A Grammar of the Skou language of New Guinea

Mark Donohue
Draft: comments welcome!

Mark Donohue
Linguistics Program, Monash University
mark@donohue.cc

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Picture 2. The foreground shows Tangwáto prominent against the silhouette of Mt. Bougainville in the background, together defining the borders on the west and the east sides of Skou land.

Picture 3. The stretch of beach east of Tangwáto where the three Skou villages are found. The mountains on the horizon mark the border with Papua New Guinea, while the low hills that form an extension of Tangwáto are the mythical homelands of the Skou people.

Picture 4. Skou Sai village (Te Bapúbi), the easternmost and smallest of the Skou villages, from the air.

Picture 5. Skou Mabo village (Te Máwo), central Skou village. The way to the road that runs from Jayapura to the border can be seen in the top of the picture.

Picture 6. Alfius Mallo pointing the way to Skou Yambe, for reasons unknown. The GKI church in the background has the best display of traditional carvings in the area.

Picture 7. Skou Yambe village (Te Tángpe) from the air. The most populous Skou village.

Picture 8. A canoe house on the beach between Skou Sai and Skou Mabo. These houses are built for canoes receiving repair work or final building.

Picture 9. Skou Mabo man and his two daughters, in their best clothes, on the beach in the morning.

Picture 10. The coast stretching west from Skou Mabo, with Tangwáto in the background behind the spray.

Picture 11. The start of the white cliffs on the northern side of Tangwáto, west of Skou Yambe.


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Preliminaries

Abbreviations and Glossing conventions

The following abbreviations have been used in glosses and in the discussion of the grammar of sentences. Some of these abbreviations are only used in combination with others to gloss portmanteau morphemes, such as 3SG.NF to gloss the non-feminine, singular, third person agreement markers.

\[
x/y \quad an \ x, \ missing \ values \ for \ y
\]

\[
\begin{align*}
1 & \quad first \ person \\
2 & \quad second \ person \\
3 & \quad third \ person \\
A & \quad most \ agent-like \ argument \ of \ a \\
& \quad bivalent \ predicate \\
AN & \quad adjunct \ nominal \\
ANIM & \quad animate \\
APPL & \quad applicative \\
C & \quad consonant \\
CP & \quad complement \ phrase, \ the \ sentence \\
& \quad including \ a \ preclausal \ topic \\
DAT & \quad dative \\
DU & \quad dual \\
ERG & \quad ergative \\
F & \quad feminine \\
F & \quad HL \ tone \ melody \\
FOC & \quad focus \\
GEN & \quad genitive \\
H & \quad human \\
H & \quad high \ (tone) \\
INAN & \quad inanimate \\
INSTR & \quad instrumental \ (also \ used \ in \ switch \\
& \quad reference \ and \ in \ conjuctions) \\
IP & \quad inflectional \ phrase, \ the \ basic \\
& \quad clause \\
k.o. & \quad kind \ of \\
L & \quad low \ (tone) \\
N & \quad nasisation \\
NF & \quad non-feminine \\
NH & \quad non-human \\
O & \quad object \ (in \ word \ order \ statements) \\
OBL & \quad oblique^{\dagger} \\
OBJ & \quad object^{\dagger} \\
OBV & \quad obviate \\
P & \quad most \ patient-like \ argument \ of \ a \\
& \quad bivalent \ predicate \\
PL & \quad plural \\
Q & \quad interrogative \\
RC & \quad relative \ clause \\
REF & \quad referential \ function \\
RED & \quad reduplicant \\
S & \quad 1. \ single \ core \ argument \ of \ a \\
& \quad monovalent \ predicate \\
& \quad 2. \ subject \ (in \ word \ order \ statements) \\
SG & \quad singular \\
sp. & \quad species \\
SUBJ & \quad subject^{\dagger} \\
V & \quad verb \ (in \ word \ order \ statements); \\
& \quad vowel \\
Y/N & \quad yes/no \ question
\end{align*}
\]

\[\dagger\] The terms ‘subject’ and ‘object’ are primarily used as a descriptive shorthand, and are not necessarily intended to imply any theoretical status. The label ‘subject’ is used as a shorthand expression to mean ‘either S or A’, and ‘object’ is used in opposition to ‘subject’ to refer to the same argument that is referred to as ‘P’ elsewhere. The discussion in 13.3 will illuminate the theoretical use of the terms. The term ‘oblique’ is used as a cover for non-terms: if a nominal is neither ‘subject’ nor ‘object’, then, regardless of whether it is an argument or an adjunct it has usually been simply labelled ‘oblique’. This collapses the distinction between subcategorised non-terms and non-subcategorised non-terms (‘adjuncts’), but does so for language-specific empirical reasons, discussed in chapters 3, 11 and 16. Both morphosyntactic coding properties, and various
syntactic alternations, show a clear motivation for grouping these two classes of functions together, and there is little data to support their separation.

In addition to the abbreviations used to gloss Skou material, there are some additional abbreviations that have been used to gloss material from other languages, where it has been used. Alamblak, Ambonese Malay, Asmat, Barupu, Duno, Dutch, Hokchia, Hokkien, (Standard) Indonesian, Irish, Lani, Nyao, Oirata, Papuan Malay, Puare, Saweru and Tukang Besi all appear in this book in some guise or another to provide a comparative or typological perspective on the material discussed (for their respective locations in the text, see the index). The following abbreviations are used in the glosses of material from these other languages, in addition to certain of the above abbreviations that are relevant:

+ ACC  accusative
+ ACCOM  accompaniment
+ CAUS  causative
+ DET  determiner
+ DR  different reference
+ ERG  ergative
+ M  masculine
+ LOC  locative
+ NOM  nominative
+ NSG  non-singular (i.e., dual or plural)
+ PAST  past
+ PF  perfective
+ PREP  preposition
+ PRES  present
+ POSS  possessive
+ POST  postposition
+ R  realis

In addition to the glossing abbreviations described above, the following additional conventions are used in the glossing line to break up the morphological and sentential material:
- hyphen separates separate morphemes within the one (morphosyntactic) word
= equals sign a clitic boundary between a bound clitic and (ultimately) a free form
(space) 1. a boundary between two lexically independent roots that are phrasally bound, such as between an adjunct nominal and a verb, or two verbs in a serial verb construction.
  2. a clitic boundary between a bound clitic and a free form, or a base and its reduplicant, in a sentence that is presented with Skou orthographic conventions, following an earlier sentence that has used the normal glossing conventions.
(no mark) a boundary between an affix and a root or other affix in a sentence that is presented with Skou orthographic conventions
. full stop 1. separates the multiple English words that are used to gloss a monomorphemic Skou root, such as ‘go.down’ to gloss the monomorphemic *hi*, or 2SG.DAT to gloss *=me*.
  2. separates grammatical information that has been encoded by vowel alternations or stem suppletion from the meaning of the verb root
  3. a final falling intonation pattern at the end of a sentence or utterance
: colon separates the English words necessary to gloss a complex Skou word, for which morpheme breaks have not been provided
, comma a break in the intonation pattern in an utterance
Punctuation conventions regarding capitalisation, etc., apply to Skou exactly as they do to English or Indonesian, except that the first person singular pronoun is not capitalised. Additionally, ungrammatical sentences are not written with punctuation (capitalisation or full stops, etc.) since they are not uttered in real language, and so are not eligible for ‘real’ punctuation. This is another tool that has been used to more clearly delineate the grammatical and the ungrammatical material. (Capitalisation and other punctuation is also withheld from phrasal, rather than full clausal, examples.) The different codes that have been used for different grammaticality judgements, all placed at the beginning of the sentence (except for material in brackets, which appears in the normal position associated with an argument of that syntactic role) are:

- (no mark) fully grammatical sentence
- * asterisk ungrammatical sentence
- ?* question, asterisk ungrammatical sentence; though some speakers will accept it to the point of translating it, none would say it
- !* exclamation, asterisk severely ungrammatical sentence (speakers strongly reject the utterance)
- # hash at best marginally grammatical sentence, though inappropriate to the context that is presented, or more likely to be phrased in a more appropriate manner; perhaps judged ungrammatical by some speakers
- #/* hash + asterisk badly infelicitous sentence, bordering on the ungrammatical
- *(XY) asterisk outside brackets the sentence is ungrammatical unless the material inside the brackets is included
- (* XY) asterisk inside brackets the sentence is ungrammatical if the material inside the brackets is included; otherwise it is acceptable
- ?#, !#,( the same combinations that are found with the asterisk * are also used with the hash #; !# indicates that the sentence causes strong puzzlement to native speakers, for instance)

Glossing marks the morphological material present in the Skou example, not necessarily the category that is represented. As an example of the importance of this distinction, consider the following simple and unambiguous glossed clause:

(i) $Pe=w\text{-}wá pá.$

3SG.F=3SG.F-stand up house

‘She stood up in the house.’

In this example the clitic $pe=$ on the verb marks third person, singular number, and feminine gender unambiguously; no other combination of person, number, and gender features may be glossed by this morpheme, and so the gloss is unique and unproblematic. Further, the prefixal $w-$ is also unambiguous as a morphological representation for 3SG.F: it occurs on all 3SG.F verbs in the glottal paradigm, to which this $h$-initial verb belongs (see 7.2.2). As such, both
morphemes are glossed uniquely for their paradigms, and both unambiguously and maximally separately from any other morphemes.

In contrast to this, examine the paradigms for the verbs ‘eat’, ‘do’ and ‘go’, in their inflections for person, number and gender (for an explanation of the orthography, see 2.7).

Table i. The verbs ‘eat’, ‘do’ and ‘go’ (in orthography)

<table>
<thead>
<tr>
<th></th>
<th>'eat'</th>
<th></th>
<th>'do'</th>
<th></th>
<th>'go'</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>kang</td>
<td>nang</td>
<td>1</td>
<td>li</td>
<td>ti</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>mang</td>
<td>ang</td>
<td>2</td>
<td>pi</td>
<td>li</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>kang</td>
<td>tang</td>
<td>3</td>
<td>li</td>
<td>ti</td>
<td>3</td>
</tr>
<tr>
<td>3F</td>
<td>pang</td>
<td></td>
<td>3F</td>
<td>tue</td>
<td></td>
<td>3F</td>
</tr>
</tbody>
</table>

In the verb ‘eat’ the form [nang] is uniquely second person plural, but this is also the stem form of the verb (2PL is often the root of inflecting verbs in Skou). Since there is no morphological marker of 2PL, the verb is glossed as ‘eat’, not as ‘2PL-eat’ or ‘2PL:eat’. All of the other cells in the paradigm are prefixed, and all the different cells are indicated as prefixal: m-ang for mā, glossed as ‘2SG-eat’, n-ang for nā, glossed as ‘1PL-eat’, etc. Similarly, with ‘do’ the form [li] does not contain morphological material that indicates 1SG, 3SG.NF, 1PL or 2PL, the persons with which it appears, and so is glossed simply as ‘do’ for these persons, while the other pronominal inflections, which are unique ([pi], [tē] and [ti]) are each uniquely glossed. On the other hand the form [tē] in the inflections for ‘go’ has been glossed variously as ‘3SG.F.go’ and ‘3PL.go’, because in general the forms for third person feminine and third person plural are differentiated. The glossing is thus an immediate representation of the morphemes when these morphemes are regular, but is somewhat abstracted when they are irregular.

The same phonological string has been glossed in different ways when it clearly occurs in different paradigms. Consider the free prime pronouns, the genitive forms of the pronouns, and the dative forms (shown in orthography).

Table ii. The free pronouns, the genitive pronouns, and the dative pronouns

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>PL</th>
<th></th>
<th>SG</th>
<th>PL</th>
<th></th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>nì</td>
<td>ne</td>
<td>1</td>
<td>nì</td>
<td>nè</td>
<td>1</td>
<td>ne</td>
<td>ne</td>
</tr>
<tr>
<td>2</td>
<td>mè</td>
<td>e</td>
<td>2</td>
<td>mè</td>
<td>è</td>
<td>2</td>
<td>me</td>
<td>e</td>
</tr>
<tr>
<td>3</td>
<td>ke</td>
<td>te</td>
<td>3</td>
<td>ké</td>
<td>tè</td>
<td>3</td>
<td>ke</td>
<td>te</td>
</tr>
<tr>
<td>3F</td>
<td>pe</td>
<td></td>
<td>3F</td>
<td>pè</td>
<td></td>
<td>3F</td>
<td>pe</td>
<td></td>
</tr>
</tbody>
</table>

In these paradigms the form [nì] appears twice and is glossed separately as ‘1SG’ and ‘1SG.POSS’, respectively. The justification for the different glosses comes from the fact that the different forms are drawn from clearly different paradigms, which happen to show some syncretism across forms. Similarly, the form [ne] appears three times, and is glossed differently each time (‘1PL’, ‘1SG.DAT’, and ‘1PL.DAT’), though in this case a (weak) argument could be made for glossing the last two forms identically, supposing a collapse in the singular/non-singular category for the dative set. The lack of any other collapses makes this possibility less likely.

There is one point which is completely inconsistent with this other reasonably methodological approach to marking only the morphosyntactically motivated distinctions, and that concerns the glossing of the ergative-marking pronouns (see 6.3.2). These are
morphologically nothing more than the regular free pronouns, yet their function when used as summation pronouns is highly restricted, with them appearing only on the A of the clause. For this reason, even though they are morphologically identical to the regular free pronominal set, they are glossed with ‘ERG’.

The very fact that various ungrammatical sentences, or sentences of dubious acceptability, have been included in this grammar is a clear indication that, in addition to participant observation and the transcription of texts, the stock-in-trade of the field linguist, considerable use has also been made of direct elicitation. I make no apology for this; it is a fact of linguistic fieldwork that we, in the field, ask questions of our informants, and do not, except in the most monolingual of situations, simply work as auditory sponges. Given that I have this material, it seems a shame not to present it, and so help to delimit the grammar more thoroughly for the reader, making it both more inclusive and more useful.

In addition to the linguistic abbreviations and conventions, the following standard abbreviations for kinterms have sometimes been used in glossing, in order to reduce the space that glosses such as ‘mother’s.younger.sister’ for tóeúe would take up (compare with the succinct ‘MyZ’).

<table>
<thead>
<tr>
<th>F</th>
<th>father</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>mother</td>
</tr>
<tr>
<td>S</td>
<td>son</td>
</tr>
<tr>
<td>D</td>
<td>daughter</td>
</tr>
<tr>
<td>P</td>
<td>parent</td>
</tr>
<tr>
<td>C</td>
<td>child</td>
</tr>
<tr>
<td>B</td>
<td>brother</td>
</tr>
<tr>
<td>Z</td>
<td>sister</td>
</tr>
<tr>
<td>Si</td>
<td>sibling (either sex)</td>
</tr>
<tr>
<td>y</td>
<td>younger</td>
</tr>
<tr>
<td>e</td>
<td>elder</td>
</tr>
<tr>
<td>H</td>
<td>husband</td>
</tr>
<tr>
<td>W</td>
<td>wife</td>
</tr>
<tr>
<td>Sp</td>
<td>spouse</td>
</tr>
<tr>
<td>o</td>
<td>other’s</td>
</tr>
</tbody>
</table>

These terms apply iteratively left to right. This means that, for instance, hóeto is glossed as (PSiC)SpSi, to show that it refers to (without the brackets) a husband or wife’s brother or sister: spouse’s sibling, that is, brother or sister in law. An additional reading is that the term is used to refer to a cousin’s brother or sister in law: that is, a parent’s sibling’s child (= cousin)’s spouse’s sibling. There is (at least in my use of English kinterms) no term in English that could be used to express the cousin’s brother/sister in law relationship, and certainly none that could encompass both of the kin relationships that hóeto covers, both SpSi and PSiCSpSi. Where the context of an utterance made the reference clear, a kinterm has occasionally been glossed simply with an English translation, if that is exact enough to not mangle the Skou divisions too much. Thus hóeto is also found in this book glossed and translated as ‘brother in law’.

Updates

While I have tried to be as thorough as possible in checking through things, it is more than likely that some corrections to this text will need to be made, hopefully just typographical but perhaps factual as well. Fallibility is all too often my forte. Such errors of fact, typing, and analysis that become known to me will be able to be found as http://www.donohue.cc (and then follow the links to academic, and languages, to find the Skou pages), which in an ideal world will be updated regularly. Any suggestions or corrections will be gratefully received at the email address listed on the Skou page mentioned above, where I hope to continue to make available other materials, both primary and secondary, on this most interesting language.
Acknowledgments

I had been inspired to work on Skou ever since reading Bert Voorhoeve’s notes in his 1975 survey of the languages of Irian Jaya (*Languages of Irian Jaya*), and then finding the more detailed notes on the language in his 1971 article. Before first meeting Skou speakers I had had numerous occasions to marvel at the accuracy of what appear to the uninitiated to be throw-away lines of Bert’s with regard to other languages that I had since come into contact with. Time and time again the apparently effortlessly produced comments on aspects of the grammar of one language or the other prove, decades later and following much more research revealing far more data than was available to Bert, to be completely accurate summations of the language structure. Therefore, for having started the ball rolling, first thanks are due to Bert Voorhoeve, who also looked out for me on numerous occasions, and who continues to inspire me.

Why Skou? Well, my first brush with linguistics, and then later more certain coat of paint, came from Phil Rose, and his fascination with tone and tonal systems has to at least some extent rubbed off on me, to the extent that non-tonal work of mine has always left me feeling somewhat guilty. This, or at least the parts of it that deal with tone, might make up in some way for my meanderings into other areas of linguistics.

Malcolm Ross kindly lent me a tape of himself and two Dumo speakers in an elicitation session. To so generously aid someone who you have not (at that stage) even met, and to trust your recordings, full of their own idiosyncrasies, to a stranger, speaks volumes about Malcolm’s scholarliness and well-placed assurance in his research methodology. Thank you, for that introduction to the languages of New Guinea (the Skou family, no less), for an example in scholarly cooperation, and for much more later on. I hope that the prose in this book pays back in some way the many (many!) hours you have slaved over my impenetrable prose in another book.

My earlier description of Tukang Besi, an Austronesian language of central Indonesia (*A Grammar of Tukang Besi*, Mouton de Gruyter 1999b), provided me with training in grammar-writing, and, as any reader of both that book and this will easily see, has strongly influenced the organisation of this book. This was not intentional, but it seemed the best way, to me, to present the data. I’m not sure if that means that I’m stuck in a rut, or that it really is a good way to present data and argue for interpretation. I should note that the fact that this book has nineteen chapters, and not twenty, annoys me somewhat, but perhaps points to a willingness to let at least some aspects of the language’s structure to dictate the manner of its presentation, and to not force the language to conform. In any case, the points at which this book is organised differently to that one are about 50% a result of the structure of the language dictating the change, and 50% the result of me becoming spooked by the overly-similar organisation in the table of organisation, and changing it just for the sake of change. I’ve noticed, glancing over the table of contents, that I am more willing to more thoroughly investigate, and report on, the lexicon, and to acknowledge that the lexicon, a source (by definition) of irregularities in language, quite happily ruins generalisations and regularities that the language otherwise follows quite well. I seem to be progressing.

My first trip to a Skou village took place at the invitation of Dwight Hartzler, who also put together a mean curried egg sandwich. While I gained more mud than linguistic insight on that day (not *entirely* his fault), glancing back over the fairly random notes that I made I can see...
early signs of my confusion about many things that confuse me still. Dwight and Margaret Hartzler have also both provided company and friendship over the years.

More generally:

An anonymous Kamoro man in Fakfak first provided tonal minimal pairs for me in a New Guinea context. It excited me no end, to know that these things really went on in this part of the world, and to hear them with my own ears.

Duane and Heljä Clouse provided me with my first systematic listen to the tones of a seriously tonal language from New Guinea, Kirikiri. That probably set me back at least a year in starting my own work on a tonal language, so scary was the experience.

Mike Moxness provided a sane voice of moderation, in the tradition that Chuck Grimes first taught me, to remember that people speak the language, and that they don’t really care that there’s a linguist interested in their grammar. Wise counsel. I think linguistics would be a stronger field if more people would remember this simple advice.

Dave and Tammy Price have done their best, often successfully, to distract me from doing the work that I needed to get this finished. Thank you. I’m sure that this book will not in the least distract them at all.

Naturally, the Skou people, who have helped me in many different ways, deserve the greatest thanks. While the following list is far from a complete, I should definitely mention:

Loisa Mallo Hanasbey was the first person to sit down with me and spend many an hour elaborating, with patience greater than I believe I would have exhibited had our positions been reversed, about what seemed so natural to her, and so hard for this ke bà ùeli to comprehend. She encouraged me to go to Skou on my own while I was still feeling nervous about it. She also had some of the most sensible things to say about the way I was writing words down, often expressing amazement that I could get it so wrong, and offered not only her time and that of her family, but also her philosophy and kindness.

The Kemo family has always been generous in Skou-Mabo, helping me with food and accommodation, encouragement, introductions, friendship and linguistic data. Special note should be made of Gideon and Theo, who despite frequent exasperation kept at it.

The Mallo clan have always been welcoming, and encouraging me in language use, even when I didn’t really want to. I’ve benefited greatly from their presence. Alfius particularly has been a calm companion, and a smooth informant on many a wander.

Various members of the Rollo clan have made sure that I didn’t get too stuck on that Skou-Mabo dialect; I can mention Seppy (and Mike), Abraham, and Abisai in particular, but this list is by no means exhaustive. I’m sorry I still haven’t mastered the Skou-Yambe tones, but I appreciate the efforts you’ve made.

To my delight, as I was starting work on this grammar over an unhurried span of a few years (thanks in large part to the generous terms of a postdoctoral fellowship at the stimulating environment of the University of Sydney), first Doug Marmion and then Andrew Ingram have come to work on languages closely related to Skou, Wutung and Dumo (see 1.4). I doubt whether anyone else is likely to read this grammar with quite the same personal interest or
professional scrutiny that they will, and I’m glad that there are, and will be, other people with a linguistic interest in this small but lovely part of the world. Slightly further afield, but still genetically related, Lila San Roque, Miriam Corris, Lea Brown and Matthew Dryer have experienced what it is to be immersed in a tone language with all manner of phonological (and other) oddities on the north coast of New Guinea. They’re my first audience. Enjoy, guys. As I finish this grammar, writing now institutionally from Monash University, I can already see that some of the conclusions contained in this volume are in need of revision, based on the results that have appeared from these other researchers. But that’s research…

Bápáne nì ne nawò e loe la yano nì ne e loe, ya héfèng e weleng nì!
Pictures

The following pictures give some visual idea of the Skou villages and their inhabitants.

*Picture 1.* Tangwáto (Tanjung Jar, Tanjung Hol) cape, the western border of Skou lands, seen in the east from Skylen, between Entrop and Abepura. Behind *Tangwáto* the slopes of Mt. Bougainville, just over the border in Papua New Guinea and part of Wutung village’s lands, can be seen. The foreground shows Tobati (on the left) and Enggros (on the right), Austronesian-speaking villages in Yotefa Bay, with which Skou has many marriage connections.

*Picture 2.* The foreground shows *Tangwáto* prominent against the silhouette of Mt. Bougainville in the background, together defining the borders on the west and the east sides of Skou land.
Picture 3. The stretch of beach east of Tangwáto where the three Skou villages are found. The mountains on the horizon are the border with PNG, while the low hills that form an extension of Tangwáto are the mythical homelands of the Skou people.

Picture 4. Skou Sai village (Te Bapúbi), the easternmost and smallest of the Skou villages, from the air.
Picture 5. Skou Mabo village (*Te Máwo*), central Skou village. The way to the road that runs from Jayapura to the border can be seen in the top of the picture.

Picture 6. Alfius Mallo pointing the way to Skou Yambe, for reasons unknown. The GKI church in the background has the best display of traditional carvings in the area.
*Picture 7.* Skou Yambe village (*Te Tángpe*) from the air. The most populous Skou village.

*Picture 8.* A canoe house on the beach between Skou Sai and Skou Mabo. These houses are built for canoes receiving repair work or final building.
Picture 9. Skou Mabo man and his two daughters, in their best clothes, on the beach in the morning.

Picture 10. The coast stretching west from Skou Mabo, with Tangwáto in the background behind the spray.
*Picture 11.* The start of the white cliffs on the northern side of *Tangwáto*, west of Skou Yambe.

Dedication

This book is dedicated to Loisa Mallo Hanasbey, who peacefully passed away in prayer on April 17th 2003. Without doubt most of what I have learned of the Skou language has come from her, though she never felt constrained to limit herself to instructing me just about the language.

*Picture 13.* Loisa Mallo Hanasbey, valued Skou informant and friend.
1 Introduction

This book presents a description of the grammar of the Skou language, with at least basic coverage of most other ‘core’ parts of the grammar, and more detailed coverage of selected topics. It cannot do equal justice to the entire range of grammatical systems found in the language, nor, in all likelihood, cover all aspects of those systems that are described here. It does, however, describe some of the salient features that can be found in the language, which represents a previously under-known part of the linguistic world, and has much of interest for linguistics. While many of my own interests are reflected in these pages more adequately and in more detail than other aspects of linguistic research, which are no less worthy of attention, this reflects my shortcomings rather than any lack of interesting data and problems from the language.

Map 1. The Skou area in New Guinea (see maps 2 and 3)

The language described here as Skou, and which has been referred to in the linguistics literature as Sko, Skou, Sakou, and Tumawo, is referred to locally as *Te Máwo pilang nè ne* (`Our, the Mabo people’s, language`). Skou is related to other languages in the Western Skou family of which it is the westernmost member. The language family stretches across the north coast of New Guinea, past Vanimo to Leitre (More distant relations can be established with other members of the Macro-Skou family, including but not confined to the previously-reported Krisa, Rawo, Puari, and Warapu [= Barupu], albeit in a substantially different arrangement to Laycock’s (1973, 1975) arrangement. See 1.2). The language is spoken with minimal dialectal variation by the inhabitants of three villages, Skou Yambe, Skou Mabo and Skou Sai, in the centre of the north coast of New Guinea (in the province of Papua, formerly Irian Jaya; see
The general location of Skou, and the other languages closely related to it, is shown in Map 1. The three villages start immediately above the high-water mark on the beaches that form their northern borders, though in all cases traditional land runs some way inland. To the west the Skou village lands are naturally enclosed by the cliffs of the cape that is known locally as Tangwáto pípong, in Indonesian as Tanjung Jar (or Tanjung Hol). To the east the Tami river forms another natural division between the Skou and their eastern neighbours who now all live in Wutung. This same river formed the border to the south, but to the south-west the ownership of land was a source of ongoing dispute between the Skou and the Elseng people, until the 1980s when the Indonesian government turned the flatlands there into a transmigration zone, and requisitioned all the land, making the issue of land ownership academic. The only uplands in the area are the hills that lead to Tangwáto pípong, where there are no settlements or gardens, but where some Skou Yambe people do occasionally go on hunting trips. These hills are quite steep, and from the northern side, on which the Skou villages are situated, they rise for the most parts in sheer limestone cliffs from a narrow coastal strip, which is fairly intensively farmed. Where these hills slope down to the level of the surrounding flat forest lands, south of Skou Mabo, the land is left more in its natural (semi-cultivated) state, with less gardening and more land left for wild sago, other forest greens, and hunting and gathering practices.

There are approximately 700 members of the ethnic group that speaks the language, almost exclusively in these three villages. Although the name Te Máwo pílang nè ne is used by speakers to refer to their own language when speaking it, whether they are from Skou Mabo or from one of the other villages, it has not been used here. One of the main reasons for this is the fact that the name Skou is judged to be an acceptable designator for their ethnic group, and has come to be recognised as the ‘official’ (= Indonesian governmental) way to refer to their language, and the normal way to refer to the language when talking to outsiders. The name Sökou is the name traditionally used in Tobati and Enggros, the western neighbours of Skou, to refer to the language, though the 1968 Capita selecta Propinsi Irian Barat does not list Skou as an ethnic group, listing only Nafri, Tobati, Sentani, Ormu, Noi (= Nyao?) and Tanah Merah as sukus (ethnic groups) in Djajapura (= Jayapura) subdistrict (kecamatan). Cheesman, writing of the main Skou village (1938: 71) records that

This is spelt Sko on some maps when it is marked at all, but has always been pronounced Seko and is so spelt [sic] on the Boundary Commission map of the district.

The spelling Skou has become (along with Skow and occasionally Skouw, showing modern pseudo-Dutch influence) the ‘standard’ spelling of this word in Indonesia, though linguistic references to the language, such as they were, changed to Sko in a rather half-hearted fashion after 1971. I shall refer to the language as Skou, following a compromise between earlier linguistic and anecdotal references to the language group and speaker preference, and with the aim of avoiding the unnecessary propagation of new language names in a region (New Guinea) that already has more than its fair share of languages (and so represents an already unfair memory load on the part of researchers). I shall retain the older spelling Skou, rather than Sko, reflecting the diphthongal pronunciation of the name in its homeland, [sɵkow].

The materials presented here were collected by the author in the period 1998-2003, mainly from people in Skou-Mabo and Skou-Yambe or from people from these villages living in Abepura, while working on various literacy and cultural projects based in those villages (and others further afield in the province). The materials were mainly collected from people in their
30s and above, but the speech of those in their teens and 20s, if they were frequent Skou
speakers, was also listened to, recorded, and taken into account in the preparation of this
grammar. During the years I have been working on this grammar my attention was not solely
focussed on Skou, due to other linguistic commitments and to the reasonably frequent military
interdictions on travel to the villages imposed by the Indonesian government, which prevented
access to many speakers at different times and which forced the end of my work with Skou
villagers in 2003. The materials reported here represent the speech of conservative Skou people
from all three Skou villages, which have been known to evidence some minor phonetic and
lexical variation, though I have not observed any consistent differences in grammatical
judgements or grammatical structures based on the different villages. The unstarred sentences
presented in this description can be accurately taken to be acceptable to all speakers with an
active command of the language (though stylistic variation abounds), and those marked with a
star or some other indicator of less-than-unquestioned grammaticality can be assumed to have
that judgement from most speakers, from all villages, at most times of the day.

This introductory chapter will present some basic social, historical and geographic
information about the Skou area, and some comparative and regional information about the
linguistic state of the language. The end of this chapter is a summary of the basic typological
profile of Skou, with reference to following chapters in which the various points raised here are
explored in more detail.

