (1900:307)—but I have no examples of
their use in context.
MRB (771)  *anu-no  isema  andio?*
thing-3SG who this
‘whose thing is this, to whom does this belong?’ (Esser 1927:157)

(772)  *i-potae  i  anu  l[i]ako-a-mo*
3SG-say PN whats-his-name PART:go-3SG-COMP
‘he says that whats-his-name has gone’ (Stokhof 1985:58)

The development into a relative marker from this somewhat already bleached sense is straightforward: a construction such as, say, Mori Bawah *anu moa*, must have been a noun-adjective formation with an earlier meaning of ‘something empty (moa), an empty thing, an empty something-or-other’ . In that the entire construction itself can now be used as a modifier—as in *si ‘e anu moa* ‘an empty rice barn’ (Esser 1927:163)—*anu* has taken on more of the status of a grammatical linker (relative marker) with even further semantic bleaching. A formal difference between the noun and the relative marker is that when the noun *anu* refers to a human, it must be preceded by the proper name marker *i* as above in example (772), but this marker does not occur with *anu* used as a relative marker. Because Padoe, Mori Atas and Mori Bawah are geographically contiguous but located in separate branches of Bungku-Tolaki, one must suspect the use of *hemu/ anu* as a relative marker to be an areal feature. This is further supported by the fact that *anu* is used in parallel fashion in neighboring Pamona, a Kaili-Pamona language.184 For example:

PAM (773)  *ayapa  anu  ma-sae*
fabric REL STATIVE-old
‘fabric which is old’ (Adriani 1931:357)

8.1.2  Wawonii *mia*

A development similar to *anu* has apparently also occurred, or is in the process of occurring, with Wawonii *mia* ‘person’,185 although the available evidence allows only a

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184 Other Kaili-Pamona languages mostly use either *to* or *tau* (< PMP *tau ‘person’) as a relative marker (Michael Martens 1998:pers.comm.).

185 The word *mia* also means ‘person’ in Padoe, Mori Atas, Mori Bawah, Bungku and Kulisu, compare also Moronene *miano* (with frozen third singular genitive pronoun), Saluan *mian*, and Muna *mie* ‘person’.
brief description. First, note that in some contexts mia can only be interpreted to mean ‘person’, as in:

WAW (774) hapao utua-no iso mia?
what purpose-3SG that person
‘what are that person’s intentions?’

We might also assume this to be true of mia in the following examples:

WAW (775) mia bete
person blind
‘blind people’ (Manyambeang, Mahmoed, et al. 1982/1983:95)

(776) inaio mia [m]okolemba-o a’ai burua?
who person PART:able-carry.on.shoulder-3SG this chest
‘who (is a person who) can carry this chest?’ (Stokhof 1985:125)

(777) ana-ana mia [m]om-piara
REDP-child person PART:ANTIPASS-tend
‘children herdsmen’

However, a weakening of the meaning ‘person’ in such contexts to that of ‘someone (who), ones who, the one who…’, (e.g. ‘ones who are blind’, ‘who is someone who can carry this chest?’, ‘children who tend’) has lead to the extension of mia to contexts where it no longer need have a human referent. In the following examples, mia is thus more clearly a relative marker:

WAW (778) lima tongo kinaa mia in-oli-no
five wrap cooked.rice REL PASS-buy-3SG
‘five wrappers of cooked rice that were bought by him’
(Manyambeang, Mahmoed, et al. 1982/1983:82)

(779) manu-manu mia ng[inj]ee-hako Kuriadondo
bird REL PASS:name-INSTR Kurindodo
‘a bird that is named Kurindodo’

Esser (1933:351) supposed mia to derive from earlier *um+ian ‘one who resides’, compare mo’ia ‘stay, reside’, inia ‘village’ from the same root. Compare also Balantak which has mian ‘person’, relative marker men.
8.1.3 Moronene da

The relative marker in Moronene is *da*, as in the following examples:

MRN (780)  
\( \text{uma-no miano da okuda} \)  
garden-3SG person REL near  
‘someone’s garden nearby’ (S. Andersen 1994a:50)

(781)  
\( \text{puhu da hai olompu} \)  
corn REL at hut  
‘the corn in the hut’ (S. Andersen 1994a:50)

(782)  
\( \text{da ari temba-a die poniu-no oleo} \)  
REL finish shoot-3SG this nest-3SG sun  
‘the one who shot the sun-nest’ (S. Andersen 1994b:7)

The morpheme *da* (or *daa*; the Tolaki cognate appears to be *laa*) is found in other Bungku-Tolaki languages as a particle with existential and/or progressive meaning, roughly translatable as ‘be’ or ‘still’, for example, Wawonii *daa mongkaa* ‘be eating’ (Manyambeang, Mahmood, et al. 1982/1983:70), Mori Bawah *tisomo da mo’oru* ‘tomorrow while it is (still) morning’ (Esser 1933:375), Padoe *daa orao* ‘still alot’ (Lara, Larobu, et al. 1991:11) Tolaki *i Ina laa monahu* ‘Mother is cooking’ (Muthalib, Alimuddin, Pattiasina, et al. 1985:28). Compare also:

KUL (783)  
\( \text{i-awa-mo mia da ng[um]ara mata-no oleo} \)  
3SG-meet-COMP person be PART:stare disc-3SG sun  
‘he met a man staring at the sun’

(784)  
\( \text{...rou-no-mo ana-no raja da mopii mokora} \)  
cause-3SG-COMP child-3SG king be sick intense  
‘...because the king’s daughter was very sick’

Although Kulisuusu *da* is not to be analyzed as a relative marker, examples (783) and (784) illustrate at least two contexts where reanalysis would be possible, e.g. ‘he met a man *who was* staring at the sun’, ‘because of the king’s daughter *who was* very sick’. In Moronene the two uses have clearly separated. Compare for example the double occurrence of this morpheme in the following:
MRN (785) da-hoo opitu da ko’ihi-ako kinaa  
be-3SG seven REL have.contents-INST rice  
‘there were seven filled with rice’ (S. Andersen 1994a:51)

(786) laica da daa bombu-bombu-no  
house REL be REDP-bug-3SG  
‘the house that has bugs’ (lit. ‘the house, the bugs of which exist’)  
(S. Andersen 1995b:9)

In addition, the following points of difference may also be noted: (a) the relative marker 
has an invariant short form da, while the existential particle is sometimes long, i.e. da ~ 
daa (in some cases also da’ar; cf. S. Andersen 1995b:9 ff.); (b) unlike the existential 
particle, the relative marker is never inflected; and (c) negation is expressed inside relative 
clauses with the regular Morononene dependent clause negator sa-, but existential clauses 
are negated with nahina (S. Andersen 1994b). Compare:

MRN (787) koie miano da sa-i molai  
that person REL NEG-3SG PART:flee  
‘that person who didn’t run away’ (S. Andersen 1994b:8)

(788) koraane-ira peta-ku nahina-po da kobede  
yonder-3PL paddy-1SG NEG.be-INCOMP REL have.dike  
‘none of my rice fields over there have dikes yet’  
(lit. ‘my rice fields over there, there aren’t yet any which have dikes’)  
(S. Andersen 1994b:7)

According to S. Andersen (1994a:50), if the relative marker da does not occur, then 
the modifier is not to be considered a relative clause. Often contrasts exist between 
constructions with and without da, the latter having a more lexicalized meaning. Compare 
for example (S. Andersen 1994a:47):

MRN (789) a. laica da montoe b. laica montoe  
house REL tall house tall  
‘tall house’ ‘house on stilts’

(790) a. miano da motu’a b. miano motu’a  
person REL old person old  
‘old person’ ‘parent’
8.1.4 Kulisu -no

In Kulisu, the verb of a relative clause occurs not only in its participle form, but is in addition marked by the suffix -no. Compare for example the verb lingka which is used as a main clause predicate in (791a) but as a noun modifier in (791b):

KUL (791) a. na-i-lembahi a’iso, Buragil i-lingka-no duka
    NEG-3SG-long.time that Buragil 3SG-set.off-COMP again
    ‘not long after that, Buragil set off again’

    b. tama-no /um|ingka-no itonia
       father-3SG PART:set.off-REL near.past
       ‘her father who had recently gone off’

The following are other examples of -no used in this function. As in examples (793) and (794), a head noun need not be present, in which case the English translation may be supplied with ‘the one(s) who...’.

KUL (792) randaa-no raja mopii-no a’iso
        daughter-3SG king sick-REL this
        ‘the king’s daughter who was sick’

(793) [m]o’ia-no ri’ai
      PART:reside-REL here
      ‘the one(s) living here’

(794) ke-o ungkude [m]om-potalo-no...
      if-ART 1SG PART:ANTIPASS-defeat-REL
      ‘if I am the one who defeats (wins)…’

186 The participle marker <um> in its function of marking relative clauses is now being extended to verb forms with which one would not expect it to occur otherwise. For example, as was noted in § 7.2.3, the participle marker does not occur with accidental passive verbs with te-, but it readily does in Kulisu if such a verb is used in a relative clause, for example:

KUL pemingku-no /um|elau-no a’iso
       deed-3SG PART:gone.too.far-REL that
       ‘those actions of his which had gone too far’
(795) mamu-manu kincah t[u]moka-no i rapa-no
  bird     kincah     PART:perch-REL at head-3SG
komondaa-no  bawu-hako  a'iso
commander-3SG   pig-COLL    that

'the kincah-bird which was perched on the head of the commander of
that herd of pigs'

However, if the verb of the relative clause is transitive and has a definite object, then the
obligatory pronoun which indexes the object supersedes marking with -no. In this case it
is simply the participle form of the verb which is used, with no other special marking for
its subordinate (relative clause) status:

KUL (796) io  bawu-hako  h[u]mohal-’o  a’iso
  ART pig-COLL  PART:seek-3SG that

'that herd of pigs which was chasing him'

The -no which marks a verb as a noun modifier as in the above examples derives
historically from the third person singular genitive pronoun—in particular, from the use of
this pronoun to mark demoted (third person singular) agents of passive verbs. As already
noted, in main clauses Kulisu passive verbs are strictly agent-deleting (§ 5.2.3),
therefore, a genitive pronoun on a passive verb actually does two things: not only does it
cross-reference the demoted subject, but it also marks the passive form as either a
nominalization or a noun modifier (relative clause). On passive verbs, the pronoun -no
stands in paradigmatic relationship with other genitive pronouns, for example:

KUL (797) ihi-no  bawu  in-ala-no  itonia
  flesh-3SG  pig  PASS-take-3SG recently

'the pig's flesh which had been taken by him earlier'

(798) ana-no  b[in]asiako-ndo  itonia
  child-3SG  PASS:dispose.of-3PL recently

'her child who had earlier been disposed of by them'

(799) kantobu  p[in]ake-miu  itonia
  sharpened.bamboo  PASS:spear-2PL recently

'the sharpened bamboo spear used earlier by you all'
However, it is only the form -no as in (797) which has spread to mark the relative clause status of other verb forms.\textsuperscript{187} This extended use implies a concomitant suppression of the connection between -no and the notion third person singular. In the following example, the head of the relative clause is clearly plural from context; nevertheless, it is still -no which is appended to the verb of the relative clause.

KUL (800) \textit{n}do-ompole mia mo-’aso-no ika i daoaa
3PL-many person PART:ANTIPASS-sell-REL fish at market
‘many people sell fish at the market’ (lit. ‘they are many, the people who fish at the market’)

The same development of the third singular genitive pronoun is also found outside of Bungku-Tolaki, for example, in both Muna and Wolio:

MUN (801) mie-hi niho r[um]ato-no ini
person-PL just PART:arrive-REL this
‘the people who had just arrived’ (Van den Berg 1989:232)

WOL (802) \textit{O ndoke-mo duka mo-hobuti-na bulu-na pani-na}
ART monkey-COMP also PART-pull.out-REL feather-3 wing-3
‘The monkey was also the one who pulled out the feathers of his wings’
(Anceaux 1988:56)

Given the close geographical proximity of Kulisu to these other languages, this innovation has doubtless spread areally.

\textsuperscript{187}Because a verb modifies a noun, it is not thereby required to be suffixed with -no or any other genitive pronoun. However the absence of -no is likely to signal a tighter semantic connection, as in for example:

KUL ika c[in]unu
fish PASS:grill
‘grilled fish’

KUL kapala i[fum]ola
ship PART:fly
‘airplane’
8.1.5 Tolaki reduplication

The overt marker of a relativized clause in Tolaki is reduplication,\(^\text{188}\) of the first one or two syllables of the initial element of the relative clause.\(^\text{189}\) If the initial element consists of two syllables as in (804) and (805), then both syllables are reduplicated; in other cases, only the first syllable is reduplicated.\(^\text{190}\) The relative clause may be headed or headless. For example:

TOL (803) langgai me-[m]elako i kitu
man REL-PART:walk at there
‘the man who is walking there’ (Stokhof 1987:197)

(804) petoro ari-ari leu i keni
administrator REL-finish come at here
‘the administrator who is here’ (Gouweloos 1936:5)

(805) anadalo mate-mate
baby REL-dead
‘the dead baby’ (Gouweloos 1936:5)

(806) me-me ’ambo
REL-good
‘the good one’ (Muthalib, Alimuddin, Chalik, et al. 1985:75)

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188 Gouweloos (1936:25) also gave ndee and hanu as relativizers, but I cannot support this analysis. From his examples it appears that these are still being used in keeping with their original meanings, respectively ‘habitually’ and ‘thing, what’sit’:

TOL ie ‘i-to ndee lako laulau i Mowewe
3SG-COMP habitually go constantly to Mowewe
‘that’s the one who is always going to Mowewe’ (Gouweloos 1936:25)

tebua-‘i-to ingoni o hanu, o donga
appear-3SG-COMP near.present ART whatsit ART deer
‘presently there appeared a whatchamacallit, a deer’ (Gouweloos 1936:25)

189 Although the initial element is usually (the participle form of) a verb, it may also be a negative particle; see example (55) below.

190 A limited number of verbs which ordinarily reduplicate only the first syllable, may optionally reduplicate two syllables, for example o-owose or owo-owose ‘the big one’ (compare owose ‘big’), i-linehe or ine-’inehe ‘that which is desired’ (compare ehe ‘want, desire’), pe-pe’ihi or pe ‘i-pe ’ihi ‘the one having contents’ (compare pe ’ihi ‘have contents’) (S. Youngman 1998:pers.comm.).
(807) *mo-mjo-sua*
REL-PART:ANTIPASS-find
‘the one who finds’ (Gouweloos 1936:9)

Reduplication as a relative clause marker appears to be uncommon cross-
linguistically, though it is also found in some languages of the Malukus (Indonesia), for example Kola:

KOL (808) *tol ar-nar*
rope REDP-long
‘a long rope’ (Takata 1992:65)

(809) *tamata-ke da-l-talah e*
person-PL 3PL-REDP-sit there
‘the people who sat there’ (Takata 1992:63)

One hypothesis concerning the origin of reduplication in Tolaki relative clauses is that it developed by analogy with relative clauses headed by indefinite pronouns. In Tolaki, indefinite pronouns are reduplicated forms of interrogative pronouns, as in for example:

TOL (810) *ina-inae [m]e-'alo [m]eohai t[in]ondu i iwoi*
REDP-who PART:MM-take PART:be.siblings PASS:drown in water
‘whoever marry being siblings shall be drowned in water’
(Sande, Sikki, et al. 1986:89)

Such relative clauses headed by indefinite pronouns are paralleled by constructions as in (811), where again we find reduplication coupled with a non-specific semantic interpretation. The only difference formally is that instead of having a reduplicated interrogative pronoun, it is rather the initial element of the relative clause which is reduplicated.

TOL (811) *laa-laa tonia, nggo [m]eindo mokora*
REDP-be young FUT PART:work hard
‘whoever is still young, must work hard’\(^{191}\)
(Muthalib, Alimuddin, Pattiasina, et al. 1985:41)

\(^{191}\) Although the Indonesian translation which these authors supply, ‘yang masih mudah harus bekerja keras’ would also admit of a specific interpretation, S. Youngman (1998:pers.comm.) has confirmed to me
When a specific referent is mentioned, however, then only a specific reading of laa-laa (and other relative clauses marked by reduplication) is possible, in other words these reduplicated forms can occur in contexts where indefinite (reduplicated interrogative) pronouns cannot:

TOL (812)  ie 'i-to laa-laa ni-lolaha-mu
            3SG-COMP REDP-be PASS-seek-2SG
‘he is who (*whoever) is being sought by you’
(Muthalib, Alimuiddin, Pattiasina, et al. 1985:27)

TOL (813)  l Ina laa-laa mo-nahu i aa m-bolu
            PN mother REDP-be PART:ANTIPASS-cook at inside LKR:hearth
‘Mother is who (*whoever) is cooking in the kitchen’
(Muthalib, Alimuiddin, Pattiasina, et al. 1985:34)

This hypothesis leaves open the question of how or why a form explicitly marked as non-specific would develop a specific reading. A second, formal incongruity is that interrogative pronouns are mostly formed by two-syllable reduplication,\(^{192}\) while as noted above reduplication in relative clauses is mostly of one syllable.

8.2  Relativization of possessor

It is also possible in many (if not all) Bungku-Tolaki languages for possessors to be relativized. The usual markers of relativization described above are used, and there must occur on the possessed noun a genitive pronoun which is coreferential with the head of the relative clause. (In the examples which I have been able to glean, it is also true that the possessed noun has the role of subject in the relative clause.) In the following examples,

\(^{192}\)In addition to ina-inae ‘whoever’, compare also umbe-umbee ‘wherever’, mahi-mahina ‘whichever’, oha-ohapo ‘whatever’ (Gouweloos 1936:24; Muthalib, Alimuiddin, Pattiasina, et al. 1985:35). Although reduplication in indefinite pronouns is common across languages (Moravcsik 1978:319; inter alia), these Tolaki forms clearly constitute an exception to Haspelmath’s observation that “the most common case are indefinites consisting of two full instances of the corresponding interrogative pronoun. I know of no case of partial reduplication…” (1997:179).
the required genitive pronoun appears in boldface type. As some of these examples illustrate, the relative clause may be headless.

TOL (814) opu-opu woha-no
   REL-used.up husked.rice-3SG
   ‘whoever’s husked rice is used up’
   (Muthalib, Alimuddin, Chalik, et al. 1985:91)

(815) ie-to ona anai’ahu taa-taa laa sarungga-no
   3SG-COMP EMPH youngest.born REL-NEG be sheath-3SG
   ‘it was the youngest born who didn’t have a sheath’ (lit., ‘...whose sheath was not’)

PAD (816) henu p[in]emoiko takau kaanga-no
   REL PASS:make.good very food-3SG
   ‘he whose food was made very good’ (Karhunen 1994:39)

MRB (817) nana’ote anu nami hina mia mota’u-do
   child REL NEG:COMP exist person old-3PL
   ‘children whose parents (mia mota’u) are no longer, children who no longer have parents’ (Esser 1927:163)

(818) kulambu anu tekosi ntu’u horu-no
   curtain REL beautiful truly weave-3SG
   ‘a curtain which was woven very beautifully’ (lit. ‘a curtain the weaving of which was very beautiful’) (Esser 1933:193)

MRN (819) na-hina da sa-i tepo-benga-benga kuli-no
   NEG-exist REL NEG-3SG STAT-REDP-open skin-3SG
   ‘there isn’t any (corn) the husk of which hasn’t opened’
   (S. Andersen 1994a:50)

(820) sitirica da da’a wea api-no
   iron REL be live.coal fire-3SG
   ‘the iron that has live coals’ (lit. ‘the iron, the live coals of which exist’.(S. Andersen 1995b:10)

8.3 Relativization of object

In order for a patient to be relativized, it must occur as surface subject, in other words the verb of the relative clause must appear in passive form. The following examples which
illustrate this thus properly belong at home under the heading ‘relativization of subject’.

For further examples, see especially § 5.2.2.

TOL (821)  
\textit{puro m-baepae i-’in-oli ingoni}  
thing LKR-play REL-PASS-buy near.present  
‘the trinkets which were bought just then’  
(S. Youngman 1998:pers.comm.)

MRB (822)  
\textit{wuku-no wali-do anu t[in]umu-no indi’upua}  
bone-3SG companion-3PL REL PASS:burn-3SG some.time.ago  
‘the bones of their companion which had been burned by her some time ago’  
(Van Eelen & Ritsema 1918–1919:278)

(823)  
\textit{mia hawe w[in]awa-ku}  
person come PASS:bring-1SG  
‘people whom I have come bringing’  
(Esser 1933:352)

BNG (824)  
\textit{rea-no in-inu nto ai}  
blood-3SG PASS-drink-1PLN this  
‘this blood of his which we drank’  
(Saro, Rahim, et al. 1982:95)

WAW (825)  
\textit{lima tonga kinaa mia in-oli-no}  
five wrap cooked.rice REL PASS-buy-3SG  
‘five wrappers of cooked rice that were bought by him’  

KUL (826)  
\textit{buah malaka in-upu ndo itonia}  
guava -- PASS-pick-3PL recently  
‘the guava fruit which they had picked earlier’

MRN (827)  
\textit{ica da t[in]umu}  
fish REL PASS:grill  
‘the fish which was grilled’

Although this pattern is by far the most usual case in Bungku-Tolaki languages, there are three conditions in Mori Bawah, and apparently also one in Tolaki, under which a relativized patient does not occur as surface subject, but rather as surface object. (Whether other Bungku-Tolaki languages also allow relativization of objects under special circumstances is unknown to me.) For Mori Bawah these conditions are:
(a) the relative clause contains the negative particle nahi plus an indication of the underlying agent (Esser 1933:353):

MRB (828) a. mia anu nahi ku-to’ori-o
   person REL NEG 1SG-know-3SG
   ‘someone whom I don’t know’

Compare the unacceptability of *mia anu nahi t[in]o’ori-ku (Esser 1933:353). If, however, there is no specification of the agent, then a passive form may be used:

b. mia anu nahi t[in]o’ori
   person REL NEG PASS:know
   ‘someone who is not known’ (Esser 1933:353)

(b) when the head is an indefinite pronoun. In this case the patient is indefinite and non-specific, and the verb of the relative clause must be an antipassive form (Esser 1927:164):

MRB (829) a. ba hapa u-po-hawe
   if what 2SG-ANTIPASS-encounter
   ‘whatever you find’

MRB (830) a. na-hina hapa-hapa ku-po-hawe
   NEG-exist what what 1SG-ANTIPASS-encounter
   ‘there is nothing which I have come across’

Otherwise, indefinite patients are simply not relativizable. For example, it is not possible to begin with the independent clause ku-po-‘inu uwoi /1SG-ANTIPASS-drink water/ ‘I drank some water’, and relativize ‘water’. For a close approximation, however, see example (857) below.

(c) when a beneficiary is also present. Compare the following example; as noted in § 6.2.6, when a beneficiary is present the otherwise required pronominal indexing of a definite patient lapses in Mori Bawah:

MRB (831) kinaa anu i-binta-ako-ira
   cooked.rice REL 3SG-leave-BEN-3PL
   ‘the cooked rice which she had left for them’ (Esser 1927:164)
Now compare the next two examples, in which there is no overt realization of the agent.

MRB (832)  
\[ \text{inisa} \quad \text{anu} \quad \text{do-me- 'in-isa-ako} \]
pestled.rice  REL  3PL-PLS-PASS-pestle-BEN
‘the cooked rice which was pestled for them’ (Esser 1933:353)

(833)  
\[ \text{dahu} \quad \text{ku-p[in]epate-ako} \]
dog  1SG-PASS:kill-BEN
‘the dog which was killed for me’ (Esser 1933:353)

In certain theoretical frameworks, one would have to argue that what has happened here is that the beneficiary has been promoted to subject position—which promotion is marked by \(<\text{in}>\) on the verb—while the patient, even though relativized, remains surface object of the relative verb. That the beneficiary is surface subject is seen in both that it is indexed by nominative pronoun, and when the beneficiary is plural (three or more), a plural subject prefix occurs on the verb.

As interesting as the ‘promotion’ story given above might be, in my opinion the source of these sentences is from analogy to constructions such as illustrated in example (834). In this case, no beneficiary is present, rather -ako in its refective function (§ 6.2.3) introduces the cause of the speaker’s being punished. Furthermore, here it is the cause which has been relativized, not the ordinary patient of \(\text{huku} \) ‘punish’:

MRB (834)  
\[ \text{hala} \quad \text{ku-h[in]uku-ako} \]
crime  1SG-PASS:punished-REF
‘the crime for which I am being punished’ (Esser 1933:353)

Corresponding to (834) one could say \(\text{ku-h[in]uku} \) ‘I am being punished’ and still have a statement which is congruent with the fuller clause; but corresponding to (833) one could not say \(\text{ku-p[in]epate} \) ‘I am being killed’ (nor \(\text{ndo-me- 'in-isa} \) ‘they are being threshed’) except by violating the original meaning. Besides beneficiaries and causes, the applicative suffix -ako introduces various other arguments into the role structure of the predicate. For an extensive treatment of the accessibility of these introduced arguments to relativization, see Chapter 6.
It appears that in Tolaki, as in Mori Bawah, a relativized patient will appear as surface object if a beneficiary is also marked on the verb of the relative clause (in Tolaki pronominal indexing of the object does not lapse as in Mori Bawah). Compare example (835) without beneficiary with the parallel construction in (836) with beneficiary. As the second example also indicates, Tolaki speakers do not know beneficiary-to-subject promotion:

\[
\text{TOL (835)} \quad o \quad \text{gandu} \quad s\{in\} \text{olongako-ro} \quad i \quad \text{tonga} \quad m\text{-bada} \\
\text{ART} \quad \text{corn} \quad \text{PASS: pour out-3PL} \quad \text{at middle} \quad \text{LKR-field} \\
\text{‘the corn which had been poured out by them in the middle of the field’}
\]

\[
\text{(836)} \quad o \quad \text{gandu} \quad \text{aso} \quad \text{lepa} \quad s\{um\} \text{olonggee-kee}\textsuperscript{193} \\
\text{ART} \quad \text{corn} \quad \text{one} \quad \text{basket} \quad \text{PART: pour out-3SG\textsubscript{i}-BEN:3SG\textsubscript{j}} \\
i \quad \text{tonga} \quad m\text{-bada} \\
\text{at middle} \quad \text{LKR-field} \\
\text{‘the basket of corn\textsubscript{i} which had been poured out for him\textsubscript{j} in the middle of the field’}
\]

### 8.4 The suffix *-a and the ‘relativization’ of locative constituents

It is not possible in Bungku-Tolaki languages to relativize oblique, if by ‘oblique’ one means a constituent introduced by a preposition. For example the oblique-marked stimulus of the following example cannot be relativized:

\[
\text{KUL (837)} \quad \text{ndo-maasi} \quad i \quad \text{ana-ndo} \\
\text{3PL-feel love at child-3PL} \\
\text{‘they feel love toward their child’}
\]

However, a close synonym\textsuperscript{194} of (837) may be created using the applicative suffix -ako, in which case \textit{ana-ndo} is not preceded by an oblique marker (preposition), and as example (838b) demonstrates, is also relativizable:

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\textsuperscript{193}The transitive verb base is \textit{solongako} ‘pour out’; inflected for a third singular object it becomes \textit{solonggee}. See further footnote 140, page 270.

\textsuperscript{194}The English glosses supplied with these examples must be regarded as provisional. Further work is necessary to determine the precise semantic distinction being encoded by these alternative encoding strategies.
KUL (838) a. *ndo-maasi-ako  ana-ndo
   3PL-love-REF  child-3PL
   'they love their child'

   b. ana-ndo  m[in]aasi-ako-ndo
   child-3PL  PASS:love-REF-3PL
   'their child who is loved by them'

The accessibility to relativization of arguments introduced by -ako has been covered extensively in Chapter 6. Just as *maasi stands next to *maasiako, there are also pairs of verbs in Kulisu such as *teleu 'arrive' and *teleusi 'come upon' which differ in the presence or absence of the applicative suffix -i. In the case of intransitive *teleu,\(^{195}\) a locative constituent must appear as an oblique, and cannot be relativized:

KUL (839)  *i-teleu-mo  Wangkinamboro  i  raha-no
   3SG-arrive-COMP  Wangkinamboro  at  house-3SG
   'Wangkinamboro arrived at his house'

However, *teleusi—presumably from *teleu with 'captured' preposition—is a transitive stem in every regard, including that the patient is fully relativizable:

KUL (840) a. *...baraako  i-teleusi-'inda  Wangkinamboro
   lest  3SG-come.upon-3PL  Wangkinamboro
   '...lest Wangkinamboro come upon them'

   b. ponseewi  tf[in]eleusi-no  Wangkinamboro  itonia
   thief  PASS:come.upon-3SG  Wangkinamboro  near.past
   'the thieves whom Wangkinamboro had come upon earlier'

These examples with -ako and -i have been brought in to illustrate that where a formal device may be lacking, a functionally equivalent strategy may yet exist. As above, one possible strategy is to incorporate an oblique constituent as a core constituent of the verb.

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\(^{195}\) In this case the stem without -i is intransitive, while the stem with -i is transitive. However, it must also be noted that there are a number of pairs in Kulisu (and other Bungku-Tolaki languages) where both stems constitute transitive verb bases, for example *laha 'hunt, seek' versus *lahari 'pursue'; *toto 'chop' versus *totoki 'chop up lots'; and *rabu 'pull out' versus *robuki 'pull out lots'. In yet other cases, the base is a noun, and only the -i form is verbal, e.g. *konuku 'fingernail' versus *konokui 'pinch, nip with fingernails'.
Another strategy, discussed below and the actual topic of this section, involves using the locative suffix -a. In this case however, the derived forms are not verbal, but rather nominal in character.

The common Bungku-Tolaki suffix -a, from PMP *-an, is added to the primary form of a verb to derive a noun which typically indicates the location where an event takes place, or (if the stem expresses a stative concept) the place where an attribute or quality holds forth. For example:

TOL (841) a. pombaho'a 'place or time for planting s.th.', cf. mombaho 'plant s.th.'
   b. butu'a 'destination', cf. butu 'go toward'
   (S. Youngman 1997:pers.comm.)