1.1 The Skou language

The Skou people are socially isolated in Papua (formerly Irian Jaya) by two factors. Firstly,
they are the only member of their linguistic family in the country (all other linguistic relatives are
now in Papua New Guinea, since the inhabitants of Sangke, Nyao Nemo and Nyao Kofro
moved across the border en masse to present-day Nyao in early 1969, following the Indonesian
takeover of the province). This has ensured that, socially, they are somewhat apart from their
neighbours. Secondly, their language is typologically very different to the languages (outside
the Skou family, with whom contact is now curtailed) spoken by other people with whom they
have frequent contact, namely Elseng, Sentani, Nafri, Tobati, and Malay/Indonesian. These
factors, both social isolation and linguistic non-conformity, have led to widespread esoterogeny
(Thurston 1982, 1987, 1989) on the one hand, and also to widespread borrowing and
adaptation, on the other, in the twin efforts to assert their distinctive identity, and to fit in with
their changing social milieu. There is evidence that the language has been (perhaps deliberately)
complicated by speakers in the recent past, possibly in an effort to maintain and assert their
separate ethnic identity through their linguistic distinctiveness (see 1.3). There are also good
grounds for believing that many of the historical changes that have ultimately resulted in the
language being the way it is today are the result of adaptations to local areal norms in the
Humboldt Bay region, and subsequent compensations of those changes.
Some of the salient points of difference between Skou and its genetically distinct, but geographically close neighbours in Humboldt Bay and its hinterland are shown in table 1.1 Here we can see that while word order in Skou is not so divergent from its neighbours, all the languages in the area (with the marked exception of Tobati) conforming to the APV/SV order that is typical of languages in the New Guinea area. The use of verbal prefixes, rather than suffixes, marks Skou as distinct from most of the other languages in the area, and both these features are different to the settings in Indonesian, the national language (and its local variety Papuan Malay). While it is true that prefixes on verbs are also found in Elseng and Tobati, their presence in Skou is still regarded as an exotic feature: Elseng is a language with little or no prominence, and Tobati is widely regarded as bizarre and unlearnable by people in the Jayapura area, mainly due to its unusual segments, including [$D$] and [$H$] (Donohue 2002). (In the Jayapura area the language is commonly jokingly referred to as Bahasa Inggeris, a double play on the name of the second Tobati speaking village, Enggros, and the [$D$] sounds.) The optional ergative marking in Skou is typologically aberrant in the area, where case systems if present have an accusative, not an ergative, alignment. Most of all the presence of tonal distinctions and front rounded vowels is an immediately salient idiosyncrasy that sets the language apart from the others spoken near Jayapura. Another major phonological difference is the lack of an /s/ phoneme (or allophone) in Skou; all the other languages have at least an allophonic [s], but Skou lacks even this, traditionally substituting an /r/ in loan words involving an [s] (more recent loans are unassimilated).

It is equally instructive to examine the differences between Skou and its genetically related neighbours in the Skou family, all of which are found across the border in Papua New Guinea. From this perspective we can see the amount of areal adaptation that Skou has undergone. The appearance of a semi-regular case marker for the ergative argument is not found elsewhere in the family, and represents a Humboldt Bay feature. The presence of an [r], and the lack of any consonant clusters is unusual in the family, though Leitre too has reduced its historical CC onsets. The presence of two contrastive non-back vowels is unique in the family, as is the lack

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2 Though see 7.2.2.1.
of a distinction between a more open and a more close mid vowel, both front and back (that is, the distinction between $\varepsilon : \varepsilon$ and $\alpha : \alpha$, found in all other Skou languages, is not maintained in Skou itself, where the open and closed varieties are present as allophones of the phonemes $/e/\,$ and $/o/\,$). Finally, the presence of a gender system is not typical of the family, though in this case it is a retention from the proto-system, rather than an adaptation to Humboldt Bay norms.

### Table 2. Some typological differences between Skou family languages

<table>
<thead>
<tr>
<th></th>
<th>V morph.</th>
<th>NP case?</th>
<th>liquids</th>
<th>clusters?</th>
<th>vowels?</th>
<th>Gender?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skou</td>
<td>s=s-V/o</td>
<td>(ERG)</td>
<td>r, l</td>
<td>–</td>
<td>7, (u, φ)</td>
<td>fem, n-fem</td>
</tr>
<tr>
<td>Nyao</td>
<td>s-V(/o)</td>
<td>–</td>
<td>r</td>
<td>some</td>
<td>8 (ø, ε, o)</td>
<td>–</td>
</tr>
<tr>
<td>Wutung</td>
<td>s-V</td>
<td>–</td>
<td>l</td>
<td>many</td>
<td>8 (ø, ε, o)</td>
<td>–</td>
</tr>
<tr>
<td>Dumo</td>
<td>s-V</td>
<td>–</td>
<td>1 ([$r$])</td>
<td>some</td>
<td>8 (ø, ε, o)</td>
<td>–</td>
</tr>
<tr>
<td>Dusur</td>
<td>s-V</td>
<td>–</td>
<td>l</td>
<td>some</td>
<td>8 (ø, ε, o)</td>
<td>–</td>
</tr>
<tr>
<td>Leitre</td>
<td>s-V(/o)</td>
<td>–</td>
<td>1 ([$r$])</td>
<td>–</td>
<td>7 (ε, o)</td>
<td>–</td>
</tr>
</tbody>
</table>

We shall return to the comparison of Skou with the languages with which it abuts in sections 1.4, 1.5 and 1.7, following an introduction to the social and historical context of the villages.

### 1.2 The turns of history

Most of the history of the Skou people is not recorded, but can be gleaned from oral histories of the clans, accounts of their interaction with neighbours, these neighbours’ accounts of the Skou people, and a comparison of the linguistic data obtained for a wide area of north-central New Guinea. Since the advent of the Dutch colonial period, and later other outside influences, in the area there has been some account, albeit intermittent and incomplete, of the Skou people in a written form.

Judging from what we can reconstruct of the unwritten history of the area, it is most likely that the Skou cultural group is not originally a coastal one. There is ample evidence to support the hypothesis that the modern dwellers of Skou Yambe, Skou Mabo and Skou Sai represent at least in part the descendants of a people who moved down the Tami river from the hinterland, somewhere on or east of the Papua New Guinea border. All clan histories in Skou relate either that their ancestors came from the mountains to the south-east, or else that they are more recent clans that have arrived from neighbouring groups along the coast to the west or to the east. The hypothesis in full can been seen in Donohue and Crowther (2000), and runs as follows, as relevant to the Skou area:

- speakers of proto-Macro Skou (see figure 2, 1.4) lived along the middle Pual river area in Papua New Guinea;
- disrupted by the intrusion of people ancestral to the modern Bewani, Mbo and Ningera languages they moved away from this region, towards hills to the north and east
- of those that moved north, one branch, the ancestors of speakers of Skou family languages (see figure 1, 1.4) moved north and west, arriving at the area now marked by the junction of the Papua New Guinea border and the Tami River’s eastern tributary, near modern Nyao
• these people largely moved down the river to the coast, arriving just east of the modern Skou villages; the majority of the people subsequently moved east along the coast (see Map 3), but the Skou people stayed behind on the beaches west of the Tami

Once established along the coast west of the Tami river the Skou people started to engage strongly with the Austronesian populations of the Humboldt Bay region, notably the Tobati/Enggros people of toβwadzić and ipijros villages in Yotefa Bay (Tobati and Enggros are the accepted, and acceptable, Indonesian versions of the names; in Skou the villages in question are known as Te Pa and Te Palong, referring to their locations in Yotefa Bay), and to a lesser extent with the inhabitants of the inner bay at Jayapura, the Kayu Pulau (known as Te Mélong in Skou) and Kayu Batu (Te Purà), and further west the Ormu people (Te Làng). These connections are maintained to the present day, striking only in contrast to the comparative paucity of social interaction with the Elseng, Nafri (Te Téme) and Sentani (Te Húng) people, who also adjoin the Skou lands. This probably reflects the common origin of the Austronesians and the Skou as outsiders: the Elseng and Sentani are all ‘bush’ peoples with interior connections, and the Nafri are related to the interior Sentani. The Austronesians are all immigrants from the east, back-migrants from the great Oceanic spread that passed this region of New Guinea 3,000 years earlier (Bellwood 1985). The Skou, too, are not indigenous to the area, though they have much closer roots. This commonality means that they share the lack of substantial land-holdings, certainly a lack of undisputed land holdings, and an orientation towards the sea. The Oceanic dwellers of Humboldt Bay have a long history of sea-faring, while the Skou had to learn this after their arrival at the coast. The traditional canoes of the Skou area, remarked on by Laycock (1975), and Friederici (1912), and also found traditionally as far east as Warapu (Thomas 1942, Friederici 1912) are in fact a copying of the sea canoes of Ormu, an Austronesian group. The Elseng, Nafri and Sentani, by contrast, represented rivals for land and for hunting grounds, and practitioners of the same interior, ‘bush’ culture that the Skou already knew, and so were less of a source of environmental knowledge, and more of a source of rivalry.

The first major contact that the Skou people had with a non-Papuan culture in recent times probably came with the arrival of the first ‘Malay’ bird-of-paradise traders in the region in the late 1800s (Swadling 1996) (‘Malay’ in quotes because these traders probably represent a wide variety of ethnic groups from across eastern Indonesia). The bird-of-paradise trade preceded the European colonial parcelling of the island, and preceded organised administration of the region. Malay traders extended at least as far as Lumi district in Sandaun Province, Papua New Guinea, where the name malai is still remembered by the One inhabitants of Kabore district (see Seiter for further references on the extent of the bird of paradise trade in New Guinea). The impact that this irregular contact had on the Skou cannot easily be judged, since there are no historical records and little in the way of oral histories of the period. Some evidence can be taken from the fact that the variety of Malay spoken by Skou people is distinctly non-standard, and so, along with other varieties of non-standard Malay spoken on the north coast, probably represents a linguistic tradition that extends back to before the Dutch presence in New Guinea. Some loan words, such as rabáká ‘tobacco’, < general New Guinea sabaka, ultimately related to tobacco, show a donor-language with an s borrowed as an r, one of the regular reflexes of proto-Skou

3 In Skou pa is ‘water’, and palong is, literally, a ‘hole to the water’; Enggros is found right at the narrow mouth of the bay, and Tobati further inside.
*s in Skou (see Laba 1996 for further discussion of the distribution of ‘tobacco’ words in New Guinea). This is in contrast to more recent loans, such as nasi ‘rice’, which survive with the [s] intact. Other early linguistic influence includes such words as the traditional designation for rice, rámángku, literally ‘ant (species)’s eggs’, a common calque for this new foodstuff in New Guinea. The fact that one of the two names for Indonesians, Te Táng, literally ‘those bird people’, refers to this early bird of paradise trading shows that there was no significant earlier contact with western Indonesians. (The other name in use for Indonesians, Te Tútú, ‘those whites’, suggests that contact with non-Papuans was with Indonesians before Europeans, who are known as Te Bà Ùeli ‘those reds’, presumably referring to the typically sunburnt skin of the Dutch colonial authorities.)

The establishment of a Dutch presence in Hollandia, later to be popularly known as Jayapura and known to the Skou people as Nofé (and briefly known as Port Numbay to its residents in the late 1990s), in 1909 began slowly, and did not disrupt the local socio-political life in any sudden way. The Pax Nederlandica had little affect on the Skou area, as they had in any event enjoyed in the main peaceful relations with the villages around them, in contrast to the struggles that went on in the Àbi Abepura and Te Húng Sentani areas.

Cheesman (1949) presents an independent and spirited account of an English naturalist travelling through the area shortly before the Second World War. Cheesman, along with, it seems, scores of nameless and rarely thanked porters, travelled through the Skou village area on her collecting tour of the north coast of New Guinea. She reported (1949: 205) that

There are three distinct villages of Seko, Sko-jambi, which has a mongrel population (their neighbours call this village Kanaka), Seko-mamba near by, and Seko-saii, which is some distance away.

Cheesman goes on to explain the problems that the Skou villagers had with their Ambonese missionary, and the clash of cultures that frequently arises when the condescending outsider tried to assert his exclusive world-view on the locals, a view that was not backed up by the Dutch controleur for Hollandia district. (Such disputes between poorly-educated evangelists and local villagers are common to this day in parts of interior Papua.) She reports (1938: 272) that there was a government post-house in Skou, and when she visited noted that ‘there were several Malays and Chinese traders already lodging there that night.’, indicating that the proximity of Hollandia was having an effect on the type and quantity of non-local goods available in the villages, and that some sort of trade

The advent of the Second World War and the arrival of an occupying Japanese force in West Nieuw Guinea did little to change the life of the Skou people. Unlike other parts of eastern Indonesia, which suffered greatly under the Japanese occupation, the Japanese presence in Skou was limited in numbers, and was both accepted by the local population and accepting of their lifestyle. Older Skou people report that the Japanese garrison in Skou Mabo lived in the same houses as native Skou people and went on fishing and hunting trips with their hosts, all in a for the most part convivial spirit. No Japanese person is claimed to have learned any of the language. The only major impact of this period was the building of an airstrip at the area known as Skou Yo, behind the current kecamatan office on the main road south of Skou Mabo. This was a labour that occupied many of the residents for a number of months, clearing a substantial area of what was then dense bush and elephant grass (the clearing efforts were highly successful, and it remains partially clear to this day, sixty years later). It also involved a change in the relations between the Skou people and the Japanese, who became much more demanding,
and strict about work targets. The airstrip was only more than a source of hard work when the first plane arrived: nothing that their Japanese friends had said prepared the Skou people for the experience of a plane landing right next to them, and many fled into the bush never to be seen again. Some of these settled permanently with the Te Húele Nyao (also known as ‘Niŋкра’, Nikra’, Sangke) people, and some died in the jungle. Those that remained were due for another shock when the advancing American forces bombed the area in order to destroy the airstrip. While these appears to have inflicted only limited casualties on the Papuans (one elderly couple from Skou Yambe who were preparing lunch were killed, while everyone else had fled to the bush at the approach of the planes), it was a cause for great shock and was devastating for the material possessions of the villages.

The arrival of the American forces under General Macarthur caused a great stir in the region. Macarthur temporarily created a huge military base out of nothing in the hills north of Lake Sentani, and changed the views forever of the people who came into contact with the American war effort about what was possible in their world. Rather than being remembered for their military abilities, or the sheer numbers of people involved in the war effort, it is the material that was imported into the region by the Americans that has formed an enduring myth. By all accounts prodigious quantities of food, jeeps, clothing and other supplies were shipped, flown, and in some cases parachuted in to the area, to the astonishment and delight of the locals. This brush with abundance certainly changed the mindset of many of the now older generation, and probably is partly responsible for much of the discontent about the present Indonesian administration, in that it showed early on the possibilities for ‘development’ in the area, which contrast sharply with the observed reality of ‘development’ under the imposed government. The fact that the very cargo cult-like hyperabundance of the Macarthur era was not a sustainable one, as shown by the levels of development under the Dutch preceding the war and in the 1950s following the war, does not enter into consideration.

Following the end of World War II the American occupation blends in to a brief period of Dutch reoccupation (1945-1961) before the arrival of the Indonesian armed forces. This period is remembered as being the time of the [űn], a reference to the United Nations (UN). The abundance of the American occupation continued, with Holland pouring in much (belated) attention to what was now the only jewel in its colonial crown. This period saw the initiation of a lot of development projects that endure to this day, such as the construction of the Jayapura hospital, and perhaps even more importantly the training of many locals (more from Biak than from the Jayapura region) in administration and other skills that were to be necessary for a potentially independent land. Holland could only too well read the signs, and saw that the colonial age was by and large coming to an end. Still smarting from the revolution in Java that had accompanied the defeated Japanese forces ‘granting’ independence to the ‘Indonesians’, Holland was determined to ‘save’ West Nieuw Guinea from the same fate, integration with the growing Javanese empire, that had fallen on the other West Indies islands of their former colony. Were it not for the unofficial policy of appeasement of non-communist countries, and resulting UN inaction when the terms of the UN mandate were so blatantly disregarded by the

4 Niŋкра / Nikra is a Papuan Malay term used in the north-eastern part of the province for the sorcerous people of the Pual valley (modern Ningera, Ossima, Osol, Ilol, Imbiyo, Bewani and outlying areas), and which is also applied to the Nyao people because of their sorcerous practices. Sangke is the name of one minor clan from Nyao, but one that had many dealings with the Skou villages.

5 See texts 15 and 16 in Appendix 4 for Skou views on the Americans in the 1940s.
Indonesian armed forces, there is every likelihood that an independent state might have resulted from this period of intense development of infrastructure and training, though how viable it might have been cannot be known. As it is, in 1961 the Dutch were evicted from the island, and the period of plenty that is so fondly remembered came to an abrupt close. The period of the 1950s is beautifully documented in the journals *Tijdschrift Nieuw Guinea* and, more academically, *Nieuw Guinea Studiën*. The former journal presents an optimistic and clearly romanticised view of the relations between the Dutch colonial overseers and their colonial subjects, and presents a vision of what might have been in the former colony. The latter journal gives a more realistic picture of some of the difficulties facing the integration of West Nieuw Guinea into a modern internationalist economy.

The year 1961 saw the western half of the island of New Guinea taken over by the armed forces of the Republic of Indonesia, and the incorporation of West Nieuw Guinea into that republic under the name *Irian Barat* (later *Irian Jaya*, currently *Papua*). This development has by all accounts brought about a series of quite drastic changes, some positive and some negative. On the positive side, the Skou villages are now connected by a sealed road to the rest of the area occupied by Skou languages, whereas before the only track connecting the two political entities ran inland to New Moso (now known as Nyao), and was not so negotiable:

The road is distinct nearly all the way, only at one point did we lose it and the whole party was obliged to spread out in all directions till it was picked up again.
It was not really lost, but continued along an immense, fallen trunk in long grass for over a hundred feet, and that was overlooked at first. (Cheesman 1938: 77)

It is intermittently more easy for a person in one of the villages to visit relatives who have moved away, through marriage, or to go shopping in town. The road extends as far as the border with Papua New Guinea, and thus also facilitates travel to Wutung for traditional reasons, and travel from Wutung. Previously all travel to other villages was by boat, but with a sealed road and thrice-daily bus services to town, that is much changed, since boat travel across the border is now prohibited. The land crossing of the border has made it more possible to travel easily across the border, though bureaucratic requirements for this crossing are constantly changing (including, often, a requirement that people obtain permission in Jayapura before returning to Skou, and then on to the border). The degree to which the border is open depends on the amount of military activity there is on the part of the OPM (*Organisasi Papua Merdeka*, the freedom fighters of west New Guinea) and the Indonesian army.

The diet of the Skou people has changed, in the main for the better, as a result of the Indonesian arrival. A much greater variety of vegetables are now cultivated in the gardens, providing a more varied crop, important in times of uncertain harvests, and also a more varied nutritional intake for people. This has, from all accounts, resulted in a great decrease in disease relating to vitamin deficiency. The downside has been the drop in hunting opportunities that has come about as the result of encroachment on Skou land from settlers in Koya (see 1.3), and a growing reliance on store-bought foods reduces their earlier self-sufficiency, and means that more of the diet is composed of food with little nutritional content.6

Another change that has accompanied the Indonesian government’s assumption of administrative control of the Skou area has been a sharp decrease in the number of traditional contacts with the Wutung people across the border, due to stricter policies and policing of border crossings. Skou Mabo now has a permanent police and army presence, as well as other

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6 Despite the printed assurances of the Indonesian Department of Health.
administrative functionaries that ‘work’ in the kecamatan (sub-district) of Muara Tami (Tami River Estuary), whose sub-district administration building lies at the junction of the border road and the road that leads to Skou Mabo and Skou Yambe. This influx of outsiders, who have no familial associations with the locals and so do not feel obliged to adapt to local customs, has led to a sharp increase in the use of Indonesian/Papuan Malay in the village. This has advanced to the extent that it is unlikely that a casual visitor will hear any Skou spoken: almost all members of the villages, the only exceptions being some particularly old men and especially women, are competently bilingual. Even a long-term stayer will not hear Skou spoken by any school-age children who attend school at either the primary school in Skou Mabo or a high school in Koya or Abepura.

Despite this wholesale influx of Indonesian and Malay, the prospect for Skou as a language continuing into the near future, at least, is not all grim (contrary to the conclusions in Donohue and Hartzler 1998). Although children attending school do not speak the language, it is apparent that they do understand it, as they are frequently addressed in it by their parents and other elders. Indonesian, while the main language of the school-attending cohort in the village, appears to be, perversely, an ‘insider language’, actively used in opposition to the language of the village to establish the identity of the teenagers. The fact that Indonesian is also used by the older people who travel to the markets in Abepura and Jayapura seems not to be a problem in its being appropriated by another age group for another purpose. The health of Skou, even when not spoken, can be gauged by the fact that on leaving school these same teenagers are suddenly speakers of Skou, even if only a few months have passed since their Junior High School (Sekolah Menengah Pertama) exams. This reflects their status now not as wards of the state educational system, immune from prosecution for any violations of village conduct because of their requirement to fulfil governmental requirements, but as members of the village community. As such, in the absence of any significant employment for Papuan school graduates, now adopt a more traditional lifestyle, including gardening, hunting, fishing, and speaking the language of their ancestors. This pattern of sociolinguistic comeback in each generation is not unique to the Skou, but has been observed by this writer elsewhere along the North New Guinea coast, on Yapen island (in both Ansus and Saweru), and in Warembori (Donohue 1999e). Janet Bateman (pc) reports a similar sociolinguistic environment amongst the Iau of the western Lakes Plains, a more traditional society. Amongst the Iau young people below marriageable age (which corresponds roughly to the age that Skou teenagers graduate from Junior High School, roughly 14-15 years old) are not traditionally expected to fit into the highly prescriptive sets of rules and behavioural regulations that characterise society on the Van Daalen river. They are permitted a significant degree of freedom, including that of the language they use, which is denied more ‘grown’ adults. Youngsters in Korodesi commonly speak in Elopí, a trade language of the lower Tariku river, at least as commonly as they speak Iau, but on reaching societal maturity they make the transition to being mainly Iau speakers, and Iau is no more an endangered language than is English.

1.3 The Skou ethnic group

Skou people are found natively in only three villages, west to east Te Tángpe Skou Yambe, Te Máwo Skou Mabo and Te Bápúbí Skou Sai. The earliest Dutch reports (eg. Verslag 1920) report the same three villages, in locations that are practically identical to their modern ones. The only recent movement that is known happened in the Second World War, when large numbers of Skou people moved up the Tami and Moso rivers. Those that did not marry into the Nyao
village there later returned to the original villages. While close to each other, each village has a different ‘character’, and a slightly different variety of speech. They are linguistically unrelated to their southern and western neighbours, but do share frequent marriage links with the Austronesian speakers of Tobati, Enggros and Ormu. The Skou do share a common history and sense of ethnic identity with their neighbours to the east along the coast, most particularly *Te Óeti* Wutung and *(Te)* Jáwung Nyao. This connection was noted early on in the history of research in North New Guinea, probably because of the ease of transport along the coast, and hence the ease of quickly investigating and comparing the different villages. The great mobility that has been shared by the peoples from Ormu in the west to Vanimo and, to a lesser extent, Leitre in the east also means that early researchers would have had easy access to people from a variety of villages. Of course, a sample of this sort necessarily skews the results that will be drawn from it, but that is one of the dangers of pioneering work.

Friederici noted the relationship between Skou and the languages to the east, noting that despite the similarities they remained distinct entities. He writes (1919: 258), concerning the relationship of Wutung with respect to Skou, that:

\[ \text{… sicherlich ist es eine andere Sprache, nicht etwa ein Dialekt derselben Sprache.} \]

Cheesman (1938), discussing the villages between then-Hollandia and Vanimo, takes the same stance of under-differentiation when she writes that

\[ \text{There is a mixture of peoples among the Papuans themselves, without counting the Malay and Chinese elements, although they all belong to the Jotefa tribe as far as Mt. Bougainville} \]

Despite the tone of these early notes, some earlier writers overstated the connections that link the villages between Skou and Vanimo. Thomas (1942: 163) classed all the coastal population from Vanimo west as belonging to the same language group, which he called ‘Coastal’, and stated that

\[ \text{The tribal or language group under discussion includes the villages of Wutong, Yako, Warimo, Manimo and Leitre, in the Vanimo sub-district, and also the three Seko villages in Hollandia, Netherlands New Guinea} \]

Although he states that these people belong to one language group, he went on to state that

\[ \text{The people of the village at Leitre appear to differ slightly in dialect from Manimo and Warimo, and there may be some slight change at Wutong and Seko, but the natives of the various villages converse freely with each other.} \]

Technically this is true even today: the conversation is carried out usually in Tok Pisin, or, for older people, in one of the other of the local languages, which remain distinct from each other. For speakers in their 30s or younger, from a Skou village, who visit villages near Vanimo, conversation is very stilted. It is most likely that Thomas observed people speaking to each other in each other’s languages, not in the same language, and that Friederici’s comments were as valid in the 1940s as they were in the earlier part of the century. Indeed, Cheesman (1949: 208-209), recording the meeting of her party of carriers from Skou with the inhabitants of Wutung, writes that

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7 This mobility continues to the present day, mediated only by the vagaries of border disputes between the two nations that hold land in this area.
The Seko carriers did not attempt to fraternise with the Wutong villagers. ... I acted as interpreter, talking Malay to one group and pidgin-English to the other, for I was curious to watch their reactions. It was only the language difficulty which baulked them, they were quite friendly disposed to one another. They all seemed very keen to collect as much local gossip as possible in order to relate it to their own people when this odyssey was finished. ... It went on for hours — I could hear the murmur when I was half asleep. After dark they seemed to have collected enough of each other's tongue to be able to yarn more comfortably ... I was surprised to find how little affinity there is between the Papuan languages spoken in the two villages, as I had though Seko spoke a dialect of the language common to all the north-coast tribes. ... If my carriers had been taken from Seko-saii probably they would have found more affinity with Wutong people.

Clearly Cheesman's account is at odds with Thomas', and the time periods that they represent overlap enough for change not to have been a factor. The fact that the Wutung and Skou inhabitants used her as an interpreter in the early stages of interaction is quite clear proof that the two languages were not similar enough to each other to allow for them to be thought of as a single language, though similar enough to each other to be acquired, in basic form, fairly quickly. Cheesman's comment about Skou-Sai and intelligibility with Wutung probably refers to the fact that there is considerable marriage between Wutung and Skou Sai, but not with the other Skou villages, which tend to marry to the west. These remarks make it all the more likely that Thomas observed villagers either using each others' languages, or Tok Pisin (Cheesman's pidgin-English) to converse, rather than simply displaying some small degree of passive bilingualism. This said, even today speakers of the Vanimo coast languages often, when they find it advantageous to their argumentation, refer to the different villages from Skou to Vanimo, and Leitre, as speaking the 'same language' (in Indonesian bahasa sama; in Tok Pisin wanpela tok ples). Crowther (2001) documents the use of linguistics terminology by New Guineans to refer not to an individual language, as a linguist would define it, but to a linguistic sub-group, and this appears to be the case for Skou and its relatives as well. When questioned on actual intelligibility, I have found that interviewees usually back-pedal on their claims of linguistic unity, saying that, while the same languages, it is true that 'the words are different', 'the sounds are different', or 'the other villages mangle the language' (kata beda / bunyi beda ~ bahasa desa lain putar (Indonesian), ol tok i krunki ~ ol narapela lain i tanim (Tok Pisin)). In the absence of extensive experience of surveying language attitudes in New Guinea, the kinds of information that would be acquired by questioning speakers of languages that one is not familiar with would not be overly helpful in determining language extent.

The Skou people have been described in not entirely complimentary terms by Cheesman (1938: 72). She describes the people of what appears to be Skou Mabo as follows:

Seko people would have been more attractive if they had been less bold, the manners of the women and children were trying because of their curiosity over the white woman, and their freedom from superstitions concerning her. It is the superstitious awe that we inspire in bush people which makes them shy.

When comparing the behaviour of Wutung people with Skous, Cheesman noted (1949: 208) that 'It was a lesson in discipline for the Seko party, whose manners were decidedly uncouth, to see how instantly my orders were obeyed.' Later, walking through Skou Sai, their different character (still prominent to this day) is mentioned (1938: 73):

We passed the unredeemed village the next morning, and saw the “men’s house” with its steep roof and projecting gables with carved ends, and the special platform for praus. The men looked particularly sullen and unfriendly, and the
women hustled their children inside the houses and shut the doors when they saw us coming. This was probably to guard them against the evil influence of a white woman.

Later, however, when passing through the same village on a subsequent trip, she appears to have markedly changed her opinions (1938: 275):

I was surprised to find a crowd of women and children who looked delighted to see me. I should have gone by with only a sidelong glance, because there were the same who had called their children indoors when I went through their village with Herr Stuber. Their friendliness was so marked that I went up to the groups and talked to them. Not in their own words of course, but in the language of signs. They were making baskets and had a lot to say about them.

This indicates that the women did not speak Malay, and were at this time not so influenced by the changes that the Dutch administration had brought about. To this day very few Skou speakers live away from the three Skou villages; a handful of Skou people have married into Tobati and Enggros villages to the west, and two or three or so Skou live in Hamadi, working in the markets there or in clerical jobs in Jayapura. A small number of Skou people, exclusively from Skou Sai, have married to and moved to villages in Papua New Guinea, most notably Wutung, but almost no Skou people live in other native villages in Papua or Papua New Guinea. Wutung, and to a lesser extent Nyao, is a more welcoming environment than most for Skou people due to the large number of second-language speakers of Skou, approximately one hundred amongst the Wutung population (of six hundred), and reportedly a somewhat smaller proportion in Nyao.

Other changes that have taken place in the area include the loss of most of the men’s houses, and the spread of Christianity. The Verslag contains a photograph of the men’s house in Skou Sai, and Cheesman describes this same house in 1938 (two quotes above). The carving that Cheesman noted in the 1930s is still to be found in the carvings that decorate the pillars of the GKI (Gereja Kemah Injil) church in Skou Mabo, preserving an old art form in a new medium.