PAD (842) a. po'angga'a 'place of work', cf. mo'angga 'work'
   b. pedolo'a 'place, room for bathing', cf. medolo 'bathe'
   (Karhunen 1994:20)

MRB (843) a. pelerea 'cite for farming', cf. melere 'set out a dry rice field'
   b. petango'a 'window', cf. metango 'look out the window'
   c. molusaa 'soft spot, soft part', cf. molusa 'soft, yielding'
   (Esser 1933:365, 366)

KUL (844) a. pocuri'a 'sleeping place', cf. moturi 'sleep'
   b. po'iha'a 'living place, residence', cf. mo'ia 'stay, reside'
   c. ropea 'direction, destination', cf. rope 'bow of boat', also 'head toward'
   d. poone'a 'place of ascent', cf. moone 'climb, ascend'

MRN (845) a. sumooa 'entrance', cf. sumoo 'enter'
   b. molinyaaha 'bright place', cf. molinyaa 'bright'
   (S. Andersen 1994a:12)

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196 For examples of -a derivations which profile the patient, see footnote 91 on page 160. This use of -a, however, reflects PMP *-en. In general -a (from PMP *-en) appears to be added to the transitive verb base alone, while -a (from PMP *-an) is added to the transitive base with or without the antipassive marker poN-, compare for example Padoe angga'a 'work' (things to be worked on) versus po'angga'a 'place of work', also asa'a 'things to sell' versus po'asa'a 'place to sell, kiosk' (Karhunen 1994:20), but Mori Bawah both pontutua, tutua 'bark cloth pounding board' (Esser 1933:366).
It is also possible for such derivations to profile the time of an event, or sometimes simply refer to an event abstractly, compare for example Tolaki perapu’a (from the middle verb merapu ‘marry’) which can mean ‘place of wedding’, ‘time of wedding’, also ‘marriage’ (S. Youngman 1997:pers.comm.), Mori Bawah matea (from mate ‘die, dead’) ‘place of death’, ‘time of death’, or just ‘death’ (Esser 1933:364 ff.). When multiple meanings are possible, the interpretation will depend on context.

So far as is known, -a forms in Bungku-Tolaki languages fill the same syntactic slots as do regular nouns, and are therefore best regarded as nominalizations. For example:

TOL (846) pe-lua’ako-’a-no mata iwoi nggiro’o
MM-expel-LOC-3SG eye water that

tewali-’i-to inotu molua rongga no-’olano
become-3SG-COMP swamp broad with 3SG-deep

‘the place where that spring of water discharged itself became a broad and deep swamp’ (Sande, Sikki, et al. 1986:89)

(847) nio-kaa po-wule-’a opitu, o’aso
exist-just ANTIPASS-chew.betel-LOC seven one

ikaa pe ’i-’ihi
exactly REDP-have.contents

‘here are seven places (containers) of betel-nut preparations, only one which has contents’

197Derivations with -a can also have concrete reference to the location where an action typically takes place or to an object involved in the action, but these functions are less relevant to the discussion at hand. Compare for example Tolaki peanaka ‘womb’ (cf. peana ‘give birth’), horu’a ‘weaving implements’ (cf. humoru ‘weave’) (S. Youngman 1997:pers.comm.); Mori Bawah ndoea ‘the part on which something is hung’ for example the handle of a bucket, the ring of a weigh-beam, also ‘place where something is hung up’ (cf. mondoe ‘hang’); ponahua ‘cooking place, fireplace, hearth’ (cf. monahu ‘cook’); ponahua can also mean ‘the time it takes to cook a pot of rice’, about 15 to 25 minutes) (Esser 1933:365, 367); Kulisusu tapaa ‘storage shelf above hearth’ (from *tapa ‘to smoke’); Moronene pondo’ua ‘cup’ (from mondo’u ‘drink’) (S. Andersen 1994a:12).

In some cases a contrast exists depending on the thematic consonant which occurs preceding -a. For example Tolaki has both pombahoa’a ‘place or time to plant something’ and pombahora ‘orchard’, from mombaho ‘plant’ (S. Youngman 1997:pers.com.); Moronene has both pisaa’a ‘place to defecate’ and pisaaka ‘toilet’, from pisaa ‘defecate’ (S. Andersen 1994a:12).
PAD (848) momoiko ngako io tepo-aso-’a-mami
  good very ART RECIP-one-LOC-1PLX
  ‘our uniting was a very good thing’ (Karthunen 1994:29)

MRB (849) hina-o-mo pesikeno-a-do
  exist-3SG-COMP ask-LOC-3PL
  ‘now they had a guide (someone to put questions to)’ (Esser 1933:365)

MRB (850) na-hina po-ronge-a-mami
  NEG-exist ANTIPASS-hear-LOC-1PLX
  ‘we have received no information about it, there is nothing posted’
  (lit. ‘our place of hearing does not exist’) (Esser 1933:189)

KUL (851) tondo a’iso i-kampai-Ø lingka-’a-ndo
  fence that 3SG-impede-3SG set.off-LOC-3PL
  ‘that fence blocked their way of going onward’

(852) i-’onto-ho bo poone-’a-no, kadi-o labu
  3SG-see-3SG FUT ascend-LOC-3SG only-3SG iron
  mentaso to ’u
  sharp very
  ‘she saw her intended place of ascending, it was nothing but very sharp iron’

This is true even when an -a derivation occupies a slot in an equative clause,\(^{198}\) i.e. there is no reason to regard pesikenoa, lako’a and cudua in the following examples as anything other than nouns:

MRB (853) pesikeno-a-no atuu pepaekombo-no kombia-no
  ask-LOC-3SG that full.sibling-3SG spouse-3SG
  ‘the one to whom he directed his question was a sister of his wife’
  (Esser 1933:365)

\(^{198}\)It is generally regarded that ‘locative focus’ constructions typical of Philippine languages developed from cleft (equative) sentences which were reinterpreted as verbal sentences. For example, following Starosta, Pawley and Reid (1982:157–158), a sentence originally meaning, say, ‘John’s climb-an (place of climbing) was the mountain’ becomes reinterpreted as verbal, i.e. ‘John climbed the mountain’. In this way ‘mountain’ is transformed into the focused constituent, -an instead of a locative nominalizer becomes the marker of locative focus, and ‘John’, originally the possessor, becomes the unfocused agent marked in genitive case.
KUL (854)  
\textit{kua'iko lako-'a-ndo a'iso cudu-a-no-mo} 
in.reality go-LOC-3PL that arrive.from.above-LOC-3SG-COMP 
\textit{duka ika a'iko} 
also fish that

'in reality their destination was also the landing site of that fish (the place where that fish had landed)'

A question of analysis, however, arises when an -α derivation is used to modify a noun, especially in cases where it can be translated as a relative clause:

MRB (855)  
\textit{togo lako-a-do} 
island go-LOC-3PL

'the island to which they are going' (Esser 1933:364)

Example (855) could of course be glossed alternatively as 'the island of their destination', in which case a more nominal interpretation is given to \textit{lako-a-do}. Compare also the following:

TOL (856)  
\textit{lau-lau-no pewiso i aa uanggi} 
immediately-3SG enter at interior seclusion.room

\textit{laa-a-no kaaka-no} 
be-LOC-3SG older.sibling-3SG

'immediately he went into the seclusion room, the place where his older sibling was' (S. Youngman 1998:pers.coom.)

MRB (857)  
\textit{uwoi po-'imu-a-no} 
water ANTIPASS-drink-LOC-3SG

'water from which he drank' (Esser 1927:164)

(858)  
\textit{komboko po-naa-pa inisa-mami} 
basket ANTIPASS-store-LOC pestled.rice-COMP

'the basket in which our pestled rice is stored' (Esser 1933:192)

(859)  
\textit{ndiindiio mia amu pesikeno-a-ku indiawi} 
here person REL question-LOC-1SG yesterday

'here is the person whom I asked yesterday' (lit. ...'who was my place of questioning') (Esser 1927:163)

KUL (860)  
\textit{pu'u-no buah malaka pocuri-'a-ndo ana-hako itonia} 
trunk-3SG guava -- sleep-LOC-3PL child-COLL near.past

'the guava tree where those (just mentioned) children were sleeping'
Two arguments in favor of regarding such -α derivations as nominalizations, however, are
(a) -α forms cannot appear as main clause predicates, and (b) -α forms can only be
inflected with genitive pronouns, and no other—in other words these forms fall outside of
the system of verbal inflection described in Chapter 7.

It may be helpful at this point to briefly compare -in-passives with -α locatives,
especially as -in-passives are thought to have derived from nominalizations (§§ 2.5 and
5.2.1), while the claim is being made here that -α locatives are still nominalizations. The
following exemplify Kulisu main clauses with marking for subject. The first also
contains a patient constituent, the second a locative constituent:

KUL (863) a. ndo-pura-ho io ika
   3PL-finish.off-3SG ART fish
   ‘they finished off the fish’

   b. ndo-lako i lipu r[fum]ame
   3PL-go at country PART:festive
   ‘they went to a festive country’

The patient can be relativized using -in-; the locative can be relativized as described above:

KUL (864) a. ika p[fin]ura-ndo
   fish PASS:finish.off-3PL
   ‘the fish which was finished off by them’

   b. lipu lako-‘a-ndo
   country go-LOC-3PL
   ‘the country to which they were going’
The patient is interrogated using an -in-passive. The location can be interrogated using either a nominalization with -a, or the regular verb form without -a, as in respectively the (b) and (c) examples, though in Kulisu the latter is by far the more common:

KUL (865) a. iō ḥapa p/[in]ura-ndo
   ART what PASS:finish.off-3PL
   ‘what was finished off by them?’

   b. maina ḥope-a-ndo?199
      where head.toward-LOC-3PL
      ‘where are they headed, where is their destination?’

   c. maina ndo-lako?
      where 3PL-go
      ‘where are they going?’

However, although the patient can also appear as surface subject in a main clause as in (866a), no corresponding construction is possible with locative constituents:

KUL (866) a. ika i-[p[in]ura-mo
   fish 3SG-PASS:finish.off-COMP
   ‘the fish was finished off’

199† myself have never heard the comparable maina lako-‘a-ndo? ‘where are you going?’ uttered by a Kulisu speaker. Compare Tolaki and Moronene, where this way of interrogating is possible, perhaps even common:

TOL ḥumbe lako-ano?
   where go-LOC-3SO
   ‘where is he going?’ (Gouweloos 1936:24)

MRN hαι ḥapa nta lako-‘a-ndo?
   at what FUT go-LOC-3PL
   ‘where will they go?’ (S. Andersen 1994a:52)

In Mori Bawah, as in Kulisu, one again finds both ways of framing a where question:

MRB isua ke u-lako?
   where INTERROG 2SG-go
   ‘where are you headed?’ (Esser 1927:159)

MRB isua po-ronge-a-mu lele atuu?
   where ANTIPASS-hear-LOC-2SG news that
   ‘where have you heard of such a report? where have you come to know of that?’
   (Esser 1927:159)
b. *lipu i-lako-'a-mo
   country 3SG-go-LOC-COMP

8.5 Other nominalizations and the ‘relativization’ of instruments

It is also possible to employ the primary form of the verb itself as a nominalization, without the addition of the suffix -a. In contradistinction to nominalizations with -a, which usually profile the location or time of an event, these other nominalizations typically profile the performance of an action, the manner in which an action is performed, the instrument with which it is performed, or in rare cases the person who performs the action (in general, the ‘means’). In the following sets of examples, nominalized forms are contrasted with corresponding participle forms, the latter, of course, only having a verbal interpretation.

TOL (867) a. posoki ‘plug, stopper’, cf. mosoki ‘stop, plug up s.th.’
   c. polanggu ‘strike, striker’, cf. molanggu ‘strike, hit s.th.’
   b. pesuko ‘question (n.)’, cf. mesuko ‘ask, inquire’
   d. pekaa ‘bite (n.), biting’, cf. mekaa ‘bite (v.)’

PAD (868) a. poroahi ‘broom, sweeping’, cf. moroahi ‘sweep s.th.’
   b. pompupu ‘cover, lid, top’, cf. mompupu ‘cover s.th.’
   c. pontulungi ‘help’, cf. montulungi ‘help s.o.’
   d. pesikeno ‘proposal’, cf. mesikeno ‘ask’
   e. pelulu ‘running, chase’, cf. melulu ‘run’
   f. petii ‘ones who come down’, cf. metii ‘descend’
   (Karhunen 1994:20)

MRB (869) a. ponako ‘thieving, thievery’, cf. monako ‘steal s.th.’
   b. polombo ‘clothes washing, clothes washer’, cf. molombo ‘wash (clothes)’
   c. podoa ‘counting, manner of counting’, cf. modoa ‘count s.th.’
   d. pompo’aha ‘shoulder (n.)’, cf. mompo’aha ‘carry s.th. on the shoulder’
   c. pompaka ‘fodder’, cf. mompaka ‘feed s.o., s.th.’
   d. po’isa ‘rice pestle’, cf. mo’isa ‘pestle (rice)’
   f. tepoto’ori ‘acquaintance’, cf. tepoto’ori ‘be acquainted with each other’
   g. pepaekombo ‘full sibling’, cf. mepaekombo ‘be full siblings’
   (Esser 1933:190–193)
KUL (870) a. lingka ‘setting off, going forward’, cf. lumingka ‘set off, go’
   b. po'ia ‘residing, stay’, cf. mo’ia ‘reside, stay’
   c. pemingku ‘action, deed’, cf. memingku ‘do, carry out’

MRN (871) a. ponto ‘ori ‘knowledge; shaman’, cf. montu ‘ori ‘know’
   b. pedandi ‘promise (n.)’, cf. medandi ‘promise (v.)’
   c. pongkerusi ‘broom; Sweeper (person)’, cf. mongkerusi ‘sweep’
   d. mokoko ‘anu ‘shyness’, cf. mokoko ‘anu ‘shy’
   e. mate ‘death’, cf. mate ‘die, dead’

(S. Andersen 1994a:11–12)

As described in Chapter 7, the primary forms given above can also be used as verbs. For example corresponding to (870a) one could also say lingka! (more often lingka-mo!) as a verbal command, ‘go, start, take off!’, likewise lingka preceded by a nominative pronoun can only be interpreted as verbal, e.g. ndo-lingka-mo /3PL-set.off-COMP/ ‘they have already set off’. Whether a primary form is to be interpreted as noun or verb, then, is highly dependent on its distribution.

In examples (872) through (881), I have chosen sentences which I believe unambiguously illustrate nominalizations, at least here we find primary forms distributing in syntactic positions normally reserved for nouns (subject, object, existential, etc.). In a number of cases, it also happens that the primary form profiles an object rather than an event, compare posoki ‘plug, stopper’ of example (872).

TOL (872) Lako-no-to lako ale r[u]m[abu-]‘i-kee
          go-3SG-COMP go take          PART:pull.out-3SG-BEN:3SG
po-soki-no
ANTIPASS-plug-3SG

‘then she went and pulled out its stopper’

PAD (873) po-roahi-mu moiko ngako
          ANTIPASS-sweep-2SG good very
1. ‘your broom is very good’
2. ‘your sweeping is very good’ (Karhunen 1994:21)
(874) petoro-ndo nie, mia mosu’o lowo
sit-1PLN this person old all
‘we that sit here are all old people’ (Karhunen 1994:21)

MRB (875) aku h[um]uku-ako-mu po-nako-mu
1SG.FUT PART:punish-REF-2SG ANTIPASS:steal-2SG
‘I will punish you on account of your thieving’ (Esser 1933:190)

(876) mansa-do me-ronge-o i Bange pe-booli-no
as.soon.as-3PL PLS-hear-3SG PN Ape MM-call-3SG
i Tanggalasi...
PN Tarsier
‘when the Apes heard Tarsier’s calling...’ (Esser 1933:190)

(877) sine po-karansa-no beine bou nahi
but ANTIPASS:scale-3SG woman fish NEG
komba\textsuperscript{200} owu, kuku-no koa
by.any.means machete nail-3SG just
‘but that which the woman used to scale fish (the woman’s fish-scaling
instrument) was by no means a machete, but solely her fingernails’
(Esser 1933:191)

(878) nahi moiko nahu-no inahu andio
NEG:3SG good cook-3SG vegetables this
‘these vegetables are not cooked well’ (lit., ‘the way these vegetables
were cooked is not good’) (Esser 1933:193)

KUL (879) i-olai-mo lingka-no
3SG-far-COMP set.off-3SG
‘he went far’ (lit. ‘his going was far’)

(880) i-pepu ‘u-mo i-soso-ako-no pemingku-no
3SG-begin-COMP 3SG-be.regretful-REF-3SG carry.out-3SG
t[um]elau-no a iso
PART:gone.too.far-3SG that
‘he began to regret those actions of his which had gone too far’

\textsuperscript{200}Although the usual negator for equative clauses in Mori Bawah is nahi ‘ia, the combination nahi komba
can also be used in this function; cf. Esser (1933:256–257).
MRN (881) *weweu-ho po-'ehe-nto panta-nto!*
   do-3SG     ANTIPASS-want-1PLN own-1PLN
   ‘accomplish our own wish!’ (S. Andersen 1994a:29)

As with forms containing the locative suffix -a, primary forms can also be used as noun modifiers. Again a question of analysis arises, for example should *po’oli-do* in the following context be interpreted as a nominalization, i.e. ‘the money of their buying rice’, or as the verb of a relative clause, i.e. ‘the money with which they bought rice’ (Esser 1933:192)?

MRB (882) *doi po-'oli-do pae*
   money ANTIPASS-buy-3PL rice

Similarly with the following examples:

TOL (883) *nese m-bewala*
   k.o.plant LKR-make.fence
   ‘nese for making a fence’ (S. Youngman 1998:pers.comm.)

MRB (884) *uwoi pe-wo ‘ohi*
   water MM-wash
   ‘wash water, water for washing oneself with, water with which someone has washed himself’ (Esser 1933:364)

   *pena po-buri-ku wunta andio*
   pen ANTIPASS-write-1SG letter this
   ‘the pen with which I wrote this letter’ (Esser 1933:192)

   *sabo po-lombo-ku lemba-ku*
   soap ANTIPASS-wash-1SG clothes-1SG
   ‘the soap with which I washed my clothes’

WAW (887) *baho pon-totapi-no pakea-ngku*
   water ANTIPASS-wash-3SG clothes-1SG
   ‘water to wash my clothes’ (Stokhof 1985:125)

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201 Compare *uwoi pe-wo ‘ohi-a* (with locative -a) ‘water for washing oneself in, or in which someone has washed himself’ (Esser 1933:364).
MRN (888)  

\textit{pali-no, nta pom-podo-no punti-no}  
axis-\textit{3SG} FUT ANTIPASS-cut\textit{-down-3SG} banana-\textit{3SG}  
‘his axe, the one he will use to cut down his banana’  
(S. Andersen 1994a:55)

(889)  
\textit{ue, pong-koko keu}  
at ANTIPASS-tie wood  
rattan, for tying wood’ (S. Andersen 1994a:53)

One diagnostic reason for considering the above primary forms to be nominalizations rather than verbal forms, is that in this context a primary form cannot be followed by an absolution pronoun. Indeed as Esser has pointed out for Mori Bawah, one uses a poN-form of a transitive verb even in cases where the object is definite, for example:

(890)  
\textit{a. keu po-nahu}  
wood ANTIPASS-cook  
‘firewood, wood for cooking’ (Esser 1933:192)

\textit{b. keu po-nahu }\textit{ (**nahu-o **} inahu andio  
wood ANTIPASS-cook cook-\textit{3SG} vegetables this  
‘the wood for cooking these vegetables’ (Esser 1933:192)

Compare also examples (885) through (888) above. This pattern is in contrast to imperatives as well as subordinate temporal clauses and relative clauses, where the normal definite/indefinite object distinction is maintained, e.g. corresponding to example (890) one would expect to find in the imperative \textit{po-nahu} ‘cook’ versus \textit{nahu-o inahu andio!} ‘cook these vegetables!’ . This argument, of course, applies only to transitive stems; the case for regarding intransitives, say, \textit{pewala} ‘make, construct a fence’ of example (883) and \textit{pewo’ohi} ‘wash (oneself)’ of example (884) as nominalizations would have to be made by extension. Examples (883) and (884) also demonstrate that one should not regard poN- per se to be an instrumental marker, rather the notion of ‘instrument’ or ‘means of performing an action’ is a property of using a primary form itself.

Sometimes a Mori Bawah transitive stem can be used as a nominalization without poN-, but in cases where this is possible, the nominalized stem does not function as a
definite object form, but rather as a passive gerund (Esser 1933:192–194). The associated
genitive pronoun thus refers not to the agent but rather to the patient of the underlying event, for example: po-nahu-no ‘his cooking, his way of cooking, his means of cooking’, but nahu-no ‘its cooking, way of being cooked, etc.’; po-horu-no ‘her weaving, etc.’ versus horu-no ‘its weaving, way of being woven, etc.’. For examples of horu-no and nahu-no in context, see respectively examples (818) and (878). Esser is clear in stating (1927:192) that only a limited number of nominalizations can be derived from transitive stems in this way.\textsuperscript{203}

\textsuperscript{202}Similarly po-nahu-\textit{a} ‘place of cooking’, nahu-\textit{a} ‘place of being cooked’ (Esser 1933:365).

\textsuperscript{203}Indeed, there are probably rather a greater number of noun/verb pairs in which the transitive verb derives from the noun, i.e. ‘denominalization’. In this case the verb most often means to supply something with the base, to perform a characteristic action upon something using the base, or to make something into the base, for example ato (transitive verb base) ‘supply with a roof (ato)’, sumpi (transitive verb base) ‘shoot at something with a blowgun (sumpi)’, kapo (transitive verb base) ‘grab at something with the claws (kapo)’, dopi (transitive verb base) ‘cut into planks (dopi)’ (Esser 1933:297-298).
9 Conclusions

Prior to and throughout most of the twentieth century, the Bungku-Tolaki languages have remained an obscure quantity. No Bungku-Tolaki representative, for example, was included in the *Comparative Austronesian Dictionary* (Tryon 1994) and even descriptions of their best-known member, Mori (Esser 1927–1933; Barsel 1994), have had little impact on Austronesian studies. This dissertation is intended to change the status quo. By drawing on the best which the available Dutch and Indonesian sources have to offer, and combining it with a period of fresh research, I hope to have at least partially exposed these languages to outside linguistic scholarship.

My approach to these languages is decidedly historical; therefore, the present work should be of prime interest to scholars studying the prehistory of Austronesian languages. And although it has not been possible in these brief pages to present a picture of Proto-Bungku-Tolaki phonology and morphosyntax in all its detail, I hope I have hit on enough of the major points to make this work an important contribution to the field of Austronesian studies. Because the Bungku-Tolaki languages are closely related, however, then like other established microgroups they become a case study for understanding language change. That is, if we can understand how these languages differ, and then trace how these differences emerged, then we can also develop an understanding of what kind of changes are possible historically—a process of understanding language change which Greenberg termed ‘intragenetic comparison’ (1974:67–68). In this respect, this dissertation should have appeal to an even broader audience of linguists interested in language typology, grammaticalization, and other processes of morphosyntactic change.

Here following, I describe some of the principle results of this study, along with areas for further research.
In regard to phonological change, one of the chief results of this study is the setting forth of the innovations which the Bungku-Tolaki languages share in common—including no less than eight splits and six mergers—and which differentiate these languages from their Proto-Malayo-Polynesian ancestor. Also, for the first time we now have a clear understanding of subgrouping within the Bungku-Tolaki group. My research has shown not only is there a clear split between eastern and western languages, but furthermore that the supposed Mori subgrouping—indeed, what Dutch and Indonesian linguists have considered to be one language—is in fact a convergence area. It is only the close contact between Mori Atas and Padoe on the one hand with Mori Bawah on the other that accounts for shared vocabulary and other resemblances. Another, even unexpected result was the discovery of a Tolaki substratum in two Mori Bawah dialects, Watu and Karunsi’e, evident especially in the form of pronouns.

Although these and other factors allow us establish the area to the west and south of Tomori Bay (at the juncture of the eastern and southeastern arms of Sulawesi) as the most plausible Bungku-Tolaki homeland, it is less certain how they came to be there. One area of further research is to determine whether the Bungku-Tolaki languages share an immediate common ancestor with any of the surrounding language groups. With this study the first steps have been taken in this direction, and with work going on in other language groups of Sulawesi it is hoped that a clearer picture will emerge in the not too distant future. My own thinking is that—with Donohue’s (forthcoming) recognition of the need to split off Wolio, Wotu and certain other languages of the supposed Muna-Buton group—a uniting of the Bungku-Tolaki and remaining Muna-Buton languages under a single macrogrouping is inevitable. In particular, it seems that all these languages share in the lowering of PMP final *-iq > *e (with *u unaffected by a following *-q), raising of PMP antepenultimate *a > *o; the uncompounded split of *s > *s, *h; and the subsequent merger of *Z and remaining *s > *s (cf. Van den Berg 1991b regarding these changes in
Proto-Muna). At the same time, however, the evidence for a 'Proto-Celebic'—including Bungku-Tolaki, Muna-Buton and Kaili-Pamona—as proposed by Van den Berg (1996) has been weakened by the present study. In particular, we now know that Proto-Bungku-Tolaki retained reflexes of both *R and final consonants, therefore PMP *R > Ø and final consonant loss cannot be cited as shared innovations.

In regard to morphosyntax, Proto-Bungku-Tolaki clearly reconstructs as having three construction types which allowed the expression of both an agent and a patient. These are identified here as the antipassive (marked by the verbal prefix *moN-/poN-), the active-direct (marked by *<um>/Ø and required pronominal indexing of the object), and the passive (marked by *<in>). Parallel divisions involving the same cognate morphology are found in other Western-Malayo-Polynesian languages, suggesting this pattern was even older.

In the morpheme reconstructed as PBT *ako (from earlier *aken), we find a classic case of preposition capture. Reconstructable as a preposition in Proto-Bungku-Tolaki, the morpheme has tended through time both to coalesce with a following pronoun, creating a set of dative or benefactive pronouns, and to precipitate as a verb suffix. Reflecting the fact that reflexes of *ako have only recently been captured as an applicative suffix, even today the argument which it introduces into the role structure of the predicate—cause, instrument, beneficiary, etc.—is always defective as an object in some way (e.g. not relativizable). Certain peculiarities which attend this morpheme—for example, when it introduces an instrument, the following pronoun indexes not the instrument but rather the ordinary patient—are found in languages across a broad swath of Sulawesi.

Surprisingly, this study has also uncovered evidence for reconstructing a suffix *ako, distinct from the preposition. In present-day languages, reflexes of this form either have an intensifying force, or turn an intransitive stem into a causative with a full-fledged
object. Although unrecognized until now, evidence for reconstructing two separate morphemes is found in languages across central and southeastern Sulawesi, and is certain to allow us to refine our notions about the prehistory(ies) of the somewhat enigmatic morpheme(s) taken.

Bungku-Tolaki languages present an interesting case of what can happen with pronoun sets. In Proto-Bungku-Tolaki main clauses, nominative and absolutive pronoun sets served as agreement markers. On intransitive verbs, nominative pronouns indexed subjects in consecutive clauses, following negatives, and in imperative contexts, while absolutive pronouns were used in other contexts. In Kulisusu absolutive pronouns lost their function of marking subjects, so that here—alone among Bungku-Tolaki languages—we see the emergence of a straight nominative-accusative system. In other portions of the Bungku-Tolaki area, we see the further development of absolutive pronouns into a (second) set of nominative pronouns used in future contexts; the most likely historical scenario is that an absolutive pronoun following a future-oriented verb became reanalyzed as belonging to the following verb (e.g. want-them cook-it \( \rightarrow \) FUT them-cook-it). In addition, the genitive subject marking characteristic of PBT subordinate temporal adverbiacl clauses has in some languages also made its way into main clauses.

In regard to relative clauses, it appears that Proto-Bungku-Tolaki must have used a gap strategy for relativizing subjects and possessors. Patients could be relativized only if 'promoted' to subject position, i.e. the verb of the relative clause had to occur in passive form. Although maintaining this basic strategy, Bungku-Tolaki languages have developed relative markers—e.g. particles which signal the presence of a relative clause—from a number of different sources. In future contexts, Mori languages have come to exhibit what must be considered a pronoun retention strategy in relative clauses.

There are, of course, other parts of the grammar of these languages, which hopefully can be investigated at some future time and as better data become available. Bungku-
Tolaki languages are rich in verbal (as well as numeral) derivational morphology, only a small portion of which has been mentioned in this study even in passing. The area of middle voice\textsuperscript{204} especially, I think, will be an interesting study; these languages provide evidence that in PBT there was a middle marker *pe- of very broad function, which has been replaced in various of its functions—especially reciprocal—by other affixes in the daughter languages. However, the available lexicographic material simply does not allow for a thorough investigation to be conducted at this time. Other areas of the grammar needing further attention include the form of complement clauses; negative particles and negative constructions; numerals, numeral constructions, and numeral morphology; deictics; articles; and noun-noun compounds especially vis-à-vis possessive constructions. With this study, then, our understanding of the nature of Proto-Bungku-Tolaki has only begun.

\textsuperscript{204}The terms 'middle voice' and 'middle marker' are used here in the sense of Kemmer (1993).
Appendix 1

Selected texts

In order to supplement the grammatical analysis presented in the body of the dissertation, five texts with interlinear glossing and free translation have been furnished in this appendix, each from a different Bungku-Tolaki language. Although both the Mori Bawah and Bungku texts have been published elsewhere, the morpheme by morpheme glossing and the English free translation are my own. Regretfully, circumstances have not allowed me to include a representative text from the Western Interior branch of Bungku-Tolaki, that is, from Mori Atas, Tomadino or Padoe. For a short Padoe text, however, I refer the interested reader to the expository text already published in Vuorinen (1995:114–116).
Tolaki: *The Story of Abunawas*

**Source**

Story told by Arsamid, December 1989, in Unaaha village. Recorded by David Mead. Glossing and free translation by David Mead with assistance from Scott Youngman.

**Text**

1. *Nango-no i Abunawas.*
   
   story-3SG PN Abunawas

2. *Laa-e-to *[m]*jo’ia i Abunawas, a-no pom-biara o*
   
   be-3SG-COMP PART:live PN Abunawas and-3SG ANTIPASS-tend ART bee, o’aso-iikaa.

   
   goat one-exactly be-3SG-COMP-just PART: tend-3SG and-3SG be FUT die

4. *Tewere-’i-to penuo-no i Abunawas, saa mate-no bee-no*
   
   worried-3SG-COMP spirit-3SG PN Abunawas when die-3SG goat-3SG
to’oto ke-no nio nggo peotoroaha-no.
   
   NEG.COMP if-3SG exist FUT livelihood-3SG

5. *[M]*om-behawe-’i akala.
   
   PART:ANTIPASS-think-3SG tactic ART rajah many goat-3SG

6. *O rada, dadio bee-no.*
   
   ART rajah many goat-3SG

7. *Nggo te’embe a-no tule-’i*[m]*oko’ale-’i-kee*
   
   FUT how and-3SG bring about-3SG PART:able.to.take-3SG-BEN:3SG bee-no nggiro’o mokole? 8. *[M]*om-behawe-’i-to akala.
   
   goat-3SG that ruler PART:ANTIPASS-think-3SG-COMP tactic

9. *Lako-no-to um-ara-ara-’i*[m]*o-wiso-kee ringgi*
   
   go-3SG-COMP PART:attempt-3SG PART:ANTIPASS-enter-BEN:3SG coin wulaa ine woroko-no.