All Skou people belong to one of thirteen nòeti patriclans, membership of which is for the most part confined to the inhabitants of a particular village. The distribution of the clans, the names by which they are referred to in Indonesian, and their relative sizes, are shown in table 3. (The numerical arrangement reflects Skou speakers’ numbering of the world: Ramela, for instance, is consistently described as the ‘second clan in Skou Yambe’, and so on. Numerically ordering the different members of a class is a feature of New Guinean classification systems.) For each village the Skou names are given on the left, and the ‘popular’ names (Malay/Indonesian forms, used for official purposes such as identity card registration and school attendance) on the right; in some cases there is a transparent relationship between the Indonesian name and the Skou name, such as with the first three of the Skou Sai clan names. In a couple of cases there is a relationship, though it is not so transparent: Kóemo is a simplification of Kóemo for use in a language (Malay/Indonesian) that lacks an [θ] (represented here with the digraph <oe>), and Patipeme is probably etymologically derived from báti Póeme ‘clan name Póeme’, with the same orthographic change as was seen with Kóemo. In many cases, however, there is no obvious relationship between the forms: Hùepa and Palora are an example of what appears to be a completely unrelated set of names for the same clan.
Table 3. Patriclans in Skou

<table>
<thead>
<tr>
<th>Te Tángpe / Skou Yambe</th>
<th>Te Máwo / Skou Mabo</th>
<th>Te Bapúbí / Skou Sai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Te Léti</td>
<td>Te Máló I</td>
<td>Te Lómó</td>
</tr>
<tr>
<td>Rollo</td>
<td>Mallo I</td>
<td>Lomo</td>
</tr>
<tr>
<td>Te Kéja</td>
<td>Te Máló II</td>
<td>Te Náli</td>
</tr>
<tr>
<td>Ramela</td>
<td>Mallo II</td>
<td>Nali</td>
</tr>
<tr>
<td>Te Bapóeme</td>
<td>Te Wí</td>
<td>Te Múngtang</td>
</tr>
<tr>
<td>Patipeme</td>
<td>Awi</td>
<td>Muntang</td>
</tr>
<tr>
<td>Te Yálu</td>
<td>Te Hùepa</td>
<td>Palora</td>
</tr>
<tr>
<td>Membilo</td>
<td>Palora</td>
<td></td>
</tr>
<tr>
<td>Te Kóemo</td>
<td>Kemo</td>
<td></td>
</tr>
<tr>
<td>Te Yálu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membilo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Te Tangpúto</td>
<td>Tangputo</td>
<td></td>
</tr>
</tbody>
</table>

In each case the first listed clan is the largest clan in each of the three villages, and is the clan from which the Ke barí (ondoafi ~ korano / village head) is chosen. It is also worth noting that there are two clans which are found in two villages: The Membilo clan is found in both Skou Yambe and Skou Mabo, and Palora is found in both Skou Mabo and Skou Sai. Some of these clans are transparently recognisable in the clan names of other villages occupied by speakers of related languages from the Skou family to the east (see 1.4). The Kemo clan, for instance, shares the same history as the Imo clan of Leitre. In the main, however, the clan names found in villages of the west coast of Vanimo do not bear any close relationship to those found in Skou. Each clan is associated with a particular set of origin myths, and has a particular bird species as its totem. In addition, there are dietary restrictions on members of each of the different clans. Some of this information, for one clan, can be found in text 20 in the appendices.

The land to the south-west of the Skou villages is now part of a large transmigration settlement camp in the area, named Koya. A steep range of hills runs from Tanjung Jar south-east and then parallel with the coast, peaking at approximately 375m above sea level, runs from the cape at Tanjung Jar 8 km west of Skou Yambe to a point approximately 3 km south of Skou Sai. The transmigration lands of Koya lie south of this small unnamed range. The question of the ownership of this land, and so which group of people are the rightful recipients of a conceived suit for compensation from the government for their acquisition of it, is the source of some contention between the clans of Skou Yambe and the Elseng people, an inland group whose northernmost range abutted on the southern border of the Skou in the region of the modern Koya transmigration site. In the late 1990s some secondary settlement from Koya was made along the road that runs from Koya to the Papua New Guinean border, approximately one kilometre south of Skou Mabo and north of this small range of hills, and indisputably inside the area of that village’s gardens and hunting domain. This is the continuing source of much contention between Skou people and the newer settlers. To the east a straggly forest occupies the land between the swamps that are found north of the Tami river and the narrow coastal strip behind the beach.

Despite the proximity of the transmigration camp at Koya, and the visible proximity of the city of Jayapura and its outlying suburbs from the beach in front of any of the Skou villages, life in Skou has not drastically changed compared to the way it proceeded, say, fifty or eighty years ago. The concreting of a market area in 2002 only 4km from the turn-off to Skou, and a roughly equal distance from Koya Timur, has not changed anything, since the location is not convenient to anyone, either Skou people or Koya transmigrants. The presence of a number of Bugis men growing coconuts from plantations near the Skou villages in the late 1970s (they paddled the produce to Hamadi market, between Tobati and Jayapura, once a week) left a
legacy of several mixed-blood children, but no other lasting social impacts. The Indonesised Dutch reform (Protestant) church (the Gereja Kemah Injil, or GKI) is active in the area, as it was since before the Second World War, with most people at least nominally adhering to that faith. In recent years the Pentecostal movement has become strong in some parts of the Skou-Mabo community (though still a vastly outnumbered minority), to the consternation of the GKI adherents, who have burned down at least one church the Pentecostalists have built.

Map 2. The Skou villages and other geographic features west of the Tami River

Agriculture is dominated by the work needed for the cultivation of hòe sago, which grows in a semi-wild state in the interior between the Skou coast and the Tami river, in those areas that have not yet been affected by Indonesian settlement. This is an area of poor soil due to frequent inundations of the Tami river, which result in fresh-water swamps along the course of the river, and mangrove near the coast (this changes on the east side of the Tami, where the land rises sharply to the border range). (Cheesman (1938: 74) records that ‘Sago does not monopolise the swamps, there are many other kinds of trees as well, but no lofty ones; other palms, Pandanus and small scrub.’) Skou people weed around the growing sago trees, and when they mature these are processed, with the resulting starchy flour then carried back to the villages for consumption, most popularly in the form of a jelly-like porridge or soup, hòe, sometimes dry-roasted into a pancake-like food, kóe. Other crops that are gathered from a semi-wild state include ápólè, genemon (tulip) and póweng, gedi (aibika). Some tubers are cultivated, mainly nále native taro, but manúa asiatic taro is also very common, and other tubers such as rángúke sweet potato and òe yams are also popular.

In addition to this forest-gathering basis of their lifestyle, contact with people from western Indonesia, and their agricultural practices, has increased the range of vegetables grown and consumed in the villages, particularly in Skou-Mabo and Skou-Yambe. This extends to several varieties of póní cabbage and póí spinach, as well as a variety of fruits, such as pêngue mangoes, mandarins, and áue jambu, which complement native ìngno bananas and hang coconuts.

The main source of protein is móe fish, which is caught to some degree throughout the year, most particularly during the feng lang ro east wind season, with a hiatus when the wà west wind is blowing, in the months of November – February, when waves prevent most fishing canoes from being launched. The lack of fish is not a hardship, however, since the bush surrounding the villages is also a source of some animals, especially during this time, and during the fu wa ro west wind season pâle pigs are the target of choice, but more commonly táng birds are hunted, and the eggs of the tangwâue bush turkey/mallee fowl are collected. This
is partly a reflection of the Skou people’s preferences, and partly a reflection of the reduction in wild *pi'* mammal population in the area since the transmigration camps were established, and since logging became a prominent industry in the hinterland east of the Tami river. This merely continues a trend noticed by Cheesman (1938: 74): ‘There are plenty of these birds in the forest still, but they are more rare, nothing like the numbers that used to be seen. No doubt they have been made wary by being persistently hunted …’

1.4 *Skou in its linguistic context*

Skou is the westernmost member of the Western Skou family. Compared to the other members of this family Skou is somewhat atypical, in terms of both morphological and phonological features (Donohue 2002), but is clearly related to them and not to the languages that now adjoin it to the west and south, which are Sentani family and Border family languages (see table 2). The internal arrangement of the immediately related languages of the Western Skou family is set out in figure 1; this represents the genetic links that apply to the languages in the family, and does not attempt to show the effects of areal diffusion (for which the reader is again referred to Donohue 2002).

*Figure 1. The Western Skou family*

```
proto-Western Skou
  ▼
   ▼
Skou  Eastern Skou
  ▼
   ▼
West Coast ▼ Leitre
  ▼
Border  ▼ Vanimo
  ▼
Nyao  Wutung  Dumo  Dusur
```

Within the Western Skou family, we must recognise a number of innovations that have spread beyond the language in which they have had their start, some of which group Skou with Nyao and Wutung, and others of which group Skou with Nyao, Wutung and Dumo. (Further groupings based on the spread of various diffusing sound changes can also be made: these group Leitre with Dusur, Leitre with Dusur and Dumo, Leitre with Dusur, Dumo and Wutung, and finally Wutung with Dumo and Dusur. See Donohue (2002).) Additionally, two changes have spread to Skou from the unrelated languages to the west, and have gained currency to various degrees in other languages related to Skou. These areal traits that have diffused into Skou include the absence of /ŋ/ and /ɡ/, and the presence of [r]. For a synchronic description of the Skou language the first of these changes, the loss of the velar nasal, is important in that it explains some of the irregularity involving the first person singular inflection on verbs (see 7.2.2, and Appendix 2). The other changes, while equally wide-ranging in terms of the reorganisation of the sound system that came about as a result of their application, are not so relevant in a synchronic description. They are mentioned briefly here and in Donohue (2002b).

Some of the phonological changes that motivate the subgrouping diagram in figure 1 are given in table 4; these changes have been selected for their use in motivating the tree in figure 1.
For a more complete assessment of the inherited and areal sound changes, and arguments for the methodology of their separation, see Donohue (2002).

Table 4. Some phonological changes in languages of the Western Skou family

<table>
<thead>
<tr>
<th>Skou</th>
<th>Eastern Skou</th>
<th>Leitre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Border</td>
<td>West Coast</td>
</tr>
<tr>
<td></td>
<td>Nyao</td>
<td>Wutung</td>
</tr>
<tr>
<td>*t</td>
<td>r</td>
<td>t</td>
</tr>
<tr>
<td>*u</td>
<td>u</td>
<td>u / i</td>
</tr>
<tr>
<td>*gʷ</td>
<td>p</td>
<td>tf</td>
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<tr>
<td>*j</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>*tl</td>
<td>r</td>
<td>hr</td>
</tr>
<tr>
<td>*f</td>
<td>f</td>
<td>f</td>
</tr>
</tbody>
</table>

The geographic distribution of these six languages is shown in map 3; this map is a compromise between the modern (post 1961) situation and the claimed land holdings of the different ethnolinguistic groups; as such, it would probably fail to please any parties. There are two major differences between the positions marked on this map and the present day. Firstly, there has been a narrowing of the Skou land towards the coast, reflecting the incursion of transmigrants from further west in Indonesia. Secondly, and occurring in approximately the same time frame, we have seen the de facto loss of the land east of the Vanimo headland from the Dusur (Lido) peoples, due to the establishment of extensive squatter settlements on this land. In addition, the language marked as Nyao, and previously spoken in at least three different settlements inland from Skou across the Tami river, is now exclusively spoken by people living at Nyao village in Papua New Guinea. This means that much of the land belonging to this group west of the border is not effectively maintained on a regular basis, though the search for logging royalties has led some Nyao people to plant gardens across the border in recent years. In 2002 a small itinerant camp of 15-20 people was established just east of the Tami River to work with the logging company, though dissatisfaction with wages and conditions means that this is unlikely to last, even though it is the only way the Nyao people have to monitor the company’s work). There are, however, no permanent settlements at the time of this writing.

Cheesman (1938), describing the villages between Jayapura (then Hollandia) and Vanimo, refers to Njau and two other, un-named villages. Skou people recognise the names Te Jáwung for modern Nyao, in Papua New Guinea, and Te Húele, Te Nóemo, Te Kófo, and Te Pòeng as villages inland on the Papuan side of the border between Skou Sai and Vanimo. Of course, not all of these names are necessarily contemporaneous: since villages traditionally move around every few years, sometimes keeping the same name and sometimes changing, one settlement may be referred to by more than one name, especially when recalled over five decades of time. The land east of the Tami river and immediately south of the coast belongs to the people of Wutung village, but again there are no settlements on this land any more, permanent or temporary. Wutung land holders do frequently cross the border for routine garden maintenance and harvesting, but do not travel in family groups. South of this strip the land belongs to the Nyao/Sangke people, and the same notes on its occupancy (or lack of) applies here as applies to
the Wutung lands. While not accurate to any one time, the map does however, provide an accurate picture of the relative positions of the different languages.

*Map 3. The Skou languages*

The Western Skou language family described above is itself part of a larger genetic grouping of languages that stretch from Skou in the extreme west of its range along the coast and immediate hinterlands of the Serra Hills behind Leitre to Barupu (formerly Warapu), now located inland of Sissano Lagoon, near Aitape in Papua New Guinea. The organisation of these languages, and their relative relationship to the languages of the Western Skou family, can be judged from figure 2.

*Figure 2. The Macro-Skou family*

*Macro-Skou linkage*

<table>
<thead>
<tr>
<th>W. Skou (see fig. 1)</th>
<th>Serra Hills</th>
<th>Piore River</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pu</td>
<td>Rawo-Main Serra</td>
<td>Warapu</td>
</tr>
<tr>
<td>Rw</td>
<td>Main Serra chain</td>
<td></td>
</tr>
<tr>
<td>Su</td>
<td>Wm</td>
<td>Mo</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
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</tbody>
</table>

Language codes:

<table>
<thead>
<tr>
<th>Ba</th>
<th>Barupu</th>
<th>Pu</th>
<th>Puari</th>
<th>Su</th>
<th>Sumararu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mo</td>
<td>Mori</td>
<td>Rm</td>
<td>Ramo</td>
<td>Wm</td>
<td>Womo</td>
</tr>
<tr>
<td>No</td>
<td>Nouri</td>
<td>Rw</td>
<td>Rawo</td>
<td>Wu</td>
<td>Wutung</td>
</tr>
<tr>
<td>Po</td>
<td>Pou</td>
<td>So</td>
<td>Sumo</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Earlier classifications of languages of this part of New Guinea have treated Skou variously as the western-most relative of the languages of the Torricelli mountains (Ray 1919, who lists ‘Seko’ and the other languages listed in figures 1 and 2 as belonging to the ‘Valman’ group); as the northern-most member of the Tami group (Cowan 1952: 135), later retracted in Cowan (1957); and as the western-most member of the Vanimo family (Laycock 1973, following
suggestions made earlier by Capell (in print 1954, but quoted earlier in Cowan 1952: 136, where Cowan credits Capell with the suggestion in 1950). The Tami group appears, in the light of later research and further analysis not to be a genetic group, but is perhaps valid as an areal affiliation of languages from a variety of families (Voorhoeve 1971). The extension of the Torricelli language grouping to include Skou and its relatives is not justified. Capell’s, and later Laycock’s, divisions are the closest in spirit to the present proposed structure. Laycock lists the following languages and groupings (1975: 851):

![Figure 3](image-url) Laycock’s classification of the ‘Sko Phylum’

<table>
<thead>
<tr>
<th>SKO PHYLUM-LEVEL STOCK:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanimo family:</td>
</tr>
<tr>
<td>Sko</td>
</tr>
<tr>
<td>Sangke</td>
</tr>
<tr>
<td>Wutung</td>
</tr>
<tr>
<td>Vanimo</td>
</tr>
<tr>
<td>Krisa family:</td>
</tr>
<tr>
<td>Krisa</td>
</tr>
<tr>
<td>Rawo</td>
</tr>
<tr>
<td>Puari</td>
</tr>
<tr>
<td>Warapu</td>
</tr>
</tbody>
</table>

While differing from the classifications presented in figures 1 and 2, certain regular commonalities can be observed, and the differences have explanations. The unit that Laycock terms the ‘Vanimo family’ corresponds to the Western Skou family in figure 1. The relationship between the languages in this group are obvious, and because of extreme borrowing of changes from one language to its neighbour, the subgrouping in figure 1 is not immediately obvious (for detailed discussion, see Donohue 2002). The identity of the languages that Capell identified as sharing a common ancestry is, however, not in doubt, and, when compared externally to the other languages in the greater family, shows complete agreement with the present classification. The ‘Krisa family’ is more problematic, and mainly reflects the paucity of data with which Laycock worked. Where Laycock classified four languages, I list ten, based on a series of walking surveys along the coast and hinterlands between Vanimo and Aitape (Laycock 1975: 849 oddly makes the emphatic statement that ‘it seems unlikely that more members of the phylum will be found’). The data from these additional languages has given an insight into the relative relatedness of the speech at different village sites that was not available to Laycock, allowing the identification of Rawo and Puari as being more closely related, along with the other three languages of the Serra Hills group. More detailed surveys of the villages inland from Warapu (now Barupu, in a new village site following the devastation wreaked by the tsunami in 1998) has shown both their internal diversity, and the bridge that Nouri forms with the Serra Hills languages. Krisa, the only language on which Laycock had extensive data, is demonstrably related to the other languages in the second column of figure 3, but given the spotty sampling it is not easy to see that Rawo, Puari and Warapu are closer to each other than they are to Krisa.

1.5 Skou as a ‘Papuan language’

Is Skou a ‘Papuan’ language? This begs the question of our ability to identify a ‘Papuan’ language, indeed of the validity of talking about such a group of languages as if they share something other than geographic proximity. This section shall examine the use of the term ‘Papuan’ as a typological classification, and determine how well this term can be applied to Skou, and to the Skou languages generally.
The label ‘Papuan’ has long been understood to be a descriptor for the languages of the New Guinea region that are not demonstrably related to the widespread Austronesian family that is prevalent over most of insular South-east Asia and the Pacific. As such it is not so much an inclusive label, as an exclusive one, and is not really useful in either a typological or a genetic sense (this point has been stressed by Capell (1940) and Foley (1986, 1998), and others). The label ‘non-Austronesian’ would then be more appropriate for what is after all merely a grouping based on non-membership in another family, and areal proximity. This label would not be very contentful for any non-New Guinea specialists listening in on a discussion of the languages, since Austronesian languages abut other language families than those in New Guinea.\(^8\)

It is certainly true that Skou does not show many typological linguistic features that can be traced to an Austronesian origin,\(^9\) and that absence of correspondence provides us with a convenient benchmark with which to gauge the language. I shall draw on Foley (1998) for contrasts between (New Guinea area) Austronesian languages, and the non-Austronesian languages of the same (general) area, supplemented by Haiman (1980), Reesink (1987), de Vries (1993, summarising them) and Donohue (1997) for typical features of ‘Papuan’ languages. All these authors tend, either implicitly or explicitly, to count the (eastern) highlands Trans New Guinea family languages as ‘typical’ exemplars of the New Guinea linguistic type, which Skou is not either genetically or geographically.\(^10\) Since most linguists will have the highlands Trans New Guinea family languages in mind as their notion of what a ‘Papuan’ language should look like, this is then also a convenient benchmark by which to assess the language.

Foley discusses eight properties that we can identify in the phonologies of Austronesian and Papuan languages, some of which provide benchmarks for contrast between Austronesian languages in New Guinea and the non-Austronesian languages of the area. His properties are listed in summary in table 5, explanations and discussions of these features and the Skou languages can be found following the table.

---
\(^8\) Namely Sinitic, Miao-Yao, Mon, Tai-Kadai, Asli, Indo-European, and Bantu. Various of these are related to each other, and there are various claims for relationships with Austronesian, but they need not concern us here.

\(^9\) There is some evidence for Skou having had an influence on the structure of nearby Austronesian languages, as reported in Donohue (2002e), and possibly there is an Austronesian source for the mixed kinship system found in Skou (see 9.9).

\(^10\) Though Foley expressly notes that this is misrepresentative of the variety found in the non-Austronesian languages of New Guinea.
Table 5. Phonology

<table>
<thead>
<tr>
<th></th>
<th>Austronesian</th>
<th>Papuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vowels</td>
<td>5 vowels</td>
</tr>
<tr>
<td>2</td>
<td>Places</td>
<td>P - T - K (~C)</td>
</tr>
<tr>
<td>3</td>
<td>Manner</td>
<td>P ≠ B; B =±MB</td>
</tr>
<tr>
<td>4</td>
<td>Fricatives</td>
<td>f v - s - ( \gamma ) fricatives equate to stops: ( p/\phi/\beta; t/r/l; k/g/\gamma ) few pure fricatives; often just s</td>
</tr>
<tr>
<td>5</td>
<td>Liquids</td>
<td>r ≠ l</td>
</tr>
<tr>
<td>6</td>
<td>Syllables</td>
<td>(C)V</td>
</tr>
<tr>
<td>7</td>
<td>Stress</td>
<td>( \sigma \ \sigma \ \sigma \ \sigma )</td>
</tr>
<tr>
<td>8</td>
<td>Tone</td>
<td>( \sim ) (tone)</td>
</tr>
</tbody>
</table>

The typical Austronesian language is said to have five vowels (\( i \ a \ o \ u \)); Skou exceeds this typologically unexceptional system with its two non-back rounded vowels, \( \u0143 \) and \( \phi \). While unusual, these would be acceptable as unusual, but not unlikely, criteria for the ‘Papuan’ class. The places of articulation found in Skou could be taken as typical for either set of languages, and the manner contrast (voicing contrast only in bilabials, not involving prenasalisation) is typical of neither, though it is not overly surprising from what we know of universal constraints on the articulation of voicing. The fricatives of Skou are not typical for either Austronesian or Papuan languages, lacking an \( s \). The contrast between two liquids is a feature of the Austronesian languages, as is the simple segmental syllable structure. The short words of Skou make an assessment of the phonological status of stress difficult, but the tone system is more Papuan than Austronesian in its style and pervasiveness (Donohue 1997).

Of the five assessable phonological features, Skou scores two each with Papuan languages and Austronesian languages. We shall now examine Skou in terms of morphological properties; table 6 summarises Foley on the typology of New Guinea Austronesian languages with Papuan languages.

Table 6. Morphology

<table>
<thead>
<tr>
<th></th>
<th>Austronesian</th>
<th>Papuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>type</td>
<td>close to isolating</td>
</tr>
<tr>
<td>2</td>
<td>inflection</td>
<td>little inflectional morph</td>
</tr>
<tr>
<td>3</td>
<td>derivation</td>
<td>suffix applicatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>prefix causatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>reduplicate for intransitive</td>
</tr>
<tr>
<td>4</td>
<td>nominal</td>
<td>no number or gender on nouns</td>
</tr>
<tr>
<td></td>
<td>categories</td>
<td>no case, word order strict</td>
</tr>
<tr>
<td>5</td>
<td>case</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>verbal agr</td>
<td>s=V=0</td>
</tr>
<tr>
<td>7</td>
<td>TAM</td>
<td>s=TAM=V</td>
</tr>
<tr>
<td>8</td>
<td>categoriality</td>
<td>precategoriality rife</td>
</tr>
</tbody>
</table>
Morphologically Skou is closer to isolating than to agglutinative, though recent grammaticalisations have led to some transparent, but significant, increases in morphology. The inflection that is present is not fusional with other grammatical categories, but rather simply agglutinative. There are productive applicatives in Skou, suffixal as predicted for Austronesian languages. The nouns are gendered, though this is not marked on them morphologically, and there is no morphological case on core nouns, as the word order is very strict. Verbal agreement follows the Austronesian pattern, though TAM marking is by serial verbs of suffixal material. Roots follow their categorial labels strictly.

Morphologically, Skou scores five points with Austronesian and two with Papuan, out of seven assessable features.

Additional features from other authors (Haiman 1980, Reesink 1987) that are commonly used to describe Papuan languages can also be added to the above list. These features are:

<table>
<thead>
<tr>
<th>Austronesian?</th>
<th>Papuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>numerals</td>
<td>n/a</td>
</tr>
<tr>
<td>based on body parts</td>
<td></td>
</tr>
<tr>
<td>classification</td>
<td>n/a</td>
</tr>
<tr>
<td>based on existential verbs</td>
<td></td>
</tr>
<tr>
<td>pronouns</td>
<td>n/a</td>
</tr>
<tr>
<td>reflect na ka fyala for 1 2 3SG</td>
<td></td>
</tr>
<tr>
<td>verbal types</td>
<td>n/a</td>
</tr>
<tr>
<td>prevalence of light verbs</td>
<td></td>
</tr>
</tbody>
</table>

Skou has a highly productive system of light or auxiliary verbs, and also a system of nominal classification which is reflected in the choice of existential verb. The numeral system reflects a complex base-eight/base-twelve system (see 5.7), and does not follow the frequent (for New Guinea) body part or base-two system. The pronouns of Skou, ni mè ke pe in the singular (first and second persons, third person non-feminine and third person feminine, respectively) reflect proto-Macro Skou *ni, *mi, *kya and *g^e, respectively.

In terms of these features, Skou is neither convincingly ‘Austronesian’ nor convincingly ‘Papuan’. It should be noted, however, that the Papuan languages that Haiman and Reesink examined in order to arrive at the features they did were exclusively Trans New Guinea family languages, and did not reflect a general areal survey of the New Guinea island or region.

Foley lists only six syntactic characteristics by which Papuan languages systematically differ from Austronesian ones:

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Austronesian</th>
<th>Papuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>phrase</td>
<td>left-headed</td>
<td>right headed</td>
</tr>
<tr>
<td>clause</td>
<td>SVO</td>
<td>SOV (usually allow OSV)</td>
</tr>
<tr>
<td>PP</td>
<td>PREP N</td>
<td>N POST</td>
</tr>
<tr>
<td>DP</td>
<td>DET N</td>
<td>no DET</td>
</tr>
<tr>
<td>modifiers</td>
<td>N ADJ, N RC</td>
<td>ADJ N, also N ADJ</td>
</tr>
<tr>
<td>sentence</td>
<td>S CONJ S</td>
<td>S S; S-SWITCH S</td>
</tr>
</tbody>
</table>

In terms of syntax, Skou is right-headed at the clausal level, with SOV (=APV/SV) word order and one postposition. There is no determiner in the Austronesian sense, and clauses are linked with a switch reference-like system. The order of adjective and noun does not support a universal right-headed analysis, but rather is N ADJ, both in Skou and in most languages of New Guinea, which is the overwhelmingly common pattern for Austronesian languages. It is
also, pace Foley, the most common pattern in the non-Austronesian languages of New Guinea as well (Dryer 1988, 1992), and so cannot be counted as evidence either for or against ‘Papuanness’. Skou scores five out of five Papuan points, for those features which can be assessed.

In total, out of the seventeen assessable features of Foley’s, Skou scores a ‘nine’ in common with Standard Papuan, as opposed to a ‘seven’ with Melanesian Austronesian, showing that it is clearly not a good exemplar of a ‘typical Papuan language’. If we add in the additional four Papuan features suggested by other writers, we find only ten out of twenty one points.

Clearly Skou is not a very good representative of Papuan languages as a whole. It is a good exemplar morphologically of the family to which it belongs, however, as well as having a number of unusual phonological features as a result of being a good distance to the west of the other members of its family. The syntax shows the result of esoterogeny and a response to attrition in the consonant system; many of the simpler systems of the Eastern Skou languages have been elaborated on in Skou to the point that they no longer represent transparent paradigms. This is most obvious in the verbal paradigms, which are detailed in 7.2 and Appendix 2.

The patterns that are typical for languages of the Western Skou and Macro-Skou families, in terms of the features that have been discussed above, are shown in table 8. As can be seen, Macro-Skou is not a typical exemplar of a Papuan language family, as determined by examining the features from Foley (1998).

<table>
<thead>
<tr>
<th>Table 8. Western Skou family and Macro-Skou family linguistic features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Skou family</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>1 Vowels</td>
</tr>
<tr>
<td>2 Places</td>
</tr>
<tr>
<td>3 Manner</td>
</tr>
<tr>
<td>4 Fricatives</td>
</tr>
<tr>
<td>5 Liquids</td>
</tr>
<tr>
<td>6 Syllables</td>
</tr>
<tr>
<td>7 Stress</td>
</tr>
<tr>
<td>8 Stress</td>
</tr>
<tr>
<td>1 type</td>
</tr>
<tr>
<td>2 inflection</td>
</tr>
<tr>
<td>3 derivation</td>
</tr>
<tr>
<td>4 nominal categories</td>
</tr>
<tr>
<td>5 case</td>
</tr>
<tr>
<td>6 verbal agr</td>
</tr>
<tr>
<td>7 TAM</td>
</tr>
<tr>
<td>8 categoriality</td>
</tr>
<tr>
<td>1 numerals</td>
</tr>
<tr>
<td>2 classification</td>
</tr>
<tr>
<td>3 pronouns</td>
</tr>
<tr>
<td>4 verbal types</td>
</tr>
</tbody>
</table>
In this, its own linguistic context, Skou still does not fit very well: it shares only three phonological traits with the Western Skou family (four with Macro-Skou). Morphosyntactically it is a much more typical exemplar of its family, with all eighteen features in accordance with familial norms. It is just the position of Skou on the western edge of the family that has led to its developing an unusual phonology, partly under influence from the unrelated languages that neighbour it, and a few morphosyntactic twists that are at least partly driven by the phonological changes that have restructured the realisation of some complex morphophonology. In terms of the lower grouping, Skou is a rather aberrant member of the Western- or Macro-Skou family morphologically, not sharing in several losses of Macro-Skou contrasts that characterise the Eastern Skou languages.

1.6 Earlier work on Skou

The first appearance of Skou in the linguistics literature was in reports by Cowan (1952a, 1952b, 1953), followed by a brief list of words in Galis (1955), and a reclassification by Cowan again (1957). Voorhoeve (1971) presented a summary of Cowan’s work along with original research, leading to the first detailed look at some aspects of Skou grammar, mainly the phonology and verbal morphology. Since then there have been references to the classification of Skou (Voorhoeve 1975a, 1975b, Wurm and Hattori 1981, Silzer and Clouse 1991). This author has published work that mentions or deals with Skou (Donohue 2000, 2001, 2002), all of which contain information that also appears in this description. I shall examine the contribution that each of these earlier works has made to our understanding of the language, and reconcile them where necessary with the analysis presented here.

Cowan (1952b) surveyed the languages of what was then Hollandia sub-district, basically the region easily accessible from Hollandia (the former name of Jayapura) presenting some brief notes on each language. In the case of Skou this amounts to a short wordlist of 65 items and a sample of basic inflected verbs. The data appears to be accurate, though many of the distinctions that are made in Skou are not noted in the transcription. Cowan notes that Skou has a gender distinction in the third person singular pronouns.\(^{11}\) He also noted the tonal nature of the language, and the fact that the pitch contrasts show both lexical and grammatical information.\(^{12}\) The clitic agreement system was noted, but the prefixal agreement system was recorded as being ‘strong variations in the root’ (1952: 136),\(^{13}\) and the alternations of the vowel of the verb root according to the features of the object were listed as being present (the description of this phenomenon as involving ‘variations in the root’, rather than simply

\(^{11}\) In the original, ‘Wat het geslacht betreft worde hier aangetekend, dat het Sekou bij de substantiva en her persoonlijk voornaamwoord der 3e pers. sing. twee geslachten onderscheidt: mannelijk en vrouwelijk (natuurlijk en grammatisch).’

\(^{12}\) In the original, ‘De taal onderscheidt zeker drie tonen, die zowel morphematische als semantische functies hebben.’

\(^{13}\) In the original, ‘sterk variëren van de wortel zelf’.
prefixation, might turn out to be very insightful; see 7.2.2 for further details). All in all, Cowan’s materials represent a useful early survey of the language, with little in the way of inaccuracies.

Galis (1955) is a very brief survey of the languages of what was then West Nieuw Guinea, drawing on a variety of wordlists collected by different government officials. The coverage of Skou amounts to only a list of fifteen words and ten numerals. As far as it goes, the material is accurate; the transcription is irregular, and under-represents the phonemic contrasts in Skou, but does not contain inaccurate data. While not explained explicitly, the use of diacritics clearly describes the contrastive pitches of the language, with examples such as (Galis’ typography) tāngrūe ‘cassowary’ and tāng ‘canoe’, representing [tāru] [–:] and [tā] [–], respectively.