10. *Sa-no karu-karu-’i-kee woroko-no*
    
    gold in throat-3SG when-3SG REDP-scratch-3SG-BEN:3SG throat-3SG bee-no, teho-hongo bee-no tepada ringgi wulaa.
    
    goat-3SG cough goat-3SG come.forth coin gold

11. *Lako-no-to n*[um]*um-’i bee-no nggiro’o mo-morusu*
    
    go-3SG-COMP PART:pull-3SG goat-3SG that REL-thin
butu i laika-no mokole. 12. No-dunggu i laika-no mokole, go.toward at house-3SG ruler 3SG-arrive at house-3SG ruler

taa hori-no n[um]umu-'i bee-no leu i laika-no mokole,
NEG before-3SG PART:pull-3SG goat-3SG come to house-3SG ruler

lala ari-'i-to mo-wiso-kee o'aso ringgi
beforehand finish-3SG-COMP PART:ANTIPASS-enter-BEN:3SG one coin

wulaa ine woroko-no bee-no.
gold inside throat-3SG goat-3SG

22. Ni-lako-no-to k[um]aru-karu-'i-kee woroko-no.
NI-go-3SG-COMP PART:REDP-scratch-3SG-BEN:3SG throat-3SG

23. Tehohongo-no bee-no, tekokaha-no, pelosi'ako-no ringgi wulaa
cough-3SG goat-3SG clear.throat-3SG spring-3SG coin gold
tepada ari aa m-bondu-no. 24. Te'eni-'i mokole,
come.forth from inside LKR-mouth-3SG say-3SG ruler

"Dadi-'i-to." 25. Ni-lako-ro-to ona [m]e-'eusa.
become-3SG-COMP NI-go-3PL-COMP EMPH PART:MM-exchange

26. No-nunu-o-to luwu'a'ko bee-no mokole i Abunawas
3SG-pull-3SG-COMP all goat-3SG ruler PN Abunawas

w[∅]awe-'i mbule i laika-no, bee-no ona i Abunawas
PART:carry-3SG return to house-3SG goat-3SG EMPH PN Abunawas

no-'ale-'i-to ona mokole.
3SG-take-3SG-COMP EMPH ruler

27. Tebunggu-no i Abunawas, ni-lako-no-to mokole [m]etarambu'u
arrive.back-3SG PN Abunawas NI-go-3SG-COMP ruler PART:begin

kf[um]aru-karu-'i-kee woroko-no bee-no i Abunawas.
PART:REDP-scratch-3SG-BEN:3SG neck-3SG goat-3SG PN Abunawas

28. Sambe mate nggiro'o o bee, ki'oki no-po-lua ringgi
until dead that ART goat NEG 3SG-ANTIPASS-expel coin

wulaa. 29. Marugi-'i-to mokole.
gold suffer.loss-3SG-COMP ruler

30. Lako-no-to mokole [m]eka'oori-mbendua-kee i Abunawas.
go-3SG-COMP ruler PART:call-again-BEN:3SG PN Abunawas
31. Te'eni-'i mokole, "Abunawas, ki'oki no-dadi to-pe-'eusa.

say-3SG ruler Abunawas NEG 3SG-become 1PLN-MM-exchange

Nggiro'o bee-mu mate-e-to. Ku-karu-karu-'i-kee woroko-no,

this goat-2SG die-3SG-COMP 1SG-REDP-scratch-3SG-BEN:3SG throat-3SG


NEG 3SG-ANTIPASS-expel coin gold 2SG-deceive-1SG

te'eni-'i Abunawas. 33. "Ku-ehe pera ke-to pe-'eusa, mano

say-3SG Abunawas 1SG-want really if-1PLN MM-exchange but

no u-pasa-aku? Ni'ino-no tabulu-keito-to [mje-'eusa,

that 2SG-force-1SG this-3SG gone.too.far-1PLN-COMP PART:MM-exchange

maa to'oto iee no-dadi." 34. Kenangia-'i-to

then NEG:COMP 3SG 3SG-become experience.defeat-3SG-COMP

mokole. 35. Opu-'i-to.

ruler use.up-3SG-COMP

Notes

4. peotoroaha-no, probably literally 'his way of being given life'. Compare toroaha 'life, existence', peotoro (transitive base) 'give life, save, take care of'.

13. komoru-morusuno... kodai-dadiono... The glossing of ko- as 'though' may not be entirely appropriate. The sense is definitely one of 'however thin... however many...'.

23. tehohongo, tekokaha are verb forms which imply the action is involuntary, though this does not emerge clearly in the English translation.

Translation

1. THE STORY OF ABUNAWAS

2. Abunawas was living, and he tended a goat, exactly one. 3. He was tending it, and it was about to die. 4. In his spirit he was worried that once his goat died, there would no longer be a way for him to make a living.

5. He began thinking of an idea. 6. The rajah, he had many goats. 7. How might he accomplish being able to take those goats of the ruler? 8. He thought of an idea!

9. Then he tried sticking a gold coin in its throat. 10. When he scratched his goat's throat, his goat gave a cough and out came the gold coin.
11. Then he led that goat of his which was thin to the house of the ruler. 12. Upon his arriving at the ruler's house, the ruler said, "What happened, Abunawas, so that that goat of yours is thin?" 13. Said Abunawas, "However thin my goat is, however many your goats are, I would certainly never want for us to trade." 14. Said the ruler, "Why is that, Abunawas?" 15. Said Abunawas, "This goat of mine is not like your goats. When I scratch its throat, it coughs, and a gold coin discharges itself." 16. Ah, it entered into the ruler's mind.

17. Then the ruler said, 'Let's trade our goats, Abunawas.' 18. Said Abunawas, "It's a pity, but no, Sir." 19. But the ruler forced him, then Abunawas said, "Then it's a deal."

20. Before they exchanged, the ruler said, "Then just try first whether it's really true that that goat of yours habitually coughs and expels a gold coin." 21. But in actuality before Abunawas had led his goat to the ruler's house, he had already beforehand inserted a gold coin into the throat of his goat.

22. Then Abunawas scratched its throat. 23. His goat coughed, cleared its throat, and out sprang a gold coin coming forth from inside its mouth. 24. Said the king, "It's a deal." 25. Then they traded. 26. Abunawas led all the ruler's goats and took them home to his house, while Abunawas's goat was taken by the ruler.

27. Abunawas having gone back, the ruler began scratching the throat of Abunawas's goat. 28. Until that goat died, he never expelled a gold coin. 29. The ruler had lost out.

30. Then the ruler called Abunawas again. 31. Said the ruler, "It's doesn't work out for us to exchange. This goat of yours has died. I scratched its throat, but it never expelled any gold coin." 32. "You deceived me!" said Abunawas. 33. "Would I really have wanted us to trade, except that you forced me? In this thing we've gone too far in exchanging, consequently it can't happen any more." 34. The ruler had suffered defeat. 35. The end.
Mori Bawah: *How It Was when Monkey and Turtle Planted Bananas*

**Source**


**Text**

1. *Pu’u-no, ondae i Bange ka i Re’a [m]om-paho*
   
   base-3SG 3PL PN Monkey and PN Turtle PART:ANTIPASS-plant
   
   *punti.*
   
   banana

2. *Pohona do-lako [m]om-paho punti, i Bange ka i*
   
   once 3PL-go PART:ANTIPASS-plant banana PN Monkey and PN
   
   *Re’a, te’o’asa-do.*
   
   Turtle one.each-3PL

   
   finish-3PL PART:plant-3SG PART:MM-return-3PL-COMP

   
   bright-3SG-COMP PART:go-3PL-COMP PART:see-3SG arrive-3PL

   
   at banana PASS:plant-3PL when-arrive-3SG just PN Monkey PART:sit.on-3SG

6. *[M]esikeno i Bange: “Pia tangke-mo ke*
   
   PART:have.question PN Monkey how.many stalk-COMP INTERROG

   *omue lewe-no punti-mu, Re’a?”*
   
   2PL leaf-3SG banana-2SG Turtle PART:reply PN Turtle be one

   *tangke lewe-no.”*

7. *Onae-mo ka-i pesikeno mbo’u i Re’a:*
   
   stalk leaf-3SG 3SG-COMP and-3SG have.question also PN Turtle

   *“Pia tangke-mo, ke Bange, lewe-no punti-mu?”*
   
   how.many stalk-COMP INTERROG Monkey leaf-3SG banana-2SG
   PART:reply PN Monkey sit.on-3SG LKR-peel-3SG LKR:eat-LKR:eat
   m-padole-no.”
   LKR-pith-3SG

10. Umari-do k[um]tia-o andio, [m]e-kule-’ira-mo. 11. Ka-i
    PART:see-3SG this PART:MM-return-3PL-COMP and-3SG
    bright and-3PL go like.this-COMP PASS:do-3PL each day
    but banana-3SG PN Monkey 3SG die because 3SG-again.and.again
    k[um]aa-no padole-no. 14. Punti-no i Re’a, onae
    PART:eat-3SG pith-3SG banana-3SG PN Turtle 3SG

[m]ewua-o-mo.
PART:have.fruit-3SG-COMP

15. Tehi-tehine motaha-o-mo a n-tuwu ng-keu-no.
    REDP:long.time ripe-3SG-COMP at LKR:spout LKR:tree-3SG

16. L[um]ako-o-mo i Re’a ta-mo m[O]jaru-o
    PART:go-3SG-COMP PN Turtle 3SG,FUT-COMP PART:climb-3SG
    punti-no, ka-i po-maru-ako hori-no, nahi te’ala.
    banana-3SG and-3SG ANTIPASS-climb-INTR side-3SG NEG:3SG able
    and-3SG ANTIPASS-climb-INTR back-3SG NEG:3SG able

18. Te’osa-o-mo [m]o-maru, [m]e-kule [m]o-boi-o
    leave.off-3SG-COMP PART:ANTIPASS-climb PART:MM-return PART:invite-3SG

i Bange. 19. Hawe-no koa i Bange, [m]o-maru,
PN Monkey arrive-3SG just PN Monkey PART:ANTIPASS-climb

ka-i pong-kaa; onae-mo ka-i pom-pepedontai
and-3SG ANTIPASS-eat 3SG-COMP and-3SG ANTIPASS-request.to.be.dropped

i Re’a. 20. Ka-i dontai-ako-no i Bange kuli-no koa.
PN Turtle and-3SG drop-BEN-3SG PN Monkey skin-3SG just
21. Onae-mo ka-i akala-o i Re’a i Bange, i-pota-e:
3SG-COMP and-3SG deceive-3SG PN Turtle PN Monkey 3SG-say
"Dontai-akune ari, Bange, owu-mu!"
22. Mansa-no
drop-BEN:1SG nothing.but Monkey machete-2SG as.soon.as-3SG
Part: drop-BEN-3SG machete-3SG 3SG-pick.up-3SG-COMP PN Turtle and-3SG
pon-tasomi ampa. 23. Umari-no t[um]asomi-o, i-ta’o-o-mo.
ANTIPASS-sharpen stake finish-3SG PART: sharpen-3SG 3SG-set-3SG-COMP
24. Koliwi-o-mo i Re’a i Bange: “Ba u-ronge-o-mo da
advise-3SG-COMP PN Turtle PN Monkey if 2SG-hear-3SG-COMP yet
te’ingka, Bange, dahu-do Datu [m]ohopa, pentoa-mo indi’ai,
soon Monkey dog-3PL Prince PART: bark spring.down-COMP here
a ng-kolingaa-no andio.” 25. Ka-i potae mbo’u i Re’a
at LKR-clear.place-3SG this and-3SG say also PN Turtle
“Sine pon-tandua koa punti ka po-’asingkeke.”
but ANTIPASS-hold.in.teeth just banana and ANTIPASS-hold.under.arm
26. S[um]angki i Bange, “Humbee!”
PART: reply PN Monkey okay
27. L[um]ako-o-mo raane i Re’a a wiwi n-tobu,
PART: go-3SG-COMP to.there PN Turtle to edge LKR-forest
[m]ohopa. 28. Mansa-no r[um]onge-o i Bange nganga-no i
PART: bark as.soon.as-3SG PART: hear-3SG PN Monkey voice-3SG PN
Re’a [m]ohopa, [m]entoa-o-mo,
Turtle PART: bark PART: spring.down-3SG-COMP contact stake die
kona ampa, maate.
29. [M]e-kule-o-mo i Re’a, hawe-no k[um]ita-o,
PART: MM-return-3SG-COMP PN Turtle arrive-3SG PART: see-3SG
mate-o-mo i Bange. 30. I-’ala-’ira-mo punti t[fin]andua-no
die-3SG-COMP PN Monkey 3SG-take-3PL-COMP banana PASS: hold.in.teeth-3SG
ka-i kaa-no. 31. Umari-no k[um]aa-’ira, [m]e-kule-o-mo
and-3SG eat-3SG finish-3SG PART: eat-3PL PART: MM-return-3SG-COMP
32. **Moboo-o-mo** i Bange **l[um]ako-o-mo** i *Re’a*
    rotten-3SG-SUBJ PN Monkey PART:go-3SG-SUBJ PN Turtle

    un-ala-o wuku-no i Bange, *ka-i tumu-o ensea.*
    PART-take-3SG bone-3SG PN Monkey and-3SG roast-3SG lime

33. **Mansa-do** n-telalo wali-no m-po-’ema ensea,
    as.soon.as-3PL PLS-pass.by friend-3SG PLS-ANTIPASS-ask.for lime

    i-wee-’ira-mo wuku-no wali-do anu i[finj]unu-no indi’upua.
    3SG-give-3PL-SUBJ bone-3SG friend-3PL REL PASS:burn-3SG some.time.ago

34. Ndi *ira me-’olai, i-booli-’ira i Re’a, i-potae: “Nahi*
    here 3PL PLS-far 3SG-call-3PL PN Turtle 3SG-say NEG

    do-men-to’ori-o wuku-no koa wali-do *ku-wee-’ira.”
    3PL-PLS-know-3SG bone-3SG just friend-3PL 1SG-give-3PL 3SG-SUBJ

35. **Onae-mo**
    ka-do m-pe-kule *ira m-pepe-o i Re’a.
    and-3PL PLS-MM-return 3PL.FUT PLS-kill-3SG PN Turtle

36. **Me-hawe-’ira**
    me-’ala-o uase, *ira me’uase-o i Re’a.
    PLS-fetch-3SG axe 3PL.FUT PLS-axe-3SG PN Turtle but

    [m]engingisi i *Re’a, i-potae-ako-’ira bange: “Lara-no koa*
    PART:laugh PN Turtle 3SG-say-BEN-3PL monkey scar-3SG just

    pendamu-a-do i i Ne ka i Ama a bungku-ku andio!”
    hack.with.axe-LOC-3PL PN Mother and PN Father on back-1SG this

37. **Sine,**
    [m]o-potae, “To-mem-pokoli-o a *ng-kolongga ka-to*
    3PL-PLS-say 1PLN-PLS-put-3SG in LKR-kind.of.basket and-1PLN

38. **Do-m-potae,**
    me-dontai-o a uwoi.”
    PLS-drop-3SG into water as.soon.as-3SG PART:hear-3SG PN Turtle

39. **Mansa-no** r[um]onge-o i *Re’a*

    pau-do bange [m]otae *ira mem-pokoli-o a ng-kolongga*
    talk-3PL monkey PART:say 3PL.FUT PLS-put-3SG in LKR-kind.of.basket

    ka-do me-dontai-o a uwoi, [m]ompengesengese-o-mo i *Re’a,*
    and-3PL PLS-drop-3SG into water PART:feignweeping-3SG-SUBJ PN Turtle

     and-3PL PLS-drop-3SG into water PART:feignweeping-3SG-SUBJ PN Turtle
40. *Me-lako-'ira-mo, me-dontai-o a uwoi, da-'ia-po i-tii*
   PLS-go-3PL-COMP PLS-drop-3SG into water be-3SG-INCOMP 3SG-descend
   a uwoi, tehehe i Re'a, mawongko aroa-no nde ta
   into water laugh PN Turtle high spirits-3SG because 3SG.FUT
   koa tuwu. 41. *I-potae-ako-'ira bange, i-hawe-o-mo*
   just live 3SG-say-BEN-3PL monkey 3SG-encounter-3SG-COMP
   po'ia-nga-do ine-no ka ama-no.
   reside-LOC-3PL mother-3SG and father-3SG

42. *N-teriso-'ira bange, ka-do me-lako me-'ala-'ira ambau-do*
   PLS-assembled-3PL monkey and-3PL PLS-go PLS-fetch-3PL buffalo-3PL

   Datu ka-do men-soso-o ka-i mate koa i Re'a.
   Prince and-3PL PLS-suck-3SG and-3SG die just PN Turtle

43. *Mansa-do men-soso-o uwoi andio, mo'are koa.*
   as.soon.as-3PL PLS-suck-3SG water this dry just

44. *M-po'unde-'ira-mo bange nde ta-mo mate i Re'a.*
   PLS-rejoice-3PL-COMP monkey because 3SG.FUT-COMP die PN Turtle

45. *Onae-mo ka-i potae-ako-'ira i Re'a bungka: “Kasi-kasi*
   3SG-COMP and-3SG say-BEN-3PL PN Turtle crab pinch-pinch
   n-tawu, kasi n-tawu-no lakil Kasi-kasi n-tawu,
   LKR-genitals pinch LKR-genitals-3SG bull pinch-pinch LKR-genitals

   kasi n-tawu-no bira!” 46. *N-te'eme-'ira-mo ambau,*
   pinch LKR-genitals-3SG cow PLS-urinate-3PL-COMP buffalo

   wali-o-mo hadio uwoi. 47. *Gaagi, tuwu-o-mo i Re'a,*
   become-3SG-COMP much water as.a.result live-3SG-COMP PN Turtle

   nde wali-o-mo hadio uwoi.
   because become-3SG-COMP much water
Notes

4. *meene-o-mo* literally ‘it was bright’, by implication ‘on the morrow, the next day...’.

6. *tangke* ‘stalk, stem’ is a numeral classifier for counting leaves; it is left untranslated in the English.

8. *ona-e-mo ka* literally ‘it was that and...’ but idiomatically ‘then, after that, thereupon...’

24. The root *oliwi* is a noun meaning ‘advice’; it can also be used as a transitive verb base meaning ‘to advise (someone)’. The form *koliwi*, however, is unknown to me, and is possibly a misprint. Although the verb *mohopa* is glossed here as a simple intransitive, ‘to bark’, it could also be regarded as an antipassive participle from the transitive verb base *kop*a ‘to bark at, to hound (someone or something)’.

34. *Ndì* *ira meolai*, literally ‘here they were, far’ but in this context ‘when they had gone so far...’; see further Esser (1927:135–138) regarding such constructions.

39. The base for *mompengesengese* is *pengese* ‘to cry, weep’; see further Esser (1933:325).

Translation

1. HOW IT WAS WHEN MONKEY AND TURTLE PLANTED BANANAS

2. One time, Monkey and Turtle went to plant bananas, each of them one plant.

3. When they had finished planting them, they returned.

4. The next day they went to see them. 5. They came to the bananas which they had planted, and upon his arriving Monkey got down over the banana which he had planted, and he ate the pith of it.


10. When they had finished looking at them, they returned. 11. And it was next day, and they went. 12. They did like that every day. 13. But Monkey’s banana plant, it was the one dying, because again and again he ate the pith of it. 14. Turtle’s banana plant, it was the one bearing fruit.
15. A good while after that and it was ripe on the new growth of her tree. 16. Turtle went to climb her banana tree, and she climbed on her side, it was not to be done. 17. And she climbed on her back, it was not to be done. 18. Leaving off climbing, she returned and invited Monkey. 19. Upon his arriving, he climbed and ate; thereupon Turtle requested some to be dropped. 20. So then Monkey dropped just the peels.

21. Then Turtle deceived Monkey, saying “Drop just your machete for me, Monkey!” 22. As soon as he had dropped his machete for her, Turtle picked it up and sharpened some stakes. 23. When she had finished sharpening them, she set them out. 24. Turtle advised the Monkey, “If soon you hear Prince’s dogs barking, jump down here on this clear place.” 25. And Turtle also said, “But just take some bananas in your teeth and hold them under your arm.” 26. Replied Monkey, “Okay!”

27. Then Turtle went there to the edge of the forest, barking. 28. As soon as Monkey heard the voice of Turtle barking, he jumped, encountered the stakes, and died. 29. Turtle returned, arrived, and saw that Monkey had died. 30. She took the bananas which he had held in his teeth, and she ate them. 31. When she had finished eating them, she returned to their house.

32. When Monkey was rotten, Turtle went and took Monkey’s bones, and she burned them into lime.

33. As soon as his friends passed by asking for lime, she gave them the bones of their companion which she had burned previously. 34. When they had gone so far, Turtle called them, saying, “They don’t know it, I gave them just the bones of their companion.” 35. Thereupon they returned in order to kill Turtle. 36. They arrived bringing an ax, they were going to chop Turtle. 37. However, laughing Turtle said to the monkeys, “The scars of where Mother and Father chopped with an ax are on my back!”

38. They said, “Let’s put her in a basket and drop her into the water.” 39. As soon as Turtle heard the monkeys’ talk, that they were going to put her in a basket and drop her into the water, Turtle feigned weeping, and said she was about to die.

40. They went and dropped her into the water, as she was still descending into the water Turtle laughed and was in high spirits, because she was only going to live. 41. She said to the monkeys, she had found the home of her mother and father.

42. The monkeys assembled, and they went and fetched Prince’s buffaloes so that they should suck it (the water) so that Turtle would die. 43. As soon as they had sucked that water, it was completely dry. 44. The monkeys rejoiced because Turtle was going to die. 45. Then Turtle said to the crabs, “Pinch, pinch genitals, pinch the bulls’ genitals! Pinch, pinch genitals, pinch the cows’ genitals!” 46. The buffaloes urinated, there came lots of water. 47. As a result, Turtle lived, because there came lots of water.
Bungku: *The Monkey and the Turtle*

**Source**

This story originally published with Indonesian free translation in Saro, Rahim, et al. (1982:94–99). Glossing and English free translation by David Mead. Addition of phonemic glottal stop and other minor spelling corrections made as suggested by my own field notes and/or other sources on Bungku.

**Text**

1. *Lutu hai Kolopuha.*
   Monkey with Turtle

2. *No‘u-o asa tempo, Lutu hai Kolopuha ndo-pefali l[um]ako*
   there-3SG one time Monkey with Turtle 3PL-be.friends PART:go

   [m]o-ungke kontora-ndo, l[um]eu-o asa kuraete
   PART:ANTIPASS-seek sustenance-3PL PART:come-3SG one former.garden.plot

   mendadi punti motaha le keu-no. 3. *Lutu t[um]ena-o Kolopuha*
   many banana ripe on wood-3SG Monkey PART:order-3SG Turtle

   ka-i pon-sende-ako-ira doru. 4. *Kolopuha [m]olo’e, “Maupo*
   and-3SG ANTIPASS-climb-BEN-3PL first Turtle PART:say although

   na-ku tesende aku l[um]elengai-o [m]on-sende.”
   NEG-1SG climbable 1SG.FUT PART:try-3SG PART:ANTIPASS-climb

5. *Kolopuha l[um]elengai-o [m]on-sende-ako aro-no, kaene
   Turtle PART:try-3SG PART:ANTIPASS-climb-INST front-3SG but

   teruru na-i m-pom-poko ‘ala.
   slipped NEG-3SG ??-ANTIPASS-able.to.fetch finish that and-3SG

   lelengai-o [m]on-sende-ako bungku-no, kaene hina koa
   try-3SG PART:ANTIPASS-climb-INST back-3SG but NEG just

   i-pom-poko ‘ala. 7. *Sa-ari-no no‘u Kolopuha t[um]ena-o*
   3SG-ANTIPASS-able.to.fetch when-finish-3SG that Turtle PART:order-3SG

6. *Ari no‘u ka-i
   finish that 3SG

   Lutu, ka-i pon-sende.
   Monkey and-3SG ANTIPASS-climb

8. *Sa-sende-no Lutu tule le
   when-climb-3SG Monkey arrive at
9. Kolopuha [m]olo'e, "Lutu! Po-dontani-aku-mo ngkude
turtle PART:say Monkey ANTI-PASS-drop-BEN:1SG-COMP 1SG
da'a. 10. [M]olo'e Lutu, "Sii-po doru ka-ku
also PART:say Monkey NEG.IMPV-INCOMP first and 1SG
po-lelengai.” 11. I-kita-o Kolopuha, Lutu [m]o-lelengai punti
ANTI-PASS-try 3SG-see-3SG Turtle Monkey PART:ANTI-PASS-try banana
motaha, sampe ka-i mofohi. 12. Jaji Kolopuha da-no koa
ripe until and-3SG satisfied therefore Turtle be-3SG just
[m]o-pepedontani, ne i-kita-o Lutu ai,
PART:ANTI-PASS-request.to.drop because 3SG-see-3SG Monkey this
[m]ong-kaa-mo [m]ong-kaa asa-asa-no.
PART:ANTI-PASS-eat-COMP PART:ANTI-PASS-eat one-one-3SG
13. T[in]ekura-no Lutu, d[um]ontani-o punti asa pole hai
PASS:angry-3SG Monkey PART:drop-3SG banana one cut with
ta'i asa pole.
feces one cut
14. Kolopuha le fita tekura, ka-i lako [m]o-'ala
turtle on earth angry and-3SG go PART:ANTI-PASS-fetch
tula fulu, ka-i sosomi-o i-hende-o labari,
kind.of.bamboo -- and-3SG sharpen-3SG 3SG-make-3SG bamboo.spike
ka-i ta'o-o le puu-no punti. 15. Opo ka-i olifi-o
and-3SG set-3SG at vicinity-3SG banana still and-3SG advise-3SG
Lutu, ke-i hopa dahu le fafo-no, lonso le pada-no,
Monkey if-3SG bark dog at above-3SG jump to below-3SG
ke-i hopa dahu le pada-no, lonso le fafo-no.
if-3SG bark dog at below-3SG jump to above-3SG
16. Sa-ari-no Kolopuha t[um]a'o-o labari ai,
when-finish-3SG Turtle PART:set-3SG bamboo.spike this
17. Sabutunga-no Lutu l[um]onso le pada-no, k[um]ona-o
   exactly-3SG Monkey PART:jump to below-3SG PART:contact-3SG

labari t[in]a'o-no Kolopuha ai tonia. 18. Lutu mate.
   bamboo.spike PASS:set-3SG Turtle this near.past Monkey die

19. Mate-no Lutu, i-fafa-o Kolopuha Lutu mate ai le
   die-3SG Monkey 3SG-carry-3SG Turtle Monkey die this to

raha, ka-i tangko-o rea-no le pido. 20. Fuku-no
   house and-3SG catch-3SG blood-3SG in bottle bone-3SG

i-hole-o ka-i hende-o ngapi. 21. Oeyo kompo-no
   3SG-dry.fry-3SG and-3SG make-3SG lime rope guts-3SG

i-'ala-o koloro, kuku-no i-'ala-o kokabi, ate-no
   3SG-take-3SG cord nails-3SG 3SG-take-3SG fishhook liver-3SG

i-'ala-o pompani.
   3SG-take-3SG bait

   Turtle PART:went PART:angle at edge water

23. Tonga-no Kolopuha k[um]okabi le fifi baho, l[um]alo-ira-mo
   middle-3SG Turtle PART:angle at edge water PART:pass.by-3PL-COMP

lutu mendadi l[um]ako [m]o-'ungke kinokaa-nido.
   Monkey many PART:go PART:ANTIPASS-seek food-3PL

24. 1-kita-ira Kolopuha lutu mendadi ai-ndo [m]olo'e Kolopuha,
   3SG-see-3PL Turtle monkey many this-3PL PART:say Turtle

"Mi-lalo-mo doru ka-to po-'imu-'imu hai ka-to
   2PL-pass.by-COMP first and-1PLN ANTIPASS-REDP-drink with and-1PLN

pom-panga-panga riai. 25. Lutu mendadi l[um]alo-ira-mo
   ANTIPASS-REDP-chew.betel here monkey many PART:pass.by-3PL-COMP

hele-hele [m]o-'imu-'imu hai [m]om-panga-panga
   REDP-glad PART:ANTIPASS-REDP-drink with PART:ANTIPASS-REDP-chew.betel
27. [M]olo' e Kolopuha, "Ngapi-ngapi opo." 
PART:say Turtle REDP-lime still

28. Ari-ro no'u Kolopuha [m]e-nani-nani, nani-no: 
finish-3PL that Turtle PART:MM-REDP-sing song-3SG

"Fali-fali ndosi, ndo-panga-panga ndosi."
friend-friend also 3PL-chew.betel-chew.betel also

29. Sa-ndo podea-o lutu mendadi nani-no Kolopuha ai,
when-3PL hear-3SG monkey many song-3SG Turtle this
mesinaaka-ira-mo. 30. Ampo fuku-no koa fali-nto
offended-3PL-COMP perhaps bone-3SG just friend-1PLN

p[in]anga-nto ai, hai rea-no in-imu-nto ai?
PASS:chew.betel-1PLN this with blood-3SG PASS-drink-1PLN this

31. Ne ise-kiita-mo [um]iangi-o ngapi-no hina koa
because fed.up-1PLN-COMP PART:add-3SG lime-3SG NEG just
i-momea. 32. Jaji pom-penasado ai manasa tutau,
3SG-red therefore ANTIPASS-feel-3PL this clearly true

ka-ndo ala-o [um]ako-o Kolopuha ira [m]epeate-o.
and-3PL take-3SG PART:catch-3SG Turtle 3PL.FUT PART:kill-3SG

33. No'u-o asa lutu [m]olo' e, "To-tumu-o."
that-3SG one monkey PART:say 1PLN-roast-3SG PART:say
Kolopuha, "Si-mi tumu-aku, ne ka-i mohalo bungku
Turtle NEG.IMPV-2SG roast-1SG because and-3SG black back

ai pe-tumu-a-no indo-ku da-ku odidi hina koa ku-mate."
this MM-roast-LOC-3SG mother-1SG be-1SG small NEG just 1SG-die
   PART:say also one monkey better just 1PLN-smash-3SG

36. [M]olo’e Kolopuha, “Si-mi do-do-aku, ne ka-i
   PART:say Turtle NEG.IMPV-2PL smash-1SG because and-3SG
   morempe bungku-ku ai pe-dodo-a-no indu-ku da-ku
   flat back-1SG this MM-smash-LOC-3SG mother-1SG be-1SG
   odidi hina koa ku-mate.”
37. Lutu mendadi [m]olo’e “Lalu
   small NEG just 1SG-die monkey many PART:say better
   koa to-dontani-o le baho.”
38. Sa-i podea-o Kolopuha
   just 1PLN-drop-3SG in water when-3SG hear-3SG Turtle
   loo-n-do ai, Kolopuha [m]emangkamangka.
   word-3PL this Turtle PART:feign.crying hear-3SG monkey
   mendadi pangka-no Kolopuha ai, ndo-pon-sende-ako-no ai,
   many cry-3SG Turtle this 3PL-ANTIPASS-climb-BEN-3SG this
   riai-mo koa?
39. Podea-o lutu
   part COMP just Turtle PART:say to.there-INCOMP
   Sa-tule-no le tufu lairo opo ka-i dontani-o
   when-arrive-3SG at top.part ?? still and-3SG drop-3SG
   Kolopuha le laro baho tudu le laro lofi.
   Turtle at inside water arrive.from.above at inside deep.water

42. Tudu-no
   arrive.from.above Turtle at inside water glad with PART:laugh
   Kolopuha le laro lofi hele hai [m]ototaha.

43. Lutu mendadi tekura ndo-umpa um-ungkesi-o
    monkey many angry 3PL-descend PART:seek.thoroughly-3SG
    Kolopuha le laro baho, kaene na-n-do humpu-o, ne
    Turtle at inside water but NEG-3PL find-3SG because
    Kolopuha [l]um[je]o m-pada le laro lofi.
    Turtle PART:dive LKR-below at inside deep.water

44. Sa-ise-n-do koa lutu mendadi um-ungkesi-o
    when-fed.up-3PL just monkey many PART:seek.thoroughly-3SG
na-ndo humpu-o, ndo-lako um-ala-o Balia-soso-la, ka-i
NEG-3PL find-3SG 3PL-go PART-fetch-3SG Buffalo-suck-stream and-3SG
leu s[um]oso-o baho. 45. Leu-no Balia-soso-la,
come PART:suck-3SG water come-3SG Buffalo-suck-water
s[um]osopi-o baho. 46. Sabutungano ta motu' i, Kolopuha
PART:suck.lots-3SG water exactly-3SG FUT dry Turtle
um-olifi-ira lufu bungka-bungka hai ura-ura, ka-ndo
PART-advise-3PL all REDP-crab with REDP-crustacean and-3PL
lako k[um]asi-o tafu-no Balia-soso-la. 47. Sa-leu-ndo
go PART:pinch-3SG testicle-3SG Buffalo-suck-stream when-arrive-3PL
bungka-bungka hai ura-ura [m]o-kasi le
REDP-crab with REDP-crustacean PART:ANTIPASS-pinch on
Balia-soso-la, tebora-no tetafi-sako baho mebinta le
Buffalo-suck-stream discharged-3SG splashed-INTS water from in
nia-no Balia-soso-la, s[um]afaroko-ira lutu mendadi tule
belly-3SG Buffalo-suck-stream PART:carry-INTS-3PL monkey many arrive
le tahi, mate lufu, koa-mo asa lutu mentia terampe,
at sea die all just-COMP one monkey pregnant washed ashore
[m]ekiana nade-o-mo um-ule-ira lufu lutu le
PART:bear.young 3SG-3SG-COMP PART:leave.behind-3PL all monkey in
junia ai
world this

Notes

5. pokola literally ‘able to fetch’, also meaning ‘able to do, succeed’. The
prenasalization at the beginning of m-pom-pokola is unexplained.

15. opo ‘still’, also meaning ‘exactly, just then’. In origin opo is likely a complex form,
composed of the third person singular pronoun and the incompletion marker -po. See
further § 4.4h.

21. oeyo ‘cord’ is unusual in having a y phoneme, and requires further investigation.
pompani ‘bait’ has the form of a nominalized verb, i.e. pom- + pani, but the meaning of
the root pani is unknown to me.
23. *kinokaa* ‘food’, passive form of *kokaa*, root *kaa* ‘eat’. Presumably *kokaa* is the durative form of *kaa*, but this has yet to be verified.

24. *ai-ndo* /this-3Pl/ = ‘these’. In Mori Bawah a plural form can also be made from *andio* ‘this’ plus the third person plural suffix -do, “which however can only be used if a great number is spoken of (thus not said of two, etc.)” (Esser 1927:131) (my translation). The same may apply of this cognate Bungku form.

40. *rarane* ‘to there’. Possibly the form should be understood as *raa-raane*. As far as I know, *raane* means ‘to there (at the same level)’, but in this context is obviously to be interpreted as ‘to there (higher up).’

47. *mebinta* ‘from’. In origin this form was a verb meaning ‘leave’. Although I gloss *mebinta* here as if it were a preposition, a verbal interpretation (e.g. /PART:MM-leave/) should still be provisionally considered.

**Translation**

1. **THE MONKEY AND THE TURTLE**

2. Once upon a time (lit. there was one time), the monkey and the turtle went together seeking their livelihood, and they came across an old garden plot, with many ripe bananas on its tree(s). 3. The monkey ordered the turtle to climb for them first. 4. The turtle said, “even though I cannot climb, I will try to climb.” 5. The turtle tried climbing on her chest, but she slipped and could not do it. 6. After that, the turtle tried climbing on her back, but again she could not do it. 7. After that, the turtle ordered the monkey, and he climbed. 8. Having climbed, the monkey arrived at the top of the ripe bananas, and ate.

9. The turtle said, “Monkey! Drop some for me too!” 10. Said the monkey, “Don’t do anything first, and I’ll try.” 11. The turtle watched the monkey trying ripe bananas, until he was full. 12. So the turtle just kept asking for bananas to be dropped, because she saw the monkey, eating and eating by himself. 13. The monkey being angered, he dropped a bit of banana with a bit of feces.

14. The turtle on the ground was angry, and he went and got some bamboo, and he sharpened it and made spikes, and he set them in the vicinity of the banana trees. 15. Then she advised the monkey, if dogs barked from above, jump to below, but if dogs barked from below, jump up.

16. Having finished setting out the bamboo spikes, the turtle went barking from above. 17. Immediately monkey jumped down, contacting the bamboo spikes which had been set out earlier by the turtle. 18. The monkey died. 19. The monkey having died, the turtle carried the dead monkey to her house, and she caught his blood in a bottle. 20. His bones she heated up, and then she made them into lime. 21. His intestines she took as cord, his nails she took as fishhooks, and his liver she took as bait.
22. The turtle went fishing at the edge of the water. 23. While the turtle was fishing at the edge of the water, a party of monkeys passed by going seeking their sustenance.
24. Seeing these monkeys, the turtle said, "Stop by first, and we’ll drink and we’ll chew betel here." 25. The monkeys stopped by, gladly drinking and chewing betel at the turtle’s residence. 26. When they were in the middle of this, these monkeys said, "Why is it, why is it this betel-nut quid is not red?" 27. Said the turtle, "Have some more lime."

28. After that the turtle sang, her song went: "Friend, friend, anyway, they chewed, chewed anyway". 29. When the monkeys heard the turtle’s song, they were offended.
30. Perhaps this stuff that we chewed were the bones of our companion, and this stuff that we drank was his blood? 31. Because we are fed up with adding her lime, and it (this betel chew) is simply not red. 32. Therefore having felt this way, that it was indeed true, they took and seized the turtle in order to kill her.

33. There was one monkey who said, "Let’s roast her over the fire." 34. Said the turtle, "Don’t you all roast me, because this back (of mine) is black from being the roasting place of my mother when I was small; I certainly won’t die." 35. Said another monkey, "It’s better if we just smash her!" 36. Said the turtle, "Don’t you all smash me, because this back of mine is flat form being the smashing place of my mother when I was small; I certainly won’t die." 37. Many monkeys said, "It’s better if we just drop her into the water." 38. When the turtle heard these words of theirs, the turtle feigned crying.
39. Hearing the turtle’s crying, the monkeys climbed with her (lit. for her), this here okay? 40. Said the turtle, further still. 41. When he (the monkey carrying her) arrived at the top, straight-away he dropped the turtle into the water, landing into deep water. 42. The turtle having landed into deep water, she was happy and laughed.

43. The monkeys were angry and they descended and sought about for the turtle in the water, but they didn’t find her, because the turtle dived down into deep water.

44. When the monkeys were fed up with seeking about for her and not finding her, they went and fetched Buffalo-stream-sucker, so that he would come and suck up the water. Buffalo-stream-sucker having come, he sucked at the water. 46. Just as it was about to be dry, the turtle advised all the crabs and crustaceans, to go pinch the testicles of Buffalo-stream-sucker. 47. When the crabs and the crustaceans had come and pinched on Buffalo-stream-sucker, the water from in Buffalo-stream-sucker’s belly was discharged and distributed, carrying the monkeys into the sea; they all died, except one pregnant monkey was washed ashore, it was she who bore young and left behind all the monkeys in this world.
Kulisusu: The Story of Wangkinamboro

Source

Story told by La Bura, February 1996, in Rombo village. Recorded by David Mead. Glossing and free translation by David Mead.

Text

1. Culacula-no Wangkinamboro.
   story-3SG Wangkinamboro

2. Wangkinamboro, o mia ngkana ingkita, ako, i-'owose,
   Wangkinamboro ART person like 1PL.N.COLL except 3SG-large
   ako, i-koeje eje i-pong-kaa mia. 3. Po'ia-ha-no da-i
   except 3SG-naughty 3SG-ANTIPASS-eat person reside-LOC-3SG be-at

   lia owose da-i tangke-no Wawontowure. 4. Wangkinamboro,
   cave large be-at mountain-3SG Wawontowure Wangkinamboro

   picu-alo picu-alo i-pong-kaa mia. 5. Be-i
   seven-night seven-night 3SG-ANTIPASS-eat person FUT-3SG
   pura-ho-mo mia-no Kulisusu k[u]m]aa-ho.
   finish.up-3SG-COMP person-3SG Kolinsusu PART:eat-3SG

   PASS:name-INSTR La Engu ANTIPASS-DURAT:seek-BEN-3SG-COMP

   akala be-i mate-'ako. 7. Ka-ndo rame-rame
   tactic FUT-3SG die-MODAL and-3PL REDP-festive

   ndo-po-horopi-ako-no-mo
   3PL-ANTIPASS-supply.with.floor-BEN-3SG-COMP lia olaro ka-ndo boboi-ho
   cave deep and-3PL call-3SG

   ng[ina]ea-hako Wangkinamboro. 8. Da [u]m]ense i wawo-no
   PASS:name-INSTR Wangkinamboro be PART:dance at above-3SG

   po-horopi-a-no
   ANTIPASS-supply.with.floor-LOC-3SG ng[ina]ea-hako La Engu
   PASS:name-INSTR La Engu

Wangkinamboro, i-molihi-mo to'u-to'u. 9. Ndo-ari-ako
Wangkinamboro 3SG-happy-COMP REDP-true 3PL-finish-MODAL
10. Da [um]ense i lia, po-horopi-a-no La Engu, be PART:dance at cave ANTIPASS-supply.with.floor-LOC-3SG La Engu
    ndo-tena-o-mo um-u'undu ka-i tepasa.
    3PL-order-3SG-COMP PART:jump.up.and.down.squatting and-3SG collapsed

11. Sa-cuuna-no i lia Wangkinamboro, mia ompole,
    when-fall-3SG at cave Wangkinamboro person many
    ndo-lua-hako-no-mo wacu, ka-i mate.
    3PL-empty-BEN-3SG-COMP rock and-3SG die

Notes

6. po-o-halu is shortened from i-po-ho-halu.

7. rame carries not only the sense of being festive, but also busy, bustling, active; compare Indonesian ramai.

8. The lense is a specific dance. Lumense is the verbal form meaning to dance this particular kind of dance.

11. ndo-lua-hako-no-mo The base here is lua 'empty', a transitive verb which takes as its object the contents (not the container) being poured or dumped out.

Translation

1. THE STORY OF WANGKINAMBORO

2. Wangkinamboro was a person just like us, except he was big, except that he was naughty and he ate people. 3. His living quarters were in a large cave, on Wawontowure mountain. 4. Every seven days, Wangkinamboro ate people. 5. He was about to finish off the Kulisusu people by eating them.

6. The one who was named La Engu sought about for a way for him to die. 7. Then they got busy, and they floored over a deep cave, and they called the one named Wangkinamboro. 8. While Wangkinamboro was dancing the lense on top of La Engu’s floored-over place, he was very happy indeed. 9. When they were finished being festive, he was going to eat people.

10. While he was dancing on the cave, La Engu’s floored-over place, they ordered him to squat and jump up and down, and it collapsed. 11. Wangkinamboro having fallen into the cave, many people emptied the rocks upon him (lit. for him), and he died.
Moronene: The Story of the Rat and the Frog

Source


Text

1. Tulura diide ya-hoo tulura-no wola ronga kore. story this COPULA-3SG story-3SG rat with frog

2. Poo’ia-ha-no wola hai asa pole-no laa watu. stay-LOC-3SG rat at one cross.over-3SG stream rock

3. Da-hoo me’asa oleo, ka-i pe-luarako wola pebinta hai be-3SG one day and-3SG MM-bring.out rat come.from at bolo-no, ka-i pom-pole [m]entete hai wawo hole-3SG and-3SG ANTIPASS-cross.over PART:use.narrow.crossing at above watu asa pole-no laa e’e, lako [m]o-’u-’ungke rock one cross.over-3SG stream water go PART:ANTIPASS-DURATIVE-seek da-nta tsin/ora-ako-no.

REL-FUT PASS:live-REF-3SG

4. Da-ho-mo konainoo si-simbu [m]o-’u-’ungke be-3SG-COMP PROG DURATIVE-wander PART:ANTIPASS-DURATIVE-seek da-nta tsin/ora-akono, ka-i turu usa ng-keua,

REL-FUT PASS:live-BEN.3SG and-3SG arrive.from.above rain LKR-drenching ya-hoo usa ea, sawali na-sa-i da’a paisa [m]om-paduli then-3SG rain big but that-NEG-3SG NEG ever PART:ANTIPASS-care kanahi nta oru-’o [m]ohule hai poo’ia-ha-no. 5. Na-i say FUT quick-3SG PART:go.home to stay-LOC-3SG NEG-3SG da’a lembahi usa, ka-i tumapa e’e waa, ka-i kolihe lihe NEG long.time rain and-3SG slap water flood and-3SG continually.see nde’e koide wola, nta [m]ohule mbule hai wonua-no, indeed that rat FUT PART:go.home return to place-3SG
nahina-mo watu koie tonia pentete-a-no, hina
NEG.exist-COMP rock that near.past use.narrow.crossing-LOC-3SG because

lolo-'ako-o-mo e’e waa. 6. Da-ho-mo nde’e
submerge-INST-3SG-COMP water flood be-3SG-COMP indeed

si-simbu [m]o-‘u-‘ungke sala-no nta
DURATIVE-wander PART:ANTIPASS-DURATIVE-seek way-3SG FUT

[m]om-pole, kando tepo-a’awa kore.
PART:ANTIPASS-cross.over and-3PL RECIP-find frog

7. Ka-i lawa kore [m]etukana, “Nde’e tokia,
and-3SG respond frog PART:have.question indeed friend

hapa da in-u-‘ungke-u?” 8. Kanahi-o-mo wola, “Da-haku
what REL PASS-DURATIVE-seek-2SG say-3SG-COMP rat be-1SG

si-simbu sanda-sanda, nta [m]om-pole, na-ku
DURATIVE-wander REDP-wander FUT PART:ANTIPASS-cross.over NEG-1SG

to’ori nta [m]o-a’awa sala-ngku, kana’umpe tonia
know FUT PART:ANTIPASS-find road-1SG how near.past

pentete-a-ngku watu daa-no-po sa-i da’a usa,
use.narrow.crossing-LOC-1SG rock be-3SG-INC neg-3SG NEG rain

lolo-’o-mo. 9. Kanahi-o-mo koide kore, “Bah! Na-i da’a
submerge-3SG-COMP say-3SG-COMP that frog bah NEG-3SG NEG

masusa. Lako-mo [m]o-’otu-akita eo, ka-u leu
difficult go-COMP PART:ANTIPASS-cut-BEN.1PLN vine and-2SG come

wawa-akita-’o.”
carry-BEN.1PLN-3SG

10. Lako koide yo wola [m]o-’otu eo, ya-ho-po
go that ART rat PART:ANTIPASS-cut vine then-3SG-INC

ka-i leu wawa-akono-’o kore. 11. Ka-i lawa kore
and-3SG come carry-BEN.3SG-3SG frog and-3SG respond frog

kanahi-ako kana diide, “I’aku nta [m]e-koo i aa-ku,
say-INST like this 1SG FUT PART:MM-tie at waist-1SG
12. Sawali na

13. Sawali nang-kanahi-ako kore, "Wah, nahina miano da ari, but that-say-INSTR frog gee NEG.exist person REL finish

14. Kanahi-o-mo kore, "To-pe-dandi-mo trick-3SG friend-3SG say-3SG-COMP frog 1PLN-MM-promise-COMP

15. Ni-lako-no-to [m]o-lawani koi-de yo wola do.what-2SG Ni-go-3SG-COMP PART:ANTIPASS-answer this ART rat

kanahi-ako, "Ki kana koi-de, kahio-o-mo ona, to-pe-koo-mo." say-INSTR if like that let-3SG-COMP just 1PLN-MM-tie-COMP

16. Ka-i pe-koo kore i aa-no, na-ho-po ka-i and-3SG MM-tie frog at waist-3SG thus-3SG-INCOMP and-3SG pe-koo na’a-na wola hai aa-no. 17. Ka-i pon-tampa’u MM-tie also-3SG rat at waist-3SG and-3SG ANTIPASS-begin koide yo kore, kanahi-ako, "Leu-mo, ka-to pom-pole.” that ART frog say-INSTR come-COMP and-1PLN ANTIPASS-cross.over

18. Ka-ndo iso [mjom-pole, da-hira-po pada nonangi. and-3PL start PART:ANTIPASS-cross.over be-3PL-INCOMP both swim
19. Sa-betu-ndo raa metonga-o laa e'e, ka-i petindowako
   when-just-3PL thither middle-3SG stream water and-3SG dive

   iaar kore korua i puri e'e. 20. Ni-lako-no-mo ka'asi iaar
   3SG frog below at bottom water NI-go-3SG-COMP what.a.pity 3SG

   wola mo-ndo-ndo'u e'e', [m]olomo dungi ka-i
   rat PART:ANTIPASS-DURATIVE-drink water PART:drown arrive and-3SG

   mate. 21. Sa-mate-no-mo nde'e koie wola, te'iaa-mo hi daa
   die when-die-3SG-COMP indeed that rat only-COMP that be

   lo-lonto koide yo bangke-no hai wawo e'e, sawali
   DURATIVE-float that ART corpse-3SG at above water but

   da-ho-si [m]eko'eo roide kore da tii sana-sanaa
   be-3SG-CERT PART:have.vine that.below frog REL descend REDP-glad

   hai puri e'e.
   at bottom water

   22. Me'asa tempo ka-i tealo nde'e sico onto-o koide
   one time and-3SG pass indeed kestrel see-3SG that

   bangke-no wola hi daa lo-lonto hai wawo e'e.
   corpse-3SG rat that be DURATIVE-float at above water

23. Tadetade-no danga-o. 24. Sawali hina daa-si [m]eko'eo
   suddenly-3SG attack-3SG but because be-CERT PART:have.vine

   roie kore da hai puri e'e me-koo, tadetade-ndo te'ala
   that frog REL at bottom water PART:MM-tie suddenly-3PL taken

   orua-'ira. 25. Wola da ni-danga-no sico, wawa-hira orua-'ira
   two-3PL rat REL PASS-attack-3SG kestrel carry-3PL two-3PL

   hai otu ng-keu. 26. Sa-teleu-no ko-keena ni-lako-no kaa-hira
   at top LKR-wood when-arrive-3SG that-there NI-go-3SG eat-3PL

   orua-'ira.
   two-3PL

   27. Dadi diide tulura upu-a-no-mo die, sawali da-hoo da
   so this story finished-LOC-3SG-COMP this but be-3SG REL
Notes

3. *t[im]ora-ako-no*, literally ‘his cause of living, that which he lives on account of, because of’. Here *ako* in its reflexive function is introducing the cause or reason of living.

12. *...mate-aku-mo aku ko-keena.* Here *aku* in its second occurrence is a shortening of *i'aku*, thus to be regarded as an independent pronoun.

Translation

1. THIS STORY IS THE STORY OF THE RAT AND THE FROG

2. The place where the rat lived was at a crossing of a rocky stream. 3. There came a day, and the rat went out from his hole, and he crossed along the top parts of the rocks at the crossing of the stream of water, and went seeking his living.

4. He was in the process of wandering about seeking that which would provide him subsistence, and there came a drenching rain, that is, a big rain, but he never thought about hurrying home to where he lived. 5. It hadn’t been raining long, when there came a flood of water, and then indeed that rat was looking about for how to return home again to his place, as the stones where he had crossed over were no longer there, because they were submerged under the flood waters. 6. He was wandering about, seeking a way to cross over, and he met a frog.

7. Then the frog addressed him, asking, “What indeed are you seeing, friend?” 8. Said the rat, “I’m wandering about here and there in order to cross, but I don’t now how to find my way, because the stones of my crossing place just then, even though it is currently not raining, are submerged.” 9. Said that frog, “Oh, it’s not difficult. Go cut some vine for us, and come bring it for us.”
10. Then the rat went and cut some vine, and only then he came bringing it for the frog. 11. Then the frog responded, saying like this: “I will tie it on my waist, only then you tie it also on your waist, and then we will cross together.” 12. But because the rat thought that he didn’t know how to swim, he asked saying “Are you not trying to trick me, friend, so that when we are going thither across the deep, you will dive so that I will die there?” 13. Said the frog, “There is no person who has tricked his friend.” 14. Added the frog, “Let’s make a promise: from this world until the afterlife, I will not do anything to you.” 15. Then that rat replied like this: “If it’s like that, just let it be, let’s tie ourselves.”

16. Then the frog tied around his waist, and likewise also the rat tied around his waist. 17. Then that frog began to cross, saying “Come on, let’s cross.” 18. Then they started to cross, they were both swimming. 19. Exactly when they were going toward there in the middle of the stream of water, the frog dived below to the bottom of the water. 20. Then what a pity, he the rat kept swallowing water, he was submerged until he died. 21. When the rat was indeed dead, only that corpse of his was floating on top of the water, but it was still connected to that frog down there who had descended happily to the bottom of the water.

22. Some time later, a kestrel passed by and saw the rat’s corpse floating around on top of the water. 23. Suddenly it attacked. 24. But because that frog who was at the bottom of the water still had the vine tied around him, suddenly both of them were taken. 25. The rat was the one attacked by the kestrel, but it carried them both to the top of a tree. 26. Arriving there, it ate them both.

27. So this story has come to an end, but there is something contained herein which reaches into the lives of people, that is, this advice: don’t let us mutually or customarily lie to one another, for nothing will eventuate if we deceive our friend, except that we will only achieve a bad result (lit. only purely bad will be achieved by us). 28. The end.
Appendix 2

Lexical reconstructions

In this appendix are listed Proto-Bungku-Tolaki lexemes reconstructed to date, along with supporting evidence. They are presented in the following alphabetical order: a, b, d, e, g, h, i, k, l, m, n, o, p, q, r, R, s, t, u, w, y. Before giving the lexical reconstructions with supporting evidence, however, a few words about these reconstructions must be given. These comments concern sources of data on Bungku-Tolaki languages; sources of PAN, PMP, and other etyma; the representation of final consonants; and how lexical reconstructions are cited. Following these introductory remarks comes the main body of this appendix, with a separate end-section devoted to loans.

Sources of present-day lexemes

The amount of evidence in support of a lexical reconstruction varies from one reconstruction to the next, sometimes drastically, depending on my sources of material. In some cases evidence extends to every Bungku-Tolaki language and dialect; in other cases reconstructions have been based on data from only two languages.

When gleaning lexical material there were only two dictionaries which I could draw from, both of relatively small size: Muthalib, Alimuddin Chalik and Arsamid’s (1985) Kamus Tolaki-Indonesia, which unfortunately is also poorly typeset, and Lara, Larobu, Vuorinen and Karhunen’s (1991) Kamus Padoe-Indonesia-inggris, compiled under field conditions. One will also note, both these languages belong to the Western branch of Bungku-Tolaki. I have also made use of relevant so-called Holle wordlists, lists of approximately one thousand items collected by Dutch civil servants, missionaries, and linguists throughout Indonesia, primarily during the first half of this century. Because of
the sometimes unreliability of the data, I have been careful to mark with subscripted \( H \) whenever my source of data was one of these lists.

<table>
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<tr>
<th>LIST NO.</th>
<th>TITLE</th>
<th>APPEARS IN:</th>
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<tr>
<td>WAW(_H)</td>
<td>244</td>
<td>Wawoni (Stokhof 1985:113–25)</td>
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<tr>
<td>BNG(_H)</td>
<td>196c</td>
<td>Bungku (Stokhof 1985:59–74)</td>
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<td>MRB(_H)</td>
<td>196b</td>
<td>Mori (Stokhof 1985:43–49)</td>
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<td>137</td>
<td>To Padoé (Stokhof 1985:95–112)</td>
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<tr>
<td>TOL(_H)</td>
<td>188</td>
<td>Kendari (Stokhof 1985:3–25)</td>
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<td>Cod.Or. 399 a,b,c</td>
<td>Tolaki (Stokhof 1987:181–98)</td>
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<td>MEK(_H)</td>
<td>191</td>
<td>Tolelaki, Kendari (Stokhof 1985:27–42)</td>
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Although together these eight lists represent sources of information on only four Bungku-Tolaki languages—despite the fact that list no. 137 is titled ‘To Padoé’, in fact it represents a Mori Bawah dialect, and Mekongga is a dialect of Tolaki—fortunately I also have had at my disposal shorter lists of 228 words collected by myself and other members of the Summer Institute of Linguistics (SIL) in every language and nearly every dialect across the Bungku-Tolaki area. In addition I have also drawn on my own fieldwork in Tolaki and Kulisu.

Otherwise, I have had to search for lexical material among various Dutch, Indonesian and English treatises on these languages, or consult with others currently working in the area (notably Scott Youngman in Tolaki, and David Andersen in Moronene). Although ideally it would be better to cite stem forms—such as might be listed in a dictionary—the nature of the utilized sources has in most cases not allowed me this convenience. Rather than make my own parse of morphology, which could introduce error, I have instead cited the forms just as I have found them, carefully noting the source in each case. If no source of data is given, one may assume it is from an SIL word list or my own field research.

When citing attested forms, I use the following three-letter abbreviations of language and dialect names. As much as possible, I have also endeavored to follow this same order
when presenting data, e.g. an attestation from Moronene is listed before one from Kulisu and so forth.

**Eastern:**

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<th>Tolaki</th>
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<td>Wiwirano d</td>
<td>WIW</td>
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<td>Asera d</td>
<td>ASE</td>
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<td>Konawe d</td>
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<td>Mekongga d</td>
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<td>Laiwui d</td>
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<td>Rahambuu</td>
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<td>Kodeoha</td>
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</table>
Sources of PAN, PMP and other etyma

The source from which an etymon was gleaned is cited in parentheses next to that form. If the original source is primarily a list of reconstructions, then the number of the appropriate entry is cited. For example, (Blust 1986 292) refers to Robert Blust’s 1986 *Austronesian etymologies–III*, entry number 292. Otherwise, a page number is cited, for example (Dahl 1981a:52) refers to a form occurring in O. C. Dahl’s 1981 *Austronesian Numerals* article, somewhere on page 52. Entry numbers are cited without a colon, page numbers with a colon.

Representation of PBT final consonants

Although present-day Bungku-Tolaki languages are lacking in final consonants, solid evidence exists (§ 2.3) for supposing that their common ancestor, Proto–Bungku-Tolaki, had maintained reflexes of almost all Proto–Malayo-Polynesian consonants in final position (PMP *-h being the only known exception). In summary, the evidence collected to date supports reconstructing no less than five contrasts in final position, which are symbolized here as *-R, *-y, *-q, *-N and *-Q. Small *-N symbolizes a merger of PMP *-m, *-n and *-ŋ, while small *-Q symbolizes a probable merger of PMP *-p, *-t and *-k.

In some cases a final consonant can be reconstructed solely on internal evidence, and no external witness is required. For example the widely attested Bungku-Tolaki stem *kaa* ‘eat’ (without final consonant) can be reconstructed as PBT *kaaN* on the basis that the third singular object form ‘eat it’ in Padoe is *kaa-n-go* and in Kulisu *kaa-ho* (§ 2.3.1). The reconstruction of a final nasal in this etymon is, of course, supported by external evidence, namely PMP *kaen* ‘eat’. However, this is not all. In order to reconstruct either *-N or *-Q on internal evidence, one must in fact know a stem’s third singular object form in Padoe and/or Kulisu. In practice, this means only transitive verbs can be reconstructed with *-N or *-Q on internal evidence—or, more to the point, only transitive
stems which have reflexes in Padoe or Kulisu. By way of contrast, consider the form
wula 'moon', which is as widely attested among Bungku-Tolaki languages as is kaa 'eat'.
However, unlike kaa, the stem wula has no use, to my knowledge, as a transitive verb. In
this case, the reconstruction of PBT *wulan (with final *-N) rests entirely on external
evidence, namely PMP *bulan 'moon'.

In some cases there is neither internal nor (as yet) any identified external evidence for
reconstructing a final consonant, but just because the evidence is silent, this does not mean
the PBT form should therefore be reconstructed as vowel-final. In such cases I employ
the symbol *-° to indicate that further investigation is needed. I also use *-° when the
identified PMP source ends in any of *-b, *-d, *-D, *-g, *-l, *-r or *-s. Although it is
clear that these protophonemes were maintained into Proto-Bungku-Tolaki in some form,
the evidence to date is simply not ample enough to make any firm statement about how
many distinct contrasts were maintained among them. The reader should bear in mind that
the symbol *-° is therefore employed in two different ways, either meaning that a
consonant (of unknown value) is to be reconstructed, or that a consonant (of unknown
value) may be reconstructed. The former is the case, for example, in PBT *kapa° 'thick'.
Here both the PMP reconstruction *kahepal and the fact that the *a of the final syllable
did not raise to o in Western Bungku-Tolaki languages (§ 2.3) suggest this form had a
final consonant in PBT.