The wordlists compiled by Anceaux, from his own work and as a compilation of other wordlists contributed by civil servants working in New Guinea (Smits and Voorhoeve, eds., 1992), provide five lists of words from Skou. These lists were collected by Anceaux himself (two lists), an assistant patrol officer, and a local teacher (one list is anonymous), under the names Sko, Tumawo, Sekou and Seko (see the beginning of this chapter for discussion of the different names used to refer to Skou). All of the lists were collected from Skou speakers resident in Tobati, much closer to the Dutch settlements in then-Hollandia. The presence of frequent and plentiful marriage links between Skou speakers and Tobati residents means that these lists are quite lexically accurate. The complex phonetics of Skou, involving front rounded vowels (familiar to Dutch speakers from their own language, but evidently unexpected in a New Guinea context), contrastive nasalisation and phonemic tone, combined with the absence of detailed explanation or consistency in the use of symbols, have led to much of the material being not readily interpretable. The notes on Galis’ representations of Skou in 1.7 also apply to the lists in Smits and Voorhoeve, probably because they both refer to the same original materials.

Voorhoeve had the opportunity to work with a Skou speaker, and then compare his notes with Cowan’s published notes on the language. Voorhoeve presents an accurate picture of the data, and his analysis, albeit sketchy because of the limited data available to him, is excellent, differing from the present analysis only in Voorhoeve’s failure to recognise the verbal proclitics (see 7.2.1). Voorhoeve also recognised a contrast between e and e, and between o and o, where the present writer feels that these are best analysed as tonally conditioned allophones of the one phoneme. He noted (1971: 53) that “all vowels [may] appear nasalized”, which does not seem to accord with the data observed here (there are no occurrences of [ũ] other than in fast-speech environments, always adjusted in slow speech), but these are small differences, and quite understandable given the limited time Voorhoeve spent on the language.

Voorhoeve notes that nasalisation can, in at least some words, be attributed to the loss of a nasal consonant between vowels (see ‘bird’ in table 11 below). While this may appear to be so in the word he cites (tāng ‘bird’), there might be another explanation for the data he noted. The other example that he cites does not appear to support the hypothesis of nasalisation resulting from nearby nasal consonants. The apparent loss of a nasal consonant most likely represents the appearance of the n- agreement marker on the verb ‘be’ used aspectually with pāng ‘chop (PL.P)’. The contrast between Voorhoeve’s interpretation of the evidence and the alternative that presents itself with the benefit of a more detailed morphological analysis of the language is

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14 An example of this can be seen in Appendix 4, text 20 line 42; it is discussed in detail in 7.2.2 and 7.2.3.
shown in table 9. We can see that it is in fact a morphological alternation between an verb with an initial \( n- \) and one without, and does not represent the allophonic alternation between the sequences \([-\text{áne-}]\) and \([-\text{aē-}]\).

<table>
<thead>
<tr>
<th>Nasal C</th>
<th>Voorhoeve</th>
<th>Alternative interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ne pāñete</td>
<td>ne pā ne ti</td>
<td>‘We are cutting wood.’</td>
</tr>
<tr>
<td>Nasal V</td>
<td>te pāete</td>
<td>te pā e ti</td>
</tr>
<tr>
<td>‘They are cutting wood.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Explaining ‘nasal loss’: a reinterpretation

An alternative explanation can also be found for the \([\text{āā}] \sim [\text{ana}]\) alternation that Voorhoeve recorded for ‘bird’, shown in table 11 below. I suggest that the first form is the citation form for bird, but that the second, transcribed by Voorhoeve as [tana], represents the response \( \text{tāng} \text{ ing a} ‘\text{the bird}’ \), which is regularly realised as \([\text{tāñ]a}\) (see 2.2.3), with the nasalisation on the vowel of ‘bird’ easily confused with non-phonemic nasalisation induced by the following nasal consonant.

Voorhoeve also noted that the labio-dental fricative ‘alternates freely with [pf] (in word initial position’, which is not attested in the Skou I have heard. This might represent a genuine change in the language, perhaps under the influence of Malay/Indonesian (see 1.7 for evidence of change in the allophones of other phonemes, possibly as a result of Indonesian influence). Voorhoeve (1971: 55) noted the presence of word-final \( n \) and \( l \), and noted that Cowan has final \( n \) in his data. These consonants have never been noticed in the Skou that I have heard.

Voorhoeve also noted the slight initial preaspiration that can accompany a sonorant, which while not very widespread can be evidenced in the transcriptions provided by other writers (see table 11 and the discussion in 2.2.1.5), but which I have not heard from any speakers. One point of Voorhoeve’s presentation that is definitely refutable is his assertion that ‘perfective aspect is indicated by a particle \( ja \) preceding the subject pronouns and the past tense form of the verb’, citing examples such as:

\[
\text{ASP} \quad \text{SUBJ} \quad \text{OBJ} \quad \text{V} \\
(1) \quad ja \quad te \quad Ø \quad tāñ \\
\text{PERF} \quad \text{they ate} \\
‘They have eaten.’
\]

While the translation of the sentence is correct, the sentence can be better analysed with the putative ‘perfective’ marker interpreted as a generic object, as below. This object does not precede the subject pronoun, but simple the (doubly) inflected verb (see 3.3, 7.2), and so can be seen to appear in the normal position for an object in this SOV language.

\[
\text{SUBJ} \quad \text{OBJ} \quad \text{V} \\
(1)’ \quad Ø \quad \text{Ya} \quad \text{te=t-ang} \quad \text{thing 3PL.=3PL-eat} \\
\]

The fact that the generic object marker can also be used in non-perfective aspects, such as \( \text{Ya te tang tang} ‘\text{They are going to eat.} ‘ \) supports the analysis presented here. Apart from these qualifications, Voorhoeve’s short notes and speculations (1971: 59) on syntax in Skou are all borne out by the present author.
No further published materials are available on Skou, and the only unpublished materials that I am aware of are some wordlists collected by Greg Kalmbacher and Mike Moxness, both of the Summer Institute of Linguistics, in 1985. These survey lists contain 210 items, and do not attempt to analyse the sounds of the language, but do accurately represent them, particularly the list collected by Moxness. Again, there is little in this list that is not reconcilable with the material in the current description (see 1.7).

Looking further afield, but within the family, there is little published material on the other languages of the Western Skou family. Ross (1980) presents a sketch of the Dumo language,\(^\text{15}\) which represents in many ways a subset of the grammatical patterns found in Skou.

From a Dumo perspective, most of the differences between it and Skou involve the lack of consonant clusters in Skou, the differences in the segmental phonologies of the two varieties, and the case marking system in Skou. The elaborations of multiple agreement found in Skou are not a feature of Dumo, nor is the gender system. Some of the more salient differences are listed in table 10.

<table>
<thead>
<tr>
<th>Table 10. Skou and Dumo compared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skou</td>
</tr>
<tr>
<td>1. Stops</td>
</tr>
<tr>
<td>2. Fricatives</td>
</tr>
<tr>
<td>3. Sonorants</td>
</tr>
<tr>
<td>4. Syllable pitches</td>
</tr>
<tr>
<td>5. Lexical clusters</td>
</tr>
<tr>
<td>6. Case</td>
</tr>
<tr>
<td>7. Agreement</td>
</tr>
<tr>
<td>8. Classification</td>
</tr>
<tr>
<td>9. Word order</td>
</tr>
<tr>
<td>10. Valency change</td>
</tr>
</tbody>
</table>

We can see that, while more closely aligned to Dumo than to the languages to its west in terms of typological profile (compare with table 2), Skou is quite different to Dumo and the other languages of the Western Skou family (see also figure 1).

---

\(^\text{15}\) Ross describes the language about which he wrote (1980) as being the Dumo dialect of the Vanimo language, acknowledging that there appear to be differences between the variety he describes and the Dús̄ (here termed Dusur) variety that was described in outline in Laycock (1975). Some aspects of the phonology of the variety that Ross describes, however, notably the appearance of an [h] where Dumo normally has [ʔ], suggest that he may have been dealing with a transitional variety of Dumo that has some characteristics of Dusur as well ([h] is found in Dusur, corresponding to Dumo [ʔ]; see Donohue 2002).

\(^\text{16}\) Ross lists /h/ as a phoneme of Dumo. This phoneme is found in Dusur, and not in Dumo, which has a /ʔ/ corresponding to the Dusur /h/.
Some limited materials on Vanimo (Dusur), can be found in Capell (1972), and more
distantly an I'saka (Krisa) grammar sketch by Donohue and San Roque (2004) presents basic
materials on that language. Material on other languages of the Western Skou family are not at
this date available in published form, though it is perhaps worth noting that Dumo is one of the
least ‘precocious’ of the languages in the family, with the least number of individual-identifying
features. The Border languages, Wutung and Nyao, both show degrees of complications in
their use of verbal collocations (see 7.8), and both Dusur and Leitre have preserved some
archaic phonological features not found in the other languages. More distantly, both the Piore
River and Serra Hills families have their own peculiarities, which are beyond the scope of the
present volume to exemplify.

1.7 Recent changes in Skou?
Although only a small amount of earlier work documenting Skou exists, these materials show
considerable differences, based mainly on the wordlists available (the largest area in which
these materials overlap). There is just enough material in Cowan’s, Galis’ and Voorhoeve’s
work to allow us to judge what appear to be some changes in the language which have occurred
in the last fifty years, as well as to show up some differences in the transcribers. Wordlists
taken, from the same informants that I have worked with, by members of the Summer Institute
of Linguistics in 1985 show some slight differences with the results of lexical work carried out
in 2000-2002, and are also reported here. Essentially, however, all the sources agree to a great
extent.

Only a few differences are worth noting, for their phonological consistency across several
lexical items. Compare the following words, given in the transcription of the sources since the
1930s (Cowan [1952] is based on materials collected in the 1930s), and their phonemic forms
as recorded at the end of the 20th century. The sources from Voorhoeve onwards all have a
much greater inventory of words, but only those words that can be compared with the earlier
sources (and a couple of other interesting ones) have been listed here. Voorhoeve (1971), for
instance, lists 82 lexical items, which we may note parenthetically is somewhat higher than
Laycock’s 1975 estimate of lexical items that can be found in that source. (Laycock [1975: 851]
states that there are ‘some forty items’ in Voorhoeve’s article on Skou.)
Table 11. Lexical materials on Skou over five decades: a sample

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>'head'</td>
<td>–</td>
<td>röbe</td>
<td>xöbib / höröbi</td>
<td>kribi</td>
<td>röbi</td>
</tr>
<tr>
<td>'bird'</td>
<td>tán</td>
<td>tåa ~ tana</td>
<td>tå</td>
<td>tå</td>
<td>tå</td>
</tr>
<tr>
<td>'wing'</td>
<td>fä</td>
<td>–</td>
<td>fä</td>
<td>φä</td>
<td>fä</td>
</tr>
<tr>
<td>'man'</td>
<td>teba-lên</td>
<td>ba, këbanè</td>
<td>ba? / bälë</td>
<td>ba / ba'le</td>
<td>bälë</td>
</tr>
<tr>
<td>'coconut'</td>
<td>hâh</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>hâ</td>
</tr>
<tr>
<td>'stone'</td>
<td>wung</td>
<td>wû</td>
<td>wû / wuŋ</td>
<td>wû</td>
<td>wû</td>
</tr>
<tr>
<td>'rain'</td>
<td>fuh</td>
<td>ifo</td>
<td>fû / fû / φo</td>
<td>φo</td>
<td>fu</td>
</tr>
<tr>
<td>'sun'</td>
<td>ráh</td>
<td>râa</td>
<td>râ</td>
<td>râ</td>
<td>râ</td>
</tr>
<tr>
<td>'fire'</td>
<td>(g)râh</td>
<td>ra</td>
<td>–</td>
<td>–</td>
<td>ra</td>
</tr>
<tr>
<td>'canoe'</td>
<td>tâng</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>tå</td>
</tr>
<tr>
<td>'arrow'</td>
<td>tâ</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>ta</td>
</tr>
<tr>
<td>'black'</td>
<td>–</td>
<td>nëmbi</td>
<td>lëmbi</td>
<td>lëmbi</td>
<td>lëfi</td>
</tr>
<tr>
<td>'two'</td>
<td>hintung</td>
<td>hîtû</td>
<td>hîtû</td>
<td>hîtû</td>
<td>hîtû</td>
</tr>
</tbody>
</table>

There is a great degree of congruence between the different recordings of the same lexical items, as would be expected for wordlists taken over a relatively small period of time in a small, stable population. Several factors lie behind this: firstly, the Skou people speak a coastal variety of Papuan Malay which is not too difficult to understand; this, as any field linguist who has struggled through monolingual elicitation or a semblance thereof will understand, would make wordlist elicitation much more reliable as well as more comprehensible. Secondly, the persons taking the word list have all been adequately prepared in Malay or Indonesian, and so are qualified to interpret the responses of the informants, and to engage in a dialogue, rather than just a question and (perhaps) answer session. Finally, it seems that in at least some of the iterations of wordlist elicitation the same informant has been used.\footnote{17}{See Reesink (1976) for another account of wordlist elicitation from the same informant in the same village with a twenty year separation in time between wordlists, and a 20\% difference in the results obtained.}

The following differences are found:
- Galis has several words with a final h, n or ng; the final n’s and ng’s all correspond to a nasalised vowel in the speech that I have heard, often in combination with a circumflex over the preceding vowel (see ‘bird’ and ‘man’). The circumflex ˆ alone is enough to indicate nasalisation, as in ‘wing’ and ‘coconut’, but can also be interpreted as marking a falling tone, as in ‘arrow’. The appearance of a final h is associated with either nasalisation or the presence of an initial r. The aspiration that Voorhoeve notes for initial r’s in Skou is indicated by Galis through this final h, and by the transcription (g) in ‘fire’, presumably representing an optional initial velar fricative (the grapheme {g} being used to indicate this sound, [x] ~ [y] in Dutch).
- The Anceaux lists (Smits and Voorhoeve 1994) show this same preaspiration of a number of words which now simply show an initial sonorant.
• Voorhoeve sometimes records an n where other sources have an l. In both the examples from table 11 above, ‘man’ and ‘black’, the sonorant occurs preceding a nasalised vowel. This is most likely simply an extreme application of the rule of nasalisation spreading to a lateral in the same syllable that has been observed in modern Skou. It is likely that Voorhoeve’s informant was simply a speaker who applied this rule more thoroughly than most. See 2.2.1.4 for further discussion on the phonetics of laterals in this environment in Skou and the likelihood that this rule was productive historically as well.

For a historical view with greater-depth we can, of course, also examine Skou in the light of the reconstructable history is has in its descent from proto-Skou, or from the earlier Macro-Skou linkage. This is beyond the scope of this current introductory section, though exactly this is reported in Donohue (2002b).

Another area from which we can suppose recent changes to have taken place is the speech of older Skou speakers. In many cases (see the texts) apparently pre-sound change variants of the phonemes can be heard. Thus, on at least one occasion an expected p has been recorded as [k*], apparently closer to the *g* sound from which modern p is derived (see table 4). These erratic pronunciations are highlighted in the texts.

1.8 An brief summary of Skou grammar

We have surveyed some features of the phonology and morphosyntax of Skou in 1.3, when discussing the degree to which Skou fits the typological profile of most languages of the New Guinea area. In this section we shall briefly review these points and introduce other typologically salient features, providing a ‘road-map’ for the rest of the grammar where further details of the language’s features can be found. A slightly more detailed, and data-driven, summary of Skou grammar can be found in chapter 3.

1.8.1 Historical environment

The Skou people, because of their place on the coast immediately to the east of Humboldt Bay, have been in contact with first Malay(-speaking) traders who came looking for bird of paradise, and later Dutch-speaking administrators, for over a century. In that respect there are a number of loan words from these languages in Skou, and most likely a number of as-yet untraced loans from one or more of the indigenous languages of the area, especially Tobati (see 1.6.2).

1.8.2 Sociolinguistic environment

Due to their having a long history of contact with both the ethnic group to the west in Yotefa Bay, Tobati-Enggros, and the other Western Skou family language-speaking villages along the coast to the east such as Wutung and Vanimo, there has always been considerable in- and out-marriage within the Skou ethnic group. This means that, despite their being only three Skou villages, located very close to each other along the one stretch of coast, there is a history of looking outside their own cultural group for trade and other relations. This has led to considerable change in the Skou language, as well as a great deal of cultural import and export. More details have been presented in 1.3 and 1.4, and to a lesser extent in 1.2.
1.8.3 Phonetics and Phonology
The phonological system of the language will be described in more detail in chapter 2, but is presented here in outline form as a summary. Segmentally, the language shows the contrasts described in table 12, consisting of 13 consonants and 7 different vowel qualities.

Table 12. The Skou segmental system

| p | t | k | i | u | u |
| b | j ~ g | θ |
| m | n | Φ | ε | o |
| f | r | l | y | w |

Phonotactically only (C)V syllables are allowed; overwhelmingly CV, and not simply V, are found (approximately \(\frac{5}{6}\) of all monosyllabic roots have a consonantal onset). This leads to word shapes with few interactions between segments. These segments are realised with allophones that are in the main unexceptional, but with some interesting developments in terms of dissimilative processes (2.2.1.1, 2.2.1.8), and a range of co-occurrence restrictions (2.4). Although analysable as a system with independent onsets, rimes, and suprasegmental elements, there are clear prosodic units greater than any of these units that determine the possible syllable shapes. In addition to these segments, nasalisation is contrastive on all the vowels except /u/, and pitch is contrastive at a word level. While nasalisation is contrastive on each syllable rime, there is considerable spreading of nasalisation to the right unless an oral non-sonorant (more explicitly, a consonant other than w y or h) intrudes. This is described in 2.3.2.

Tone is present at the word level, but syllable-level constraints apply to limit the realisation of certain tonal contours on monosyllabic words. Five word tones (phonetically H, L, HL, LH, and LHL) are thus realised on monosyllabic words as [–], [–] and [\(\backslash\)], with the rising and the rise-fall pitch contours not found on single syllables. This is described in detail in 2.3.1. The HL melody shows additional contrasts depending on the placement of an accent, which results in the prelinking of the tonal units to the designated syllable.

1.8.4 Morphological profile
There is evidence of Skou having been a language at the isolating end of the spectrum, with little derivational or inflectional morphology, but has recently moved to a more inflecting system, with considerable head marking of both pronominal agreement and, on verbs, aspect, and also a developing case system. The most developed morphology is that on verbs, where subject agreement is more than just universal, and vestiges of an object inflection can be found in some verbs. Applicatives are the sole valency-increasing mechanism in the language, and there is an apparent passive construction in the language, unusual for its area. The morphological system is radically suffixing, with clever disguising of the monoconsonantal subject agreement affixes as prefixes through interaction with the global phonological constraint against codas.

1.8.5 Syntactic patterns
Skou has OV and SV patterns (Dryer 1991). When, rarely, both nominal positions are filled, this is typically realised as a clause with SOV order (see 3.1). Skou shows most of the typological profile that can be expected for a language in the New Guinea part of the world,
including head-initial noun phrases. The tables in 1.5 have already shown much of this basic information when comparing Skou with Foley’s ‘generic New Guinea’ profile.

Variation in the clause is found in three main areas:

- there is a pre-sentential topic position (4.2);
- low-affect Ps may appear postverbally, in the place normally reserved for NPs with goal properties (5.4);
- negation forces a re-structuring on the clause in many cases (chapter 16).
- there is an apparently passive construction, with extremely restricted occurrence, which encodes the patient as S and an agent as an optional adjunct (chapter 13).

These, and many other unusual features of Skou syntax, are described in many of the following chapters, including 3, 4, 7, and 18.

1.8.6 Semantics
As with many languages of New Guinea, there are many lexicalised items which are composed of two or more independent lexical entries, with non-compositional semantics. These are mainly described here in the section on adjunct nominals. The nominal classification system is another manifestation of the overt marking of semantic categories in the syntax, and the kinds of multiple senses of many words, especially those used in the kinship system, are also indicative of a complex set of culture-specific semantic correlations.

1.8.7 Lexicon
The lexicon of Skou shows, not surprisingly, a predominance of words that reflect either proto-Skou lexical items, or else words that can be phonotactically and phonologically plausibly assigned to proto-Skou, even though they have not yet shown cognacy in other related languages. A selection of these words can be found in the wordlists in appendix 1.

In addition to this native lexicon, we can recognise a number of loans from languages with which Skou has been in contact. These include Dutch, local varieties of Malay, and Tok Pisin. There are probably also a number of words that find their origin in the languages related to Mbo (Kilmeri), Elseng (Morwap), Tobati and Sentani, but since lexical materials on these languages are scarce little can be said for that possible connection. Some examples of words from the three languages that we can examine in detail include the following (with no semantic adaptations).

<table>
<thead>
<tr>
<th>Dutch</th>
<th>Malay</th>
<th>Malay</th>
<th>Tok Pisin</th>
</tr>
</thead>
<tbody>
<tr>
<td>oto</td>
<td>kurú</td>
<td>kopi</td>
<td>tàngmio</td>
</tr>
<tr>
<td>&lt; auto</td>
<td>&lt; guru</td>
<td>&lt; kopi</td>
<td>&lt; tamiok</td>
</tr>
<tr>
<td>[o:to:]</td>
<td>‘teacher’</td>
<td>‘coffee’ (</td>
<td>‘axe’ (ultimately</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(&lt; Dutch koffie) (rarely used; more common is simply</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>pa tá (see below) for both ‘tea’ and ‘coffee’)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>lémong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; lemun</td>
<td>‘lemon’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
(related to Southern Min Hokkien *te*, from which come Dutch *thee*, Malay *teh*, English *tea*, etc.)

Unknown? (Pan-New Guinea; locally, *[sa∫akaj]* in Tobati, Sentani)

*rabáka* &lt; *sa∫[b/v]aka* ‘tobacco’ (ultimately related to ‘tobacco’)

It is highly likely that we would be able to identify more lexical material from nearby languages that have been shared with Skou if we had a greater lexical corpus from the languages of the Humboldt Bay region, and so would perhaps be able to identify more non-genetic linguistic influences on the language. Since there is evidence for extensive linguistic influence from the western languages to Skou (Donohue 2002) in terms of the sound changes that have been reconstructed to account for the modern distribution of correspondences, it is likely that more detailed lexicographic work in the area will eventually reveal a large number of borrowed lexemes as well.

One interesting set of data that we can obtain from examining these loanwords and their phonological adaptation into Skou involves the treatment of stress, tone, and voicing values in the source languages. As will be seen in more detail in the next chapter, voicing bears a very restricted functional load in Skou, being contrastive only for bilabial stops, but the presence of voicing in the source languages affects the assignment of tone in Skou. This is discussed in more detail in 2.4.1.
2 Phonology

The phonology of Skou involves two different suprasegmental tiers and an array of consonants and vowels with somewhat unusual properties, both allophonic and distributional. None of the segments or suprasegmental tiers are of themselves unusual, but they interact in several interesting fashions. The following sections detail the phonotactics and segmental phonology first, followed by a lengthy discussion of the tonal and nasalisation systems in the language. This is followed by a second examination of phonotactic constraints, taking into account both segmental and suprasegmental conditions. The chapter concludes with a discussion of orthographic choices, and the problems in identifying the nature of a tone system when tone sandhi masks other distributional factors.

2.1 Phonotactics

Skou is phonotactically uncomplicated at a gross level. The syllable in Skou does not allow for complex onsets, nor any segment (consonant or glide) in the coda. The rime may be nasalised (shown here as ‘N’, in brackets because this feature is optional), and contrastive tone is present (shown as ‘T’). The shape of the syllable is as follows:

$$\sigma \rightarrow (C) \ V + T \pm N$$

That is, a syllable consists of a vowel, a choice of pitch contour (high, low or falling), and furthermore may optionally begin with a consonant. The rime is specified as displaying nasalisation on the vowel, or remaining oral.

Although the template above allows for both CV syllables and syllables consisting solely of a V, the CV structure is by far the more common, with only approximately 10% of syllables lacking an onset, irrespective of their place in a word. Owing to the lack of complex onsets, or any codas, there are no sequences of consonants in Skou, and sequences of two vowels are syllabified as two separate syllables, each with their own timing and possibilities for pitch choice. (Historically a range of complex onsets was possible, and indeed many complex onsets are preserved in all other Skou languages except Leitre, which has also reduced CC clusters to monoconsonant onsets, though by a different process of simplification to that found in Skou. For further information see section 1.6, particularly table 10, and Donohue (2002b) for a more detailed discussion of historical phonology in Skou and the other Skou languages. See, however, 1.7.) The one exception to this generalisation is discussed in 8.2.2. This means that no non-phonemic glides in codas are formed. Most words are only one, or at most two, syllables long. The relative frequencies of roots of different length are given in table 13, the data set being taken from a random sampling of a dictionary file. Only slightly more than half the free roots are monosyllabic, but less than 10% consist of three or more syllables, and this count includes words which are recognisably multi-morphemic, though constituting a single lexical item, such as the names of many animal species (móehábá ‘whale’, for instance, is composed
of the generic móe ‘fish, water creature that swims’ and the specific hábá ‘whale’). If these words were to be reclassified, then the proportion of one and two syllable roots would rise significantly.

<table>
<thead>
<tr>
<th>Table 13. Length of words</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Words</strong></td>
</tr>
<tr>
<td>Totals</td>
</tr>
<tr>
<td>%AGE</td>
</tr>
</tbody>
</table>

I shall deal with the segmental phonology of Skou based on the syllable, since there are not any restrictions on the segments found in the second or third syllable of a word that do not apply to the first syllable. Furthermore, there are no linguistic processes that refer to foot-level units rather than syllables, excepting stress (2.3.2.3). Similarly, the identity of the segments in one syllable of a word does not appear to influence the choice of phonemes in other syllables of the same word, though certainly allophonic differences do exist, mainly suprasegmentally. There are not enough examples of four or five syllable words for us to be able to draw significant conclusions about any possible restrictions. Following the discussion of the suprasegmental features of Skou phonology we will return to the subject of phonotactics, discussing co-occurrence restrictions.

2.2 Segmental phonemes

There are twenty segmental phonemes in Skou, seven vowels and thirteen consonants. Both the arrangement of the vowels and the consonants are unusual typologically, and are described in this section. Their interaction with the suprasegmental features of nasalisation and tone is discussed in 2.4, following a discussion of those features in 2.3.

2.2.1 Consonants

The thirteen consonants of Skou show a rather unusual arrangement, the result of competing areal changes and abrupt historical repairs effected to recover from these changes (Donohue 2002b). Most notable is the almost complete absence of contrastive voicing in the system. Unusual, both for New Guinea generally and for the Skou family, is the presence of two non-nasal sonorants, both l and r. The absence of an s, either phonologically or phonetically (except in one or two suspected loanwords), is also unusual, both cross-linguistically and in the Skou family.

<table>
<thead>
<tr>
<th>Table 14. The consonants of Skou</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bilabial</strong></td>
</tr>
<tr>
<td>Voiceless stop</td>
</tr>
<tr>
<td>Voiced stop</td>
</tr>
<tr>
<td>Fricative</td>
</tr>
<tr>
<td>Glide / Affricate</td>
</tr>
<tr>
<td>Lateral</td>
</tr>
<tr>
<td>Rhotic</td>
</tr>
<tr>
<td>Nasal</td>
</tr>
</tbody>
</table>
The phonemes conform closely to the IPA values typically associated with the symbols used, with little variation other than erratic aspiration which is heard weakly and intermittently with the voiceless stops, typically word-initially but also occasionally heard word-internally. Of the consonants listed above, only the voiceless bilabial stop, the labio-velar glide, the two palatal consonants and the non-nasal sonorants require extensive comment, which can be found in the sections following.

In addition to these sounds, there are also two known occurrences of an [s] that cannot be assumed to be an allophone of one of these listed phonemes (see 2.2.1.5). These words, sangbiki ‘pumpkin’ and so ‘well then’, are both of (highly) suspected non-Skou origins, but they might presage the return of an /s/ phoneme to the language.

2.2.1.1 /p/
The voiceless bilabial stop has two allophones, a plain [p] and a rounded [pʷ]. The unrounded variant is the most common allophone, heard in all environments and from all speakers. The rounded allophone is heard only from older speakers, and is found only preceding non-round vowels (see 2.2.1.8 for examples). It cannot thus be described as assimilation or dissimilation, but rather is more to do with the realisation of rounding on a syllable containing the /p/. When the rime realises this rounding, then it is not found on the stop, but if there is no rounding in the rime (that is, the rime consists of an unrounded vowel), then the rounding is realised on the onset.

<table>
<thead>
<tr>
<th>Table 15. Allophony of /p/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allophone</td>
</tr>
<tr>
<td>/p/</td>
</tr>
<tr>
<td>[pʷ]</td>
</tr>
</tbody>
</table>

The rounding effects on a /p/ the precedes an unrounded vowel are perhaps more accurately represented as [“pʷ”], since there is a noticeable [“-”] off-glide to any preceding vowel. For instance, /ɔpa/ ‘earlier’ is heard as [ɔ*pʷ*a], with rounding audible on both sides of the plosive. Here the unroundedness of the following [-a] provides the environment for the rounding of the /p/, which is then in addition heard on the preceding syllable.

A similar dissimilation, not motivated by any obvious articulatory factors, is found in the Balig varieties of Bontoc, in the northern Philippines. In this language consonants palatalise before the low vowel /a/, but not before high vowels (Lawrie Reid, pers. comm. 2002). Similarly, Blust (2000: 307) notes that Reid’s (1971) data on Kakiduge:n Ilongot ‘shows raising of *a to a high central vowel (presumably [i] -MD) after voiced construents (obstruents? -MD) other than velars’, suggesting a similar dissimilation for the feature [high] in the syllable.

Another fact about the voiceless bilabial stop is that, in the speech of some Skou Mabo people, it is frequently omitted in discourse: in running speech it is not unusual for a /p/ to be omitted, especially at the beginning of a clause. For instance, in the following segment from a text the proclitic on the verb (in bold) was pronounced without the /p/ by the speaker giving the text:
While this allophone is not common, it does occur frequently enough to be noticeable when listening to people speaking quickly. Skou speakers seem oblivious to this dropping. The implications this has for the featural specification (and underspecification) of the Skou segments will be taken up in 2.2.2.1.

2.2.1.2 /b/
The only unambiguous voiced oral stop, the bilabial, is usually realised simply as [b], but is occasionally heard as [β] when intervocalic in a word or a compound. One example of this is [tɛβapubi] for /tEbapubi/ Te Bapúbi ‘Skou Sai’. This is, however, exceptional; overwhelmingly, [b] is heard in all positions, with [tɛβapubi] more common than the lenited form.

2.2.1.3 /w/
In addition to the common [w] allophone the labio-velar glide /w/ displays one unusual allophone, a rounded voiced velar stop [gʷ], when it is preceded by a nasalised vowel. The stopped allophone is more common when the pitch rises from a low to a high level over the two syllables, as can be seen in the examples following. The first three examples in table 16 do not show an upstep in pitch from the first (nasalised) syllable to the second, and also do not usually show prestopping of the /w/. The following three words are all characterised by an upstep in pitch, and a not unusual stopped allophone of /w/. (For the prenasalisation of the pre-stopped w, see 2.3.2.1.)

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>[rawi]; [răngʷi]</td>
<td>lamp’</td>
<td></td>
</tr>
<tr>
<td>[tawa]; [tăngʷa]</td>
<td>‘tern’</td>
<td></td>
</tr>
<tr>
<td>[rawau]; [răngʷau]</td>
<td>‘axe’</td>
<td></td>
</tr>
<tr>
<td>[kŋʷou] ~ [kŋwou]</td>
<td>‘hermit crab’</td>
<td></td>
</tr>
<tr>
<td>[tăngʷau] ~ [tawau]</td>
<td>‘bush turkey’</td>
<td></td>
</tr>
<tr>
<td>[tăngʷatɔ] ~ [tawatɔ]</td>
<td>‘Cape Jar’</td>
<td></td>
</tr>
</tbody>
</table>

The tendency to pre-stopping suggests either a consonantal origin for the nasalisation on the vowel (as suggested by Voorhoeve 1971 – see 1.5 for a discussion of some problems with this analysis), or a more stopped origin for the /w/. Given that proto-Skou had a *gʷ phoneme (Donohue 2002), since lost in Skou, this might reflect the reintroduction of that phonetic sequence to some extent. Regardless of these diachronic speculations it is clear that /w/ is a phoneme in Skou, and that the major realisation of that phoneme is as a labio-velar glide.
2.2.1.4 /m/, /n/, /n/  
No special allophony has been noted for these phonemes; these three consonants conform to IPA norms for these symbols, with little if any perceptual variation.

2.2.1.5 /t/  
The voiceless alveolar stop is almost always realised as a simple stop, [t]. Occasionally, when intervocalic and preceding a high front vowel, it is heard as a fricative [s]; this seems to occur more frequently when the syllable is low-pitched (though the paucity of data makes this an impressionistic, and not statistic, observation). This is found in the speech of all ages of Skou speakers, and in all cases is a very infrequent allophone, which, if pointed out to someone, will inevitably result in either denial that an [s] was produced (if it occurred in their own speech), or else condemnation of the speaker as someone who cannot speak the language ‘properly’. In any case, it is a highly infrequent allophone, which nevertheless is found scattered about the language.

Some examples of words that have been heard with alternations between [t] and [s], and some other words that have not been observed with an [s] because of the wrong pitch environment.

<table>
<thead>
<tr>
<th>Phonemic form</th>
<th>Pitch</th>
<th>Phonetic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>/nati/</td>
<td>HL</td>
<td>‘new’ [nati] ~ [nasi]</td>
</tr>
<tr>
<td>/fati/</td>
<td>HL</td>
<td>‘hut’ [fati] ~ [fasi]</td>
</tr>
<tr>
<td>/hāti/</td>
<td>FL</td>
<td>‘coconut rope’ [hāti] ~ *[hāsi]</td>
</tr>
<tr>
<td>/bati/</td>
<td>LH</td>
<td>‘devil, demon’ [bati] ~ *[basi]</td>
</tr>
<tr>
<td>/tāti/</td>
<td>HH</td>
<td>‘cicada’ [tāti] ~ *[tāsi]</td>
</tr>
</tbody>
</table>

The fact that even a word like hàngti ‘coconut rope’ never shows an alternation might mean that the nasalisation on the preceding vowel is also a (negative) conditioning factor in the realisation of the [s], but the infrequency of this allophone makes this speculative. The fact that hàngti is polymorphic might also be relevant, since the other words cited above that do not show alternation with the fricative [s] are all polymorphic words, like bátí ‘devil’, which is composed of bà ‘person’ plus an additional formative, tí with a LH melody (see 2.3). The last example above, tángtí, is similarly made up of tàng ‘bird’ plus a formative tí with either H or ‘L’ melody (and thus not identical to that seen in ‘devil’. It might be that, while the /t/ in náti is morpheme-internal, the other /t/s that do not show alternation are restricted on the basis of being at the edge of a morpheme, and that the presence of nasalisation in the cited forms is epiphenomenal.

Another, and even more rare, allophone of /t/, is found word-internally preceding a /u/, provided that the preceding vowel is not rounded. We might formalise the conditions governing this allophone as

(2) /t/ → [tv] / V[– round] — u

In this environment the /t/ is very strongly rounded, to the point that it is not difficult to perceive the sound as a [p]. Some examples of words that do and do not show rounded allophones are shown in table 18.
Table 18. Rounding of /t/

<table>
<thead>
<tr>
<th>Phonemic form</th>
<th>Phonetic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>/tutu/</td>
<td>‘white’ [tutu]; <em>[tut</em>ũ]</td>
</tr>
<tr>
<td>/balêtu/</td>
<td>‘demon’ [balêt*ũ] ~ [balêtu]</td>
</tr>
</tbody>
</table>

Both these allophones are rare, partly because of the rather specific conditioning environments that each of them require, and partly because there are also very few word-internal /t/ in the language.

2.2.1.6 /l/
The lateral is sometimes realised as a nasalised lateral, [̃l], when it follows a syllable with nasality. This is most common, and most auditorily prominent, following nasalised vowels, but also occurs to some degree following a syllable with a nasal onset even if the vowel is not contrastively, but merely phonetically, nasalised. This is described in 2.3.2.1. Examples of this allophone are not common, but are listed in table 19.

Table 19. Nasalised lateral allophones

<table>
<thead>
<tr>
<th>Phonemic form</th>
<th>Nasalised lateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>/kɔlɔ/</td>
<td>‘underneath’ [kɔlɔ]</td>
</tr>
<tr>
<td>/mɔlɔ/</td>
<td>‘clan name’ [mɔlɔ]</td>
</tr>
<tr>
<td>/tālu/</td>
<td>‘eagle species’ [tālu]</td>
</tr>
<tr>
<td>/tâle/</td>
<td>‘lorikeet’ [tâle]</td>
</tr>
<tr>
<td>/tâlu/</td>
<td>‘fishing spear’ [tâlu]</td>
</tr>
</tbody>
</table>

I have stated above that there are not many unambiguous examples of this nasal spread. It is noteworthy that sequences of the form /-VlV/ or /(m, n)VlV/ are greatly outnumbered by words with /-Vl/ and /(m, n)Vl/ or /(m, n)l/, respectively, implying that this rule has some diachronic, as well as synchronic, validity. The fact that in the related language Leitre *l has shifted to /n/ when it occurs in a syllable with a nasalised vowel is further evidence that this rule was productive at an earlier stage in the language’s history.18

2.2.1.7 /r/
While the lateral liquid is clearly alveolar, articulated immediately behind the teeth as with the other alveolar consonants, the rhotic shows variation in place from alveolar to post-alveolar position. The more backed allophones are more likely in non-initial position, and more likely when preceded by a low or back vowel (the quality of the vowel in same syllable as r is not important). Even the most backed allophones are not realised as retroflex, but they can be realised with less prominent trill, and more prominent flap characteristics.

The trill has been reported as displaying preaspiration when it occurs initially. As noted in 1.5, the Dutch linguists Cowan, Galis and Voorhoeve reported this, and wordlists taken in 1985 by members of the Summer Institute of Linguistics also show initial [h ~ x ~ k] preceding an /r/. This is not prominent in the speech I have heard, some of it from the same informants

18 For instance, compare Leitre na ‘mouth’ with Dumo/Dusur lă, Skou lă-u. See Donohue (2002b).
used by Moxness and Kalmbacher in 1985. For example, the word which is here transcribed as /ŋɾbi/ ‘head’ is recorded in 1985 as xŋɾbi / hŋɾbi (Moxness) and kŋbi (Kalmbacher). Similarly ‘fire’, heard by me as /ra/, is listed by Galis as (g)rāh. The initial <g> may seem strange until we recall that <g> is the grapheme used for a voiceless velar fricative, [x], in Dutch. The brackets presumably indicate the optionality of this segment, thus yielding [xra] ~ [ra] (Galis uses a final <-h> to mark either nasality or high tone, but not, it seems, aspiration). While different in detail from the forms recorded around the year 2000 (from speakers of all ages, including the oldest), the relationship between the older and the newer records is clear, and has been discussed in 1.7.

2.2.1.8 /j/ and /ʃ/

The palatal glide shows allophonic variation between a glide, a glide-released alveolar affricate and a glide-released alveo-palatal fricative, with younger speakers more likely to select allophones towards the glide end of the range, in keeping with formal Indonesian norms, and older speakers more likely to select allophones that start with a fricative or affricate component, alveo-palatal or palato-alveolar, and then move to a palatal glide. These older-speaker forms, in addition to being presumably more ‘original’ in Skou, also reflect the more regional allophones of the Papuan Malay palatal glide phoneme [j], a linguistic variety that, with the development of standard language schooling and greater contact with the city, has lost considerable prestige amongst the younger generation. The palatal stop is merging with the glide in the speech of many younger Skou people, but in more conservative speech they are clearly differentiated. The allophony here is driven by dissimilation, with the more back allophones appearing preceding front vowels, especially [i]. This creates maximal phonetic distance between the glide and the stop phonemes in identical contrasts, but also creates similar enough allophones for younger speakers to reinterpret the allophones as all belong to the one phoneme.

<table>
<thead>
<tr>
<th>Environment</th>
<th>Allophone</th>
<th>Older speakers</th>
<th>Younger speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ʃ/</td>
<td>[ʃ]</td>
<td>/__ front (unconditioned)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[zʃ]</td>
<td>(unconditioned) (unconditioned)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[dʒʃ]</td>
<td>(unconditioned) /__ back</td>
<td></td>
</tr>
<tr>
<td>/j/</td>
<td>[ʃ]</td>
<td>/__ back n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[gʃ] ~ [gj]</td>
<td>/__ front n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[g]</td>
<td>/__ front n/a</td>
<td></td>
</tr>
</tbody>
</table>

We can see that there is a process of dissimilation in operation in syllable with either the palatal stop or the voiceless bilabial stop. With the bilabial stop we can see that rounding is realised on the stop only when it is not present in the syllable rime, and with the palatal stop we observe that the more back allophones of the stop are realised only when the rime contains less back vowels. Examples of these processes are shown in the following pairs of allophonic minimal pairs.
Table 21. Allophones of /p/ and /j/

<table>
<thead>
<tr>
<th>Rime</th>
<th>/p/</th>
<th>/j/</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>[pʰ]</td>
<td>[g]</td>
</tr>
<tr>
<td>e</td>
<td>[pʰ]</td>
<td>[gʰ]</td>
</tr>
<tr>
<td>a</td>
<td>[pʰ]</td>
<td>[j]</td>
</tr>
<tr>
<td>ɔ</td>
<td>[p]</td>
<td>[j]</td>
</tr>
<tr>
<td>u</td>
<td>[p]</td>
<td>[a]</td>
</tr>
<tr>
<td>ø</td>
<td>[p]</td>
<td>[a]</td>
</tr>
</tbody>
</table>

Neither /p/ nor /j/ is found with /ø/ in the rime, and there are in addition further restrictions on the vowels that may follow /j/ (see 2.4.3), accounting for some of the gaps in table 21 above. Note further that both /j/ and /j/ share a feature of tongue backing: most allophones of these consonants involve either a back articulation, or movement to a more back articulation from a less back place (in [zj], for instance, the tongue moves from an alveo-palatal setting to a full palatal setting). This is important for the discussion in 2.4.1.

2.2.1.9 /k/

The high back consonant is more strongly, and more frequently aspirated than the other stops. The only allophony that has been noted involves intervocalic lenition, in which a /k/ in a clitic is sometimes realised as [ɣ] or [h].

In addition to this allophony we can also find morpholexical variation between k and Ø. This is found in the 1SG subject prefix (see 7.2.2), and in some lexical items, such as ku ‘child’, which is sometimes heard as u (such as in the fixed expression tata u-ké ‘Jesus’, literally ‘God’s child’, which is never heard as tata ku-ké). This might reflect contamination from the eastern neighbours of Skou, Wutung and Musu, in which a *k > / sound change has run to completion. Further, kung ‘I drink’ is sometimes heard as hung; this might be contemporary sociolinguistic influence from the languages around Vanimo, or it might reflect regularisation of the inflection, since the k- in ‘I drink’ is a rare instance of the overt realisation of 1SG agreement, where the norm is for no morpheme to be added (see 7.2.2 and appendix 2).

2.2.1.10 /h/

The /h/ phoneme is a relatively unexceptional voiceless segment, the only unusual aspect of which is its tendency to disappear between two adjacent vowels. A common example of this can be seen in lihi ‘garden’, which is often realised simply as [lii], though in careful, elicited speech [lihi] is always produced. When this happens it appears that the whole second syllable, which has the /h/ onset, is omitted, as the tonal information associated with that syllable, as well as the [h], is not realised. The optional vowel lengthening found with this allophone is the only trace that is found of the elided syllable.

If an h begins a word spoken in other than utterance-initial position the vowel of the preceding word provides the necessary environment for the omission of the lexical h in the word; an example can be seen in line (4) of text 13 in the appendices, where the sequence /nɛrəhiwa -H HL H/ is realised as [nɛrəhiwa -hə].
2.2.2 Consonantal analysis
The previous sections described the phonetic differences between the consonants and the environments in which they are found, and in this section I shall propose a phonological account of those patterns.

2.2.2.1 Consonantal analysis
The contrasts that we have seen for the consonants of Skou can be described with the features seen in table 22. This table presents the full specifications for all features on each distinctive consonant. Of course a greater range of features might also have been employed, but the set of eight used here suffices to differentiate all the consonants, and also reflects what appears to be the relative markedness relationships between the consonants in the language. The phoneme /p/, for instance, is assigned the smallest number of features of all the consonants, reflecting both the fact that it is the one phoneme with zero allophones (see 2.2.1.1) and the fact that it is the most consonant phoneme with the highest frequency.

Table 22. Contrastive features of the consonants

<table>
<thead>
<tr>
<th>Feature</th>
<th>p</th>
<th>t</th>
<th>k</th>
<th>b</th>
<th>j</th>
<th>f</th>
<th>h</th>
<th>w</th>
<th>y</th>
<th>r</th>
<th>l</th>
<th>m</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>back</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>coronal</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>continuant</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>sonorant</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>nasal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>lateral</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>voice</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Not all of these features used in table 22 bear the a comparable functional load. Voicing, for instance, is used only to allow the contrast between the two bilabial stops, /p/ and /b/. For that pair it is the sole distinguishing feature, and so clearly necessary, but everywhere else the voicing value for a segment can be predicted from other features specifying manner and place. Similarly it is redundant to specify a vowel as both [- low] and [+ high] (see 2.2.3.1), where the single specification [+ high] can be taken to subsume the specification [- low], and vice versa (Archangeli 1988, Steriade 1995, etc.). We can make the following assumptions about markedness hierarchies, based on observed cross-linguistic tendencies:

place: consonants are unmarkedly non-back;
      high (stop) consonants are unmarkedly back;

manner: non-coronal sonorants are unmarkedly nasal;
        consonants are non-sonorant;

voicing: non-sonorants are unmarkedly voiceless;
         sonorants are unmarkedly voiced.

In addition to these universally motivated and widely attested conditions on underspecification some markedness rankings must be assumed to apply to Skou, adduced on the basis of the behaviour of the phonemes in the language. They are the following:

Skou: consonants are unmarkedly non-continuants;
coronal sonorants are unmarkedly lateral.

Applying these principles we can stated that, unless expressly marked for [+ voice], a non-
sonorant will be voiceless, and a sonorant will be voiced. Similarly, in Skou the basic
continuant is, unless expressly marked to the contrary, a sonorant (and thus unmarkedly
voiced). Taking these hierarchies into account to redraw of the feature system to reflect these
markedness relationships is shown in table 23, in which the symbol \( u \) stands for ‘unmarked
value (given the other features assigned)’.

**Table 23. A markedness analysis of the Skou consonants**

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>t</th>
<th>k</th>
<th>b</th>
<th>j</th>
<th>f</th>
<th>h</th>
<th>w</th>
<th>y</th>
<th>r</th>
<th>l</th>
<th>m</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
</tr>
<tr>
<td>back</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
</tr>
<tr>
<td>coronal</td>
<td>–</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
</tr>
<tr>
<td>continuant</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>sonorant</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>nasal</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
</tr>
<tr>
<td>lateral</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
</tr>
<tr>
<td>voiced</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>( u )</td>
<td>+</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
<td>( u )</td>
<td>+</td>
</tr>
</tbody>
</table>

Reading table 23 we can see that the only features that are actually specified for, for
instance, /\( h \)/ are the values [+back] and [+continuant]. All the other phonetic features follow
from the principles outlined above: nasality is unmarkedly negative, and consonants are non-
sonorant. Voicelessness is the norm, and so it too is unspecified. Similarly, /\( b \)/ is marked only
for the features [-continuant] and [+voice], since all of the other values follow from the defaults
or are non-contrastive. Non-backness is the norm, as is non-sonorance.

Correlating this system with the observed frequencies of consonants in Skou we find that
the most commonly occurring consonants are the ones with the least amount of featural
specification. Compare the amount of specification in the table above with the following chart
showing the relative frequencies of the different consonants of Skou.

**Table 24. Frequencies of the Skou consonants**

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>t</th>
<th>l</th>
<th>n</th>
<th>h</th>
<th>k</th>
<th>r</th>
<th>f</th>
<th>b</th>
<th>m</th>
<th>w</th>
<th>y</th>
<th>j</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency (%)</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

All consonants are specified as either plus or minus coronal. The least specified consonants are
\( p \) and \( t \), implying that specifying coronal is ‘worth less’ in terms of markedness than the other
features. The next two most frequent consonants are also coronal, but sonorant. The most
infrequent consonants are those that are sonorant but non-coronal, or else non-sonorant but
voiced. The relative frequencies of the consonants in table 24 reflects the number of features
that are required to specify those consonants.

2.2.2.2 An alternative arrangement of the consonants

The discussion above both describes and analyses the consonantal system of Skou. The
presentation has held closely to the phonetic distinctions present in the consonants, and has not
imposed too much in the way of analytical machinery on to it. Some aspects of the distribution of the phonemes, and their allophones, suggests that an alternative view is possible.

The only completely clear voiced:voiceless contrast in the same place of articulation in Skou is p:b; the dental, palatal and velar places lack this contrast, either phonetically or phonologically. Nevertheless, the fact that /w/ has the allophone [g] in some environments (see 2.2.1.4), and that there are two non-nasal sonorants in the alveolar place, a unique feature amongst languages in the Skou family and unusual in New Guinea generally, could lead to the following rearrangement of some of the phonemes:

<table>
<thead>
<tr>
<th>Table 25. The consonants of Skou II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Labial</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Voiceless</td>
</tr>
<tr>
<td>Voiced</td>
</tr>
<tr>
<td>Continuant</td>
</tr>
<tr>
<td>Nasal</td>
</tr>
</tbody>
</table>

The advantages of this arrangement are plain to see: the system is much more symmetrical, and the gaps in the inventory are not so typologically unusual. All the major places of articulation show a voicing contrast in the non-continuants, and all have a continuant. The fact that a /l/ is sometimes realised as [d] following a nasalised vowel (eg., feng=ra ‘just bad’ /fēra/ appearing as [fēnda]) also suggests that this might be a valid analysis. While tempting, this analysis ignores the fact that historically the /l/ is derived from *t, and that the voiced alveolar stop *d has developed into the /l/. While the arrangement does show a ‘neater’ picture of Skou consonants, it does not explain the borrowing of words with [s] into Skou with a [r], whereas the historical scenario, in which *s > **t > /r/ offers a perfect explanation (see Donohue 2002b for a fuller explication of historical changes in the phonologies of the Western Skou family languages).

Another organisational option would be to assign the /j/ to the voiced back position (recall that it does show the allophone [g’], a clearly back sound), and perhaps separating f and h from l and j, thus allowing ‘space’ for w as a continuant, but otherwise following the arrangement above. The fact that at least one loan word, kurù ‘teacher’, is known in which a g in the source language (the roots of the word are Indonesian/Malay guru) is transferred into Skou as a voiceless velar stop k, rather than the voiced palatal j, suggests that this option is not without problems of its own, and so has not been pursued in detail here.19

2.2.3 Vowels

The vowel system of Skou consists of seven contrastive vowels, including four rounded and three unrounded ones, and containing the presence of high and mid front rounded vowels, something that is generally typologically unusual and particularly unusual in the New Guinea context. The number and nature of vowel contrasts varies depending on the suprasegmental environment in which the vowels appear. Ignoring constraints imposed by the choice of onset, if present (see 2.4.3), we find the following contrasts in different tonal environments.

---

19 It is interesting to reflect on the neat arrangements that can be made from a closed system in a language, and to ponder to what extent they reflect language-internal organisation, or a linguist’s striving for the ‘neater’ and ‘more elegant’ solution to a messy data set.
Firstly, there are seven phonetic contrasts in syllables with a high pitch, arranged as follows.

Table 26. Vowel qualities encountered in high or falling pitch syllables

<table>
<thead>
<tr>
<th>i</th>
<th>u</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>ø</td>
</tr>
<tr>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td></td>
<td>a</td>
</tr>
</tbody>
</table>


In syllables which have a falling pitch or a low pitch there is still a seven-way contrast, but it is composed of different phonetic vowels. The contrasts found in these environments are in most cases made by different vowels to those seen in high pitched syllables.

Table 27. Vowel qualities encountered in syllables with low and falling pitch

<table>
<thead>
<tr>
<th>i</th>
<th>ø</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>


It is clear that only seven distinctions are operating here, but with both somewhat overlapping allophones; this is preferable to positing the existence of twelve phonetically different vowel contrasts. Alternations in pitch on words when they precede high or falling tones show the alternations.

When we extend the data set to include nasalised vowels, yet more phonetic vowel qualities are found, though the total number of contrasts in each set is reduced. In all cases there is no highish- centralish- rounded vowel in a nasalised environment. When the syllable is nasalised and has high or falling pitch, the vowel qualities are lower than would be expected for vowels in a non-nasalised syllable.

Table 28. Vowel qualities encountered in high and falling pitched nasalised syllables

<table>
<thead>
<tr>
<th>i</th>
<th>ø</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When the pitch of a syllable is low, then the vowel qualities are even lower, as seen in table 29.
Table 29. Vowel qualities encountered in low pitched nasalised syllables

<table>
<thead>
<tr>
<th>ɛ</th>
<th>ɔ</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɛ</td>
<td>ə</td>
</tr>
<tr>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

The total range of phonetic vowel qualities found is shown in figure 4, which contains sixteen different vowel types.

Figure 4. Phonetic vowel qualities found in Skou

<table>
<thead>
<tr>
<th>i</th>
<th>y</th>
<th>u</th>
<th>u</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>ɛ</td>
<td>ə</td>
<td>ɔ</td>
<td>ɔ</td>
</tr>
<tr>
<td>ɛ</td>
<td>ə</td>
<td>ɔ</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Again, we would not want to posit sixteen underlying vowel contrasts, since no tonal or nasalisation environment allows all these vowel qualities contrastively. On the basis of the data above, we can assume the following underlying set of vowel contrasts in Skou, with four degrees of phonetic height, and at least five phonetic positions on the front-back axis, which are described phonemically in 2.2.2.1 in terms of a simply binary opposition in each direction.

Table 30. The underlying vowels of Skou

<table>
<thead>
<tr>
<th>front ←→ back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
</tr>
<tr>
<td>i</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>φ</td>
</tr>
<tr>
<td>low</td>
</tr>
<tr>
<td>ɛ</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>a</td>
</tr>
</tbody>
</table>

These vowels show allophones in different suprasegmental environments according to the forms shown in the preceding tables (tables 26 – 29). For instance, the variation in the back vowels can be summarised in (3).

(3) /u/ → [ɔ] / low pitch  (→ [u] elsewhere)
    /ø/ → [ø] / high pitch  (→ [ɔ] elsewhere)
(a similar analysis can be developed for the front vowels and the non-back rounded vowels)

It could be argued that the fact that the same phonetic quality (in this example, [ɔ]) is being assigned to different phonemes based on the pitch environment is an unnatural stipulation. That is, an alternative analysis would assign the identical [ɔ] vowels to the one phoneme, and the alternation between [ɔ] and [u] would be assigned to another phoneme, as in (4).

(4) /u/ → [ɔ] / low pitch  (→ [u] elsewhere)
    /ø/ → [ø] / everywhere
The advantage of this solution would be that the language learner need only acquire one rule of allophony, the rule that accounts for the variation between the extremes, while one of the vowels remains constant. The practical differences between the analysis in (4), with one varying vowel and one unchanging vowel, and the one proposed in (3) can be seen in the data set in table 31:

Table 31. Two analysis of vowel contrasts

<table>
<thead>
<tr>
<th>Phonetic forms</th>
<th>Analysis:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>[kɔ] [\ ] ‘east’</td>
<td>/kɔ/</td>
</tr>
<tr>
<td>[ko] [\ ] ‘kind of armband’</td>
<td>/kɔ/</td>
</tr>
<tr>
<td>[ku] [\ ] ‘dew’</td>
<td>/ku/</td>
</tr>
</tbody>
</table>

We can show that the alternations which have been shown here as allophonic, summarised in analysis (3), are in fact dynamic allophones of the same vowels. This can be demonstrated by examining the allophones of the vowel /e/ when the syllable in which it is appeared changes pitch. For instance, the genitive pronouns (see 6.3.1) are derived from the basic pronouns by changing the pitch to a falling one (or in one instance high – see 2.4.1 for discussion), regardless of what the lexical pitch for that pronoun is. When this happens, the allophone of /e/, the vowel of most pronouns, is raised:

Table 32. Allophony of /e/

<table>
<thead>
<tr>
<th>Environment: basic pronoun; low pitch</th>
<th>genitive pronoun; high or falling pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>/pe/ 3SG.F</td>
<td>[pe] [\ ]</td>
</tr>
<tr>
<td>/te/ 3PL</td>
<td>[te] [\ ]</td>
</tr>
<tr>
<td>/ke/ 3SG.NF</td>
<td>[ke] [\ ]</td>
</tr>
</tbody>
</table>

The only difference between the basic and the genitive pronouns shown here is the pitch, and there is a clear relationship between the two. This is suggestive that the differences in vowel quality do reflect actual allophony, and that the analysis in (3) is to be preferred over that in (4). Furthermore, speaker preferences for orthographic representation are also supporting evidence for the analysis here (with the orthographic forms ko ‘east’, ku ‘child’, kò or ko ‘armband’ and kú or ku ‘dew’).

The allophones that have been reported for vowels in different pitch environments in the various tables of this section are summarised in table 33.
Table 33. Vowel allophones in Skou conditioned by pitch or nasalisation (summary)

<table>
<thead>
<tr>
<th></th>
<th>Non-nasalised</th>
<th>Nasalised</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High pitch</td>
<td>other</td>
</tr>
<tr>
<td>/i/</td>
<td>i</td>
<td>i</td>
</tr>
<tr>
<td>/e/</td>
<td>e</td>
<td>e</td>
</tr>
<tr>
<td>/a/</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>/ɔ/</td>
<td>ɔ</td>
<td>ɔ</td>
</tr>
<tr>
<td>/u/</td>
<td>u, u</td>
<td>u, ɔ</td>
</tr>
<tr>
<td>/ʊ/</td>
<td>ʊ</td>
<td>ʊ</td>
</tr>
<tr>
<td>/ø/</td>
<td>ø</td>
<td>ø</td>
</tr>
</tbody>
</table>

There is no low front [æ] phone in Skou. While this is not surprising cross-linguistically, it is striking compared to the other languages closely related to Skou (see 1.2), all of which show this phone, as a nasalised allophone of /ɛ/ (which contrasts with /e/). The lack of this sound in Skou is something that visitors from Papua New Guinea remark upon as a salient quality of Skou.

The list of allophones in table 33 does not exhaust the range of allophonic possibilities for vowels in Skou, as the form of the vowel in a preceding syllable of the same phrase also has an effect. This shall be described in the following section, 2.2.3.1. Additionally, there is also a non-syllabic allophone of the vowel /i/. This vowel is realised as a nasal in one environment; while there is only one morphophonological environment for this unusual allophone, it does occur extremely frequently because of the frequent use of the morpheme that shows this variant. The clitic cluster used to express definiteness, =/a/, which is here orthographically represented as =ing a ‘the’ following slow speech pronunciation and speaker preferences for orthography, is low-toned and as a clitic sequence always occurs in an unstressed position in whatever word it forms a foot with. As such, it is not surprising that it is often pronounced as a single syllable, with the high vowel pronounced as a glide that preserves the nasalisation of the original vowel, resulting in the form [ja]. A further development of this desyllabification is for the nasalised palatal glide to be realised, unsurprisingly, as a palatal nasal, thus [na]. This has been observed to be particularly common after a /u/ vowel, and less common after a nasalised vowel. Some examples of these allophones are shown in (5) - (7). The presence of phonemic nasalisation on the last vowel of the noun in (7) decreases the likelihood of the [na] allophone appearing.

(5) /peːku t a/ [pəŋku t a] ~ [pəŋku t a] ~ [pəŋku t a] ‘the girl’ {pe=angku ing a}

(6) /ha t a/ [ha t a] ~ [ha t a] ~ [ha t a] ‘the bag’ {ha ing a}

(7) /hə t a/ [hə t a] ~ [hə t a] ~ [hə t a] ‘the coconut’ {ha ing a}

Only three monomorphemic words are known with to have the syllable /s t s/ (that is, a nasalised high front vowel with no consonant in the onset position. Of these three two have either a word break or a consonant following the /h/. The remaining word has a tone pattern which does not require a prominent (high or falling) pitch to be associated with that syllable,
and the syllable following the /h/ is another onsetless syllable, making for another /hV/ environment. In this word we also find the palatal nasal allophone in variation with nasalised vowel or nasalised glide allophones.

(8) /h/ ‘dig up’ \{ing\} \\
    [i] 

(9) /taihe/ ‘money’ \{taingbe\} \\
    [taihe] \sim \[taihbe\] 

(10) /he5/ ‘cat’ \{ingeong\} \\
    [he5] \sim \[je5] \sim \[ie5] 

In all cases described here the spread of nasality is optional; it is never compulsory. The version of \textit{taingbe} with no prenasalisation on the stop shown in (9) is quite common, and completely natural.