*kapa° ‘thick’
KUL, MRB, PAD (Lara, Larobu, et al. 1991:24), TOL (Muthalib,
Alimuddin, Chalik, et al. 1985:50), MEK: mokapa. [PÅN *kaSepal
‘thick, of solid objects’ (Blust 1986 133)]

Likewise we must suppose that PBT *ngapa° also had a final consonant, though in this
case our evidence is limited to the fact that the Tolaki reflex is ngapa (if the PBT form
were reconstructed as vowel-final, one would expect the Tolaki reflex to exhibit vowel raising, i.e. **ngapo).

*ngapa° ‘site along shoreline where boats are kept’
    MRN: ngapa ‘port, beach’; KUL: ngapa ‘a beach, cove, or other break in the rocky coastline, where one puts out to sea or in to shore, and where one’s sampan is stored when not in use’; TOL: ngapa ‘anchorage, port’.

In the following entry, however, *-° simply means that a final consonant may be reconstructed. The present witnesses are in fact compatible with either no consonant or any consonant (other than *-q; see § 2.3.2) being reconstructed in final position.

*ngolu° ‘dew’
    BNG, MRB, TOL, MEK: ngolu ‘dew’.

Since a notation to precisely define each eventuality would prove cumbersome, I keep to the present system. No information is hereby lost; a more exact ‘reading’ of *-o is always recoverable either from the witness forms, or from the PMP etymon if it has already been ascertained. If neither *-° nor any other final consonant is symbolized, then the reconstructed form is to be regarded as being vowel-final.

Citing PBT lexical reconstructions

Although I follow the practice of listing reconstructed forms according to the stem, this should not be taken to mean that the stem itself necessarily occurred as an independent word. For example, although I reconstruct PBT *tahaQ ‘ripe, done’, as far as I am aware there is no Bungku-Tolaki language which has the word taha as a free form. Rather, it must be bound, compare for example Kulisusu motaha (stative) ‘done, ripe’, pokotaha (transitive base) ‘make ready, done; cause to ripen’, etc.
Reconstructions

The following list of Proto–Bungku-Tolaki lexical reconstructions began as a compilation of terms for working purposes only, and I am afraid that it still reflects its ‘working-class’ heritage on some points. Regarding PAN or PMP etyma, for example, I have not been able in every case to track down the author who first proposed a given reconstruction, but instead give credit to someone else who cited them. And although I have made efforts to eliminate loans, I am sure my lack of knowledge of surrounding languages, or languages of wider communication, has prevented me from catching every instance. If the more advanced scholar will forgive these shortcomings, I hope they may yet find much that is useful in the following entries.

*(p,k,s,h)ule ‘to return’

*aan ‘hole, conduit, interior’

*aaoq ‘waist, loins’

*aahq ‘to sharpen’

*aah ‘salty’
*ahu 'smoke'
   All languages: ahu. [PMP *qasu (Blust 1981c 146)]

*ahuR 'bamboo water container'

*ala 'to take'

*ala° 'rice barn'

*alu 'pestle'
   All languages except TAL, MRA: alu. [PWMP *qaSelu 'rice pestle' (Blust 1989 330)]

*ampah-i 'to spread out'
   KUL: empe 'mat'; MRB (Esser 1927:26): mo’empehi ‘to cover’ (with an underlay); TOL (Muthalib, Alimuddin, Chalik, et al. 1985:4) ampahi ‘mat’. The Kulisu and Mori Bawah forms have unexplained *a > e. [PAN *[qh]ampar, *[qh]apar (Dyen & McFarland 1970 34)]

*ampa° 'trap with bamboo spikes'

*ampoh 'forgiveness'

*anan 'to weave'

*anaQ 'child, offspring'
   All languages: ana. [PMP *anak (Blust 1981c 56)]

*ane 'termite'
*anu ‘whatsit’

*apu° ‘lord, king’
[compare PPH *a(N)pu ‘grandparent, grandchild’ (Charles, in Zorc 1971 0236)]

*apuy ‘fire’
MRA, PAD, TOM: apui; all others: api. [PAN *Sapuy]

*ari° ‘finish; already’

*aroQ ‘front’
BNG, BAH, MRB, PAD, MRA, TOM, RAH: aro ‘front’; TAL: i aroa ‘in front’.

*aRa° ‘great’

*asa ‘one’ (bound numeral)
*asa ‘one’ (independent numeral)

*ase ‘chin’

*asi*° ‘to squeeze’
BNG (Saro, Rahim, et al. 1982:28, 89): asi, asipako ‘to squeeze’; PAD (Lara, Larobu, et al. 1991:5); mo asi ‘squeeze, pinch’; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:10, 122): me’asikke ‘to slip something in between’, teasi ‘compressed, squeezed’ (as in a crowd of people); MEKH: asisi ‘pinch, squeeze it’. Compare also Tolaki me’asinggeke ‘to carry under the arm’. [compare PMP *atip ‘pinch together’ (Blust 1980 25)]

*ate ‘liver’
all languages: ate. [PAN *qatey (Nothofer 1984:452)]

*atiho° ‘to sneeze’ < cmp. (169)

*atoQ ‘roofing thatch’

*aun ‘sadness, longing’
MRN (D. Andersen 1995:5) me’au ‘sad’; KOR, KUL: uma ‘weep’; PAD (Lara, Larobu, et al. 1991:51): mo’o’au ‘have sorrow’; TOL (Youngman 1997:pers.comm.): moko’au ‘feel longing for s.th.’, cmp. mo’au ‘lonely, deserted’, also ‘melodious, sweet (soud), apparently a sound which causes one to feel longing’. [PAN *quaŋ ‘howl, wail’ (Blust 1980 26)]

5Kulisu without among Bungku-Tolaki languages has a form isa (sometimes pronounced lengthened iisa), which distribution suggests borrowing from Wolio. The Kulisu form isa used in straight counting (e.g. isa, ora, oto, ‘one, two, three...’) while the form saade is used in counting objects (saade kuro, orua kuro, oto, kuro ‘one cookpot, two cookpots, thre cookpots...’).
*awo* 'step-' (relationship in a blended family)

*awu* 'ashes'
BNG, KOR, MEN, BAH: *afu*; all others except WIW, LAI: *awu*. [PMP *qabu 'ashes']

*awuQ* 'dust'

*bahog* 'wet; bathe'
MRN, TOK, TAL, KUL, KOR, TUL, WAI, TOR, BNG, LAL, WIW, TOL, MEK, LAI, RAH, KOD: *mobaho* 'bathe (someone)'. Compare also Taloki, Kulisu, Koroni *waho* 'rain', and Wawonii, Bungku (Adrainai 1990:267) and Mori Bawah *mobaho* 'wet', which retain the original meaning of this etymon. [PAN *baseq 'wet' (Dempwolff, Dyen, in Zorc 1971 0859), PMP (ma)-baseq 'wet' (Blust 1981c 141)]

*baki* 'k.o. basket'

*bali* 'enemy'

*bali* 'allow; change, become'

*balo* 'fat, thick'
MEN: *mefalo*; WAW, LAN, TUL, TOR, ROU, WAR, LAL, WIW, ASE, TOL: *mewalo*; BAH: *mebalo*; MRB: *mebalo, mewalo*. 
**banan** ‘thread’

**bangkaq** ‘boat’
WAR, LAL, WIW, ASE, TOL, MEK: *bangga*; all others except LAI, RAH and KOD: *bangka*. [PMP *baNkaq (Dempwolff, cited in Zorc 1971 0840)]

**beaq** ‘heavy’

??bene° ‘plant species with thorns’
KUL: *bene* ‘k.o. plant with thorns and a small, edible tuber, usually growing in rocky areas’; TOL (Youngman 1997: pers.comm.): *bene* ‘kind of vine with thorns’.

**benu** ‘coconut husk’

**bewe°** ‘to wind (around)’

**bibi°** ‘lips’

**bine** ‘seed rice, rice seedling’
PAD (one wordlist): *bine ‘rice seedling’*; WAW, MRB (one wordlist), TOL, MEK, RAH, KOD: *wine ‘rice seedling’. In Tolaki and possibly other areas, *wine* is also the term for ‘seed rice’. [PMP *biniq, *beniq ‘seed’ (Dempwolff)]

??bingki° ‘earthen water barrel’
WAW: *bingki*; TOL, MEK: *benggi*. The Tolaki forms have unexplained *i > e.*
*bintan-i 'leave'

*biriN ‘ear, edge’
All languages except KOD: *biri ‘ear’. Compare also MRN, TOK wiri ‘edge’ which retain the original meaning. [PIN *bi(d,D)ing ‘side, edge; aslant’ (Mills 1981 52)]

*bokeo ‘tie’

*bongoo ‘deaf’
KUL: kobongobongo ‘stupid, not all there’; KOR, MEN, LAN, TOR, BNG, ROU, BAH, MRB, PAD, MRA, TOM, WAR, LAL, WIW, ASE, TOL, MEK: bongo, mobongo. [PWMP *beŋel, *beŋer (Blust 1983/1984 49), PAN *bëŋel (Dyen & McFarland 1970 98)]

*bonto ‘wet’

*boro ‘mucus’

*bose ‘oar, paddle’

?*bo(n)so ‘enclose’

*boton ‘seed, classifier’
*boto* ‘body, main part’
  KUL: *boto* ‘body’; BNG (Adriani 1900:274): *foto-no* ‘oneself’ (with 3rd sg. suffix);
  TOL (Youngman 1997:pers.comm.): *boto-no laika* ‘main part of a house, excluding
  attached parts such as a porch, terrace, or kitchen’. Compare also Moronene
  (Muthalib, Pattiasina, et al. 1983:17) and Tolaki (Muthalib, Alimuuddin, Chalik, et al.
  1985:158) and Mekongga *wotolu* ‘body’. [PAN *be(n)teŋ* ‘abdomen’ (Dyen &
  McFarland 1970 105)]

*buan*o ‘k.o. net’
  *mebuani* ‘to fish with a net’.

*bue* ‘cradle, swing’
  ‘cradle, swing’; TOL (Muthalib, Alimuuddin, Chalik, et al. 1985:21): *mebue* ‘to rock,
  sway, wave, flutter’.

*buke* ‘full’
  TAL, KUL, KOR, WAW, MEN MRB: *buke*; PAD (Lara, Larobu, et al. 1991:11),
  MRA: *buuke*; TOM, KOD: *buke*. [PAN *bukay* (Mills 1981 160)]

*buku lale*o ‘ankle’
  KUL, WAWH, BNGH: *buku lale*; MRBH: *wuku lale* ‘ankle’; TOLH, MEKH: *buku lale*
  ‘ankle’. [PMP *buku lali, *buku lalιŋ ‘ankle bone’]

*bumbung-an* ‘ridge of roof’
  KUL: *pobumbu* ‘ridge pole’; WAWH: *bumbunga*; BNGH: *fumbunga*; MRBH: *mbumbunga*;
  TOLH: *bumbunga*. [PAN *bubuŋ* (Dyen & McFarland 1970 124)]

*bunga*o ‘flower’
  All languages except TAL, KUL: *bunga* ‘flower’. [PMP *buŋa* (Blust 1981c 116):
  North Sulawesi *bunjaŋ* (Sneddon 1995: personal communication)]

*bungka*o ‘crab’
  TOLH, MEKH: *bungga*. [cmp. PSS *bungkang ‘crab’ (Mills 1981 6)]

*bungku*o ‘back’
  MRN TOK, WAW, MEN, BNG, BAH, MRB, PAD, MRA, TOM: *bungku*; WAR,
  WTW, ASE, TOL, MEK: *bunggu*; LAL: *bugu*. [PMP *bu(N)kul ‘protrude’
  (Dempwolff, in Zorc 1971 1105); cmp. PPH *buk/tut ‘bent with age; hunched; to
  protrude, bulge’ (Zorc, Charles, in Zorc 1971 1108)]

*buroto*o ‘mosquito’
  KUL, TOR, LAL, TOL, MEK: *buroto*. [compare Proto-Muna *buroto ‘mosquito’
  (Van den Berg 1991a:36)]

*buso*o ‘high tide’
  KUL: *poone buso* ‘high tide’ (*poone* = ‘ascend’); TOL: *buso* ‘high tide’. Compare
  Wolio (Anceaux 1988:24) *buso* (trans.) ‘collect, pile up, accumulate, compress, cram’.
*butu° 'go toward'

*butun° 'only, just'
KUL: sabucuno 'just then' (discourse marker signaling direct sequencing of events); MRB_H (Esser 1927:42), PAD (Lara, Larobu, et al. 1991:11): butu 'only' (t for expected **s unexplained); TOL (Muthalib, Alimuddin, Chalik, et al. 1985:24, 113) sabutu 'just'; sabutuno 'just as, at the same moment as'. [PPH *butuŋ 'only, sole' (Zorc, cited in Zorc 1971 1196)]

*dahu° 'dog'
All isolects except RAH: dahu. [Proto-Muna *dahu 'dog' (Van den Berg 1991a:29,48), compare PMP *asu (Blust 1981c 96)]

*doa° 'to count'

*dopi° 'board, plank'

*duku° 'winnowing tray' «nyiru»

*dulan° 'tray, basin'
BNG (Saro, Rahim, et al. 1982:88): dula 'tray'; MRB (Esser 1927:45): dula 'wooden container, trough' «bouen bak, trog»; TOL (Youngman 1997:pers.comm.): dula 'kind of large carved wooden bowl with two handles on side at top, for mixing sago, washing dishes'. [PAN *dulan 'tray, basin' (Blust 1970 155)]

*dungku° 'to arrive'
MRN (D. Andersen 1995:18): dungku 'arrive'; PAD: duungku 'bump into'; TOL, MEK_H: dunggu 'arrive'.

*ehe° 'want, desire'

*elo° 'tongue'
all languages: elo.
*elu 'orphan'

*eme 'urine'
All languages: eme. According to Adriani (1900:281), this form is cognate with Pamona eme 'liquid', for example, vegetable liquid with one pours over rice. [PMP *kemiq or *kemi? 'urinate' (Blust 1989 268)]

*engeo 'nose'
All Eastern isolects and PAD, MRA, TOL: enge. [compare PAN *qiucus 'snort, wheeze' (Dempwolff, Dyen, in Zorc 1971 0472)]

*enuq 'beads, necklace'

*epo 'swamp, marshy area'

*etu 'hundred'
KUL: ecu; All languages: etu. [PAN *Ratus]

*euro 'substitute, replacement'

*garu 'stir'

*gauo 'to speak' (deceptively)
MRN: mogau 'to speak, to talk at length'; KUL: mogau 'speak', pogau 'language'; WAWH: gumau 'tell lies'; MRBH: megaupi 'to tell lies'; PAD (Lara, Larobu, et al. 1991:16): megau 'naughty'; TOLH (Adriani 1914:229): gau, mogau-gau 'cheat'. This form has undergone semantic ameliorization or pejoration. [PSS *gau(k?) 'to work, to do' < PIN ?*ga(ho)u(k?) (Mills 1981 16)]

*gau 'fog'
WAI, BNG: gafu 'fog'; ROU: gawu 'fog'; TOK, LAN, TUL, TOR, WAR, LAL: gawu 'cloud'; MRA (Esser 1927:63): gawu 'mist, white haze' megawu-gawu 'not clearly visible' (because of haziness or distance); TOL: gawu 'fog, cloud on mountainside, cloud'. [PMP *kabut 'fog, mist' (Dempwolff, in Zorc 1971 1678)]
*gele ‘laugh, tickle’
  [PMP *geli ‘laugh, tickle’ (Dempwolff, in Zorc 1971 1537); *i > PBT *e unexplained]

*geru* ‘scratch’

*gili*° ‘to turn around, rotate’

*gilin* ‘to grind’
  KUL, BNGH, MRBH, MEKH: mogili. [PAN *gilin (Dyen & McFarland 1970 243)]

*golu* ‘ball’

*hai, *-ai* ‘to burn’

*hakaQ* ‘root’
  all languages: haka. [PAN *wakat ‘mangrove root’]

*hakiq* ‘pain, sickness’
  BNG (Adriani 1900:259), WAWH, MRBH (Esser 1927:38), TOL: haki. [PAN *sakît ‘pain’ (Dyen & McFarland 1970 526)]

*halaq* ‘fault, debt’

*halu* ‘eight’ (bound numeral)

*hanAN, *-anan* ‘right’
*hapa* ‘what’

*hapu*° ‘to deny’
BNG<sub>H</sub> (Adriani 1900:267), WAW<sub>H</sub>, MRB<sub>H</sub> (Adriani 1900:291), MRA (Adriani 1900:291); TOL<sub>H</sub>, MEK<sub>H</sub>: *mekapu*. [compare Pamona sapu ‘deny’ (Adriani 1900:291), PAN *s<sub>2</sub>aput* ‘to wrap around’ (Dyen & McFarland 1970:332), PMP *saput* ‘wrap, shroud; cover’ (Dempwolff, in Zorc 1971:2999)]

*hawa*° ‘to think about, to remember’

*hawuR* ‘to sow (by scattering)’
KUL: *hawiko* (stem) ‘sow, scatter’; BNG<sub>H</sub>: *mohafi*; WAW<sub>H</sub>, MRB<sub>H</sub>: *mohawi*; TOL<sub>H</sub> (Adriani 1914:225), MEK<sub>H</sub>: *mohawu*. [PMP *sabuR* ‘scatter, strew’ (Dempwolff, in Zorc 1971:2878)]

*hea*° ‘slice’
[PWMP *sayad* ‘to slice’ (Blust 1986:289)]

*he<sub>la</sub>*° ‘mix’

*heon* ‘ant’

*hiku* ‘elbow’

*hiwu*° ‘small’
KOR: *mohiwu*; WAW: *mohewu*; TOR, WAR, TOL, KOD: *mohewu*; MEK: *mohewu*, *mohiwu*; LAI: *mohiwu*.

*ho* ‘one’ (special bound form occurring only with *puluq* ‘ten’)
All Eastern isolects: *ho-pulu*; all Western isolects: *ho-pulo*. [PAN *sa-*(Dahl 1981a:46)]
*hoa° ‘hornbill’
KUL, BNG\textsubscript{H}, TOL\textsubscript{H}, MEK\textsubscript{H}: hoa.

*hoalu ‘eight’ (independent numeral)
MRB, PAD: oalu; all others: hoalu. Note two Mori Bawah wordlists have o’alu ‘eight’ (with glottal insertion). The loss of h in MRB and PAD is ascribed to contamination from the other numerals, where prothetic vowel o- is regular.

*hoani ‘bee’
BNG\textsubscript{H}, WAW\textsubscript{H}, MRB (Esser 1927:37), PAD (Lara, Larobu, et al. 1991:19), TOL\textsubscript{H}, MEK\textsubscript{H}: hoani. Note MRN and KUL both have roani ‘bee’. [Parnona uani (Esser 1927:52), PMP *wañi ‘honeybee’ (Blust 1986 433)]

*hodu ‘hiccup’
KUL, BNG\textsubscript{H}, WAW\textsubscript{H}, TOL\textsubscript{H}, MEK\textsubscript{H}: mohodu ‘to hiccup’; MRB\textsubscript{H} (Adriani 1900:291, Esser 1927:51): hodu ‘hiccup’; mohodu ‘to hiccup’, sansodu ‘to sob’; MRA (Adriani 1900:291): hodu ‘hiccup’. [PAN *se(n)du ‘hiccup’ (Blust 1986 292); PMP *d > PBT *d unexplained]

*holay ‘fry without oil’

*holua° ‘ladle’

*hopa° ‘to bark’

*hori ‘side’

*horo° ‘floor’
*horu ‘to weave’
   KUL: horu ‘weave’ (cloth); BNGH (Adriani 1900:270), WAWH (Manyambeang,
   also Tolaki (Adriani 1914:223) hinoru nggangga ‘spider web’. [Proto-Ambonese
   *sedu ‘weave’ (Stresemann 1927, cited in Wrum and Wilson 1975:237)]

*hule*° ‘heart’
   All languages except TAL: hule.

*hule(r,t) i ‘to repeat’
   MRN: mohuleri, huleri-o; WAW, MEN: mohuleti, humuleti-o; MEK: humulei-o.
   Compare also PAD mekuleti-o and KUL sulengi-o, ‘to repeat’, which have different
   initial consonants. [PPH *sub/iq ‘continue, repeat’ (Zorc, in Zorc 1971 3182)]

*huloy ‘top’ (toy)
   BNGH, WAWH, MRBH: hule; PAD (Lara, Larobu, et al. 1991:20): huloi; TOLH,
   MEKH: hule.

*huluç ‘torch, resin’
   1900:259), WAWH, MRBH (Esser 1927:35): hulu; PAD (Lara, Larobu, et al.
   [PAN *s2uluç ‘torch’ (Dyen & McFarland 1970 565)]

*hunuR ‘to burn’
   KUL: mohuni ‘burn’ (a field or other large area); TOL (Youngman 1991:pers.comm.):
   mohunu ‘light a fire which spreads’, MEK: mohunu, humunu ‘i ‘burn’. [PMP *sunuR
   ‘burn’ (Dempwolff, in Zorc 1971 3233)]

*ia* ‘live, stay, reside’
   MRN, KUL: mo’ia ‘stay’; MRB (Esser 1927:10): mo’ia-ia ‘stay, sojourn’; TOL:
   mo’ia ‘live’.

*ihi ‘contents, flesh’
   All Eastern isolects and PAD, MRA: ihi ‘flesh; contents’; TOLH: ihk ‘flesh of fruit;
   contents’. [PAN *isi ‘contents, flesh’ (Dempwolff, Dyen, in Zorc 1971 0501)]

*ihuQ ‘rib’
   bone’; MEKH: toola ehu ‘rib bone’. Mori Atas has orusu (Esser 1927:61), probably
   borrowed. [PAN *Rusuk]

*ikan ‘fish’
   MRN, TOK, TAL, KUL, KOR, WAW, MEN, LAN, TUL, WAI, TOR, BNG, ROU,
   TOM, WAR, LAL, WTW, ASE, TOL: ika. [PMP *hikan]
*ikuR 'tail'
MRN: ici; TAL: iku (u unexplained); KUL, KOR, WAW, MEN, LAN, TUL, WAI, TOR, BNG, ROU, BAH, MRB, PAD: iki; MRA, TOM: okui (Adriani 1900:293 gives MRA: ukui); TAL, MEK, TOL, WAW, LAL, WIW, ASE, LAI, RAH: iku. [PMP *ikuR (Blust 1981c 105)]

*ila 'wild' (undomesticated)

*ilan 'lost'

*ili 'go downstream'
KUL: mengili 'descend'; BNGH (Adriani 1900:268), MRBH (Esser 1927:18): umili 'go downstream', mengili 'descend' (from a mountain or height); TOLH: mili. [PWMP *ili? 'to flow' (Blust 1980 168); PMP *hililR 'flow off, ebb, downstream' (Dempwolff, in Zorc 1971 0440)]

*inalahi 'forest'
KUL, MRN, MEK, TOL: inalahi. Note this form in origin is morphologically complex, probably meaning 'that which is covered with trees', although the corresponding active form of the verb has not been attested. [PMP *halas ['tree'] (Dempwolff, Zorc, in Zorc 1971 0104)]

*inaquR 'descend'

*inia 'place, village'
BNGH, MRBH (Adriani 1900:286, Esser 1927:15): inia 'village', PAD (Lara, Larobu, et al. 1991:22), MRA (Esser 1927:33): inie 'village'. This form probably also occurs (with coalescence of ia > e) in TOL inehapo 'where', literally 'what place'. This form is complex, derived from passive marker in- + stem ia 'to live, reside', thus meaning 'that which is resided (in)'.

*in-ipian 'when?' (past)
*in-ipua* 'day before yesterday'
MRN (D. Andersen 1994:20); nipua; KULb: inipua; BNGb: ndiipua; WAWb: ipua;
MRB (Esser 1927:21); indi'ipua; MRA (Esser 1927:21): inipua; TOLb, MEKb: inipua. See also *te-ipua* 'day after tomorrow'.

*inun* 'drink'
LAN, TUL, TOR, ROU, WAR, LAL: mo'enu; BNG: mo'enu, mo'inu; BAH, MRB
and all Western isolects: mo'inu, moinu (rarely, mo'enu). The form mo'enu appears to
be a development in the southern Bungku area. [PMP *inum (Blust 1981c 40)]

*ipali* 'forbidden, taboo'
peli; MRA (Adriani 1900:295) upeli; MEKb: ipali. [PAN *paliSi 'taboo' (Wolff
1988:142)]

*iipi* 'to dream'
All languages: mo'iipi. [PAN *Sepi (Blust)]

*ipo* 'cockroach'
BNGb, MEKb: ipo. [PAN *[q?]ipes 'cockroach' (Dyen & McFarland 1970 263)]

*(i,u)saq* 'to pound, to stamp'
MRN, TOK, TOR, BAH, MRB: mo'isa; PAD, MRA, TOM: mo'use; TOL, MEK, LAI:
umusa, mo'usa. [PMP *iNZak 'step on; dance' (Dempwolff, cited in Zorc 1971
0476)]

*(i,u)saq* 'ladder'
KUL, WAWb: esa; BNGb (Adriani 1900:253), MRBb (Adriani 1900:295): insa, ensa;
TOL, MEK (Adriani 1914:236): la'usa. Compare also Moronene (Adriani 1914:239)
la'usa 'ladder', presumably borrowed from Tolaki; the first syllable la is shortened
from laa 'stem, trunk' (long object). [PMP *iNZak 'step on; dance' (Dempwolff, cited
in Zorc 1971 0476)]

*iton* 'black'
TOK, TAL, KOR, LAN, TUL, WAI, TOR, ROU, BAH, MRB: mo'ito; MRA, TOM:
mo'eto; PAD and all West Coast isolects: me'eto, meeto. [PMP *(ma)-qitem (Blust
1981c 147)]

*itoluR* 'egg'
LAN, TUL, TOR, TOM: toli; MRB, MRA: su'ului, sului (< metathesis); BAH, PAD:
sului (< metathesis); all West Coast isolects except KOD: ti'olu (< metathesis). [PMP
*qitem (Blust 1981c 98)]

*iwio* 'water'
MRB, PAD, MRA: uwo; TOM: ufoi; BAH and all West Coast isolects: iwoi.

*kaan* 'eat'
PAD, MRA, TOM, WAR, LAL, WIW, ASE, TOL, MEK, RAH: mongga; LAL, KOD: mogaa; all others: mongkaa. [PAN *kaen 'eat']
*kadadi* ‘animal’
MRN (Muthalib, Pattiasina, et al. 1983:24): *kadadi* ‘animal’ (including birds); KUL, WAW<sub>H</sub>, TOL: *kadadi* ‘animal’.

*?kadun* ‘woven bag’
WAW: *kadu-kadu*; BNG: *kadu*; TOL: *kadu* ‘betel pouch’; MEK: *kadu-kadu* [PMP *karun* ‘sack bag’ (Dempwolf, in Zorc 1971 1713) PBT *d unexplained]

*kaho* ‘rafter’
MRN (Adriani 1914:240), BNG<sub>H</sub>, MRB<sub>H</sub>: *kaho*; TOL<sub>H</sub>, MEK<sub>H</sub>: *laho* ‘rafter’ (initial *l* unexplained). [PAN *kasaw* (Dyen & McFarland 1970 295)]

*kaiq* ‘hook’

*kalu*° ‘curly’ (hair)

*kamban* ‘swelling’

*?kampon* ‘village’

*kangga*° ‘spider’

*?kansai*° ‘spear, lance’

*kapa*° ‘thick’
KUL, MRB<sub>H</sub>, PAD (Lara, Lrobu, et al. 1991:24), TOL<sub>H</sub> (Muthalib, Alimuddin, Chalik, et al. 1985:50), MEK<sub>H</sub>: *mokapa*. [PAN *kaSepal* ‘thick, of solid objects’ (Blust 1986 133)]
*kapaq* ‘to flap, flutter’

*karu*° ‘leg, foot’
All eastern BT isolects: *karu*; all western BT isolects: *kare*. Also meaning ‘paw’ in several (if not all) dialect areas as well. The development of *u* > *e* in western Bungku-Tolaki is irregular, possibly the result of contamination from *kae* ‘hand’. [compare PMP *kadus* ‘scratch, rub’ (Dempwolf, in Zorc 1971 1681), PAN *karut* ‘scrape, rasp’ (Blust 1989 256)]

*kaRa*° ‘to bite’

*kasi*° ‘tongs, pinchers’

*kato*° ‘to itch, to be itchy’
MRN, TAL, KUL, WAW, BNG: *mokato*; MRB, MRA, WAR, TOL, MEK, KOD: *mokokato*. [PMP *katel* ‘itch’ (Dempwolf, Zorc, in Zorc 1971 1761)]

*kawo*° ‘to beat bark cloth’

*kayu* ‘wood’
All Eastern isolects: *keu*; PAD, MRA, TOM: *kau*; all West Coast isolects: *kasu*. [PAN *kaSiw]*

*kea-kea*° ‘parrot or cockatoo’

*keke*° ‘armpit’
**keke** 'to dig'

**kela** 'gourd, pumpkin'

**kena** 'alike, similar'

**keru** 'scrape, grate'
KUL: *keru* 'scrape out' (as young coconut from the shell with a spoon); PAD (Lara, Larobu, et al. 1991:26): *mongkeru* 'grate'; TOL (Youngman 1997:pers.comm.): monggeru (stem = keru) 'scratch, put a scratch or cut in'.

**kiki** 'to bite'
TAL, KUL: mongkikii; WAW, BNG, BAH, MRB (Esser 1927:38): mongkiki; TOL, MEK: mekiki, monggiki.

**kila** 'lightning'

**kima** 'shell'

**kinowian** 'evening'

**kire** 'eyebrow'

**kita** 'to see'
BNG, BAH, MRB: mongkita; TOM, MRA, PAD: mongkito, monggito. [PAN *kiCa* 'see']

*koao 'enough, sufficient; (for) each and every'
MRN (Muthalib, Pattiasina, et al. 1983:79): koa 'enough, sufficient, complete' <cukup, sempurna>; BNG (Saro, Rahim, et al. 1982:51): koa 'in addition' <juga>; MRB: koa 'just, nothing but'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:54): koa 'each, every; exact, fitting; the ... (er), the ... (er)'.

*koea 'fruit bat'
MRN, TOK, WAW, MEN, LAN, TUL, BNG, BAH, TOM, KOR, MEK, LAI, TOL, ASE, WIW, LAL, WAR: koea.