2.2.3.1 Further vowel allophony

In the previous section we saw data showing that the pitch of the syllable affects the quality of the vowel, as does the presence of nasalisation on the syllable rime. In addition to this, the quality of vowels in neighbouring syllables, particularly preceding syllables, affects the quality of the vowel (though there is no observed correlation between position in a word and vowel quality). The following table lists some common examples of vowel allophony influenced by the quality of the vowel in the preceding syllable, when there is an intervening consonant. For instance, the vowel [e] is heard in the second syllable when any of the sequences (C)iCE, (C)aCE, or [(C)yCE] (< (C)\phi CE]) are present, and [e] is heard for /e/ when the preceding vowel is anything else.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline
\text{Vowel in preceding syllable (V\textsubscript{b})} & \text{\textit{i}} & \text{\textit{i}} & \text{\textit{e}, \textit{e}} & \text{\textit{a}} & \text{\textit{ɔ}, \textit{o}} & \text{\textit{u}, \textit{u}} & \text{\textit{φ}, \textit{œ}} \\
\hline
\text{\textit{i}} & \text{\textit{i}} & \text{\textit{i}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} \\
\text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} & \text{\textit{e}} \\
\text{\textit{a}} & \text{\textit{a}} & \text{\textit{a}} & \text{\textit{a}} & \text{\textit{a}} & \text{\textit{a}} & \text{\textit{a}} & \text{\textit{a}} \\
\text{\textit{ɔ}} & \text{\textit{ɔ}} & \text{\textit{ɔ}} & \text{\textit{ɔ}} & \text{\textit{ɔ}} & \text{\textit{ɔ}} & \text{\textit{ɔ}} & \text{\textit{ɔ}} \\
\text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} \\
\text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} & \text{\textit{u}} \\
\text{\textit{φ}} & \text{\textit{φ}} & \text{\textit{φ}} & \text{\textit{φ}} & \text{\textit{φ}} & \text{\textit{φ}} & \text{\textit{φ}} & \text{\textit{φ}} \\
\hline
\end{tabular}
\caption{Vowel allophony and preceding vowels in V\textsubscript{b}CV\textsubscript{a} template}
\end{table}

In addition to the allophony shown in table 34xx, in which the allophone is shown as being dependant on the nucleus in the preceding syllable, vowels can be substantially influenced by a following vowel if there is no intervening consonant (in contrast to the preceding-syllable allophony, which applies even if there is an intervening consonant). The following-vowel allophony mainly involves assimilation in terms of rounding, and dissimilation in terms of height, and to a lesser extent degree of backness.
Table 35. Vowel allophony and preceding vowels in $V_bV_a$ template

<table>
<thead>
<tr>
<th>$V_a$:</th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>o</th>
<th>u</th>
<th>u</th>
<th>ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>i</td>
<td>i</td>
<td>i</td>
<td>i</td>
<td>i</td>
<td>(i)</td>
<td>ø</td>
</tr>
<tr>
<td>e</td>
<td>e</td>
<td>e</td>
<td>e</td>
<td>e</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>u</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
</tr>
</tbody>
</table>

Combining the various listed allophones in tables 34 and 35 with the pitch- and nasalisation-induced allophonic variants described in the preceding section we can easily see that many of the environments are compatible. The allophones listed in the above tables should thus be taken not as providing an absolute prediction of the realisation of a vowel, but a list of the most common variants that will be encountered. For instance, in the phrase ‘the burp’, *oe*ing a, we find two competing environments that could determine the quality of the /i/ vowel, the preceding /ø/ and the nasalisation. The first of these would suggest a [ø] or [ø] vowel, and the second a [e] vowel. In fact the vowel can be realised as any of these: the phrase may be heard as [øæa], or equally [øæa], and several other variants besides. A full list of the qualities associated with each phoneme, assembled from the tables preceding in this and the previous section, is given in figure 5, which shows the different vowel qualities and is divided by lines indicating the regions of allophony of each phoneme.

Figure 5. Vowel spaces and overlap of allophones

This same data is summarised in table 36, showing more clearly the points at which the allophones of different phonemes overlap. In this table not all phonetically distinct forms have been assigned to a separate column, but rather some compromises have been made. The table shows the allophones from high front running through the low allophones to the high back, and then mid- and front unrounded qualities.
Another point of note, immediately obvious from figure 5 and table 36, is that many of the vowel phonemes show allophones that are identical or near-identical to the allophones found for other vowel phonemes, but appearing in different environments. More relevantly, many of the allophones of some vowels overlap with the allophones of other vowels in tonal environments. This creates some difficulty for an outsider hearing the language for the first time, and is probably responsible for Voorhoeve’s (1971) analysis of the language as having nine vowels (which was also this author’s first impression).

The phonetic data can be modelled phonologically without recourse to extreme specification, and accounting for the allophones of the underlying vowels is easily accomplished by using the following set of features to describe and separates these vowels.

<table>
<thead>
<tr>
<th>Feature</th>
<th>[i]</th>
<th>[e]</th>
<th>[a]</th>
<th>[ɔ]</th>
<th>[u]</th>
<th>[ʊ]</th>
<th>[ʌ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>back</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>front</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>round</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>(low)</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The feature [low] has been included in the table not because it is necessary to distinguish any vowels in Skou, but because it is a reminder of the uniquely low status of /a/, which has several behavioural peculiarities and is best referred to without reference to disjunctive sets. As with the consonants, we can redraw this table in terms of marked and unmarked categories. The following principles are applied, none of them specific to Skou.

- frontness: vowels are unmarkedly non-back;
  non-back vowels are unmarkedly front;
- height: non-back, non-high vowels are unmarkedly low
- rounding: back vowels are unmarkedly rounded;
  non-back vowels are unmarkedly unrounded

This results, along with the removal of the redundant feature [low], with only seven ‘plus’ values in the chart, which is shown below.
Table 38. A markedness analysis of the Skou vowels

<table>
<thead>
<tr>
<th></th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>o</th>
<th>u</th>
<th>u</th>
<th>φ</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>+</td>
<td>−</td>
<td>u</td>
<td>−</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>Back</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>+</td>
<td>+</td>
<td>u</td>
<td>u</td>
</tr>
<tr>
<td>Front</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>−</td>
</tr>
<tr>
<td>Round</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Again we can examine these features in terms of the predictions that they would make about the relative frequencies of vowels in the lexicon. Again, as with the consonants, these frequencies match up well with the amount of feature specification we have posited.

Table 39. Frequencies of the Skou vowels

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>i</th>
<th>φ</th>
<th>ε</th>
<th>u</th>
<th>o</th>
<th>u</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency (%age)</td>
<td>29</td>
<td>24</td>
<td>16</td>
<td>13</td>
<td>7</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

Here too we can see that the features we have used to specify the vowels correspond to the frequencies with which the vowels are represented. The vowel a is overwhelmingly common, and is the least specified vowel. i is specified only for [+high], and is second in frequency. A significant drop later φ and ε appear, followed by the back vowels and finally the highly specified high mid rounded vowel u.

This feature system establishes the following set of natural classes:

Figure 6. Simple natural classes

There are other classes of vowels, which are useful to recognise because of their common behaviour in various phonological processes. They are defined by a combination of features and relationships between features, described in table 40.

Table 40. Classes of vowels

<table>
<thead>
<tr>
<th>Class</th>
<th>Defining features</th>
<th>Defines</th>
<th>Referred to by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-front round</td>
<td>+ round, -front</td>
<td>u u o</td>
<td>marking feminine</td>
</tr>
<tr>
<td>front or low</td>
<td>α front, -α low</td>
<td>i ε φ a</td>
<td>co-occurrence with voiced stops</td>
</tr>
<tr>
<td>front unrounded</td>
<td>+ front, -round</td>
<td>i ε</td>
<td>marking plural</td>
</tr>
<tr>
<td>non-back, rounded</td>
<td>-back, + round</td>
<td>φ u</td>
<td>non-occurrence with [j]</td>
</tr>
</tbody>
</table>

The phonological shape that the morphological marking of feminine and plural takes is dealt with in the following section; the morphosyntactic effects and consequences are described in
7.2.3, 7.3.4 and 7.3.5. Section 2.4 documents the co-occurrence restrictions that pertain between consonants of different types and vowels.

2.2.3.2 Changes in vowels for number or gender of argument

The following rule describes the changes observed in the vowels of a number of verbs when feminine is marked:

\[
\begin{align*}
\begin{bmatrix}
\alpha & \text{front} \\
\beta & \text{back}
\end{bmatrix} & \rightarrow \\
\begin{bmatrix}
-\alpha & \text{back} \\
-\beta & \text{high}
\end{bmatrix}
\end{align*}
\]

This rule backs and rounds vowels when the feature [feminine] is marked on a predicate. The following vowels are regularly affected:

\[
\begin{align*}
\text{(11)'} & \quad i \rightarrow u \\
& \rightarrow u \rightarrow u & \text{li ‘do’} & \quad tu ‘she does’ & \quad fu ‘see’ & \quad fu ‘she sees’ \\
& \phi \rightarrow u & \rightarrow o & \phi & \text{lu ‘she shaves’} & \quad ru ‘she shaves’ \\
& \epsilon \rightarrow u & (u) & \rightarrow o & \text{lϕ ‘give’} & \quad nϕ ‘she gives’
\end{align*}
\]

The operation of this rule is discussed in more detail in 8.2.3. When the feature [plural] is marked on the verb, the vowels change in a different pattern, as described in the following rule:

\[
\begin{align*}
\begin{bmatrix}
\alpha & \text{back}
\end{bmatrix} & \rightarrow \\
\begin{bmatrix}
+ & \text{front} \\
- & \text{back} \\
- & \text{round} \\
- & \alpha & \text{high}
\end{bmatrix}
\end{align*}
\]

This rule serves to front and raise a vowel; it models the following alternations:

\[
\begin{align*}
\text{(13)'} & \quad u \rightarrow i & \text{lu ‘hear’} & \quad ri ‘they hear’ \\
& \phi \rightarrow i & \phi & \text{lu ‘shave’} & \quad ri ‘they shave’ \\
& \epsilon \rightarrow i & \epsilon & \text{lu ‘get’} & \quad ki ‘they get’ \\
& u \rightarrow \epsilon & \text{fu ‘fear’} & \quad fe ‘they fear’ \\
& o \rightarrow \epsilon & \text{lu ‘hide’} & \quad ke ‘they hide’
\end{align*}
\]

This rule is also discussed in more detail in 7.2.3, and data on the irregular forms that are partly covered by this rule can be found in appendix 2.

2.2.3.3 Relational feature analysis

Another way to consider the featural analysis of the vowels of Skou is to examine them in terms of relational features. So, for instance, compared to the front-most vowel, i, both u and u are [+back]. The features used are the same as those seen in the previous section, but here they are applied relationally, not absolutely.

By comparison with table 38, we could suggest the set of relational features to describe the vowels shown in table 41xx.
Table 41. A relational feature analysis of the vowels

<table>
<thead>
<tr>
<th>features</th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>o</th>
<th>u</th>
<th>u</th>
<th>ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>+</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>back</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>u</td>
</tr>
<tr>
<td>front</td>
<td>+</td>
<td>+</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>round</td>
<td>u</td>
<td>u</td>
<td>u</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

(Note that rounding is only contrastive for ø; otherwise, [+back] implies [+round]. Similarly, u does not need to be specified as [+high], since it is already uniquely specified by the features [front] and [back].)

The natural classes described in table 40 can even more simply be described with this set of features: the vowels that mark feminine are all [+back], and those than can co-occur with voiced stops are all [–back]; plural is marked with vowels that are [+front, –round], and the vowels that cannot occur with [j] are [+front, +round].

The non-appearance of [u]) can be described as the feature [+nasal] implying [α front, -α back]; that is, vowels which are nasalised must have different values for the features [front] and [back] (an identical set of features defines the absence of [wu] sequences; see 2.5.3). The high frequency of nasality with /a/ is due to the fact that this vowel carries less positive features than any others.

2.2.3.4 Vowels and syllabification

We have mentioned that the shape of the syllable in Skou does not allow for a coda position. This means that any sequences of vowels must necessarily involve a sequence of two syllables; in no cases are two adjacent vowels interpreted as belonging to the same syllable. This can be demonstrated by the ability of the two vowels to appear with different pitch contours, and more importantly with different specified values for nasality (though through the process of nasal spreading (2.3.2) the second vowel in a sequence of two vowels will be somewhat nasalised phonetically, even if not specified for nasalisation phonologically). For instance, in the word [fEû] ‘tomorrow’, the two vocalic segments will never be realised as *[fEw] or *[fEw]; the nasalisation is a property of the rime of the second syllable, and can only spread rightward.

2.2.4 Segmental phonology: a summary

The following table summarises the segmental phonemes, with their major allophonic variants shown in square brackets following. The arrangement is not ideal, since it cannot represent all the natural classes that can be identified.
The most obvious lack in this table is the organisation of the phonologically rounded segments /p/ and /w/, which are not grouped coherently. The vowels, too, ideally require some further differentiation, as detailed in 2.2.3.2.

### 2.3 Suprasegmental phonology

In addition to the vowel and consonant segments, Skou also displays suprasegmental contrasts in both pitch and nasalisation. Three different pitches contrast on monosyllables, and, although there are regularly three degrees of phonetic nasalisation, only two phonologically contrastive levels, nasalised and oral. These contrasts are illustrated in the six-way contrasting set shown in table 43, in which all the words consist of the segments [t] and [a], with different suprasegmental features.

**Table 43. Tonality and nasality contrasting on monosyllables**

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Nasalisation</th>
<th>Oral</th>
<th>Nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>[l]</td>
<td>ta</td>
<td>tā</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘hair’</td>
<td>‘canoe’</td>
</tr>
<tr>
<td>high</td>
<td>[h]</td>
<td>ta</td>
<td>tā</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘grass’</td>
<td>‘bird’</td>
</tr>
<tr>
<td>falling</td>
<td>[f]</td>
<td>ta</td>
<td>tā</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘arrow’</td>
<td>‘machete’</td>
</tr>
</tbody>
</table>

A more detailed description of the realisation of these suprasegmental features is given in the following sections, first describing the tonal melodies and tone sandhi processes, and then the realisation of nasalisation and the differences between phonological and phonetic nasalisation.

#### 2.3.1 Tone

Tone plays a high functional load in Skou, serving both lexical and grammatical functions. An example of a tonal minimal pair in a environment where context does not serve to disambiguate the meaning can be seen in the following pair of sentences, in which the pitch of the
monosyllabic verb stem (shown above the verb in Chao tone letters (Chao 1920), a high pitch and a falling pitch, respectively) is the only possible means of disambiguating the words and the clauses. In the following minimally-contrastive sentences, the pitch of the syllable of the verb root is shown to indicate the nature of the pitch contrast; the rest of the sentence is (approximately) the same. 20

\[ [42 \ 21=44 \ 22 \ 21] \]

(14)  \( H\ddot{o}e \ pe=h\ddot{a} \ e \ tue. \)
sago 3SG.F=pound 3SG.F.be 3SG.F.do
‘She is pounding sago (to make flour).’

\[ [42 \ 21=42 \ 21 \ 11] \]

(15)  \( H\ddot{o}e \ pe=h\ddot{a} \ e \ tue. \)
sago 3SG.F=weave 3SG.F.be 3SG.F.do
‘She is weaving sago (into thatch).’

Skou contrasts three different pitch contours on monosyllabic words: high, a 44 pitch, low, a 22, and falling, 41 (plus conditioned variants; see the following section). These categories are recognised by Skou people, who describe the different pitch melodies, using Indonesian, as *logat tarik* (or *logat tinggi*) ‘pulled tone’ (or high tone), *logattengah* ‘middle tone’ or ‘average tone’, and *logattekos* ‘pressed/stressed tone’, respectively. 21 Tone is independently affiliated with each word, not to each syllable, as has previously been stated in previous descriptions of the tone system (Voorhoeve 1971, Donohue 1997) (see 2.6 for discussion). This section shall deal with the realisation of tone as pitch contours on syllables, and the contrasts thus presented, as well as the methodology of determining the phonological rules underlying the different pitch contours. As an aid to understanding the system quantitatively, fundamental frequency tracings of syllables representative of the different pitch envelopes described here are presented in appendix 4 (though see Rose 1988 for a caution against directly equating pitch, one of the perceptual correlates of linguistically significant tone, and fundamental frequency, an acoustic measure).

2.3.1.1 Tone Sandhi

Not all of the phonetic realisations of the one lexically-associated tone melody on a syllable are the same in Skou, implying that there might be some dynamic process or processes that result in an alternative to the underlying form of the specified pitch. Ross (1980) describes a process of tone sandhi in Vanimo (Dumo – see 1.4) which operates such that adjacent sequences of falling and then either falling or high are realised as a sequence of high pitches. The same phonetically natural process of tone sandhi can be observed in Skou; this may be informally represented as follows:

(16)  \( F \rightarrow H / __H, F \)

---

20 An additional contrastive sentence, with pitch levels approximately [42 22 21], can be made from each of these two sentences by inflecting it for past tense; this involves suppleting the lexical pitch of the verb root with a low pitch (see 2.3.1.6), and not using the auxiliaries.

21 In addition to frequent, mutually bewildering, consultation with native speakers on the tone (‘sound’) of their language, my exposition has benefited from correspondence with Larry Hyman. While he may not agree with everything said here, thanks to him it’s easier to see the points of disagreement. Tida Syuntarö has provided valuable comments concerning various aspects of tone and analysis (and see also Tida 2000, 2003).
This rule applies both word-internally and across words within the phrase. Examples of the application of this rule are given below, with the numbers in square brackets representing the pitch contour of the phrase, syllable by syllable (after Chao 1920), with 1 standing for the lowest pitch value and 5 the highest. The first set shows the pitches in forms closest to their lexically specified form, as they appear preceding a low tone on the prominence clitic a (see chapter 4 for more discussion of these clitics). Even in this environment there is some change, with a grammatical word such as the clitic a following a falling pitched-syllable optionally appearing with the fall spread over the two syllables.

  fall-low high-low low-low
  ‘the sago’ ‘the house’ ‘the chopstick(s)’

If these same roots appear with a falling tone following them, realised here with the first person singular genitive suffix, the pitch contour is in some cases substantially altered:

(18) hP ni [44 41] pa ni [44 41] fe ni [22 41]
  fall-fall high-fall low-fall
  ‘my sago’ ‘my house’ ‘my chopstick(s)’

(19) HL+HL → H HL H+HL → H HL L+HL → L HL

This gives clear evidence for the existence of a productive tone sandhi rule as described above in (16), a rule that has a clear phonetic motivation: preceding a word that starts with a high pitch, the pitch of a syllable with a high component stays high. In terms of tonal melody units we might re-write (16) as shown in (16)’, showing the disassociation of the L in a HL sequence from its syllable when followed by a syllable associated with either H or HL.

(16)’ H L H (L) → H Ω H (L)

Further processes of tonal modification apply when a syllable appears phrase-finally, in which case the tone shows a slight falling off-glide (which can make the high and the falling pitches hard to distinguish), and phrase-initially, in which case there is often a slight up-glide. The different allotones are shown in table 44.

Table 44. Pitch contours associated with phonological tonal units on monosyllables

<table>
<thead>
<tr>
<th></th>
<th><em>L</em></th>
<th>_H, F</th>
<th># # # #</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>44</td>
<td>44, 34, 445</td>
<td>33, 3(4)4</td>
</tr>
<tr>
<td>Low</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Fall</td>
<td>41</td>
<td>44</td>
<td>341</td>
</tr>
</tbody>
</table>

Further complications in tonal realisation are due to the fact that different dialects maintain the tonal contrasts with different tone melodies. The description above applies to the variety of Skou spoken in Skou Mabo. In Skou Yambe, however, the following melodies are prominent:
Table 45. Pitch contours in Skou Yambe

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>H, F</th>
<th># #</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>45</td>
<td>44</td>
<td>43</td>
</tr>
<tr>
<td>Low</td>
<td>22</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>Fall</td>
<td>342</td>
<td>34</td>
<td>41</td>
</tr>
</tbody>
</table>

While the overall system is the same as the Skou Mabo one in terms of the contrasts that are maintained and their approximate location in tone space, there is considerable variance in the phonetic details, especially involving the equivalent of the falling pitch contour of Skou Mabo. This unit of contrast frequently shows a rise in Skou Yambe, which is not something attested in Skou Mabo outside question-induced rising intonation environments. Not enough material from Skou Sai has been heard and recorded to allow for a reasonable assessment of the pitch categories in that linguistic variety.

We have seen examples of tonal contrasts on monosyllabic roots in 2.3. Pitch is associated with the syllable in Skou, and given that at least some roots are polysyllabic, we can also monitor the appearance of different tonal melodies on polysyllabic roots. This is taken up in the following sections.

2.3.1.2 Pitch contours on disyllabic roots

If the tonal system in Skou was a syllable based one, in which each syllable could be independently specified for tone, we would predict that there should be seven contrastive pitch patterns on disyllabic words. This assumption is based on the starting point of having three contrastive pitch contours attested on monosyllables, each of which would be independently specified in a two-syllable word, yielding $3 \times 3 = 9$ possibilities. This total is then reduced by two because there is no contrast predicted between the putative tone sequences HH and FH, or between HF and FF, due to the operation of the tone sandhi rule described in (16) above. These are in fact the attested tone patterns, as shown in table 46; the asterisks next to the sequences *FH and *FF indicate that they are not predicted, because of the application of the tone sandhi rule.

Table 46. Pitch contrasts on disyllabic roots

<table>
<thead>
<tr>
<th>Length</th>
<th>Pitch contour</th>
<th>Tonal melody</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-σ</td>
<td>3(4)-43</td>
<td>HH</td>
<td>lēfi ‘black’</td>
</tr>
<tr>
<td>43-21, 343-21</td>
<td>HL</td>
<td>kíü ‘green tree frog’</td>
<td></td>
</tr>
<tr>
<td>44-41</td>
<td>HF</td>
<td>fūli ‘scorpion’</td>
<td></td>
</tr>
<tr>
<td>22(3)-(3)44</td>
<td>LH</td>
<td>nake ‘dog’</td>
<td></td>
</tr>
<tr>
<td>22-21</td>
<td>LL</td>
<td>pērō ‘lip’</td>
<td></td>
</tr>
<tr>
<td>23-(3)41</td>
<td>LF</td>
<td>pēbī ‘bamboo pig arrow’</td>
<td></td>
</tr>
<tr>
<td>*FH</td>
<td></td>
<td>–</td>
<td>n/a</td>
</tr>
<tr>
<td>41-21, 42-11</td>
<td>FL</td>
<td>leu ‘ketapang fruit, peanuts’</td>
<td></td>
</tr>
<tr>
<td>*FF</td>
<td></td>
<td>–</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Combining the information in tables 44, 45 and 46, and to some extent pre-announcing the results of trisyllabic tone patterns seen in 2.3.1.3 and 2.3.1.4, we can arrive at the following phonetic generalisations:
• all upper tones show an initial rise to a level at the beginning of an utterance; this is only occasionally found when the tone has a falling contour;
  thus 33, 344 and 34 are positional variants of 44.
• all tones show some fall in pitch at the end of an utterance;
  thus 43 and 42 are variants of 44, and both 11 and 21 are variants of 22.
• all tones accommodate the start or finish of a non-identical tone in an adjacent syllable;
  thus 223 and 23 are variants of 22 preceding higher-pitched syllables; 43 and 33 are variants of 44 preceding lower-pitched syllables and 344 and 34 are variants of the high pitch following low pitched syllables. Similarly, the audibly convex pitch contour 341 is a predictable variant of 41 following a low-pitched syllable.
• tones dissimilate to some extent to avoid a series of identical pitches on adjacent syllables; this is especially true for high pitches (see (1) and its discussion in this section, and further on in sections 6 and 7).
  thus all the sequences 34-43, 34-44 and 34-33 represent two identical high-pitched syllables in a row, 44-44, with obligatory dissimilation.

Applying the principles that we can infer from observing these phonetic processes, and adding our knowledge of the pronunciation of words when in linked phrases or clause, we can ‘tidy up’ the raw phonetic data to derive the tone melodies shown in table 46. The simplest phonological account of these data from disyllabic roots involves one of two possible hypotheses about the lexical assignment of tone in Skou. Either:
• there are restrictions on the tone combinations that can appear on multisyllabic roots, with *FH and *FF being proscribed; the same proscription results in tone sandhi when two (or more) monosyllabic roots with tones specifying these pitches come together;
  OR
• there are no restrictions on the tones that can be affiliated with each syllable in a multisyllabic root, but automatic tone sandhi processes neutralise absolutely the difference between the unattested *FH and the attested HH, and similarly with the unattested *FF and the attested HF.

Based on the data available we cannot decide which these two alternatives better accounts for the data. When we examine trisyllabic roots, however, we find that neither of these hypotheses completely adequately accounts for the facts of Skou tonology, and that a third hypothesis presents itself.

2.3.1.3 Pitch contours on trisyllabic roots
With trisyllabic roots there is a smaller corpus of words – most lexical items of three syllable length are transparently compounds, such as ṭo̱li HHH ‘dolphin’, composed of the specifier ṭo̱ H ‘fish’, and the disyllabic genus name li H ‘dolphin’ (the tone of this morpheme in isolation cannot be determined, since it is not produced in isolation). Many examples of this sort of specifier-specific compounding can be found, and only a relatively small number of examples are given in table 47. Here we can see that while this process of compounding with a general
specifier is particularly widespread with animal species names, it applies to both animate and inanimate nouns, though it does not appear so frequently with plant types. Chapter 10 and appendix 1 present further lexical information, showing the distribution of specifiers in different semantic domains.

Table 47. Specifier + specific trisyllabic lexemes

<table>
<thead>
<tr>
<th>Specifier</th>
<th>Specific type</th>
<th>Specific type</th>
</tr>
</thead>
<tbody>
<tr>
<td>mØ</td>
<td>H fish</td>
<td>HH ‘flying fish’</td>
</tr>
<tr>
<td>mØhaba</td>
<td>HHH ‘whale’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>mØhi</td>
<td>HH ‘tortoise’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>mØli</td>
<td>LF ‘stingray’</td>
<td>HHH ‘dolphin’</td>
</tr>
<tr>
<td>mØliu</td>
<td>HHH ‘dolphin’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>mØma</td>
<td>HL ‘shark’</td>
<td>L ‘cot fish’</td>
</tr>
<tr>
<td>mØnØ</td>
<td>HF ‘crocodile’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>mØyá</td>
<td>LH ‘cat fish’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>tá</td>
<td>H bird</td>
<td>LHL ‘butterfly’</td>
</tr>
<tr>
<td>táceró</td>
<td>HH ‘eagle’</td>
<td>HHL ‘shark’</td>
</tr>
<tr>
<td>táfomó</td>
<td>HFL ‘dragonfly’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>táfí</td>
<td>HH ‘black bat (sp.)’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>tåruru</td>
<td>LHH ‘willy wagtail’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>tápa</td>
<td>HH ‘heron’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>táru</td>
<td>HL ‘praying mantis’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>táru</td>
<td>HF ‘cassowary’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>táü</td>
<td>HL ‘hornbill’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>tå</td>
<td>F blade</td>
<td>F ‘machete’</td>
</tr>
<tr>
<td>táliló</td>
<td>LHL ‘scissors’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>támió</td>
<td>LHL ‘axe’ (&lt; Tok Pisin tamiok)</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>tánófó</td>
<td>LHH ‘knife’</td>
<td>HH ‘eel’</td>
</tr>
<tr>
<td>táru</td>
<td>HH ‘handle of a machete’</td>
<td>HH ‘eel’</td>
</tr>
</tbody>
</table>

In cases such as these the obvious segmentability allows the items to be elicited one syllable at a time, and also in paradigms, and so the underlying F on the first syllable of ‘scissors’ can be discerned. When we have a polysyllabic, non-segmentable root, this is not the case. With a form such as ifáfó HHL ‘spit(tle)’, or pirara LHH ‘scar’, there are no morpheme breaks, and so no paradigmaticity: the first syllable of ifáfó cannot be heard in any context other than a following high tone, and so (keeping the two hypothesis presented for tonal melodies on disyllabic roots above in mind) we would not be able to determine whether this was underlingly ‘FHL’, for instance. Examining trisyllabic roots would allow us to see whether the pattern observed in disyllables, that of disallowing a F before another F or a H, holds for longer words. Of the 27 logical possible combinations for trisyllables, illicit sequences of *FH or *FF would occur in ten, disallowing them by the sandhi rule in (16) and thus predicting that we should find seventeen contrastive melodies. The results are shown in table 48xx; melodies that would be judged to be illicit from the already-mentioned tone sandhi rule, such as *LFH, have been marked with an asterisk, to indicate that the absence of any lexemes attesting that pattern is not surprising.
Table 48. Tonal melodies on trisyllabic roots

<table>
<thead>
<tr>
<th>Length</th>
<th>Pitch contour</th>
<th>Tonal melody</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-σ</td>
<td>3(4)4-44-43</td>
<td>HHH</td>
<td>lēbābā 'sandfly'</td>
</tr>
<tr>
<td></td>
<td>34-43-21</td>
<td>HHL</td>
<td>hahafa 'slow'</td>
</tr>
<tr>
<td></td>
<td>34-44-41</td>
<td>HHF</td>
<td>apōle 'Gnetum sp.'</td>
</tr>
<tr>
<td></td>
<td>34-44-41 / 33-44-41</td>
<td>HLH</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HLL</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HLF</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*HFH</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>44-41-11</td>
<td>HFL</td>
<td>nahipa 'eight'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*HFF</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>23-34-43</td>
<td>LHH</td>
<td>mabiri 'twenty-four'</td>
</tr>
<tr>
<td></td>
<td>23-34-43</td>
<td>LHL</td>
<td>küp=B 'spider, octopus'</td>
</tr>
<tr>
<td></td>
<td>23-43-21</td>
<td>LHF</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LLH</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>22-22-21</td>
<td>LLL</td>
<td>rāwah axe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LLF</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*LFH</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LFL</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*LFF</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*FHH</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*FHL</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*FHF</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FLH</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FLL</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FLF</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*FFH</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*FFL</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*FFF</td>
<td>n/a</td>
</tr>
</tbody>
</table>

While it is true that the predicted gaps are not found in the data, it is also true that fully seven of the remaining seventeen predicted tone melodies are not found. Most interestingly, these gaps are not random. The following sections presents an alternative, better analysis of pitch in Skou as a word-level phenomenon.

2.3.1.4 Tone melodies and pitch contours

In the previous section, we saw that for trisyllabic roots ten different melodies are attested. Table 49xx presents them again in a different arrangement to that seen in table 48xx, in that the attested melodies are shown by the overall shape of their contour.
Table 49. Melodies associated with trisyllabic roots

<table>
<thead>
<tr>
<th>Attested:</th>
<th>Not attested</th>
</tr>
</thead>
<tbody>
<tr>
<td>![melody1]</td>
<td>![melody2]</td>
</tr>
<tr>
<td>![melody3]</td>
<td>![melody4]</td>
</tr>
<tr>
<td>![melody5]</td>
<td>![melody6]</td>
</tr>
<tr>
<td>![melody7]</td>
<td>![melody8]</td>
</tr>
<tr>
<td>![melody9]</td>
<td>![melody10]</td>
</tr>
<tr>
<td>![melody11]</td>
<td>![melody12]</td>
</tr>
<tr>
<td>![melody13]</td>
<td>![melody14]</td>
</tr>
<tr>
<td>![melody15]</td>
<td>![melody16]</td>
</tr>
</tbody>
</table>

The patterns of permitted tone melodies are clear: there are five word-melodies, which have different points of inflection (Donohue 1997) for the complex tones. A melody of the sort HLH or HLHL, which would underlie the possibly predicted, but not attested, patterns *![melody17] and *![melody18], respectively, is not a member of the five distinct tonal melodies that can be affiliated with the word. The patterns which were not predicted by virtue of being ruled out on the automatic tone sandhi analysis mostly involve HLH or HLHL melodies. The other of the unexpectedly unattested tone patterns involve the appearance of a F in a word with a LHL melody, or the appearance of tonal changes on the antepenultimate syllable. These restrictions will be discussed in more detail in 2.4.2.

However, before abandoning the syllable-tone analysis we should examine the disyllabic data in the light of this word-tone analysis. If there is no correlation between the disyllabic word-melodies and those seen in trisyllables, then the analysis would lose credibility. Rearranging the disyllabic data in terms of the categories discovered for trisyllabic roots, we find the following patterns:

Table 50. Melodies associated with disyllabic roots

<table>
<thead>
<tr>
<th>Attested:</th>
<th>Not attested</th>
</tr>
</thead>
<tbody>
<tr>
<td>![melody19]</td>
<td>![melody20]</td>
</tr>
<tr>
<td>![melody21]</td>
<td>![melody22]</td>
</tr>
<tr>
<td>![melody23]</td>
<td>![melody24]</td>
</tr>
<tr>
<td>![melody25]</td>
<td>![melody26]</td>
</tr>
<tr>
<td>![melody27]</td>
<td>![melody28]</td>
</tr>
</tbody>
</table>

Again the non-occurring patterns involve HLH or HLHL melodies, and the allowed patterns all fit into the five word tone patterns discovered for trisyllabic roots. It remains only to compare the apparently simple three-way distinction on monosyllabic roots with this analysis. Since only three pitches are contrastive on monosyllables, we need to develop a careful methodology in order to detect traces of a five-way contrast. Two factors can assist us:

- although rise and rise-fall are found as word melodies, there are no cases, in either polysyllabic or monosyllabic words, of a LH being associated with a single syllable;
- while no homophones exist in polysyllabic words, there are many homophones on monosyllables.
The first of these factors suggests that there is a highly-ranked constraint in Skou against the sequence LH associating to a single syllable. This would bar the direct realisation of either a LH or a LHL melody on monosyllables, which is the observed pattern.\footnote{Parenthetically we can note that this restriction, combined with the observed restrictions on the data, would also argue strongly against the need for a tonal root node construct in a model of Skou tonology.}

The second factor is also suggestive of there being an underlying tonal contrast that is not distinctive on monosyllables. While some degree of homophony is to be expected (the phonological resources of Skou only allow for 149 segmentally contrastive syllables,\footnote{Given tonal restrictions and restrictions on consonant and vowel cooccurrences, there is a total of only 413 phonetically contrastive monosyllables. See 2.5 for further discussion of phonotactics.} not an high total), we can examine the frequency of homophones, arranged by the phonetic pitch contours observed. We would predict that, all other phonotactic factors being equal, if there was a tonal category collapse, there should be a greater number of homophones present on these syllables representing the many-to-one collapse than for a phonetic pitch which only represents one underlying tone. This is shown graphically in table 51.

\textit{Table 51. Predictions of relative frequency of monosyllabic homophones}

<table>
<thead>
<tr>
<th>Underlying tones: X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface pitches:</td>
<td>X</td>
<td>Y</td>
</tr>
<tr>
<td>Homophones?</td>
<td>n</td>
<td>2n</td>
</tr>
</tbody>
</table>

With this model in mind we can now examine the homophones found on monosyllables, and compare that with the prediction that both of the above factors have led us to: that LH and LHL melodies would be realised as one of the other melodies (phonetically [|], [\_] or [\|]), with a concomitant increase in the incidence of homophony in these tonal categories. Of course, this is not necessarily to claim that this is a synchronic process; enough to state that such a process has applied in the past. The results of a homophone search on a mini-dictionary file of approximately 1,000 words (a subset of the words listed in appendix 1) are presented in table 52. The lexemes are arranged by pitch, with the total number of syllables that show more than one meaning listed in brackets under the heading for the pitch category. In table 52xx below we can see that the monosyllable [p] is ambiguous between the meanings ‘black ant (sp.)’ and ‘yam’. The syllable [ha], on the other hand, is four-ways ambiguous, with the meanings ‘(I/you(PL)) close’, ‘nose’, ‘(I/you(PL)) walk’, and ‘(I/you(PL)) pound (sago)’. (The presence of different conjugations mean that these verbs are not complete homonyms, and are differentiated in other person/number/gender combinations; ‘close’ is \textit{y\d} in 3PL, whereas ‘walk’ is \textit{t\d}, for instance. See 7.2.2 for further discussion of verb inflection.)
Table 52. Homophones in monosyllabic roots: high pitch

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Homophones</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (26)</td>
<td>bi ‘tree sp.’ bi ‘empty’</td>
</tr>
<tr>
<td>fi ‘louse’ fi ‘meet’</td>
<td></td>
</tr>
<tr>
<td>ha ‘close’ ha ‘nose’ ha ‘stand’ ha ‘pound’</td>
<td></td>
</tr>
<tr>
<td>hê ‘yawn’ hê ‘oSpSi’</td>
<td></td>
</tr>
<tr>
<td>i ‘snake’ i ‘SpF, CH’</td>
<td></td>
</tr>
<tr>
<td>ja ‘cup, glass’ ja ‘sea’ ja ‘wet place’ ja ‘noose’</td>
<td></td>
</tr>
<tr>
<td>ka ‘hit’ ka ‘armband’</td>
<td></td>
</tr>
<tr>
<td>kā ‘I eat’ kā ‘tusk’</td>
<td></td>
</tr>
<tr>
<td>kē ‘catch’ kē ‘k.o. rope’</td>
<td></td>
</tr>
<tr>
<td>kē ‘ask’ kē ‘shaman’</td>
<td></td>
</tr>
<tr>
<td>kō ‘beetle sp.’ kō ‘fence’</td>
<td></td>
</tr>
<tr>
<td>kō ‘thorn’ kō ‘under’</td>
<td></td>
</tr>
<tr>
<td>ku ‘frog’ ku ‘k.o armband’ ku ‘fall’</td>
<td></td>
</tr>
<tr>
<td>la ‘roast’ la ‘exterior wall’†</td>
<td></td>
</tr>
<tr>
<td>lō ‘wash’ lō ‘bud’*</td>
<td></td>
</tr>
<tr>
<td>lō ‘shave’ lō ‘ear’</td>
<td></td>
</tr>
<tr>
<td>lu ‘release’ lu ‘cough’</td>
<td></td>
</tr>
<tr>
<td>lu ‘hear’ lu ‘chop branch’ lu ‘blow’ lu ‘ashes’</td>
<td></td>
</tr>
<tr>
<td>na ‘splash’ na ‘sago bundle’</td>
<td></td>
</tr>
<tr>
<td>ō ‘big wave’ ō ‘lime’ ō ‘sago grub’</td>
<td></td>
</tr>
<tr>
<td>φ ‘black ant’ φ ‘yam’</td>
<td></td>
</tr>
<tr>
<td>pā ‘bedbug’ pā ‘chop.PL’ pā ‘husband’</td>
<td></td>
</tr>
<tr>
<td>pi ‘full’ pi ‘half-ripe’ pi ‘language’</td>
<td></td>
</tr>
<tr>
<td>pō ‘endure’ pō ‘thick’</td>
<td></td>
</tr>
<tr>
<td>rō ‘cloth’ rō ‘matoa tree’</td>
<td></td>
</tr>
<tr>
<td>tō ‘beads’ tō ‘hot ashes’</td>
<td></td>
</tr>
</tbody>
</table>

† Also láho. * Also rlió, with ri ‘tree’.

With low pitch we again see an impressive range of homophones, and again some syllables are up to four-ways ambiguous.
Table 53. Homophones in monosyllabic roots: low pitch

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Homophones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>a ‘cloud’</td>
</tr>
<tr>
<td></td>
<td>fa ‘betelnut’</td>
</tr>
<tr>
<td></td>
<td>fu ‘rain’</td>
</tr>
<tr>
<td></td>
<td>fu ‘see’</td>
</tr>
<tr>
<td></td>
<td>ha ‘bag’</td>
</tr>
<tr>
<td></td>
<td>hā ‘coconut’</td>
</tr>
<tr>
<td></td>
<td>hū ‘drink’</td>
</tr>
<tr>
<td></td>
<td>i ‘well’</td>
</tr>
<tr>
<td></td>
<td>ku ‘dew’</td>
</tr>
<tr>
<td></td>
<td>lā ‘clay’</td>
</tr>
<tr>
<td></td>
<td>lō ‘work’</td>
</tr>
<tr>
<td></td>
<td>lu ‘full’</td>
</tr>
<tr>
<td></td>
<td>φ ‘burp’</td>
</tr>
<tr>
<td></td>
<td>pa ‘water’</td>
</tr>
<tr>
<td></td>
<td>pō ‘edge’</td>
</tr>
<tr>
<td></td>
<td>tā ‘canoe’</td>
</tr>
<tr>
<td></td>
<td>ti ‘hot’</td>
</tr>
<tr>
<td></td>
<td>ya ‘grass’</td>
</tr>
<tr>
<td></td>
<td>yu ‘cousin’</td>
</tr>
<tr>
<td>(19)</td>
<td>fa ‘blackpalm’</td>
</tr>
<tr>
<td></td>
<td>fa ‘inner wall’</td>
</tr>
<tr>
<td></td>
<td>fu ‘see.F’</td>
</tr>
<tr>
<td></td>
<td>fa ‘that’</td>
</tr>
<tr>
<td></td>
<td>ha ‘star’</td>
</tr>
<tr>
<td></td>
<td>hā ‘peel’</td>
</tr>
<tr>
<td></td>
<td>i ‘edge’</td>
</tr>
<tr>
<td></td>
<td>i ‘line’</td>
</tr>
<tr>
<td></td>
<td>ku ‘stab’</td>
</tr>
<tr>
<td></td>
<td>lā ‘mixing bowl’</td>
</tr>
<tr>
<td></td>
<td>lā ‘tuber meal’</td>
</tr>
<tr>
<td></td>
<td>lu ‘narrow’</td>
</tr>
<tr>
<td></td>
<td>φ ‘bamboo sp.’</td>
</tr>
<tr>
<td></td>
<td>pa ‘INSTR’</td>
</tr>
<tr>
<td></td>
<td>pō ‘blow at fire’</td>
</tr>
<tr>
<td></td>
<td>tā ‘gall’</td>
</tr>
<tr>
<td></td>
<td>tā ‘last night’</td>
</tr>
<tr>
<td></td>
<td>ti ‘arrow shaft’</td>
</tr>
<tr>
<td></td>
<td>ya ‘sister’</td>
</tr>
<tr>
<td></td>
<td>yu ‘brother’</td>
</tr>
</tbody>
</table>

Falling pitch monosyllables also present homophones, but in no cases are there four-way homophones, and the number of homophones is in any case much less than with the other two pitches.

Table 54. Homophones in monosyllabic roots: falling pitch

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Homophones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>e ‘cooked’</td>
</tr>
<tr>
<td></td>
<td>e ‘wife’</td>
</tr>
<tr>
<td>(10)</td>
<td>la ‘help’</td>
</tr>
<tr>
<td></td>
<td>la ‘prawn’</td>
</tr>
<tr>
<td></td>
<td>la ‘HM’</td>
</tr>
<tr>
<td></td>
<td>lā ‘chop’</td>
</tr>
<tr>
<td></td>
<td>lā ‘foot’</td>
</tr>
<tr>
<td></td>
<td>lē ‘red ant’</td>
</tr>
<tr>
<td></td>
<td>lē ‘fin’</td>
</tr>
<tr>
<td></td>
<td>na ‘flesh’</td>
</tr>
<tr>
<td></td>
<td>na ‘left (hand)’</td>
</tr>
<tr>
<td></td>
<td>φ ‘ripe’</td>
</tr>
<tr>
<td></td>
<td>φ ‘house part’</td>
</tr>
<tr>
<td></td>
<td>φ ‘penis’</td>
</tr>
<tr>
<td></td>
<td>pa ‘scratch’</td>
</tr>
<tr>
<td></td>
<td>pa ‘right(hand)’</td>
</tr>
<tr>
<td></td>
<td>pā ‘flower’</td>
</tr>
<tr>
<td></td>
<td>pā ‘steam’</td>
</tr>
<tr>
<td></td>
<td>pi ‘dry in sun’</td>
</tr>
<tr>
<td></td>
<td>pi ‘mountain’</td>
</tr>
<tr>
<td></td>
<td>ta ‘bow’</td>
</tr>
<tr>
<td></td>
<td>ta ‘SpM, SW’</td>
</tr>
</tbody>
</table>

Some caveats need to be attached to the data in this table. Firstly, there is no contrast between high and low pitch for voiced onsets, so bi and ja could equally well have been listed as (phonologically) low tone homophones rather than high tone homophones. The actual pitch realised on these syllables is in fact somewhat higher than that normally associated with phonologically low syllables, and somewhat lower than that associated with phonologically high syllables (see 2.4.1).
Further, several of the putative homophones are probably simply semantic extension. For instance, the part of a house designated by [\(\phi\)] \(\parallel\) is a small dowel that joins two planks together in the flooring of a room; the homophony with ‘penis’ is likely to be a semantic extension, especially given that house building is an exclusively male affair. It is not too far-fetched to suppose that ‘ripe, ready’ might well be a further, metaphorical extension of the same concept. The range ‘sea’, ‘wet place’ and ‘cup, glass’ for [ja] \(\parallel\) is a very obvious extension of a core meaning involving liquid and its containment, as is the range ‘clay’, ‘pot’ and ‘pounded tuber dish (prepared in a pot)’ for [lå] \(\parallel\). (Further discussion on possible cultural semantic extension is presented in 9.3.) Nonetheless, we have a significant difference in the number of homophones. These are arranged for easy comparison in table 55. Quite clearly the high pitch \(\parallel\) and low pitch \(\parallel\) show twice as many homophones as does the falling pitch \(\parallel\).

<table>
<thead>
<tr>
<th>Tones:</th>
<th>H</th>
<th>L</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw homophones:</td>
<td>26</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Revised homophones:</td>
<td>21</td>
<td>20</td>
<td>9</td>
</tr>
</tbody>
</table>

The simplest conclusion, given the suggestion that we are actually dealing with five underlying contrastive tonal melodies, is that phonetic \(\parallel\) and \(\parallel\) are each used to realise two underlying tones. Is there a principled method of determining which of LH and LHL are realised on which of \(\parallel\) and \(\parallel\)?

Given that a LH sequence is barred from appearing on one syllable, that is it is impossible for a L and a H to both be associated, in that order, on one syllable, we can propose a rule that dissociates LH from a syllable when it is associated with it. This would operate as shown in (20).

\[
(20) \quad \sigma \rightarrow \sigma
\]

\[
\begin{array}{c}
\sigma \\
L & H & L
\end{array} \quad \begin{array}{c}
\sigma \\
L & H & L
\end{array}
\]

This model predicts that an underlying LHL tone melody would be realised as \(\parallel\) on a monosyllable. The other ‘missing’ melody, LH, is slightly more complicated. Simply dissociating the LH part of the melody is not a sufficient explanation, since that would leave no tone to be associated with the lexeme. Since a word is not phonologically well-formed without a lexical tone being associated with the syllabic tier, the rule of dissociation is blocked from applying completely, and only the first component of the melody is dissociated, leaving H free to associate with the syllable.

\[
(21) \quad \sigma \rightarrow \ast \quad \sigma \rightarrow \sigma \rightarrow \sigma
\]

\[
\begin{array}{c}
\sigma \\
L & H \\
\end{array} \quad \begin{array}{c}
\sigma \\
L & H
\end{array} \quad \begin{array}{c}
\sigma \\
L & H
\end{array}
\]

We can now update table 55 to reflect our understanding of the mechanics of Skou tone association with monosyllabic words. Table 56 shows the collapse in phonetic terms of different tone melodies when they are associated with monosyllables.
Table 56. Homophones and the predictions of absolute neutralisation in monosyllables

<table>
<thead>
<tr>
<th>Underlying tones:</th>
<th>LH</th>
<th>H</th>
<th>LHL</th>
<th>L</th>
<th>HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface pitches:</td>
<td>[</td>
<td>]</td>
<td>[–</td>
<td>]</td>
<td>[</td>
</tr>
<tr>
<td>Homophones?</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We can then see that, despite appearing initially to be a language with three contrastive tones, and having a productive tone sandhi rule that does satisfactorily account for the melodies found on disyllabic roots, the language does in fact contrast five tone melodies which are affiliated at the word level (Donohue 1997), and which show reduced contrasts in monosyllables. While a substantial reanalysis of the data in Skou, this new analysis is not without support. Skou is related distantly to the languages of the Serra Hills and Piore River families. While no detailed phonological work has been carried out on the Serra Hills languages, it is known that they possess tone systems with up to five or even six contrastive pitches on monosyllables. In the Piore River family Barupu has received treatment from Crowther (2000), who shows that there are at least five tone melodies (L, H, HL, LH and LHL) that are affiliated at the word level – the same melodies, and the same association principles, that we have just discovered in Skou.24 In the light of this information from other members of the Macro-Skou family, the reanalysis does not seem so surprising.

It is also in striking accord with speakers’ reactions when checking tonal minimal pairs. Many speakers, when confronted with, for instance, ha [–|] ‘bag’ and ha [–|] ‘star’, or ku [–|] ‘child’ and ku [–|] ‘dew’, would insist that they are not the same sounds, even though they ‘normally’ sound the same. If, for instance, ‘bag’ had the tone melody LHL and ‘star’ was simply L, we could account for speakers claiming that the words were different (= different underlying phonological structure), while acknowledging that the sound of the words was the same (= identical surface phonetic form).

The reader should not conclude from this that speakers are unaware of homophones. All speakers recognised the identity through semantic extension of, for instance, φ ‘penis, dowel in floorboards’, and the phonetic identity of the semantically unrelated set tà ‘canoe’ / tà ‘gall bladder’ / tà ‘last night’ was also acknowledged by some. But with some words speakers would insist on the distinction, even though they admitted that they were pronounced in the same way when you speak. Some sophisticated speakers, while insisting that the words in question did sound the same, would invent ad-hoc tonal distinctions in order to prove that they were really different. These distinctions were not consistent from speaker to speaker, or from the same speaker at different times.

2.3.1.5 A model of the tone system of Skou

It remains to account for the differences in tonal association: an overall falling pitch on a disyllabic word is, for instance, supposed here to reflect an underlying HL tone melody associated with the word as a whole. The differences between the melodies [–|], [–\ ] and [\ –|], attested in the words [kũₐ] [–|] ‘green tree frog’, [fũₐ] [–\ ] ‘scorpion’ and [leu] [\ –|]

---

Crowther reports for Barupu, which also has a process of tonal simplification on monosyllables (unlike Skou; this simplification is in Barupu, the easternmost Skou family language), that the tonal melodies are also dissociated from the left, matching the Skou analysis presented here.
‘peanut’, which would all logically be based on the tonal units H and L in that same sequence, have not yet been explained. It seems that there is a further phonological stipulation, in addition to the lexical specification of the tonal melody. For contour tone melodies we additionally need to specify the presence or absence of a phonological accent, and if one is present, also its position. (This accent, and its function, is similar to the analysis of ‘inflection point’ in Usarufa, found in Donohue 1997). The words meaning ‘green tree frog’, ‘scorpion’ and ‘peanut’ are differentiated as follows, with the asterisk indicating the accent.

Table 57. Homophones and absolute neutralisation in monosyllables

<table>
<thead>
<tr>
<th>Syllable</th>
<th>Tone association</th>
<th>Pitch contour</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘frog’</td>
<td>[kĩu]-HL σ σ</td>
<td>[( )]</td>
</tr>
<tr>
<td>‘scorpion’</td>
<td>[fũũ]-HL σ σ</td>
<td>[( )]</td>
</tr>
<tr>
<td>‘peanut’</td>
<td>[lẽũ]-HL σ σ</td>
<td>[( )]</td>
</tr>
</tbody>
</table>

It is impossible to determine the tone melody associated with a monosyllable with a high or low phonetic pitch unless it is also attested in compounds whose second element is not associated with a lexical tone. This, combined with the fact that the notational diacritics ‘ and ‘ adequately describe the patterns found in Skou (both the underlying tone melody, where it can be determined, and the accent for tonal association), they alone shall be used to represent pitches in the description that follows.

2.3.1.6 Grammatical uses of tone/pitch

In addition to tone being used to make lexical distinctions, at least one grammatical category, tense, is marked by pitch differences alone. In past tense the pitch of any verb is always realised as low, regardless of the lexical tone (normally) associated with that word. In (22) and (23) the verbs are shown inflected for a 2SG subject (see 7.2). The verb in (22) are imperative forms, which preserve the underlying form of the verb without any changes (other than the 2SG inflection). In (23) the same verbs are shown inflected for past tense, and here the verb roots all show a low pitch pattern, regardless of the lexical tone associated with each verb, observable in (22).

Imperative forms

(22) me mu [44 41] (< [41 41]) me ma [44 44] me mũ [44 21] (< [41 22])
fall-fall fall-high fall-low
‘You sew!’ ‘You stand!’ ‘You drink!’

Past tense forms

(23) me mu [44 21] (< [41 22]) me ma [44 21] (< [41 22]) me mũ [44 21] (< [41 22])
fall-low fall-low fall-low
‘You sewed.’ ‘You stood.’ ‘You drank.’

The differences in the pitch realised on the verbs can be best accounted for by a rule of tonal stripping that is part of the phonological specification of the past tense morpheme (other specifications of this morpheme include incompatibility with reduplication – see 7.9). (24) and
(25) show the different processes associated with tonal association in both non-past and in past tenses for *hù* ‘sew’.

**Non-past tense**

\[
\begin{align*}
\mbox{m} & \quad \epsilon & \quad \mbox{m} & \quad u & \quad \rightarrow & \quad \mbox{m} & \quad \epsilon & \quad = & \quad \mbox{m} & \quad u & \quad \rightarrow & \quad \mbox{m} & \quad \epsilon & \quad \mbox{m} & \quad u \\
\sigma & \quad \sigma & \quad \rightarrow & \quad \sigma & \quad \sigma & \quad \rightarrow & \quad \sigma & \quad \sigma & \quad \sigma
\end{align*}
\]

\[
\begin{align*}
H & \quad L & \quad H & \quad L & \quad \rightarrow & \quad H & \quad \text{O} & \quad H & \quad L & \quad \rightarrow & \quad H & \quad L
\end{align*}
\]

‘2SG’ ‘sew’

**Past tense**

\[
\begin{align*}
\mbox{m} & \quad \epsilon & \quad \mbox{m} & \quad u & \quad + & \quad \mbox{m} & \quad \epsilon & \quad \mbox{m} & \quad u & \quad \rightarrow & \quad \mbox{m} & \quad \epsilon & \quad \mbox{m} & \quad u & \quad \rightarrow & \quad \mbox{m} & \quad \epsilon & \quad \mbox{m} & \quad u
\end{align*}
\]

\[
\begin{align*}
\sigma & \quad \sigma & \quad \rightarrow & \quad \sigma & \quad \sigma & \quad \rightarrow & \quad \sigma & \quad \sigma & \quad \sigma
\end{align*}
\]

\[
\begin{align*}
H & \quad L & \quad H & \quad L & \quad \circ & \quad H & \quad L & \quad \text{O} & \quad H & \quad L & \quad \rightarrow & \quad H & \quad L
\end{align*}
\]

‘2SG’ ‘sew’ ‘[PAST]’

More details on the formal characteristics behind tonological processes can be found in the following sections. The following section deals with the phonetic effects of phonological nasalisation, and the differences between phonetic and phonological nasalisation.

### 2.3.1.7 Excursus: brief comparison of the tone systems of related languages

Having discussed the tonal system of Skou, we can quickly compare this system with that found in the other, related, languages of the family. The essential points of the Skou tonal system may be summarised as follows:

- there are five underlying tone melodies, L, H, LH, HL and LHL;
- the sequence *LH may not be realised on a single syllable, but only spread over multiple syllables in such a way that there is no rise phonologically assigned to a single syllable (this limits the number of contrasts on monosyllables to three);
- with complex tones not involving the sequence LH there is an additional contrast in the placement of an accent in the word, anywhere in the final two syllables of the phonological word.

Comparing these defining criteria to those that we need to postulate to describe the prosodic systems of those other languages of the Skou family for which we have adequate data, we find a very high level of congruency.

In Puare, a language of the Serra Hills group, (see figure 2 in 1.4) the following factors are relevant to a description of the tonal system:

- there are five underlying tone melodies, L, H, LH, HL and HLH;
- the sequence *HLH may not be realised on a single syllable, but only spread over multiple syllables (this limits the number of contrasts on monosyllables to four);
• with complex tones there is an additional contrast in the placement of an accent in the word, anywhere in the final two syllables of the phonological word.

While not identical to the Skou system, the variation is minimal. In Sumo, a language of the Piore River branch of the family, the following appear to be the governing conditions (the Sumo data is less well documented than the Puare or Skou data):

• there are five underlying tone melodies, L, H, LH, HL and LHL;
• the sequence *LHL may not be realised on a single syllable, but only spread over multiple syllables in such a way that there is no rise phonologically associated with a single syllable (this limits the number of contrasts on monosyllables to four);
• with complex tones there is an additional contrast in the placement of an accent in the word, anywhere in the final two syllables of the phonological word.

Barupu, closely related to Sumo (Crowther 2000) shows essentially the same system, except for the addition of a HLH melody, and the possibility of any of the tonal sequences occurring on a single syllable.

Finally, in I'saka, a higher-level relative to all the languages mentioned above (again, see figure 2 in 1.4, and Donohue and San Roque 2004), we can describe the tonal system as involving:

• five underlying tone melodies, L, H, LH, HL and LHL;
• the sequence *LHL may not be realised on a single syllable, but only spread over multiple syllables (this limits the number of contrasts on monosyllables to four);
• with complex tones there is an additional contrast in the placement of an accent in the word, its presence being contrastive only on the last syllable of the phonological word.

We can compare these different constraints in table 58, from which we can see that the similarities shared in the tonological systems of the different (related) languages far outweigh the differences.

<table>
<thead>
<tr>
<th></th>
<th>Skou</th>
<th>Puare</th>
<th>Sumo</th>
<th>I'saka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accent domain</td>
<td>[σ σ] #</td>
<td>[σ σ] #</td>
<td>[σ σ] #</td>
<td>[σ] #</td>
</tr>
<tr>
<td>Accent/Tone cooccurrence</td>
<td>HL</td>
<td>LH, HL, LHL</td>
<td>LH, HL, LHL</td>
<td>LH, HL, LHL</td>
</tr>
</tbody>
</table>

Compared to the possible variation that is attested in tonal systems around the world, and in New Guinea in particular (Donohue 1997), we can see that only micro-parametric change is required to shift from one system to another in this family. While more work is clearly needed before we can reconstruct the tone system of the proto-language with confidence, it is unlikely to be very divergent from something involving five or possible six tone melodies associated
with word-level phonological units, contrastive accent placement on the last two syllables of the phonological word, and a restriction on the appearance of overly complex tonal units on single syllables.

Other more finely grained typological details, such as the behaviour of tone in compounds, also appears to show similar traits (right dominance) in the languages for which we have data, lending further evidence that the tonological systems we can observe in the modern Skou family languages reflect an earlier system not too different from the current exponents.

The tentative hypothesis that the Skou languages might ultimately be related to those of the Lakes Plains (see Clouse 1997 for a description of this family) is also (circumstantially) supported by this phonological typology. In Kirikiri, a language of the Central Lakes Plains family the same L, H, LH, HL and LHL units are found, with contrasts in the contour tones depending on the placement of an accent. This is strikingly similar to the analysis of Skou presented here, except that in Kirikiri the accent is contrastive within the syllable at the moraic level (Clouse 2002 pc.), and there are no constraints on the realisation of tone melodies on single syllables. Further work investigating more rigorously the putative relationship between the two groups of languages remains to be carried out, though there are some promising lexical cognates (such a proto-Lakes Plains *fli ‘louse’, proto-Skou *fi).

2.3.1.8 Tone in compounds

When two lexical roots are compounded together, a process very frequent in forming the names of things (see 2.3.1.3), the tonal specification of the final element of the compound is spread over the whole word; the two tones do not interact, other than to disassociate the first lexically-specified tonal melody. For instance, the general classifier for flying creatures is táŋ ‘bird’, which has a high pitch, [| – ]. The name of a particular species of large bats is tangóe ‘bat species’. The process can be modelled as follows:

\[
\begin{align*}
\text{(26)} & & t & \overset{\sigma}{\text{ā}} & \overset{\sigma}{\phi} & \overset{\sigma}{\overset{\sigma}{\overset{\sigma}{t}}} & \overset{\sigma}{\text{ā}} & \overset{\sigma}{\phi} & \overset{\sigma}{\overset{\sigma}{\overset{\sigma}{\overset{\sigma}{t}}}} & \overset{\sigma}{\text{ā}} & \overset{\sigma}{\phi} \\
& & \bigwedge & + & \bigwedge & \bigwedge & \bigwedge & \bigwedge & \bigwedge \\
& & \text{H} & \text{L} & \text{H} & \text{H} & \text{L} & \text{H} & \text{L} & \text{H} \\
& & \text{[| – ]} & \text{(not found independently)} & \text{[| – – ]} & \text{[| – – ]} \\
& & \text{‘bird’} & \text{‘species’} & & & & & & 
\end{align*}
\]

A complex tone melody may also be overwritten in this way. In the following example the compound táŋgráie ‘handle of a machete’ displays a [| – – ] contour, reflecting a H melody. When it is independent of the compound the element táŋ ‘blade’ is found with a [| \ ] pitch, reflecting a HL melody. Clearly the H melody of the second element of the compound overwrites the complex melody of the first.
The only apparent exception to such overwriting of tones is found when the tone of the last element in the compound is a low tone. Low tones do not cause the tone of the rest of the compound to dissociate, but are rather themselves overwritten or ignored.25 Thus, for example, we might expect that salt, a compound composed of *tí* H ‘sea’ and *na* L ‘flesh’, would appear with a L tone melody spread over the two-syllable word. This is not the observed result, with the compound having a high tone throughout: *tína*.

This is suggestive of an analysis by which a L tone melody affiliated with a word is in fact the absence of an assigned H tonal unit, in isolation or in combination with other tonal units. This is an analysis to which I shall return in chapter 7, where I discuss the behaviour of apparently toneless clitics.