*kolopua 'tortoise'

*koloro 'rope'
KUL, KOR, WAW, TUL, TOR, ROU, MRB, PAD, MRA, TOM, WAR, LAL, WIW, TOL, MEK: koloro; RAH, KOD: kororo. Compare also Mori Bawah (Adriani 1900:289), Padce (Lara, Larobu, et al. 1991:27) mongkoloro and Mori Atas (Adriani 1900:289) monggoloro 'to twine'.

*kolupe 'to forget'

*kompisi 'cheek'

*kompon 'stomach, intestines'
KUL, BNGH (Adriani 1900:253): kompo 'guts'; BAH, MRB, PAD, MRA, TOM: kompo 'belly'; TOLH, MEKH: kombo 'guts'. [PAN *kempunj 'intestines']

*kona 'to hit, to touch'
KUL: kona (trans. stem) 'reach, fit, contact, touch, hit'; MRBH (Esser 1927:35): mongkona; PAD (Lara, Larobu, et al. 1991:27, 28): koono 'hit target, come into contact with, be struck by', mongkonai 'get, find'; MRA (Adriani 1900:296): kono; TOLH, MEKH: kumono-i, kono-i. [PAN *kena 'hit affected' (Dempwolff, Dyen, in Zorc 1971 1838)]

*kona 'true, right'
BNGH: kona; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:57): kono, tekono. [PMP *kena 'right, suitable' (Blust 1986 141)]
*konuai ‘millipede’

*koo° ‘tie’
  MRN (D. Andersen 1995:4) *koo ‘tied bunch’; KUL: *koo (transitive stem) ‘tie up (as a chicken)’; TOL (Youngman 1997:pers.comm.) *tekoo ‘tied to another object (as one boat being pulled by another)’.

*kopun ‘embrace’

*kora° ‘strong’
  WAW_H, BNG_H (Saro, Rahim, et al. 1982:45) *mokora ‘strong’ (person); MRB_H (Esser 1927:26, 62) *mokora ‘strong, severe’ (e.g., wind), *mongorakaka ‘to assist, aid’; TOL_H (Adriani 1914:225) *mokora ‘strong’ [PMP *keras ‘hard’ (Dempwolff, in Zorc 1971 1820)]

*kori° ‘skin disease’

*kotu° ‘pick, break off’

*kua° ‘industrious’

*kuhe ‘marsupial’

*kuku ‘nail, hoof, claw’
  TAL, KUL: *konuku; MEK: *kuku, *kukubatu, *kubatu, *kobatu; all others: *kuku. Given the restricted distribution of *konuku, its occurrence in Kulisu and Taloki may reflect influence from Wolio. [PAN *kuskuS ‘scrape’, *k-aN-uSkus ‘fingernail, claw’ (Blust 1989 314)]
*kukuti* 'to pinch, squeeze'
  [PAN *ku(Ct)ku(Ct) 'claw, scratch; dig into' (Blust 1970 221)]

*kulaq* 'hot'
  PAD: *mokule*; all others: *mokula*. [PAN *kulat* (Mills 1981 172)]

*kuliq* 'skin'
  all languages: *kuli*. [PMP *kulit* (Blust 1981 12)]

*kulisi* 'to peel'
  KUL, BNG: *mongkulisi* 'to peel'; MRB: *kulisi-o* 'peel it'; PAD (Lara, Larobu, et al. 1991:30): *mongkulii* 'take off bark, peel'; TOL (Youngman 1997:pers.comm.): *kulisi* (stem) 'peel woody items (e.g. cassava) using a blade'. [PAN *kúlit* (Dyen & McFarland 1970 334)]

*kuluri*° 'parrot, parakeet'

*kumbi*° 'skin disease'
  KUL: *kumbi* 'scabies'; BNG₇: *kumbi jafa* 'framboesia', *kumbi-kumbi* 'scabies'; MRB₇ (Esser 1933:317): *kumbi* 'scabies'; TOL₇: *kumbi* 'framboesia'.

*kundon* 'rain cloud'
  KUL, KOR, WAW, MEN, WAI: *kundo* 'cloud'; MRN, TOR: *kundo* 'rain cloud'; TOL: *kundo* 'dark cloud'. [PAN *kuDem* 'darkened by clouds, overcast' (Blust 1989 302)]

*kuni* 'tumeric'
  (Dempwolf, in Zorc 1971 1988)]

*kuni*° 'yellow'
  MRN, TOK, WAW, MEN, TAL, KUL, KOR, LAN, TUL, TOR, TOL: *mokuni*; WAI, BNG, TUL: *mokohoni, mokohoni* (ho unexplained); ROU, BAH, MRB, PAD: *mongkuni*; MRA: *mongkuni, mongguni*; TOM, WAR: *mongguni*. [PMP *kunij* (Dempwolf, in Zorc 1971 1989), PMP *(ma)-kunij* (Blust 1981c 150)]

*kurun* 'cooking pot'
*kuru* ‘to scrape’
[PMP *kurkur ‘scratch’ (Dempwolff, in Zorc 1971 1982)]

*kutu* ‘louse’
MRA, PAD, TOM: kusu; all others: kutu. [PMP *kutu (Blust 1981c 108)]

*laa*° ‘internode’

*laa*° ‘stem, trunk’

*laa*° ‘streambed’
The term laa, either singularly or in combination with another morpheme, is used to mean ‘river’, as in all the following wordlist responses:
1) without modification: MRN (one wordlist), TAL, KUL, KOR, MEN, WAI, TUL, MRB (two wordlists): laa.
2) modified by a word which means ‘water’: MRN, TOK: la'e'e; KOR: e'e laa; BNG, ROU: baho laa; MEK: iwai laa.

*lao*° ‘spread out over space or time’
KUL: molaa ‘far apart, spaced apart (e.g. bamboo slats of a floor), spread out in space or across time’; MRB (Esser 1927:14): molaa ‘seldom, spaced far apart’; PAD (Lara, Larobu, et al. 1991:41): molaa ‘seldom’; TOLH: molaa ‘now and then, occasionally’. [PMP *lawas ‘long time; endure’ (Dempwolff, in Zorc 1971 2167); PAN *lawas (dbl. lawa) ‘wide, broad’ (Blust 1986 180)]

*lao*° ‘to fly’
MRN, TOK, TAL, KOR, LAN, TUL, TOR, WAI, BNG, ROU, MEK, KOD, LAI, TOL, LAL, WAR: lumaa; MRB: melumaa, lumaa. Kulisu has lola, possibly from a reduplicated form, i.e., lola < lolaa (stem) < laa (root). [PAN *layap ‘to fly’ (Blust 1986 181), PMP *laya ‘fly, hover’ (Dempwolff, in Zorc 1971 2175)]

*labu*° ‘iron’
BNGH, WAWH, MRBH, PAD: labu; TOLH, MEKH: lawu.
*lahā° 'search for'

*lako° 'to go'
PAD: leko; all others except MRB, WAW, MEN, TAL, KUL, KOR: lako. The raised vowel of the PAD form is by backformation from the participle form lumeko, where raising *a > e is regular following high vowel u. [PMP *lakaw (Blust 1981c 5)]

*lalo° 'to pass, to exceed'

*laloy° 'fly'

*langkai 'great, male'
WAWH: langkai 'old man'; BAH, MRB, PAD, MRA, TOM: langkai 'great, big'; MEK, TOL, ASE: langgai 'male'; LAI: lagai 'male'. [PIN *laŋŋa(h)əi, *laŋŋa(h)ai (Mills 1981 86), compare also PPH *laŋŋa(h)ay 'testicles, manliness' (Zorc, in Zorc 1971 2051)]

*langku° 'to strike'

*langu° 'dizzy, drunk'

*(l,a,n)anguy° 'to swim'
MRN, TOK: nonangi; TAL: lunangi, KOR: lumangi; KUL, WAW, MEN, LAN, TUL, TOR, BNG, ROU: numangai; PAD: numangoi; MRA: monangi; WAR, LAL, WIW: numango; TOL, MEK: numango, lumango; ASE, LAI: lumango; RAH, KOD: numonango. Note Adriani (1900:296) gives MRB: monangui 'to swim'. The lowering of u > o in Tolaki, Padoe and Mori Atas is unexplained, but possibly due to the influence of the preceding velar nasal. [PAN *Naŋuy (Dahl 1976:75; Wolff 1988), laŋuy / naŋuy (Blust 1989 140)]
*lanu*° ‘palm species’


*lapi*° ‘layer’


*laron* ‘inside’


*lau°* ‘proceed directly’

KUL: *lausako* ‘go on (to next place or next activity) without delay or intervening activity’, TOL: *lausau* ‘immediately, directly’. [Wolio *lausaka* ‘straight on, (act) direct, immediate’, *lausau* ‘go on, continue, incessant’, and *lausausaka* ‘straight on, directly, immediately’ (Anceaux 1987:s.v.)]

*lawan* ‘to oppose, to respond’


*layu* ‘run, flee’

PAD: *mola* ‘flee’ (expected: **molau); TOL: *molasu* ‘flee’. [PMP *laRiw* ‘run, flee’ (Dempwolff, in Zorc 1971 2054); the expected Eastern reflex **leu is unattested206]

*layu* ‘wither’


*leao* ‘flame, spicy’


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206 Although similar in form and meaning, Moronene, Kulisu, Mori Bawah *molai* ‘flee’ (Andersen 1995:4; Esser 1927:57) appears not to be not cognate; compare Pamona *palai* ‘flee’ (Addrinai 1928), PPH *laRi* ‘hurry, fast’ (Zorc, in Zorc 1971 2052).
*lelu° ‘earthquake’

*lemba° ‘to carry on the shoulders’

?lembon ‘valley, watercourse’

*lemo° ‘citrus fruit’

*lepa° ‘to sit with knees bent to one side’
BNG (Adriani 1900:267): melepa ‘to sit like a woman’; MRB₇, TOL₇: melepa ‘to sit with knees bent to one side’, lumlepa ‘to sit modestly’.

*leu° ‘to arrive’
All isolects except TAL, MRB, PAD, MRA, TOM and KOD: leu.

*lewe° ‘flat, broad’

*libu° ‘to move in a circle’
KUL: balibulibu ‘gather (oneselves) together into a circle’; MRB (Esser 1927:18): molibu ‘to trace circles in the air’ (birds, etc.); TOL (Youngman 1997:pers.comm.): molibu, molibutu ‘surround, encircle’. [PPH *libu ‘move in a circle’ (Charles, in Zorc 1971 2265)]

*lili° ‘go around’
*lima* ‘five’ (bound numeral)

*o-lima* ‘five’ (independent numeral)
All Eastern isolets: *olima*; all Western isolets: *olimo*. [PAN *la-lima ‘five, hand’]

*lumpa*° ‘to go, to walk’

*lingaa*° ‘clear, bright’

*lino*° ‘the world’

*lino*° ‘clear (water)’

*lintaq* ‘leech’
BNGH, MRBH, MRA (Adriani 1900:288): *linta*; TOLH: *linda*. [PWMP *qali-metaq (Blust 1986 7)]

*lipu*° ‘country, village’

*liqoha* ‘nit’
*lokat-i* ‘peel, lift’
KUL: *molongkaci* ‘peel off something glued or stuck’; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:67): *moloka* ‘pull out’, *lokati* (stem) ‘to pick, to open, to lift up’; [PWMP *le(o)kab* ‘open, uncover’ (take off, pull off, peel off, get loose or unfasten) (Blust 1989 341), PMP *le(o)kaq* ‘to open’ (force open, unfold, untie) (Blust 1989 342)]

*lolai*° ‘umbilical cord’
KUL: *lolae*; BNG<sub>H</sub>: WAW<sub>H</sub>, TOL<sub>H</sub>: *lolai*; MEK<sub>H</sub>: *lolai ndowuni*.

*lolawu*° ‘crazy’
BNG<sub>H</sub>: *mololafu*; TOL<sub>H</sub>, MEK<sub>H</sub>: *mololawu*.

*lomba*° ‘hole, perforation’

*longko*° ‘loose’
KUL: *molongko* ‘loosen’ (as coconut meat from the shell by striking the shell); WAW<sub>H</sub> (Manyambeang, Mahmoed, et al. 1982/1983:113): *molongko*; BNG<sub>H</sub>: *longko*; TOL<sub>H</sub> (Adriani 1914:225), MEK<sub>H</sub>: *molongko*. Pamona longko ‘wide, roomy, loose’ (Adriani 1928:s.v.) [compare PMP *luNga(R,r)* ‘roomy, loose’ (Dempwolff, in Zorc 1971 2385)]

*lons(i,o)*° ‘to jump’

*lonto* ‘float’

*loqia* ‘ginger’
BNG<sub>H</sub>: *loia*; MRB<sub>H</sub>: *lo'ia*; PAD (Lara, Larobu, et al. 1991:37): *lo'io*; TOL<sub>H</sub>, MEK<sub>H</sub>: *loio*. [PAN *laqia* ‘ginger’]

*lotu*° ‘break’

*lowu*R ‘deep water, flood’
*lua<sup>o</sup> ‘broad, wide’

*lua<sup>o</sup> ‘empty, expel’
KUL: molua ‘empty, pour out’ (the contents of something), TOL (Youngman 1998:pers.comm.): molua ‘put something out, expel something’. As a middle verb, having the sense of ‘vomit, empty oneself’, as found in: MRN: molua; LAN, TUL, TOR, WAI, BNG, ROU: kolualua; BAH: pelua; MRB: melua, telua, kolualua; PAD: telue; MRA: melue, kolue-lue. [PWMP? *luqar ‘outside’ (Blust); loss of glottal in PBT unexplained]

*luarako ‘bring out, expel’

*luku<sup>o</sup> ‘to fold’

*lulu<sup>o</sup> ‘pursue, run’

*luwu<sup>o</sup> ‘all, collective’

*maa<sup>o</sup> ‘to yawn’
BNG<sub>H</sub> (Adriani 1900:256), MRB<sub>H</sub> (Adriani 1900:297), PAD (Adriani 1914:233), MRA (Adriani 1900:297): momaa; WAW<sub>H</sub>: momomaa; TOL<sub>H</sub>: momomaa; MEK<sub>H</sub>: munomaa. [PAN *(ma)-Suab (Blust 1981c 47)]

*mai ‘to come’
*maloy ‘tired’

*mamak-i ‘chew’

*mami ‘sweet’

*manasa ‘surely’

*manu ‘chicken’

*mata ‘eye’
All languages: mata. [PAN *maCa (Blust)]

*mataq ‘unripe’
BNGH, WAW, MRBH, PAD (Lara, Larobu, et al. 1991:40), TOLH, MEKH: momata. [PAN *ma-qataq ‘raw, unripe’; PMP *ma-qataq, doublet *ma-hataq (Blust)]

*mate ‘dead’
All languages: mate. [PMP *matey ‘die, be dead’ (Blust 1981c 75)]

*mea ‘red’
TAL: mowea (w unexplained); KUL, WAW, MEN: mea; KOR, LAN, TUL, WAI, TOR, BNG, TOM, TOL, MEK: monea. [PMP *ma-Raq (Blust 1981c 149)]

*meeq ‘afraid’
*meha*° 'some, a portion of'

*moiko*° 'good, appealing'
MRN: moico; TAL, KUL, KOR, WAW, BNG, MRB, PAD, TOM: moiko; TOL (Youngman 1997:pers.comm.): moiko 'appealing to the sight or taste; attractive, nice, pretty, delicious'.

*moa*° 'air, atmosphere, outside; empty'

*moo-moo*° 'to smile'

*mori*° 'k.o. bat'

*naa* 'to breathe'

*naa*° 'put, place, store'

*nahu* 'to cook (by boiling)'

*nami*° 'taste'
*nanaq ‘pus’

*nani ‘to sing’
TOK, KOR, BNG, MRB, PAD, MRA, TOM, WAR, LAL, WIW: menani; BAH: penani. [PMP *nani ‘sing’ (Dempwolff, cited in Zorc 1971:2496)]

*nduu-nduu ‘crashing, booming sound’
MRN (S. Andersen 1994a:11): nduu-nduu ‘boom (like drum)’; KUL: nduu-nduu ‘bumping, thumping sound’; TOL: nduu-nduu ‘crash (e.g. falling rock)’. [Wolio nduu ‘report (of gun), crack, detonation; bang of a drum’ (Anceaux 1987:115)]

*nean ‘tame’

*ngamba ‘leprosy’
KUL: ngamba ‘k.o. skin disease; possibly ichthyosis or leprosy’; BNGH, TOLH, MEKH: ngamba ‘leprosy’.

*nganga ‘interior of mouth’

*ngapa° ‘site along shoreline where boats are kept’

*ngaqe° ‘to headhunt’

*ngara° ‘palate’

*ngare° ‘lazy’
*ngean ‘name’
MRN: nee ‘name’, (Muthalib, Pattiasina, et al. 1983:37) monee ‘accuse’ (n unexplained); KUL: ngee ‘name’, ngineahako ‘be named with’ (which preserves original a of the root); TOK, TAL, MRA, PAD: nee (n unexpl.); all other Eastern iselects: nge ‘name’. [Muna nea (Van den Berg 1991a:49), PMP *njajan (Blust 1981c 63)]

*ngilu ‘set teeth on edge’

*ngisi ‘tooth’
all languages: ngisi. [PMP *ngisi (Blust 1981c 31)]

*ngolu ‘dew’
BNGH, MRBH, TOLH, MEKH: ngolu.

*ngoni ‘to request’

*ngura ‘young’
MRN, KOR, WAW, BNG, MRB: mongura; PAD, MRA, MEK, KOD: monguro; RAH, LAI: morungo (< metathesis). [PAN *uda]

*ngusu ‘snout’

*niniq ‘mosquito’

*nipiQ ‘thin’ (objects)

*nobun ‘rice mortar’
All languages: nohu. [PAN *Nesun (Wolff 1988)]
*nomo 'six' (bound numeral)

*ohia 'salt'
TOR, BNG, ROU, BAH, MRB: ohia; all Western isolects except TOL: ohio. [PMP *qasiRa (Blust 1981c 125)]

*olai2 'far'
WAR, TOM, PAD, MRA, and all Eastern isolects except MRN and TOK: olai; MEK (two wordlists): mondai 'very far'; TOL: mondae. [PAN *alawi(dDj) 'far' (Blust 1973, cited in Wurm & Wilson 1975:73)]

*olaron, *ondalon 'deep'
MRN (Muthalib, Pattiasina, et al. 1983:23): olaro 'deep' (water); KUL, BNGH: olaro; WAWH: ondaro; MRB (Esser 1927:22): ondalo; MRA (Esser 1927:22), PAD (Esser 1927:22): onalo; TOL: olano. The Wawonii form ondaro appears to be a merger of olaro and ondaro. Loss of d must have preceded metathesis in Tolaki, that is ondalo > onalo > olano. The initial *-o- is tentatively regarded as a shortening of the verbal prefix mo-; one TOLH wordlist has retained molano. [PAN *Dâlem 'inside, deep' (Dyen & McFarland 1970 202)] See also *laron 'inside'.

*oleo 'day'
MRN, KUL, WAW, BNG, MRB: oleo; PAD: olo (loss of e unexplained); MRA, WAR, TOL, KOD: oleo. [PMP *qalejaw (Blust 1981c 168)]

*oli2 'to buy'

*olimpopoq 'firefly'
MRN, TOK: olimpopo 'star'; TOL: olimbopo 'firefly'. The semantic shift 'firefly' > 'star' is a feature of neighboring Muna, whence its probable spread into the Moronene area [Proto-Muna *kalipopo 'star' (Van den Berg 1991a:48), PWMP *qali-petpet, *kalim-petpet, *salimpetpet 'firefly' (Blust)]

*oloq 'space between'
MRB (Esser 1927:12, 26): olo 'between space', mo'oloti 'to separate, to obstruct'; PAD (Lara, Larobu, et al. 1991:48): olo 'between'; TOL (Gouweloos 1936:49): olo 'between, in the midst of'. [PMP *elet 'interval, space' (Dempwolf, in Zorc 1971 0326)]

*olipan 'centipede'
*oliwi* 'advice, instruction'
MRN (D. Andersen 1995:16, 22): oliwi (noun) 'advice' (transitive verb base) 'advise';

*onda* 'scale' (of fish)

*one* 'sand'
WAW, LAN, TUL, TOR, MRB, and all Western isolects except TOM, KOD: one.
Note Taloki and Kulisu have bone. Other isolects have buranga (predominantly
Bungku) and nahi (Moronene and Kodeoha). [PMP *qenay (Blust 1981c 121)]

*ongo* 'harmful insect'
KUL: ongo 'white insect found on stems of cassava plants'; MRB (Esser 1933:318):
ongo 'rice bug' «walang sangit»; PAD (Lara, Larobu, et al. 1991:49): ongo 'kind of
plant disease'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:90): ongo 'biting
grasshopper' «walang sangit». [compare PAN *banjau 'noxious insect' (Blust 1980
42)]

*onia* 'raft'

*onitu* 'ghost, spirit'
BNG, MRB: onitu; PAD (Lara, Larobu, et al. 1991:49): onisu 'spirit, satan'; MRA
(Adriani 1900:290): onisu; TOL, MEKH: onitu. [PAN *qanitu 'spirit, soul'
(Dempwolff, Dyen, Charles, in Zorc 1971 0165)]

*o-onon* 'six' (independent numeral)
All Eastern isolects and PAD: onon; MRA, TOM: oono; WIW: ono; all other Western
isolects: o'ono. [PAN *a-enem 'six']

*onon* 'to see'
MRN, TOK, TAL, KUL, KOR, WAW, MEN: mo'onto; BNG, TOR, LAN, TUL,
WAI: mo'unto (u unexplained); MRB (Esser 1927:23) mongkokonto 'to stare, to look
fixedly at something'; TOL (some wordlists): monggondo (stem kondo). Velar onset
unexplained in Mori Bawah and Tolaki. [PPH *eNteŋ 'see, observe' (Charles, in Zorc
1971 0358)]

*o-o(m)paq* 'four' (independent numeral)
All Eastern isolects and PAD: opaa; MRA, TOM: oompa; LAL, ASE: omba; WAR,
WIW, TOL, MEK: o'omba; KOD, LAI, RAH: o'oba. [PAN *Sa-Sepat]

*opoyu* 'gall bladder'
MRN (Muthalib, Pattiasina, et al. 1983:16), BNGH (Adriani 1900:258), MRBH (Esser
posu. [PAN *qapeju]
*opu° 'use up'
opu; TOL (Adriani 1914:226, Muthalib, Alimuddin, Chalik, et al. 1985:91), MEK:
opu 'use up'; TOLH, MEKH: mokoopu-o 'finish it'. [PMP *e(m)pus 'finish, complete'
(Blust 1989 189)]

*oqow-i 'to lie prone, to brood'
KUL: okowi (stem) 'brood' (k unexplained); WAWH: umo 'to lie prone'; BNGH
1991:82): umu'uwii 'to brood (b unexplained); MRA (Esser 1927:36): mo'o'owi 'to
brood'; MEKH: umo'owi 'to brood'.

*oru° 'early'
mo'oru 'tomorrow'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:91): oru 'soon,
quickly', mo'oru-oru 'early morning'.

*ota° 'chaff'
'chaff'.

*oti 'ebb'
KUL: oti 'ebb, low tide'; BNG (Adriani 1900:260), MRB (Adriani 1900:296), MRA
(Adriani 1900:296): oti 'ebb'; TOLH: mooit. [PAN *(ma)-eti (Stresemann 1927, cited
in Wurm & Wilson 1975:65)]

*owaRa 'shoulder'
BNGH (Adriani 1900:253): ofeaa; MRBH (Adriani 1900:292), PAD (Lara, Larobu, et
al. 1991:50): owea. [PAN *qbaraRa? 'shoulder, shoulderblade' (Dyen & McFarland
1970 1); the expected Mori Atas and Padoe reflex is **owaro, indicating the Padoe
form owea was borrowed from Mori Bawah; the expected Tolaki reflex is **owaho.]

*owose° 'big, large'
KOR, MÉN, WAI, BNG: ofose; all isolots except BAH, MRB, PAD, MRA, TOM,
RAH and KOD: owose. [compare PMP *besar 'thick' (Dempwolff, in Zorc 1971
0964)]

*pada 'equal'
'equally, both, all'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:93): pada 'same'.
[Malay pada 'equal', PPH *pada 'even, same, equal' (Charles, in Zorc 1971)]

*pae 'field rice'
All languages except TOK, KOD: pae. [PAN *paje]

*paho° 'to plant'
BNGH (Adriani 1900:266): paho 'dibble', mompahoh 'to dibble, plant'; MRBH (Esser
1927:51): paho 'dibble', mompahoh 'to plant'; TOL: mombah, paho-i 'to plant'.
[possibly from pre-PBT *pa-Sasek < PAN *Sasek 'dibble' (Blust 1981b:23)]
*pakan 'to feed'
KUL: *mompaka 'feed' (spirits); MEK: *pinopaka 'domesticated animals', lit., 'that which is given food'. [PMP *pakan 'feed' (Dempwolf, in Zorc 1971 2578)]

*pake 'to use'

*paku 'ferns'
BNGH, MRBH: *paku; PAD (Lara, Larobu, et al. 1991:52): *pakue (-e unexplained); TOLH, MEKH: *paku. [PMP *paku ['plant'] ATHRIUM ESCULENTUM (Dempewolf, etc., in Zorc 1971 2586)]

*palay 'palm, sole'

*pali 'axe'

*palo 'buttocks'

*palu 'hammer' (tool)
KUL, BNGH, MRBH, TOLH, MEKH: *palu. [PAN *pálu? 'to beat' (Dyen & McFarland 1970 443)]

*pampang 'edge'
BNG, WAW, MEN: *pampa; TOL, MEK: *pamba. Compare also WAWH *pampa tahi 'beach'; TOLH, MEKH: *pamba tahi 'beach'. [PAN *panpaj 'river bank']

*pangi 'wing'

*panggi 'tree, PANGIUM EDULE'
MRB (Esser 1927:55): *pangi 'a tree' (PANGIUM EDULE); TOL (Youngman 1997:pers.comm.): *pangi 'a tree, the fruit of which is edible after soaking and pressing (otherwise poisonous), also processed for cooking oil; the tree is not cultivated'. [PPH *pangi ['plant'] PANGIUM EDULE REINW., poisonous squash' (Charles, in Zorc 1971 2642)]
*paqa 'thigh'
 WAWH, MRBH (Esser 1927:53), PAD (Lara, Larobu, et al. 1991:54), MEKH: pa'a;
 TOLH: pa'a, paa. [PAN *paqa 'leg, support like leg' (Dempwolff, Dyen, in Zorc 1971
 2541)]

*paaqo 'bitter'
 MRN (Muthalib, Pattiasina, et al. 1983:54): mopai; KUL, WAWH, BNGH (Adriani
 mopa'e (e unexplained); MRA (Adriani 1900:287), TOLH: mopa'i; MEKH: mopai.
 [PAN *paqt (Dyen 1953b)]

*paaqo 'chisel'
 BNG (Saro, Rahim, et al. 1982:90): pao; MRB (Esser 1927:53): pa'o; PAD (Lara,
 Larobu, et al. 1991:54): pa'u (u unexplained); TOL (Muthalib, Alimuddin, Chalik, et
 al. 1985:95): pao 'chisel', mombaoti 'to chisel something'. [PAN *paqet 'chisel'
 (Dempwolff, Dyen, in Zorc 1971 2545)]

*paaRai 'shelf above fireplace'
 KUL: pea 'attic, space underneath roof'; BNG (Adriani 1900:256, 257), WAWH
 'storage loft' (Blust 1970 287); the expected Padoe and Mori Atas reflex is **paro, the
 expected Tolaki reflex is **paho]

*pasipolo *to make ready'
 WAW (Manyambeang, Mahmoed, et al. 1982/1983:36): pasipole (stem) 'to ready,
 finish'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:96): mepasipole 'to contact,
 arrange; to endeavor'.

*paaso 'peg, nail'
 'nail'; MRB (Esser 1927:41): paso 'wooden peg, nail'; TOL (Muthalib, Alimuddin,
 Chalik, et al. 1985:96): paso 'peg'. [PMP *pasek 'peg, stopper' (Dempwolff, cited in
 Zorc 1971 2656)]

*pato 'four' (bound numeral)
 1982/1983:112), BNG (Adriani 1900:276), MRB (Esser 1933:268), PAD (Karhunen
 1994:36), TOL (Gouweloos 1936:64): pato. [PMP *Sepat (Blust 1981c 200)]

*pato 'bamboo sp.'
 MRN, TOL, MEK, LAI, RAH, KOD: pato. [PWMP *patoŋ 'large, thick bamboo
 species' (Blust 1980 336)]

*pess 'tight, close'
 KUL:pees (stative) 'tight'; MRB (Esser 1927:61): mopee 'narrow, shut tight', mompee
 'to tighten tightly'; TOL: mopee 'tight'.
*penasa* ‘feel’

*perin* ‘bamboo sp.’
KUL, WAW, TOR, ROU, WIW, TOL: *peri*. [PMP *perin* ‘bamboo sp.’ (Blust 1980 343); this form has unexplained PMP *e > PBT *e.]

*pia* ‘how many?’ (bound numeral)

*po-pia* ‘how many?’ (independent numeral)
WAW, MEN, TOK, MRN, BNG, BAH, MRB: *opiap*; PAD, MRA: *opio, popio*; TOM: *popio*; MEK, RAH, KOD, LAI, TOL, WAR: *opio*. [PAN *pa-pia* ‘how much?’ (Dyen & McFarland 1970 474)]

*piara*° ‘tend, care for’
KUL: *ana piara* ‘adopted child’; WAW (Manyambeang, Mahmoed, et al. 1982/1983:89): *mompiara* ‘tend’ (e.g. water buffaloes); TOL: *mombiara* ‘take care of’.

*pidi*° ‘bow’ (for hunting)

*piha*° ‘boil’

*piha° ‘to break, to shatter’

*pio*° ‘squeeze in hand’

*pisiQ* ‘squeeze between the fingers’
*piso ‘knife’
All isolets except MRN, KUL, LAN: piso. [PMP *pisaw (Dempwolff, cited in Zorc 1971:2764)]

*pitu ‘seven’ (bound numeral)

*o-pitu ‘seven’ (independent numeral)
MRA, TOM: opisu; KUL, LAN, TUL: opicu; WIW, ASE: pitu; all other isolets: opitu. [PAN *pa-pitu ‘seven’]

*podea‘to hear’
TOK, MRN, WAW, MEN, LAN, TUL, WAI, BNG: mompodea; MEK, TOL: mombodea.

*pokatu° ‘package; to send’

*pole ‘cut (through)’

*polu° ‘hearth, fireplace’

*pombula ‘plant’ (in garden)

*ponangi° ‘defeat’
KUL: momponangi ‘win over, defeat’; BNG (Adriani 1900:266): moponangi ‘conquer’; TOLH: meponangi ‘win’

*pone° ‘to ascend, to climb’ (as a tree)
*poniki 'bat'
TUL, TOR, WAI, BNG, ROU, BAH, MRB, PAD, MRA, TOM, MEK, RAH, KOD, TOL, LAL, WAR: poniki. We recorded five terms for bats in the Bungku-Tolaki languages, and when they cooccur in the same isolet, they can be ranked according to relative size: koea (largest) > kalua > poniki > wilalae & mori (smallest). In some areas of Bungku, poniki serves as a generic term for bat, including both large and small varieties. [PMP *paniki 'bat' (Dempwolff, cited in Zorc 1971 2616)]

*pono 'full'
LAN, TUL, WAI: pondo (d excrecence irregular); MRN, TOK, TOR, BNG, ROU, BAH, and all West Coast isolets except KOD: pono. [PAN *penúq 'full' (Dyen & McFarland 1970 468), PAN *pénéd 'to wedge in' (Dyen & McFarland 1970 467)]

*ponu 'turtle'

*popolo 'bride price'
KUL, LAN, TUL, MEK, TOL, ASE, WIW, LAL, WAR: popolo.

*poqahan 'to shoulder'
BNG_H: mompo'aha; MRB_H: mopoa'ha; TOL_H: mombo'aha. [pre-PBT *peqasan < PMP *pas(e)qan 'carry on the shoulder' (Blust 1989 428) with metathesis]

*pua 'wind'
WAW, MEN, LAN, TUL, WAI, TOR, BNG, BAH, MRB: pue 'wind' (e unexplained); PAD (Lara, Larobu, et al. 1991:57): pue 'wave'; WIW: pua 'wind'; ASE, TOL, MEK, LAI: opua 'wind'.

*puai 'to dry in the sun'
MRN, TOK: mompuai, mopu'ai; TAL: mempu'ai; KUL, KOR, WAW, MEN: mompu'ai; TUL: moppo'ai; TOR, BNG, ROU, BAH, MRB, MRA, TOM: mopu'ai; PAD: mopu'ai; WAR, LAL, WIW: mombuai; ASE: mombu'ai; TOL: mombuai, mombu'ai; MEK, RAH: mombuai; LAI: mobu'ai; KOD: moubuai. [pre-PBT *po- + wai < PMP *w+aRi 'sun, day' (Dempwolff, cited in Zorc 1971 3747)]

*puhoy 'navel'

*pukoo 'net'
WAW_H, TOL_H: puko. Compare also MEK_H, TOL (Muthalib, Alimuddin, Chalik, et al. 1985:105) puka. Presumably puko is the inherited form, whereas puka has arisen from later Malay influence, compare Malay pukat. [PMP *puket 'net (drag/trail)' (Dempwolff, etc., in Zorc 1971 2795)]

*pulurq 'ten' hopulu
All Eastern isolets: pulu; all Western isolets: pulo. [PAN *pulurq]
*puluq* 'sap, gum'

*pumpun* 'to gather, assemble'

*punti* 'banana'
KUL: punci; PAD: pusi; TOM, MRA: punci; LAL, WTW, ASE, TOL, MEK, RAH: punti; LAI, KOD: pudi; all others except WAR: punti. [PAN *punti* 'banana' (Dempwolf, Dyen, in Zorc 1971 2822)]

*pupu* 'to pick' (fruit)
KUL: mo'upu 'pick' (as fruit), (upu-o 'pick it'), mo'upui 'pick off' (as grains from an ear of corn); WAW: moupu 'to gather'; BNG: moupu 'to pick'; MRB (Esser 1927:41) mo'opu 'to pick, gather'; TOL (Adriani 1914:222): pupu, mombu; MEK: pupu. Eastern forms have unexplained loss of initial *p. [PMP *pupu, *pupuq (dsj. *pupul) 'pick, pluck (as fruit)' (Blust 1983/1984 298)]

*puqun* 'base, trunk, origin'

*puri* 'buttocks, posterior'

*pusuq* 'mountain, rise'

*pusu* 'eyes closed, blind'

*pute* 'white'
LAN, TUL, WAI, TOR, BNG, ROU, BAH, MRB and all Western isolects except TOL, RAH: mopute. [PAN *putiq (Dyen & McFarland 1970 492)]
*putu* 'short'
KUL, WAW, MEN, TOR: *ompudu* (d unexplained); BNG: *ompodo* (d, o unexplained);
MEK, LAI, TOL, WIW, ASE: *oputu* 'short, low'. [PMP *putut 'cut; short' (INL, in 
Zorc 1971 2849)]

*puur-i* 'to blow' (on a fire)
MRN (Muthalib, Pattiasina, et al. 1983:43): *mepupuu*; BNG<sub>H</sub>: *mompuu*; WAW
(Muthalib, Alimuddin, Chalik, et al. 1985:105): *pupuri* (stem) 'blow'; MEK<sub>H</sub>: *puri-o*
to blow on a fire'. [compare PWMP *put 'puffing sound' (Blust 1983/1984 300)]

*rabuq* 'to pull out'
(S. Andersen 1995a:29) *morobusi* 'to weed'; TOL: *morabu* 'to pull out' (as weeds, or
feathers from a bird). [PAN *rabu(Ct) 'pull out s.t. rooted in soft matter' (Blust 1970
344)]

*rahan* 'house'
BNG<sub>H</sub>, WAW<sub>H</sub>, MRB<sub>H</sub> (Adriani 1900:285, Mills 1981:66), PAD (Lara, Larobu, et al.

*raki* 'fine dirt'
body'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:107): *meraki* 'covered with fine
dirt'. [PAN *(d)akan 'dirt on the skin' (Blust)]

*rakoq* 'catch'
KUL: *morako* 'catch' (e.g. fish); WAW (Manyambeang, Mahmood, et al.
of'; PAD (Lara, Larobu, et al. 1991:58): *morako* 'catch'; TOL (Muthalib, Alimuddin,
& McFarland 1970 179)]

*rakuq* 'grab by handful'
MRB (Esser 1933:271): *moraku* 'grasp in something with one’s full hand'; PAD
(Karhunen 1994:13): *raku* 'handful' (unit of measure); TOL (Gouweloo 1936:67):
*moraku* 'grasp a handful (of a granular substance)'. [PAN *(d)akup 'snatch, grasp'
(Blust 1983/1984 75)]

*rano* 'lake'
MRN, TOK, TAL, KOR, MEN, TUL, TOR, BNG, BAH, MRB, MRA, TOM, LAL,
WIW, ASE, TOL, MEK, LAI: *rano*. [PAN *(d)anaw (Dyen & McFarland 1970 203)]

*rapuR* 'spouse'
MRN: *rapi 'spouse*'; KUL: *rapi 'kitchen*'; TOL (some wordlists), WIW: *rapu*. The
stem *rapuR* 'spouse' is plausibly a backformation from *merapuR* 'to be married',
originally 'to have a home/hearth'. [PAN *(d)apuR<sub>3</sub> 'hearth' (Dyen & McFarland 1970
207)]
*raqi ‘forehead, face’
MRN, TOK, LAN, TUL, ROU, and all Western isolects except TOM: ra’i ‘face’;
ra’i ‘face, forehead’; MRA (Adriani 1900:288): ra’i ‘forehead’; TOLH, MEKH
*tapura ‘i ‘forehead’ (tapu = ‘cape, projection’). [PMP *daqIS ‘forehead’ (Blust
1980:21)]

*raraN-i ‘expose to radiant heat’
MRN (D. Andersen 1997:pers.comm.): morara, morarani ‘roast’; MRB (Esser
1927:65): mokorara ‘to warm’ (by the fire), morarami ‘to cook or roast something
above the fire’; PAD (Lara, Larobu, et al. 1991:59): morarami ‘roast, bake’, merarami
‘warm oneself up by the fire’; TOL (Youngman 1997:pers.comm.): rara ‘heat from a
source above or below’ (as in rara oleo ‘heat of the day/sun’), morarami ‘grill
something above coals’; MEKH: rarawi-o ‘to grill, to roast’ (w possibly a misprint for
m). [PMP *da(n)dañ ‘to warm up, singe’ (Dempwolf, INL, in Zorc 1971 1229)]

*raRaQ ‘blood’
All Eastern isolects and PAD, MRA and TOM: rea; WAR, RAH: raha. [PMP *daRaq
(Blust 1981c 23)]

*reōN ‘feverish, to have a fever’
MRN (D. Andersen 1997:pers.comm.), WAWH, TOL (Youngman 1997:pers.comm.),
MEKH: moreo. [PAN *dajem, *ma-dajem ‘chills, as of malaria’ (Blust 1980 92)]

*ri ‘at’ (locative preposition of very broad scope)
TAL, KUL, KOR, WAW, MEN, LAN, TUL, TOR: i ‘at’; BNG: le ‘at’; ROU, BAH: i
‘at’; MRB (Esser 1933:261, 265): i, ndi ‘at’ (the latter used with personal names and
kin terms), likewise in the Watu dialect i, nde ‘at’; MRA (Esser 1933:265): Molio’a
dialect i, ri ‘at’; PAD: ai ‘at’; other Western isolects: i ‘at’. Additional support for *
ri is found in the lexicalization of the following two prepositional phrases.

*ri + mbui° ‘in back’
MRN: merumbui ‘come in back’; KUL: i mbui ‘in back’, merimbui ‘be/go at the rear’;
1985:110): rombui ‘last, at the back’.

*ri + ou° ‘in front’
MRN (Muthalib, Pattiasina, et al. 1983:29): meriou ‘go first’; KUL: i ou ‘in front,
before’, meriou ‘go in front, precede’; TOL: periou ‘go first’.

*rindiN ‘wall’
only); MRA (Adriani 1900:288): rini; TOLH, MEKH: porini. [PMP *diŋdiŋ
(Dempwolf, in Zorc 1971 1420)]

*riniN ‘cold’ (as of water)
MRN, EPE (Adriani 1914:231), BNG, MRB, PAD, MRA, TOM, WAR, LAL, WIW,
ASE, TOL, MEK: morini; ROU, TOL (one wordlist), RAH, LAI: moringi. [PMP
*(ma)-diŋdiŋ ‘cold’ (of weather) (Blust 1981c 139)]
*roa° ‘clean’

*roa ‘lively, crowded’

*robu° ‘bamboo shoot’

*rodo° ‘to throw’

*rombo° ‘gather’
KUL: rombo (trans. stem) ‘gather’; PAD (Lara, Larobu, et al. 1991:60): morombu ‘gather’ (u unexplained); TOL: rombo-rombo olutu ‘sit with legs up, knees clasped by arms’ (olutu = ‘knee’).

*rondoman ‘darkness’

*rongan ‘together, with’

*rongo° ‘carry (with headstrap)’

*rongoR ‘to hear’
TOK: roronge; TAL: poronge; KUL: moronge; BAH, MRB: moronge; MRA, PAD, TOM: morongot; WAR, LAL, WIW, LAI, RAH: morongo. [PMP *Deñer (Blust 1981c 44)]
*ropa ‘fathom’

*rope ‘bow’ (of boat)
KUL, BNGH, MRBH, TOLH, MEKH: rope.

*rua ‘two’ (bound numeral)

*o-rua ‘two’ (independent numeral)
All Eastern isolects: orua; All Western isolects: oruo. [PAN *da-duSa]

*rui ‘thorn’
MRN, TOK, TAL, KUL, WAW, MEN, TOR: riu (< metathesis); all others: rui. [PAN *duRi]

*rumbia ‘sago palm’
TAL, TOK, LAL: rumbia; MRN, MRB, PAD, MRA: rumbia, rumbia; KUL, KOR, WAW, MEN, LAN, TUL, TOR, WAI, BNG, ROU, BAH, TOM, WAR: rumbia. [PMP *rumbia ‘sago palm’ (Blust 1989 505)]

*rumpaq ‘to bump into, to topple’

*rungku ‘thin, sickly’

*ruru ‘to pick up, collect’
*rusu*° ‘thin, scrawny’ (person, animal)
KUL, WAW (Manyambeang, Mahmoed, et al. 1982/1983:78), MRA (Adriani 1900:292), TOL, MEKh: *morusu.²⁰⁷*

*saa* ‘python’

*sakan* ‘boil, cook’

*salan* ‘road’
WAW: *salaha; all others: *sala. [PMP *Zalan]

*sampaq* ‘branch’

*sampe* ‘to hang, dangle’
*KUL: *monsampeako ‘hang’ (trans) (as clothes on a bush or line); MRB (Esser 1927:31): *mosampe ‘to hang or dangle s.t. over s.t.; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:116): *sambeako ‘to hang’ (trans.). [PMP *sampay ‘hang, wear’ (Dempwolff, INL, in Zorc 1971 2982)]

*sandu*° ‘wooden spoon or ladle’

*sangkoleo*° ‘soul, spirit, consciousness’

²⁰⁷Compare Sneddon (1984:10) who considers Proto-Sangiric *Rusuk ‘skinny’ to reflect PPH *Rusuk ‘rib’ but the meaning is an innovation. If these Bungku-Tolaki forms also originate from *Rusuk ‘rib’, then they have been borrowed, as ordinarily PMP initial *R- > PBT *Ø.
*saqaq, saqoq 'bad, ugly'

*sarai° ‘new’
WAW, MEN, KOR, LAN, TUL, TOR, ROU, BNG, MRA, RAH, WAR: sarai.

*sara° ‘borrow’

*sawi° ‘mount, ascend, ride in/on’

*seka° ‘brave’

*sere° ‘cut, slice’

*serun ‘cloud’
MRN, TOK, BNG, ROU, BAH, MRB and all Western isolects except WAR, LAL: seru. Apparently in the Tolaki area, also meaning ‘fog, mist’. [PMP *sirui ‘dark, shade’ (Dempwolf, in Zorc 1971 3130)]

*sese° ‘to cut’

*sile° ‘to lick’

*singkolodo° ‘back of the knee’
**sinsi** ‘ring’

**sio** ‘nine’ (bound numeral)

**o-sio** ‘nine’ (independent numeral)
KOR: *osiu*; WIW: *siu*; TOK: *hosio*; all others: *osio*. Initial *h* in the Tokotu’a dialect of Mornene is ascribed to contamination from *hoalu ‘eight’ and *hopulu ‘ten’*. [PAN *sa-siwa ‘nine’; compare also *siyaw ‘nine’ Mindanao and N. & C. Celebes (Charles 1973:21)]

**sipi** ‘tongs’

**siro(bo)°** ‘to sip, slurp’
BNG (Adriani 1900:258): *siro*; WAW: *monsirobo*; TOL: *sumiro, mosirobo*; MEH: *mesirobo*.

**siru** ° ‘spoon’

**siu** ° ‘sweet’

**soda** ° ‘to bear, carry’ ° pikul

**sole** ‘grain’
**songko**° 'hat, covering'
TAL: songko wulu 'coconut shell'; KUL: songko 'hat', also songko rapa 'skull',
songko wulu 'coconut shell'; KOR: songko 'coconut shell'; MRB (Esser 1933:381),
PAD (Lara, Larobu, et al. 1991:67): songko 'hat'; TOL (Muthalib, Alimuddin, Chalik,
et al. 1985:121): songko 'hat'. [Malay songkok 'Indonesian hat, fez']

**sopu**° 'temper'
MRN (D. Andersen 1997:pers.comm.): sopu 'temper, dip in cold water; also, gild'
«celup air dingin; sepuh»; KUL: monsopu 'to put hot metal into water, to temper';
TOLH (Muthalib, Alimuddin, Chalik, et al. 1985:121): sumopu 'to gild' «menyepuh».
Compare also TOLH, MEKH sopura 'smithy'. [PMP *sebu 'sudden meeting of water
and heat: extinguish a fire, temper metals' (Blust 1986 290) PMP *b > PBT *p
unexplained]

**soro**° 'to push'
mosoro 'push forward'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:122): soro
(stem) 'push'. [PAN *suroŋ 'push forward' (Blust, cited in Wurm and Wilson
1975:163), PSS *sorong 'push' (Mills 1975:834)]

**soRami** 'rice stalk'
BNGH: seami 'rice stalk'; MRBH (Esser 1927:59): seami 'stubble'; PAD (Esser
1997:pers.comm.): sohami 'straw, dry rice stalks' [PAN *ZeRami]

**sosoq, *osoq** 'to suck'
'suck, smoke'; BNG (Saro, Rahim, et al. 1982:96): soso 'suck up' (as water); MRB
(Esser 1927:50): monsoso 'suck up, smoke', mo'oso 'suck out'; PAD (Lara, Larobu,
oso-i 'suck up' (as water). [PAN *sepsep 'suck' (Dempwolff, Dyen, INL, cited in
Zorc 1971 3079)]

**sowi**° 'knife for harvesting rice plant'
BNGH (Saro, Rahim, et al. 1982:90): sofii; AWGH, MRBH (Esser 1927:34), PAD
stem in these languages, sofii, sowi also means 'to harvest'. [Wolof sowili 'bamboo
knife (used for cutting umbilical cord)' (Anceaux 1987:170)]

**sowu** 'thousand'
MRN, TOK, LAN, TUL, TOR, MRB, PAD, MRA, and all West Coast isolects: sowu.
[PAN *sa-Ribu (Wolff, cited in Dahl 1981a:20)]

**soyun** 'needle'
BNGH (Adriani 1900:254), WAWH, MRBH, PAD (Adriani 1914:233), MEKH, TOLH:
seu; Compare also MRB (Esser 1927:59) monseu 'to sew', PAD (Esser 1927:61):
mosou 'to sew'. [PAN *ZaRum]
**sudu** ‘to poke, prod’

**suere** ‘different’

**sukiq** ‘insert (into small crack or crevice)’
KUL: *monsusuki* ‘stuff into a crack’; MRB (Esser 1927:41): *monsuki, monsunnggi* ‘pick, pry out’. [PMP *zukit ‘cut into; insert(ion)’ (Dempwolff, cited in Zorc 1971 1444)]

**sumpiq** ‘blowgun’

**suquN** ‘to carry on the head’

**susu, ?*uhu** ‘breast’
All Eastern isolets except KUL, BAH and MRB: *susu; BAH, MRB, PAD, MRA, TOM: uo (o unexplained); all West Coast isolets: *uhu. Note Esser (1927:48) reports susu also used in the Watu area of Mori Bawah. [PMP *susu (Blust 1981c 18)]

**susuq, *uhuq* ‘pierce’
MRN (D. Andersen 1997:pers.comm.): *mo‘uhu* ‘pierce’; KUL: *mo‘uhu* ‘pierce, prick’ (as with a needle); TOL (Youngman 1997:pers.comm.): *mo‘uhu* ‘stab, pierce, prick’ (instrument does not remain in object), mosusu ‘skewer’ (object remains impaled). [PAN *susuk ‘to pierce’ (Dyen & McFarland 1970 570)]

**taa** ‘to laugh’
WAW, MEN, MRN, BNG, MRB: *mototaa; MRA, MEK: mototao; TOL: mototao, motota. Note BAH and two BNG wordlists have *mototaha*. [PMP *(ta)-tawa (Blust 1981c 33)]

**taa** ‘long’ (of objects)

**tabaq** ‘body fat’
All languages except KOD: *taba. [PPH *tabaq ‘fat’ (Zorc, in Zorc 1971 3287)]
*tade⁰ ‘to stand’
MRN, TOK, KOR, WAW, MEN: mentade; TAL: pentade; KUL, LAN, TUL, TOR, WAI, BNG, ROU: tumade; BAH, MRB, TOM: metade; MRB: metade, mentade; LAL: mopotade.

*tado⁰ ‘portion, apportionment’

*tahaq ‘ripe, done’, hence ‘red’

*tahiq ‘sea, ocean’
All languages: tahi. [PMP *tasik (Blust 1981c 124)]

*talaq ‘row’

*tampil-an ‘sheath’

*tambu ‘scoop, dip’

*tanda⁰ ‘to squat’

*tanduQ ‘horn’
WAR, TOL, MEK, RAH, KOD: tanu; BNG, BAH: tindu (i unexpl.); all others: tandu. [PMP *taNduk (Dempwolf, in Zorc 1971 3417)]
*tangke ‘stalk’
WAW$_H$: tangke ‘stalk, ear (of grain)’; BNG$_H$: tangke ‘ear (of grain)’; MRB$_H$ (Esser 1933:270): tangke ‘thick, inflexible stem’ hence classifier for counting ears of corn, etc.; TOL (Gouweloos 1936:65): tangge ‘stalk, stem (whether thick and stout or thin and flexible)’; MEK$_H$: tange ‘branch, trunk, midrib (of palm frond)’. [PAN *taňkay ‘stem, trunk’ (Dyen & McFarland 1970 660)]

*tangke$^o$ ‘mountain’
MRN, TOK: tankeno; KUL: tangke; ASE, RAH: tanggeno; LAI: tageno.

*tangke-lari$^o$ ‘shin’

*tangkoo ‘catch’
BNG (Saro, Rahim, et al. 1982:94): tangko ‘catch, receive’ (as liquid into a bottle); TOL (Muthalib, Alimuddin, Chalik, et al. 1985:130): tetanggo ‘caught, stuck’. [PMP *taňkep ‘catch’ (Blust)]

*tanoN ‘to bury’

*tapa ‘smoke, grill’

*tapak-i ‘to strike with the hand’
MRN (Muthalib, Pattiasina, et al. 1983:45): metapa ‘to hit’ (with the flat of the hand); TOL$_H$ (Adriani 1914:223): tumopaki, monopaki, (Muthalib, Alimuddin, Chalik, et al. 1985:143): topa-topa ‘to hit mercifully’ «pukul kesayangan». [PWMP *ta(m)pak ‘slap, strike with the hand’ (Blust 1989 624)]

*tapu$^o$ ‘extremity, tip, projection’
BNG$_H$: tapu susu ‘nipple’ (lit. tip of the breast); MRB$_H$: tapu uo ‘nipple’, also Watu dialect has tapu ‘extremity, tip, edge’ (Esser 1933:268); PAD (Karhunen 1994:26): tapu ‘tip’; TOL: tapu ra’i ‘forehead’. [PPH *tapus ‘finish, end’ (Zorc, in Zorc 1971 3448)]

*tapuno ‘cape’ (promontory of land)
*taqan, *taqon 'set' (traps)
   KUL: monta’o ‘set’ (traps); BNG (Saro, Rahim, et al. 1982:94): monta’o ‘set’ (traps);
   MRB (Esser 1927:53): monta’o ‘set’ (traps, and similar items); PAD (Lara, Larobu, et al.
   1991:73): monta’a ‘set (a snare)’; MRA: monta’a ‘id.’; TOL (Muthalib, Alimuddin,
   Chalik, et al. 1985:126): tuma’a, ta’ai ‘set, install’ (e.g., a trap). [PAN *taqan (dlbl.
   *taqen) ‘set a trap’ (Blust 1983/1984 423)]

*taqi ‘feces’
   All isolects: ta’i. [PAN *Caqi]

*taqowu° ‘heavy sword’
   KUL: ta’owu ‘machete’; WAW (Manyambeang, Mahmoed, et al. 1982:120) taawu;
   MRB (Muthalib, Pattiasina, et al. 1983:130): ta’owu; TOL (Muthalib, Alimuddin,
   heavy sword; from the tip to the end of the hilt about 80 cm., and the width at the tip
   about 9 cm’. [likely from *taa + *owu; compare MRN (D. Andersen 1995:38): taa

*taqu ‘clever’
   (Adriani 1914:225): mota’u. [PAN *Caqi ‘know (how)’]

*taqun ‘year’
   BNGH, WAWH, TOLH (Muthalib, Alimuddin, Chalik, et al. 1985:131): ta’u; MEKH:
   tau. [PAN *taqun ‘year, season’ (Dempwolff, Dyen, in Zorc 1971 3283)]

*taRan ‘to answer’
   *taRam (Grace 1969, cited in Wurm & Wilson 1975:6)]

*tason ‘sharp’
   mondsasu; TOLH, MEKH: monggaso. The Tolaki form monggaso (expected:
   **mondsaso) is possibly the result of contamination from monggusu ‘blunt’. Final u
   rather than o in Wawonii and Mori Atas may have the same explanation. [PAN *taZém
   (Dyen & McFarland 1970 603)]

*tasu° ‘dibble stick’
   KUL, MRBH, PAD (Lara, Larobu, et al. 1991:73), TOL (Muthalib, Alimuddin, Chalik,

*tataki ‘to pull down’ (as house)
   BNGH, MRBH: montataki; PAD (Lara, Larobu, et al. 1991:73) metataki ‘tear down’
   (as a pig might tear down a fence); TOLH, MEKH: tumataki-i, mondataki.

*tatapi ‘to wash’ (clothes)
   KUL, BNG: montotapi; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:131):
   mondatapi, tatapi-i. [PAN *CabCab ‘clap, beat, hack’ (Blust 1983/1984 69)]
*tawan 'to capture'
BNG_H: mia tinafa ‘prisoner’ (mia = ‘person’); TOL_H, MEK_H: pinetawa ‘prisoner’. [PMP *taban ‘hold firmly, capture; booty’ (Dempwolff, iNL, in Zorc 1971 3291)]

*tawaro° 'sago starch'
KUL: tawaro ‘sago starch, collected from both the sago (METROXYLON) and aren (ARENGA) palms’; TOL: tawaro ‘the sago palm (METROXYLON species)’

*tawu° 'testicle'

*tea° ‘fight, make war’

*te-ipayn ‘when?’ (future)

*te-ipua° 'day after tomorrow'

*tele° 'shallow'
BNG_H: montele ‘shallow’ (dish); TOL_H MEK_H: mondele, ondele ‘shallow’ (dish, river).

*tetu° 'order, send'

*tepe ‘bridge’

*tia° 'distribute'
*tian* 'belly'
KUL: *cia*; all other languages except BAH, MRB, PAD, MRA, TOM: *tia*. [PMP *tian (Blust 1981c 14)]

*t(i,u)ha* 'to descend'

*tile* 'vagina'

*tinsu* 'awaken s.o.
MRN: *tisu* (stem) (Tokotu’a dialect *tinsu*); TAL, KUL, KOR: *mosinsu*; WAW: *mosunsungi*; BNG: *motinsu* (also dialectally *sinsu, sunsu*); WAR: *modinsu*; LAI: *medisu*. Consonant harmony (*t > s*) occurs irregularly in some forms.

*tinti-ngara* 'to lie supine'
WAW_H: *tingiringara*; MRB_H: *sinsingara*; TOL_H: *tindingara, tindiranga*; MEK_H: *tindingara*. The Mori Bawah form is likely a borrowing from Mori Atas or Padoe, where *t > s* before high vowels is regular (compare also Mori Bawah *tinti opo* ‘to lie prone’). The Konawe form *tindiranga* exhibits irregular metathesis, possibly from contamination from *merangga* ‘to lie prone’.

*t(i,u)sa* '(house) post'

*tisua* 'to point'

*tobo* 'keris'
*toko* 'alight'
  KUL: *toko* 'perch, alight'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:140): *toko* (stem) 'perch, alight' (as a fly or bird). [PMP *teka* 'arrive' (Dempwolff, in Zorc 1971 3503)]

*toko* 'guest'
  MRN, KOR, WAW, BNG: *toko*; MRB: *totoka*; MRA, TOL, MEK, LAI: *totoko*.
  [PMP *teka* 'arrive' (Dempwolff, in Zorc 1971 3503)]

*tole*° 'pandanus'
  All Eastern isolects except TOK, TAL: *tole*; MRA, TOM: *tole*; TOL (one wordlist), MEK (one wordlist): *totole*.

*tolea*° 'functionary in administering *adat* law'
  MRN (Muthalib, Pattiasina, et al. 1985:79), TOL (Kruyt 1922:431): *tolea*. This is probably a complex morphological form. Compare also Bungku (Saro, Rahim, et al. 1982:26) *pelea* 'order, command' «perintah».

*tolewa*° 'butterfly'

*tolu* 'three' (bound numeral)

*o-tolu* 'three' (independent numeral)
  LAL, WIW, ASE: *tolu*; all others: *otolu*. [PAN *ta-telu]

*tonda*° (or *donta*)° 'to fall'
  BNG: *medonta*, *tedonta*; TOR, BAH, TOM, MRB, PAD, MRA: *tedonta*; MEK, TOL, WIW, ASE, WAR, LAL: *motonda*; LAI: *motoda*. Compare also BNG_H *modontangi* 'to throw away'. Note Esser (1927:45) also gives MRB *rumonta* 'fallen off'.

*tonga*° 'follow'

*tondo*° 'barrier'
  KUL, WAW_H: *tondo* 'fence'; BNG_H: *tando* 'small dike in rice field' (a unexpl.); PAD (Lara, Larobu, et al. 1991:76): *tando* 'fence'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:141): *tindo* 'dike' «bendung»; MEK: *tondopi* 'fence'. [Pamona *tondo*, *tondori* 'barrier, for example a small gate for the ladder opening, to prevent children from falling to the ground' (Adriani 1928:894); PSS *tondok* 'enclosure, village' (Mills 1975:865)]
*tondoha*° ‘anvil’
[Pamona *tondosa* (Adrian 1914:228), Nias *tandrosa* (Esser 1927:47)]

*tondu*° ‘heavy’

*tonea*° ‘taro’

*tongaq* ‘middle’

*tongo*° ‘wrap’

*tonia*° ‘new, young’
MRN, TOK, TAL, KUL: *tonia* ‘new’ (inanimate); MEK, TOL, WIW, ASE: *tonia* ‘young’ (animate).

*tonto*° ‘under, space under a house’
BNG (Saro, Rahim, et al. 1982:89): *tonto* ‘space under a house’; MRN, TOK, KOR, LAN, TUL, TOR: *tonto* ‘under’; MRB, PAD, MRA, WAR: *toto* ‘under’ (denasalization unexplained); ASE, WIW: *tondo* ‘under’; RAH, LAI, KOD: *todo* ‘under’.

*toqolo*° ‘forest’
LAN: anto’olo; TUL, BNG: to’olo; PAD: te’olo; TOL: ando’olo. [compare Pamona to’olo (Adrian 1914:223); Proto-Malaitan *tolo* ‘forest’ (Levy & Smith 1969, cited in Wurm & Wilson 1975:84)]

*toqori* ‘to know’
All languages: to’ori, toori. [PMP *taquh* ‘know (how)’ (Dempwolff, in Zorc 1971 3280)]

*tora* ‘alive’
*toreao° ‘leftover; more’
BNG:\text{H}, MRB:\text{H}: toreao \text{ ‘more’}; PAD (Lara, Larobu, et al. 1991:77): toreao \text{ ‘remainder’};
TOL:\text{H} (Muthalib, Alimuddin, Chalik, et al. 1985:143): toreao \text{ ‘remainder, leftovers’, petoreao \text{ ‘more’}.} [\text{compare PMP *ri[h]a[q] \text{ ‘abundant’} (Dempwolff, in Zorc 1971 2252)}]

*toriki\text{o°} ‘wall’

*toro ue ‘rainbow’

*torukoo° ‘mountain, backbone’
TAL, KOR: toruku \text{ ‘mountain’}; WAI, BNG, BAH, MRB, MRA, TOM: torukuno \text{ ‘mountain’}; PAD (Lara, Larobu, et al. 1991:77): tokuruno \text{ ‘hill’, toruku \text{ ‘backbone’}; TUL, ROU, WAR, LAL: torokuno \text{ ‘mountain’}; TOL, MEK: toruku \text{ ‘back’}. Note also several languages use this term in a compound meaning \text{ ‘spine’, including: BNG:\text{H}, MRB:\text{H}: wukuntoruku; TOL:\text{H}: kasundoruku; MEK:\text{H}: toolandoruku \text{ ‘backbone, spine’}.}

*torao° ‘hard’

*toroo ‘a kind of tree’
KUL: teo \text{ ‘nangka species with small fruit’}; MRB (Esser 1927:59): teo \text{ ‘a kind of tree’ (ARTOCARPOUS BLUMEI)}; TOL: toho \text{ ‘wild nangka; the pitch is used to catch birds by placing it on a board or on the end of a broom straw shot through a blowgun’}. [PAN *(Cl)eRep \text{ ‘k.o. tree’} (ARTOCARPUS species) (Blust 1970 127)]

*towu ‘sugarcane’
BNG\text{H} (Saro, Rahim, et al. 1982:14): tofu; WAW\text{H}, MRB\text{H} (Adriani 1900:296), MRA (Adriani 1900:296), TOL\text{H}: towu. [PAN *tebuS]

*towuan ‘wasp’
KUL: towua; BNG\text{H}: tohua; MRB\text{H}: towua; PAD (Lara, Larobu, et al. 1991:78): towue; MEK\text{H}: towua. [PAN *tabu-an \text{ ‘[insect] bee; noisy insect’} (Dempwolff, Dyen, in Zorc 1971 3297)]

*towuni ‘afterbirth’
KUL: towuni; BNG\text{H}: tofuni; TOL\text{H}, MEK\text{H}: towuni. [PAN *tabuni (Dyen & McFarland 1970 658)]

*totoro° ‘sit’
PAD: mentoro; RAH: kototoro; MEK, WAR, LAL: mendotoro; LAI, KOD: medotoro; all others except TOL, MRA and TOM: totoro, tumotoro. [Proto-Saddang or Proto-Toraja *t(ʔu)(dr)o \text{ ‘stay, dwell’} (Mills 1981 32)]

*tuantua° ‘conch shell trumpet’
BNG: ntuantua; TOL: tuandua.
*tudu* ‘arrive from above’  

*tueh-i* ‘to fell, to cut down’  

*tukana* ‘ask’  

*tuko* ‘staff, walking stick’  

*tulei* ‘capable, able’  

*tuli* ‘earwax’  

*tulura* ‘speak’  

*tuna* ‘shoot, side-sprout’  

*tundo* ‘heel’  

*tungkeho* ‘to choke’  
BNG$_H$: tungkeho; MEK$_H$: tunggeho.
**tuntu** 'end'
KUL: cuncu (intrans. stem) 'come to an end (as a story)'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:147): tundu 'end, tip, point' «ujung».

**tunu** 'to roast, to burn'
MRN, TOK, TAL, KOR, TOR, WAI, BNG, ROU, MRB: montunu; KUL, LAN, TUL: moncunu; PAD (Lara, Larobu, et al. 1991:69): mosunu; MRA (Adriani 1900:290): sunu (stem) 'roast by the fire' TOM: monsunu; MEK, TOL, LAL: mondunu, tumunu 'i'; KOD: modunu. [PAN *CunuH 'roast on fire' (Zorc 1982:122)]

**tuqa** 'old'
All Eastern isolects except MRB: motu 'a'; MRB: mota 'u (< metathesis); PAD: mosuo; MRA, TOM: mosuo, mosu 'o'; all West Coast isolects: motu 'o. [PAN *tuqaS]

**tuqu** 'true, real'

**tuquR** 'dry'
MRN, TOK, TAL, KOR, WAW, BNG, BAH, MRB: moti 'i, motui; KUL: mocu 'i; PAD, MRA: mosu 'i, mosui; TOM: mosu 'i; RAH: motu 'u. [PMP *tuquR 'evaporate, dry up' (Blust 1986 411)]

**turuR** 'to sleep'
KUL, LAN, TUL: mocuri 'sleep'; all other Eastern isolects plus PAD, MRA, TOM: moturi; WAR, MEK, TOL, RAH: moturu 'to sleep', motuturu 'to lie down'. [PAN *túDuR₂ (Dyen & McFarland 1970 643)]

**tuRaN-i** 'to increase'

**tutuk-i** 'to pound'
KUL: moncucu 'strike, hammer' (as a blacksmith); BNG₇: montutuki 'pound' (bark cloth); MRB: montutu 'pound bark cloth'; MEK₇: monutuki 'pound' (bark cloth). [PMP *TukTuk 'knock' (Dempwolff, INL, in Zorc 1971 3678)]

**tutuq-i** 'to prune, to cut'
MRB (Esser 1927:35): tutu 'i 'to strip off the leaves and some of the branches' (of a tree); MRA (Esser 1927:35): toto 'i 'id.'; TOL (Youngman 1997:pers.comm.): toto (stem) 'to hack, chop up'; totoki (stem) 'cut through (rope, rattan, etc.) in one stroke'. [PAN *(Ct)a(q)(Ct)uq 'to prune, trim (branches)' (Blust 1970 139)]
*tutuw-i ‘to cover’
MRB (Esser 1927:44): montutuw; TOL (Youngman 1997:pers.comm.): metutu enge
‘close the nose’ (enge = nose). [PMP *tutup ‘to cover (up)’ (Dempwolff, INL, in Zorc
1971 3741)]

*tuu°, *olo-N-tuu° ‘knee’
MRN, TOK, TAL, WAW, MEN, LAN, TUL, WAI: tuu; KUL: cuu; KOR: engentuu;
TOR, BNG, ROU, BAH, MRB: olontuu; PAD, MRA: olutu, ulutu; TOM and all West
Coast isolets: lutu. It is unclear if Tolaki, etc. lutu should be regarded as a borrowing,
or a development from olo-N-tuu (cmp. Malay lutut ‘knee’). [PAN *qSØaleb ‘knee’
(Blust 1970 321) and PAN *(t)uSud ‘knee’ (Blust 1981b:25)]

*ue ‘rattan’
All languages except BAH, MRB, PAD, MRA and TOM: ue. [PMP *quey ‘rattan,
reed’ (Dempwolff, in Zorc 1971 0522)]

*ula° ‘rope’
MRN, TOK, KOR, MEN, TUL, TOR, BNG, BAH, MRB, TOM, MEK, TOL (some

*ule ‘snake’
All isolets except TOK: ule. Compare also Moronene (D. Andersen 1995:6) ko’ule
‘wormy’, Mori Bawah (Esser 1927:67) ule-ule ‘worm, caterpillar’. [PAN *quey
‘snake’ (cited in Van den Berg 1991a:29)]

*ulIN ‘rudder’
MRN (Muthalib, Pattiasina, et al. 1983:23), BNG, WAW, MRB (Esser 1927:43),
TOL, MEK: uli ‘rudder’, umuli ‘to steer’. Compare also Mori Bawah (Esser
1927:56) ulima ‘stem’. [PMP *qulin ‘rudder’]

*ulu ‘head’
All isolets except MRN, TOK, TAL, KUL, KOR: ulu. [PMP *qulu ‘head’ (Blust
1981c 24)]

*uma ‘to kiss’
MRN (Muthalib 1983:42): me’uma ‘to kiss’; TOL (Muthalib, Alimuddin, Chalik, et

*unoy ‘inside’
KUL: une ‘center of trunk’; all West Coast isolets: une ‘inside’. Note the expected
reflex in Padoe, Mori Atas or Tomadino **unoi has not yet been attested. [PMP
*qunej ‘soft core, pith’ (Blust 1983/1984 437)]

*uni ‘sound, utterance’
‘speak, utter’; KOR: ko’oni ‘speak’; MRB (Esser 1927:34): uni ‘sound’; PAD (Lara,
[PMP *huni ‘noise’ (Dempwolff, in Zorc 1971 0603)]
*untoq 'brain'
  KUL: unto; MRN, BNG₃: unta (a unexplained); MRB₃ (Esser 1927:18): unto; TOL₃ (Muthalib, Alimuddin, Chalik, et al. 1985:151), MEK₃: undo. [PAN *qu(N)tek 'brain' (Dempwolff, Dyen, in Zorc 1971 0649)]

*uran ‘shrimp, crustacean’

*uRaQ ‘vein, tendon, sinew’

*uSan ‘rain’
  MRA, PAD: use; all others (except KUL, KOR, TAL): usa. [PMP *quZan (Blust 1981c 133)]

*uso ‘green’
  MRN, TOK, KUL, WAW, MEN, LAN, TUL, TOR, WAI, BNG, ROU: mo uso 'green'; TOL: mo uso 'green, yellow'; MEK, LAI, RAH, KOD: mo uso 'yellow'. Apparently in the Moronene, Kulusu and Wawanii area, this color shades off into blue. In the Konawe area, mo uso nine times recorded as a response to 'green', three times as a response to 'yellow'. Note one Tulambatu wordlist had mo iso. [PAN *hiZaw 'unripe, green' (Wolff 1982:8)]

*uwan ‘grey hair’

*uwe° 'remove, take out'
  KUL: uwe (stem) 'remove, take out (as food from a cookpot)'; PAD (Lara, Larobu, et al. 1991:82): mo uwe 'take out with hands (rice, sand)'; TOL (Youngman 1997:pers.comm.): mouweti 'lift and move s.th.'.

*uki ‘tuber’

*waaq ‘flood, flow’
*wai* ‘female’
MRB (Esser 1933:346): *wai* ‘female of animals’; MRB (3 wordlists), PAD, MRA, LAI, RAH: *irowai* ‘female’. [PAN *bahi* ‘woman, female’ (Blust)]

*waipode* ‘young girl, virgin’

*wała* ‘fence’

*wali* ‘spouse, companion’
WAW, MEN, TOR, TOL, LAN, MRA: *wali* ‘spouse’. In addition, *wali* or a derived form of it means ‘companion’ in the following isolects: KUL: *wali*; WAW, TOR: *pewali*; MEN: *pefali*; BNG, TOM: *fali*; BAH: *fali-fali*; MRB: *wali*, *pewali*; MRA: *pokowali*; PAD, WÌW, MEK, RAH, KOD: *wali*; TOL: *wali-wali*, *pewali*. [PAN *bali* ‘equal, equivalent’ (Blust 1989 58)] Doublet: *bali* ‘enemy’.

*waloh-i* ‘to take revenge’

*walu* ‘to wrap (around)’

*wana* ‘stern’ (of a boat)
BNG: *fana*; TOL, MEK: *wana*.

*wangku* ‘to beat, strike’

*wangun* ‘wake up, arise’
WAW: *mewangu* ‘morning’; MEN: *fumangu* ‘to wake up’; MRB, PAD, MRA: *mewangu* ‘to wake up’; TOM: *mefangu* ‘to wake up’; TOL: *pewangu* ‘to wake up’. [PMP *banjun* ‘wake up, arise’ (Dempwolff, in Zorc 1971 0831)]

*wao* ‘leech’
*waraka*° ‘healthy’


*waRa* ‘embers, glowing coals’


*wata*° ‘tree trunk’


*watu* ‘stone’

KOR, MEN, WAI, BNG, BAH: *fatu*; PAD, MRA, TOM: *wasu*; all others: *watu*. [PAN *batu]*

*wawa* ‘to take along, carry’


*wawaq* ‘opening’


*wawo* ‘above, upper portion/surface’

All languages: *wawo*. [PAN *babaw* (Dyen & McFarland 1970 62)]

*wee(hi)* ‘give’

KOR: *mombe*; WAW: *mompombehi*; MRB: *mompowe*; PAD: *mompowea* (final a unexplained); MRA: *mompowei, mompowea, mompoweangako* (a unexplained); TOM: *mompofe*; WAR: *mombwe*; TOL, MEK: *mombwehi, mombwehi*; RAH, LAI: *mowwe*; KOD: *moboweih*. [PAN *beReey* (Dyen & McFarland 1970 102)]

*w(e,l)ti° ‘calf (of leg)’

*wiaq 'k.o. plant'
   BNG (Adriani 1900:257): /uia/ 'arum' (ALOCASIA CELEBICA); TOL: /wia/ 'k.o. inedible, non-woody plant with large wide leaves often used for temporary umbrellas'. [PAN
   *biRiaq [plant] HOMALOMENA (Dempwolff, Dyen, cited in Zorc 1971:1004)]

*wiku° 'eel'

*w(i,o)ngi° 'night'
   MRB: /wungi/, /wongi/; MRA, PAD: /woongi/; TOM: /fongi/; all West Coast isolects: /wungi/.
   (Note Moronene, Kulisu, Wawonii and Bungku have /mao/ 'night'.) [PAN *beRqi
   (dbl. *beRgi) (Blust 1980:58)]

*winso° 'to enter'
   1927:37): /mewunso/ (u unexplained); TOLH: /wiso-i/ 'fill', (Mutalib, Alimuddin, Chalik,
   et al. 1985:155): /pewiso/ 'enter, put on clothes'. [Pamona wunca 'to put in, to enter'
   (Esser 1927:43)]

*w(i,u)taq 'earth'
   All Eastern isolects: /wita/; MRA, PAD, TOM: /wute/; all West Coast isolects: /wuta/.
   [PWMP *buRtaq 'mud, earth' (Blust 1989:111)]

*wiwi° 'edge'
   MRN, TAL, WAW: /wiwi/; KOR, MEN, BNG, BAH: /fi/; LAN, TUL, TOR, ROU,
   MRB, MRA and all West Coast isolects: /wiwi/. [PWMP *birbir 'rim, edge, border',
   *biRbiR 'lip' (Blust 1980:65)] Doublet: *bibi° 'lips'.

*wohuR 'satisfied'
   /mofofi/ (< metaphesis); WAWH, MRBH (Esser 1927:34): /mowohi/; TOLH, MEKH:
   /mowohu/. Compare also TOLH /tewohua/ 'to belch'. [PMP *besuR 'full, satisfied'
   (Dempwolff, cited in Zorc 1971:0968)]

*wolay 'spread out'
   something that is wrapped up' (expected: **wolai; possibly wola by backformation);
   /tewole/ 'open, spread out'. [PAN *belaj 'to spread' (Dyen & McFarland 1970:95)]

*wolian 'shaman'
   MRN (Adriani 1914:240), KUL: /wolia/; BNGH: /folia/. [PAN *bali(nN) (Blust 1970
   22)]

*wolo° 'lukewarm'
   BNG: /mofolofolo, folo'oleo/; MRN, MRA, MRB: /wolowo'oleo/; WAR: /wochwolo/
   TOL, MEK, RAH, KOD: /mowolo/.
*wolu* ‘to straighten’

*wongko*° ‘goitre’

*woo* ‘odor, smell’

*woRa*° ‘uncooked rice’
WAI, BNG: *feaa*; LAN, TUL, MRA: *wea*; TOR and West Coast isolects: *woha*. The Torete form *woha* must be regarded as a borrowing from Tolaki. [PAN *beRas (Dyen 1953a:359)]

*wotaq* ‘split open’
KUL: *wota* ‘split open’ (as a young coconut with a machete); TOL (Muthalib, Alimuddin, Chalik, et al. 1985:158): *wota* ‘split apart’ (transitive stem) «membelah». [PPH *bštak ‘crack’ (Zorc 1978:107)]

*woton* ‘millet’
BNG$_H$: *foto*; TOL, MEK$_H$: *woto*. [PAN *beCеj ‘millet sp. (foxtail millet?)’ (Blust 1980 51)]

*wotu*° ‘to hatch’

*wotu*° ‘time, season’

*wuwaq* ‘fruit’
BNG, WAI, MEN, BAH, TOM: *fua*; PAD: *wue, MRA: wue, wua; all others: *wu*. [PAN *buwaq (Dyen & McFarland 1970 117)]
*wuku 'bone, seed'
   KOR, MEN, WAI, BNG, BAH, TOM: fuku 'bone, seed'; all others except KOD and MEK: wuku 'bone' and/or 'seed'. Usually both meanings are attested, except for Talokni and Kulisusus which have wuku 'bone' but oliso 'seed'; Rahambuu which has wuku 'bone' but watu 'seed'; and the Lalomeri dialect of Waru which has wuku 'seed' but to'ola 'bone'. [PMP *buku 'node, joint, knuckle' (Dempwolff, in Zorc 1971 1102)]

*wulaaN 'gold'

*wulan 'moon'
   KOR, MEN, WAI, BNG, BAH: fula; PAD: wule; all others except TOK: wula. [PMP *bulan (Blust 1981c 129)]

*wulele 'flower'
   KUL: wulele 'flower (as of squash, fruit tree)'; BNG_H: fulele; KUL, TOL, MEK: wulele. Also with the metaphorical meaning in Tolaki of 'child, one's offspring' (Tariman 1989:124, 357).

*wulu 'body hair, feathers'
   KOR, MEN, WAI, BNG, BAH: fulu; all others: wulu. Kuluisusu contrasts rembe 'body hair' and wulu 'feathers'. [PMP *bulu 'down, hair, feathers' (Dempwolff, in Zorc 1971 1130)]

*wuluk 'kind of bamboo'
   MRN, WAW, TOR, TUL: wuluk; PAD (Lara, Larobu, et al. 1991:86): wulo 'k.o. small bamboo'; WTW, ASE, TOL, MEK, LAI, KOD: wulo. (Note one Konawe and one Mekongga wordlist have wuluk.) [PAN *buluk 'type of bamboo' (Li 1994:249)]

*wuni 'to hide'

*wunuq 'k.o. tree'
   MRB (Esser 1927:43): wunu 'tree species'; TOL (Youngman 1997:pers.comm.): wunu 'tree species, the bark of which is used for carrying straps, snares, and course thread'. [PAN *bunut ['tree]; coconut husk or fibers' (Dempwolff, Dyen, in Zorc 1971 1151)]

*wuqhoi 'to wash'
   KUL: mowu'ohi 'wash by rubbing the surface of'; BNG_H: mofoofii; MRB_H (Esser 1927:30): mowu'ohi, mowo'ohi, mowoohi; MRA (Esser 1927:30): mowoohi; TOL (Youngman 1990:pers.comm.): mowu'ohi 'to clean'. Padoe (Esser 1927:30) mowohoki 'to wash' and Tolaki mowohiki 'wash' may be from the same stem, but with -ki suffix and vowel coalescence, i.e. wohiki < *woohiki < *wu'ohi + ki. [Pamona mawuso'i (Esser 1927:30)]
*wuti* ‘deception’

*wuuq* ‘hair of head’
BNG, WAI, MEN, BAH, TOM: *fuu*; all others: *wuu*. [PMP *buSuk* (Blust 1981c 26)]

*wuwu* ‘fishtrap’

*wuwui* ‘sow, drop a few seeds’
KUL: *mowuwui* ‘feed chickens’; BNG₆: *mosufui* ‘sow’; TOL (Youngman 1997:pers.comm.): *mowuwui* ‘give seeds to’ (as dropping seeds into a dibble hole, or giving a small amount of feed to chickens). [PWMP *bu(q)buq* ‘to sow, plant seed’ (Blust 1980 82), loss of final *q in PBT unexplained]

Loans

The following is a compilation of loan words which I have happened upon, and where I have been able to identify the source of borrowing. It is hoped that a more systematic study of loans can be undertaken in the future.

Muna *bake* ‘fruit, heart’ (Van den Berg 1991a:48)
TAL: *bake* ‘fruit, heart’; KUL, KOR: *bake* ‘fruit’.

Malay *baca* ‘read’

Malay *benteng* ‘fort’
KUL, BNG, MRB: *bente*; TOL: *bende*.

Malay *bicara* ‘to speak’
WAW, LAN, TUL, TOR, BNG, ROU, BAH, WAR, ASE, TOL: *bitara, mebitara*; RAH: *mombitara*; MEK, KOD: *mobitara*.

Malay *biru* ‘blue’
BNG: *biru* ‘blue’; KOR: *mobiru* ‘green’.
Malay *cankir* ‘cup’

BNG (Saro, Rahim, et al. 1982:87): *sangkiri*; MRB<sub>H</sub>: *kangkiri*; TOL<sub>H</sub>: *sangkiri*.

Malay *cerek*


Malay *dapur* ‘hearth’ < PAN *DapûR<sub>3</sub>* (Dyen & McFarland 1970 207)

MRN (Adriani 1914:240), WAW<sub>H</sub>: *dapura*.

Malay *dasar* ‘base, foundation’ < PMP *Daser* ‘foundation’ (Dempwolf, in Zorc 1971)

MRB (Esser 1927:45): *dasa* ‘small floor, raised platform, plank bed’. The expected PBT reflex would be **raho**.

Malay *dayung* ‘oar, paddle, fin’ < PMP *Dayun<sub>3</sub>* ‘oar’ (Dempwolf, in Zorc 1971)


Wolio *dudu* ‘breast’

KUL: *dhudhu*. Limited distribution within Bungku-Tolaki suggests this origin.

Malay, etc. *gendang* ‘drum’ < PMP *geNdan<sub>3</sub>* ‘drum’ (Dempwolf, in Zorc 1971 1545)


Malay *gergaji* ‘saw’ (tool)


Malay *guci* ‘jar’ < PAN *guci* ‘earthen jar’ (Dempwolf, Dyen, in Zorc 1971)

KUL: *gusi* ‘water jar’; BNG<sub>H</sub> (Saro, Rahim, et al. 1982:88), MRB<sub>H</sub>: *kusi* ‘earthen water barrel’.

Malay, etc. *gula* ‘sugar’

All languages: *gola*. “The word for ‘sugar’ is a loan, and there is no solid evidence for assigning it to PMP” (Blust 1995: pers.comm.)

Malay *gunting* ‘scissors’ < PMP *guNti<sub>3</sub>* ‘shears, scissors’ (Dempwolf, cited in Zorc 1971)


Buginese *jaka* ‘comb’

TOL<sub>H</sub>, MEK<sub>H</sub>: *daka*. This etymology proposed by Adriani (1914:221).
Buginese *jama* ‘to work’

TOL\(_H\) (Adriani 1914:221): *modama, madama*. This etymology was first proposed in Adriani (1914:221).

Malay *jembatan* or Buginese *jambatang* ‘bridge’


Buginese *jaji* ‘become, happen’ < PAN *Zadi* (Dempwolff, Dyen, cited in Zorc 1971)


Malay *jala* ‘net’

MRB\(_H\): *gala* ‘castnet’; TOL\(_H\): *jala* ‘castnet’; MEK\(_H\): *odala*.

Buginese *jali* ‘rattan mat’ < PMP *zalin* ‘bind, tie, weave’ (Dempwolff, in Zorc 1971)

MRB (Esser 1927:40): *gali*.

Buginese *jampu* ‘jambu’ (EUGENIA) (Adriani 1914:221) and/or Malay *jambu*


MRB\(_H\) (Esser 1927:40), PAD (Adriani 1914:232): *gampu*; WAW\(_H\), TOL\(_H\), MEK\(_H\): *dambu*. Note one TOL wordlist has *dampu*.

Buginese *janggo* ‘beard’ (Adriani 1914:221) and/or Malay *janggut* ‘beard’ < PMP *zaNgut* ‘chin, beard’ (Dempwolff, in Zorc 1971 1301) (30)

KUL: *jangku* ‘beard’; BNG\(_H\): *janggo*; MRB\(_H\) (Esser 1927:40), PAD (Adriani 1914:232): *ganggo*; WAW\(_H\), TOL\(_H\), MEK\(_H\): *danggo*.

Malay *janji* ‘promise’


Buginese *añarrang* ‘horse’


Malay *jaring* ‘net’ < PMP *zariñ* ‘net’ (hunting) (Dempwolff, cited in Zorc 1971 1272)


Malay *jarum* ‘neddle’ < PMP *Zarum* (Blust 1981c 68)

MRA (Adriani 1900:294): *garu*.

Buginese *jempang* ‘metal object to cover the private parts of small girls’

MRB (Esser 1927:40): *gempa*.

Bugis *jori*, also *cori* (Esser 1927:49)

Malay "gagah" 'brave, dashing'

South Sulawesi "galung" 'rice paddy'

Malay "gandum" 'grain'<br>KUL, WAW<sub>H</sub>, BNG<sub>H</sub> (Adriani 1900:283), TOL: *gandu* 'maize'.

Malay "getah" 'sap' <PAN>*getaq* 'juice, syrup [plant]' (Dempewolf, Dyen, in Zorc 1971)

South Sulawesi "maido", Malay "hijau" 'green' <PMP>*hiZaw* 'unripe, green' (Wolff 1982:8)
TAL: *maido*; KUL: *moijo*; BNG, TOM: *ijo*; MEK, RAH, KOD, LAI: *maido*.

Portuguese "cadeira"

Malay "labuh" 'dock, drop anchor' <PAN>*Nabuq* 'drop, throw, cast' (Dahl 1981b:105)
MRB: *pelabua* 'harbor'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:60): *melabu* 'dock, anchor'.

Malay "lada" 'red pepper' <PMP>*laja* 'burn, smart' (Dempewolf, in Zorc 1971 2043)
MRB (Adriani 1900:286). TOL<sub>H</sub>, MEK:<sub>H</sub> *lada* 'red pepper'. Esser (1927:67) considers this form to be borrowed from Bugis (or Makassarese) *lada*. Cmp. also Pamona (Adriani 1928:327) *lada*.

Bugis *lassa* 'ten thousand' (Mills 1975:899) and/or Wolio *lasa* 'ten thousand' (Anceaux 1987:92), ultimately from Sanskrit *laksa* 'hundred thousand'
MRN (D. Andersen 1994:3), KUL, WAW<sub>H</sub>, TOL<sub>H</sub>: *lasa* 'ten thousand'.

Pamona *lauro* 'rattan'
BAH, MRB, PAD, MRA, TOM: *lauro*. This distribution within Bungku-Tolaki suggests borrowing from Pamona.

Malay *meriam* 'cannon'
MRB, TOL: *maria*.

Malay *meja*, from Portuguese *mesa*
Malay minyak 'oil'
   KUL: mina 'cooking oil'; TOL (Muthalib, Alimuddin, Chalik, et al. 1985:77): mina tana 'petroleum'

Malay pandai, ultimately from Sanskrit papgái
   KUL: pande 'worker, craftsman'; WAW\textsubscript{H}, MRB\textsubscript{H} (Esser 1927:33): pande 'clever';
   PAD (Lara, Larobu, et al. 1991:53): paande 'clever, wise'; TOL\textsubscript{H}: pande 'clever'.

Buginese palisu 'crown' (of head)
   MEK\textsubscript{H} (Adriani 1914:236): palisu.

Malay pintar 'smart'
   TOL\textsubscript{H}: pindara 'clever'.

Malay pinggang 'plate'
   BNG\textsubscript{H}, WAW\textsubscript{H} (Manyambeang, Mahmoed, et al. 1982/1983:121), TOL\textsubscript{H} (Muthalib,
   (1982:87) give Bungku pingka 'plate'.

Malay piring 'plate'
   MRN (Muthalib, Pattiasina, et al. 1983:10), WAW\textsubscript{H}: piri; MEK\textsubscript{H}: ana piri.

Malay pontianak 'evil spirit'
   TOL\textsubscript{H} (Adriani 1914:223): pondiana.

Wolio rou 'face' (Anceaux 1987:54)
   TAL, KOR: rou. This limited distribution within Bungku-Tolaki suggests borrowing
   either from Muna or Wolio. Compare also Balantak roup 'face', Proto-Sangiric
   *doRup 'face' or 'forehead' (Sneddon 1984:78).

Malay rusa 'deer' < PAN *Rusa 'deer' (Blust 1970 367)
   BNG\textsubscript{H}, MRB\textsubscript{H}, MEK (Adriani 1914:236): rusa. The irregular reflex of PMP *R, and
   the failure of final *a to raise to -o in Tolaki, confirms that this is a borrowing.

Malay salah 'wrong' < PMP *salaq 'sin, error, mistake' (Dempwolff)
   MRN (Muthalib, Pattiasina, et al. 1983:52), BNG\textsubscript{H}, MRB\textsubscript{H} (Esser 1927:51): sala;
   TOL\textsubscript{H}, MEK\textsubscript{H}: tesala.

Bugis saliwagon 'outside' < PSS *saliw(a)nah (Mills 1975:282) (-177)
   PAD, MEK, RAH, KOD: i saliwa 'outside'. The limited distribution of this form
   indicates borrowing from Bugis or some other South Sulawesi language.

Malay sembah 'homage' < PMP ?*seNbah 'worship' (Dempwolff, in Zorc 1971 3063)
   WAW\textsubscript{H}: somba 'to worship'; MRB\textsubscript{H}: mesomba 'to worship', also (Esser 1927:17, 35)
   somba 'tribute, homage', mesomba 'to pay homage to'; PAD (Lara, Larobu, et al.
   somba 'to pay homage to'; MEK: somba 'bride price'; LAI, RAH, KOD: soba 'bride
   price'.
Malay sendawa ‘gun powder’, ultimately from Sanskrit saindhava ‘salt-peter’
BNGH: sadafa; WAWH, MRBH, TOLH: sadawa.

Javanese singkur ‘let someone misunderstand, not be willing to make someone know or understand’

Malay tempo ‘time’

Pamona uase ‘axe’ < PAN *wasay ‘axe’ (Blust 1970 439) (509)
MRB (Esser 1927:37): uase. Both limited distribution and PAN *w > u suggests borrowing.

Pamona wasa ‘wet, to bathe’ < PKP *wasa’ < PAN *baseq ‘wet, wash up’
(Dempwolff, Dyen, in Zorc 1971 0859) (154) (-198)
MRA (Adriani 1900:317, Esser 1927:43): mewaha ‘to bathe’, mowaha ‘wet’. The restricted geographical occurrence of this form (Mori Atas only), combined with the fact that PAN *e > a in ultimate syllables is regular for Kali-Pamona (Martens 1989:45) but not for Bungku-Tolaki, confirms it as a loan word.

Javanese welanda, walanda ‘Dutch’, ultimately from Portuguese
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