The morpheme *kung* LHL, which might be loosely glossed on its own as “crustacean” or “arthropod” (the difficulty being that it never occurs on its own), provides further evidence of the spread of tones over the domain of a L melody. When *kúng*, which appears as a high-pitched syllable meaning ‘small crab species’ when it occurs alone in elicitation environments, is found with a following morpheme specified for a L tone melody, the LHL of *kúng* overwrites the L and spreads over two syllables, being realised as one L and one HL syllable. Similarly when an apparently disyllabic L-melody morpheme is added to *kung* the LHL melody spreads over the resulting three syllables, surfacing as L, H and L.

25 There is one apparent exception to this apparent exception, the case of a low pitch marking past tense. This is discussed in section 2.3.1.9.
Double overwriting is also found, when a trisyllabic compound is created by compounding a monosyllable to an existing compound, and so creating a word that has the structure \[ [ \text{root}_1 ]_{\omega} [ \text{root}_2 ]_{\omega} [ \text{root}_3 ]_{\omega} \]. One such compound is \text{táŋgrángpoe} \[ [\text{H} - \text{L}] \] ‘twelve-wired bird of paradise’, which is composed of \text{táŋgráng} \[ [\text{H} - \text{L}] \] ‘bird of paradise’ and \text{poe} \[ [\text{H} - \text{L}] \] ‘twelve-wired bird of paradise’, where \text{táŋgráng} is itself a compound of \text{táng} \[ [\text{H} - \text{L}] \] ‘bird’ and \text{ráng} \[ [\text{H} - \text{L}] \] ‘sun’. When \text{táng} and \text{ráng} combine there is no change in the pitch realised, since both specify a \text{H} melody. The final compound has a single \text{H} melody, that which is lexically associated with \text{ráng}. When combined with the species name, \text{poe} \[ [\text{H}] \], which does not occur on its own, the \text{HL} pitch of this element overwrites the \text{H} associated with the compound \text{táŋgráng}.

In addition to the tone of the first element overwriting the low tone in the second element of the compound, the combined syllable structure of the compound is the domain for the association of tonal accents. This can be illustrated with the following compound, ‘tulip leaves’, composed of the elements \text{ápólè} ‘kind of edible leaf; tulip’, with a \text{H'}L' melody resulting in a \[ [\text{H} - \text{L}] \] pitch contour, and \text{ha} ‘leaf’, which has a \text{L} melody and so a \[ [\text{H}] \],pitch contour. Here we can see, through the shift in the accent, that the tone association of the first element in the compound has not simply combined with the second element, but rather has overwritten it. The resulting pitch contour shows an accent on the syllable that constitutes the morpheme ‘leaf’, which previously showed no evidence of such a specification: \[ [\text{H} - \text{L}] \].

Not only is the \text{HL} tonal melody of \text{ápólè} spread over the entire compound, but also the information regarding the final position of the accent is now applied to the compound as a whole, with a constant final-syllable placement. Clearly not on the tone melody must be thought of as being autonomous from the syllables to which it is assigned (and so \text{a-H}, \text{po-H}, \text{le-HL} must be rejected as an analysis), but the accent must also be seen as simply applying to whichever syllable meets the correct prosodic position in the domain in which it is associated. Since the domain of autosegmental association is the word, not the morpheme, this means that although a penultimate position would be legitimised by the phonological constraints of the language, there are in fact no particular associations between the \text{le} syllable of \text{ápólè} and the accent, which simply seeks the final syllable in the word, and so in a compound applies to the
final syllable, regardless of whether or not that syllable was part of the lexeme for which the accent was specified.

A similar example of low pitches being replaced with higher pitches in compounding can be seen in the word *pátánɡke* ‘kingfisher’, which is morphologically composed of the roots *pa* L ‘water’, *táŋ* H ‘bird’, and the bound form *kè* HL ‘kingfisher’. We can hypothesise that the L melody of ‘water’ is erased by the following H in ‘bird’, by the principle that L tones are always overwritten by a more specified tone melody, leaving a H-melody compound. We do, however, have direct evidence (from the phonetic forms heard) that any subsequent H-tone melody on the two syllable compound is then erased by the presence of a non-L tone melody on the final element of the compound, the HL. The final resulting three-element compound displays only the tonal characteristics predictable from the HL melody of the final element in the compound.

One consequence of this rule of tonal suppletion in compounds that is particularly useful for the phonological investigation of tone is that it allows us to investigate the tone of a monosyllabic lexical item when it appears spread over two or more syllables, thus offering a positive answer to the question of whether or not there are more underlying phonological contrasts on monosyllabic roots than appears to be the case based on the phonetic data of them in isolation. For instance, the noun *hòe* ‘sago’ is a monosyllabic root pronounced with a falling pitch: *hòe* [hY, \:]. When it is combined with a following element, and that element has a lexical low pitch, then, by normal conventions, the tone of the first element of the compound prevails, in this case the HL melody of ‘sago’, and is spread over the now disyllabic base. We would expect the disyllabic compound to shown a [\|--] pitch contour, assuming that the HL contour associated with *hòe* spreads over the whole compound, by analogy with the tone spread in cases like the following compound or *pá* ‘house’ and *ràng* ‘house pole’.

\[(32)\]  

```
(32)  \[
\begin{array}{cccc}
\sigma & \sigma & \sigma & \sigma \\
\sigma & \sigma & \sigma & \sigma \\
H & H & L & H \\
H & H & L & H \\
[\|--] & [\|--] & [\|--] & [\|--] \\
\end{array}
\]
\]  
```

A similar example of low pitches being replaced with higher pitches in compounding can be seen in the word *pátánɡke* ‘kingfisher’, which is morphologically composed of the roots *pa* L

 `water`, *táŋ* H ‘bird’, and the bound form *kè* HL ‘kingfisher’. We can hypothesise that the L melody of ‘water’ is erased by the following H in ‘bird’, by the principle that L tones are always overwritten by a more specified tone melody, leaving a H-melody compound. We do, however, have direct evidence (from the phonetic forms heard) that any subsequent H-tone melody on the two syllable compound is then erased by the presence of a non-L tone melody on the final element of the compound, the HL. The final resulting three-element compound displays only the tonal characteristics predictable from the HL melody of the final element in the compound.

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\[(32)\]  

```
(32)  \[
\begin{array}{cccc}
\sigma & \sigma & \sigma & \sigma \\
\sigma & \sigma & \sigma & \sigma \\
H & H & L & H \\
H & H & L & H \\
[\|--] & [\|--] & [\|--] & [\|--] \\
\end{array}
\]
\]  
```

A similar example of low pitches being replaced with higher pitches in compounding can be seen in the word *pátánɡke* ‘kingfisher’, which is morphologically composed of the roots *pa* L ‘water’, *táŋ* H ‘bird’, and the bound form *kè* HL ‘kingfisher’. We can hypothesise that the L melody of ‘water’ is erased by the following H in ‘bird’, by the principle that L tones are always overwritten by a more specified tone melody, leaving a H-melody compound. We do, however, have direct evidence (from the phonetic forms heard) that any subsequent H-tone melody on the two syllable compound is then erased by the presence of a non-L tone melody on the final element of the compound, the HL. The final resulting three-element compound displays only the tonal characteristics predictable from the HL melody of the final element in the compound.

One consequence of this rule of tonal suppletion in compounds that is particularly useful for the phonological investigation of tone is that it allows us to investigate the tone of a monosyllabic lexical item when it appears spread over two or more syllables, thus offering a positive answer to the question of whether or not there are more underlying phonological contrasts on monosyllabic roots than appears to be the case based on the phonetic data of them in isolation. For instance, the noun *hòe* ‘sago’ is a monosyllabic root pronounced with a falling pitch: *hòe* [hY, \:]. When it is combined with a following element, and that element has a lexical low pitch, then, by normal conventions, the tone of the first element of the compound prevails, in this case the HL melody of ‘sago’, and is spread over the now disyllabic base. We would expect the disyllabic compound to shown a [\|--] pitch contour, assuming that the HL contour associated with *hòe* spreads over the whole compound, by analogy with the tone spread in cases like the following compound or *pá* ‘house’ and *ràng* ‘house pole’.

\[(32)\]  

```
(32)  \[
\begin{array}{cccc}
\sigma & \sigma & \sigma & \sigma \\
\sigma & \sigma & \sigma & \sigma \\
H & H & L & H \\
H & H & L & H \\
[\|--] & [\|--] & [\|--] & [\|--] \\
\end{array}
\]
\]  
```
In this example the tone melody that is realised as a falling pitch on one syllable spreads over two syllables to a disyllabic expression with one syllable bearing a high pitch and the other bearing a low pitch. Identical patterning is found when *kue*-HL ‘jaw’ combines with *ta* L ‘hair’ resulting in *kúeta* [\(\|=\)] ‘beard’. This would be our expected target for the compound composed of *hòe* ‘sago’ + *na* ‘flesh’, since *hòe* has a falling pitch, and *na* is low-pitched, and hence sees its tone melody overwritten. In fact we find a falling-low pitch contour, [\(\|=\)]. This gives evidence for the tone melody associated with *hòe* in fact being a ‘HL melody, and not either a H'L or a HL melody.

\[
\begin{array}{c}
\text{(33)}
\end{array}
\]

\[
\begin{array}{cccccccc}
\sigma & \sigma & \to & \sigma & \sigma & \sigma & \sigma & \sigma
\end{array}
\]

\[
\begin{array}{cccccccc}
\mathcal{H} & \mathcal{L} & \mathcal{L} & \mathcal{L} & \mathcal{L} & \mathcal{L} & \mathcal{L} & \mathcal{L}
\end{array}
\]

\[
\begin{array}{cccccccc}
\text{‘sago’} & \text{‘flesh’} & \to & \text{‘sago pith’}
\end{array}
\]

\[
\begin{array}{cccccccc}
h & \phi & \n & \sigma & \n & \sigma & \n & \sigma
\end{array}
\]

Three-syllable (and longer) words show exactly the same pitch contour possibilities as are found for two-syllable words; furthermore, when observing trisyllabic (and longer) words we find that there are no accents located further than two syllables from the right edge of the word. Examine the following possibilities for the pitch realisations of a HL melody on a trisyllabic word. Only the first three patterns are attested, with the final pitch pattern not found in Skou. This final possibility would appear in a word that had the HL melody combined with an accent on the antepenultimate syllable, but while the melody is clearly acceptable, the antepenultimate accent placement is not found in the Skou data.

\[
\begin{array}{cccccccc}
\text{26}
\end{array}
\]

This morpheme is not found as an independent lexical item: *kúéé* ‘jaw+bone’ is the normal collocation for ‘jaw’, with the H tone melody of *é* ‘bone’ spreading over the whole compound. Speakers are, however, able to produce the syllable in isolation.
Why should there be this restriction on the placement of an accent? There are no clear answers, but it is worth noting that there are (almost) no unambiguously trisyllabic roots in the language. While there are many trisyllabic words, they are all composed of more than one morpheme. Some of the more convincing roots are plant terms, such as *sangbíki* ‘pumpkin’ and the already-mentioned *ápólè* ‘kind of edible leaf; tulip’, but even these are questionable, given, for instance the existence of the root *pó* ‘vegetable’, and the frequent pseudo-prefixal element *a*- in plant names, and the word *pupúki* ‘eggplant’, with the same final syllable -ki and the same LHL melody as *sangbíki*, which is in any case a loan word (it is attested in Manado Malay, though not in current Papuan Malay). Only one possibly quadrisyllabic animal name, *ibábuéli* ‘wasp’, is known, but almost all other trisyllabic words have an easily identifiable first syllable that is clearly a generic or species designator. This restriction on the shape of roots may influence the phonological possibilities on multisyllabic roots.

### 2.3.1.9 Tonal suppletion and tonal stripping

The previous section has demonstrated that a low pitch is always overwritten when it occurs in competition with another tonal melody, in a compound, regardless of precedence. There is, however, one instance in which a low tone appears to overwrite other tones, indicating that complex autosegmental interactions are occurring.

Past tense in Skou is not marked by any segmental changes or additions, but is indicated by a low pitch on the verb (It could be argued that past tense is segmentally marked by the absence of reduplication, found in future and intentional clauses, and the absence of an auxiliary, found in continuous and intentional clauses. More positively, however, these other TAM categories do not show the tonal behaviour that is unique to the past tense). Compare the following examples, which show the pitch patterns in two different tenses for three different verbs. The tenses shown contrast a future tense, marked by reduplication, with a past tense.

<table>
<thead>
<tr>
<th>Table 59. Pitch correlates for tense</th>
</tr>
</thead>
<tbody>
<tr>
<td>future</td>
</tr>
<tr>
<td>'roast’ lala</td>
</tr>
<tr>
<td>'vomit’ yāyā</td>
</tr>
<tr>
<td>'scratch’ papa</td>
</tr>
</tbody>
</table>
The simplest account of these alternations is that the verbs ‘roast’, ‘vomit’ and ‘scratch’ (and many others like them) are assigned a tone melody lexically (H, L and HL, respectively), which is realised (with appropriate tone sandhi) in the future, and other, tenses. In the past tense, however, the lexical tone melodies are stripped off in the past tense, leaving a syllable without any associated tone melody. The default pitch for a syllable is low, so this process of tonal stripping effectively replaces the whatever pitch contour would be associated with the lexical tone with a low pitch. We can model this for the case of ‘scratch’, a verb with a lexical falling pitch, as shown in (35).

\[(35) \begin{align*}
\text{p} & \quad \text{a} \\
\text{σ} & \quad \text{H} \quad \text{L} \\
\text{[\|]} & \quad \text{(not found independently)}
\end{align*} \rightarrow \begin{align*}
\text{p} & \quad \text{a} \\
\sigma & \quad \text{H} \quad \text{L} \\
\text{[\|]} & \quad \text{(low pitch by default)}
\end{align*}
\]

This ‘tonal stripping’ model suggests an answer to the question of why the low tone manages to overwrite a lexically specified tone here, but in compounds is always overwritten, regardless of its position in the string of morphemes. While the compounding places two melody + segment units in a single prosodic word, the case of past tense low tone suppletion takes a melody + segment unit, the verb root, and adds a tone melody that has no segments associated with it. The only realisation of the tense morpheme is the tonal melody, while the verb root has both a tonal melody realisation and a segmental realisation. For this reason the L tonal melody is ‘allowed’ to overwrite the lexical tonal melody of the word.

If this sort of tonal suppletion were not allowed, of course, we would never see any evidence for this morpheme, since it has no segmental form. We could theoretically posit any number of suprasegmental morphemes that do not successfully overwrite the tone associated with the segmental item (for instance, by being the first element in the ‘compound’ with the lexical element), but there would be no evidence for their existence.

Another case of a probably tonal morpheme (or, at least, formative) emerges when we examine the forms of the plain pronouns and compare them with the genitive and dative pronouns. The different sets are given in table 60.

<table>
<thead>
<tr>
<th></th>
<th>Free pronoun</th>
<th>Genitive Pronoun</th>
<th>Dative pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>ni</td>
<td>[|]</td>
<td>ne</td>
</tr>
<tr>
<td>2SG</td>
<td>me</td>
<td>[|]</td>
<td>me</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>ke</td>
<td>[|]</td>
<td>ke</td>
</tr>
<tr>
<td>3SG.F</td>
<td>pe</td>
<td>[|]</td>
<td>pe</td>
</tr>
<tr>
<td>1PL</td>
<td>ne</td>
<td>[|]</td>
<td>ne</td>
</tr>
<tr>
<td>2PL</td>
<td>e</td>
<td>[|]</td>
<td>e</td>
</tr>
<tr>
<td>3PL</td>
<td>te</td>
<td>[|]</td>
<td>te</td>
</tr>
</tbody>
</table>

The appearance of a high pitch on the 3SG.NF GEN pronoun, rather than falling pitch, is discussed in 2.5.1.
Just as with the past tense being marked by a low tone that overwrites the tone of the lexical item, we can most easily account for these pronominal data by assuming that the free pronouns represent the most basic forms of the pronouns, and that the genitive pronouns are formed by the addition of a (no longer productive?) morpheme (or formative), ‘genitive’, realised by a falling pitch [\]. The dative set is formed by the addition of a frozen dative morpheme, ‘dative’, which is realised both segmentally and suprasegmentally; segmentally, the rime of the syllable is replaced by \(-\), and suprasegmentally the pitch of the pronoun is replaced by a syllably not associated with any tone melody, the syllable thus being realised at a low pitch [\]. In both cases the tones of these derivational morphemes overwrite the tone of the underlying pronoun, and so again we see a case of tone a low pitch apparently ‘overwriting’ a more complex pitch. In the case of the dative the low pitch is associated with some segmental material as well, the vowel \(\epsilon\), which replaces the lexically-assigned syllable rime. In the case of the dative set we can see that there is a vowel associated with the morpheme that has no corresponding position on the syllable tier, and so is realised by overwriting the vowel of the pronoun. The combination of the first person singular pronoun and the dative formative is shown in (36), showing both the overwriting of the HL tone melody associated with first person singular, and the overwriting of the vowel as well.

\[\begin{array}{c}
n    i \\
\sigma \\
H L \\
[\[\]] \quad (\text{not found independently})
\end{array}\]

\[\begin{array}{c}
\text{‘1SG’} \\
\text{[DATIV]} \\
\text{1SG.DAT}
\end{array}\]

We can demonstrate the need to posit a segmentally specified, but syllabically deficient morpheme by contrasting the dative morpheme with the focus marker \(=a\). This morpheme does not supplete the vowel of a pronoun to which it attached: \(mè a\ \text{‘you PROM’}\), not *\(mà\), as shown in (37). Alternative explanations for the realisation of the lexical vowel in \(mè=a\) and no in dative forms, which we would derive from *\(mè-\epsilon\), could be found in the fact that a clitic boundary separates the pronoun and the \(=a\) in \(mè a\), not an affix boundary. Alternatively, the fact that the dative morpheme is unproductive might mean that a degree of grammaticalisation has applied between the original suffix and its host, and that vowel loss, such as that seen in (36), is exceptional, while the retention of the vowel is normal. Identical behaviour accompanies the use of the prominence clitic on nominals as well as pronominals.

\[\begin{array}{c}
m    \epsilon \\
\sigma \\
H L \\
[\[\]] \quad (\text{not found independently})
\end{array}\]

\[\begin{array}{c}
\text{‘2SG’} \\
\text{[PROMINENT]} \\
\text{‘You!’}
\end{array}\]
The examples seen in this section show that special behaviour is found with the low pitch in compounds when it is not associated with any syllable structure. The last example shows that even with segmental material, if that material is not linked to the syllabic tier the tone is still capable of overwriting the tone of the lexeme.

2.3.2 Nasalisation

Nasalisation is contrastive at the segmental level in Skou, with both consonants (if voiced and stopped) and vowels being eligible to be produced with nasal airflow. In addition to being specified on a particular consonant or vowel, nasalisation also influences other segments in several ways:

1. it affects vowel quality (and is constrained as to which vowels it may appear with);
2. it affects the production of neighbouring consonants;
3. it affects the production of neighbouring vowels

I shall address these points separately in the following sections. Non-universal conditions, such as statistical tendencies that are found in the combinations of nasalisation and different segmental elements of the syllable, will be discussed in 2.5.

2.3.2.1 Segmental effects of phonological nasalisation

Nasalisation acts acoustically to lower the first formant of the vowels on which it occurs, which has the effect of reducing the vowel space. This means that it is not unusual to find a collapse in the number of vocalic contrasts in the nasal vowels, and this is also true of Skou, in which $\tilde{e}$ does not occur as a nasalised vowel, thus reducing the number of vowel contrasts in the language from seven to six when nasalised. We can contrast the two vowel systems as follows:

$$
\begin{array}{ccc}
\text{Oral} & \text{Nasal} \\
\hline
i & \tilde{i} \\
\varepsilon & \tilde{\varepsilon} \\
a & \tilde{a} \\
a & \tilde{e} \\
\ddagger & \ddagger, \ddagger \\
u & \ddagger, \ddagger \\
\ddagger & \ddagger \\
\phi & \phi \\
\end{array}
$$

The vowels $^*u$ and $^*\phi$ show an historical merger in nasal syllables, such that a proto-Skou $^*\ddagger$ has the rime $\phi$ as its reflex in modern Skou (Donohue 2002b). Synchronically, however, where we would expect $\ddagger$ we in fact find $\ddagger$. The synchronic alternation is apparent in the case of predicates with the vowels $\varepsilon$ or $\phi$, which show inflection by vowel alternation for feminine. When not nasalised, these vowels show feminine with $\phi$, but when nasalised the resulting feminine form is $\ddagger$. This is discussed in context in 7.2.3, but the following examples illustrate the point. With $\ddagger$ we see that the regular feminine form simply involves raising the vowel to $\ddagger$. ‘Speak’, however, starts with the same vowel, but shows a high back vowel in the feminine, which is what we would expect for a verb with $\ddagger$ as its lexical vowel. The irregular vowel alternation for ‘speak’ follows from the more important constraint against the coda $^[\ddagger]$. 
This illustration of different approaches to the elimination of ŭ in synchronic and diachronic perspectives serves to illustrate the fact that historical processes are not necessarily the same as synchronic processes. Historically, when ŭ became dispreferred, the vowel was lowered, in keeping with the general tendency for vowels to appear lower in nasalised rimes. In modern morphophonemic alternations, however, the markedness relationship between the vowels has changed, and the height of ŭ is preserved, and the vowel simply appears as the most unmarked vocalic element that is both [+ high] and [+ round], which is u. A common allophone of the nasalised u is, in addition to ŭ, also a syllabic velar nasal, ñ (suggesting that the constraint against *[û] is partially operative for #[û] as well). This is quite a perceptually striking allophone, with words such as ‘she speaks’, phonemically /rû/, being produced as [rñ]. The nasal stop allophone is most common following h or the nasals m and n: ‘drink’ [hñ], ‘deep’ [mñ ø], and ‘kind of hand net’ [ññ], but [pñ] ~ [pû] ‘liver’.

While there is, synchronically, a restriction on the kinds of vowels that may appear nasalised, there are no such restrictions on the identity of the consonant in the onset of a syllable that has a nasalised vowel: any consonant may be present, and nasalisation contrasts may be found on syllables with any onset. Examples of contrastive nasalisation on vowels with different consonantal onsets are shown in table 62 (not all the pairs here are minimal, due to tonal contrasts; note the syllabic nasal allophone of /û/).

<table>
<thead>
<tr>
<th>Onset</th>
<th>Oral</th>
<th>Nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>pa</td>
<td>‘water’ [–]</td>
</tr>
<tr>
<td>t</td>
<td>ta</td>
<td>‘hair’ [–]</td>
</tr>
<tr>
<td>k</td>
<td>kô</td>
<td>‘baked sago’ [–]</td>
</tr>
<tr>
<td>b</td>
<td>ba</td>
<td>‘who’ [–]</td>
</tr>
<tr>
<td>j</td>
<td>ji</td>
<td>‘break’ [–]</td>
</tr>
<tr>
<td>f</td>
<td>fa</td>
<td>‘inner wall’ [–]</td>
</tr>
<tr>
<td>h</td>
<td>ha</td>
<td>‘bag’ [–]</td>
</tr>
<tr>
<td>w</td>
<td>wa</td>
<td>‘basket’ [–]</td>
</tr>
<tr>
<td>y</td>
<td>ya</td>
<td>‘grass’ [–]</td>
</tr>
<tr>
<td>r</td>
<td>ra</td>
<td>‘fire’ [–]</td>
</tr>
<tr>
<td>l</td>
<td>la</td>
<td>‘outside wall’ [–]</td>
</tr>
<tr>
<td>m</td>
<td>mô</td>
<td>‘season’ [–]</td>
</tr>
<tr>
<td>n</td>
<td>nu</td>
<td>‘tree species’ [–]</td>
</tr>
</tbody>
</table>

In addition to lowering the height of vowels (see the allophones in table 33), nasalisation is also phonetically prominent on consonants in its immediate environment. A stop that immediately follows a phonologically nasalised vowel is often realised with some degree of homo-organic prenasalisation:

(39) /tâberô/ ‘butterfly’ {tangbéro}
    [tâberô] ~ [tâmberô]
Phonetic homoorganic prenasalisation is not found when the following segment is a fricative or the trill r:

(40) /lēfî/ ‘black’ \([lēfî]\) *\([lēhfî]\)

When a semivowel follows a nasalised vowel, it is sometimes realised with both prenasalisation and stopping. Examples of this for both the palatal and the labiovelar glides are shown in the following examples:

(41) /tāwatɔ/ ‘Cape Jar’ \([tāwatɔ]\) ~ \([tāŋ⁹atɔ]\)

(42) /yāyā/ ‘vomit repeatedly’ \([yangyang]\) (< yang ‘vomit’) \([ónja)ónja]\) ~ \([ónja)ndója]\)

When the following consonant is the lateral \(l\), the lateral is sometimes realised with a degree of nasalisation, although this is rare. More commonly, the vowel following the lateral is more perceptibly nasalised than the lateral itself. As can be seen by the examples above, the vowel following a semivowel is not nasalised by spread: note that the vowel in the second syllable of tangwáto above, and also the second syllable in tangyúpa ‘blue’ \([tāndzupa]\), neither of which will occur nasalised, regardless of whether stopping occurs or not: *\([tāŋ(ŋ)wātɔ]\), *\([tānda)ndzupa]\).

(43) /k̩l̩ɔ/ ‘below’ \([k̩l̩ɔ]\) ~ \([k̩l̩ɔ]\) ~ \([k̩l̩] ~ [k̩l̩]\)

The (putative, in this case) prenasalisation of a following stop is of course undetectable when the following stop is a nasal, so the degree to which the \(n\) in ṭînɔ ‘banana’ is affected by the preceding nasal vowel cannot be determined; it is certainly not lengthened perceptibly. It is worth noting, in this regard, that the lexicon contains relatively few examples of \(V[m/n]\) or \([m/n]V\), despite their being no phonotactic constraints against these sequences. This implies that the lack of clear perceptual cues has resulted in the dephonologisation of the nasality on the vowel.

2.3.2.2 Nasal spread

The feature [+nasal] is lexically assigned to individual segments, both vowels and consonants, but is also found, in varying degrees, on segments to which it has not been lexically assigned. Nasalisation spreads from phonologically specified segments to segments to other segments which are found to their right. Nasalisation is phonologically present only on vowels (other than \(u\)) and the onsets \(m\) and \(n\) (the first might arguably be \(b\) with a nasal tier attaching to it, but the absence of either phonological or phonetic \(d\) in Skou makes the analogy with \(n\) less transparent). Despite this, we often find weakly nasalised pronunciations of segments that are not (and cannot be) contrastively nasalised phonologically. For instance, as a control we can note that the nasality found in the final syllable of the phrase in (44),

(44) k̩e hu f̩ê 3SG.NF stomach bad \(\{k̩e hue f̩êng\}\)

‘He’s angry.’
is only specified on the last vowel, and only it displays any nasality: all the preceding segments are oral, true to their lexical specifications. If the first syllable contains a segment that is phonemically nasalised, however, this description changes. The phonological specification is as follows, with only the first stop and the last vowel nasalised.

\[
\begin{array}{ccc}
\text{ni} & \text{hù} & \text{fè} \\
1SG & stomach & bad \\
CV & CV & CV \\
N & N & N
\end{array}
\]

\{ ni hue fèng \}

‘He’s angry’

Because of the process of nasal spread, however, weak nasalisation is also found on segments to the right of the strongly-nasalised \(n\) (solid lines indicate strong nasalisation, and dashed lines show weak nasalisation).

\[
\begin{array}{ccc}
\text{n} & \text{i} & \text{h} \quad \text{u} \\
\text{N} & \rightarrow & \text{N} \quad \text{Ø} \quad \text{N}
\end{array}
\]

After the fully specified nasal onset in \(ni\), weak nasalisation spreads rightward until interrupted by an oral consonant, in this case the \(f\). Despite the weak nasalisation spreading until interrupted by an oral non-sonorant, we can and must distinguish strong and weak nasalisation: weak nasalisation does not affect the quality of vowels to the same degree, and is not sufficient to induce prenasalisation on a following stop. Additionally, the weak nasalisation is found on all segments following the nasal stop, including the \(u\), which cannot be strongly nasalised phonologically. Other examples of the spread of nasalisation, resulting in weakly nasalised vowels and no prenasalisation, which contrasts with strongly nasalised vowels and prenasalised stops, can be seen in (47). Here the weakly nasalised vowel (due to nasal spreading from the phonologically nasalised /n/) in the first syllable of ‘five’ does not induce prenasalisation on the following stop, whereas the phonologically nasalised vowel in the first syllable of ‘four’ does spread to the following consonant.

\[
\begin{array}{ccc}
\text{napā} & \text{n̂pā} \\
\text{five} & \text{four} \\
\text{‘five’} & \text{‘four’}
\end{array}
\]

\[
\begin{array}{ccc}
\text{nā} & \text{pā} & \text{n} \quad \text{5} \\
\text{N} & \text{Ø} \quad \text{N} & \text{N} \quad \text{N} \quad \text{Ø} \quad \text{N}
\end{array}
\]

\* [nāmpā] √ [n̂mp̂ā]

\√ [n̄a´p̄ā] \* [n̄p̄p̄a]
(48) \textit{nì ha tà}  \\
‘I run’  \\
Segments: n i h a t a  \\
Phonological nasalisation: + - - - - -  \\
Phonetic nasalisation: ++ + + + Ø Ø  \\
[mü hàta]

In (49) we have a different sentence exemplifying the same spread of nasalisation to the right, but here we can also see that the segment [h], adjacent to the phonologically nasalised vowel but preceding it, is not nasalised. This is clear evidence that nasalisation does not simply spread to adjacent segments, but proceeds in a left to right fashion.

(49) \textit{hang e ang}  \\
‘You all ate coconuts’  \\
Segments: h ā e ā  \\
Phonological nasalisation: - ++ - ++  \\
Phonetic nasalisation: Ø ++ + ++  \\
[hājēā]

In (50) we again see the rightward spread of nasalisation, from the consonant \textit{n} to the following vowel, and the absence of prenasalisation on a non-nasal stop following a weakly nasalised vowel.

(50) \textit{táng nì ká}  \\
‘I shot a bird’  \\
Segments: t ā n i k a  \\
Phonological nasalisation: Ø ++ ++ - - -  \\
Phonetic nasalisation: Ø ++ ++ + Ø Ø  \\
[tānūka]

When a phonologically nasalised (that is, phonetically strongly nasalised) segment precedes an oral stop, that stop is realised with slight prenasalisation. The intrusion of the oral consonant blocks the further rightward spread of phonetic nasalisation.

(51) \textit{táng ke ká}  \\
‘He shot a bird’  \\
Segments: t ā k ŋ k a  \\
Phonological nasalisation: Ø ++ - - - -  \\
Phonetic nasalisation: Ø ++ +/- Ø Ø Ø  \\
[tāŋkēkə]

Example (52) illustrates the same process of nasal spreading as (47), but with a different subject clitic shows that any induced prenasalisation is homo-organic with the following stop.
(52) **táng pe wá**
‘She shot a bird’

Segments: 

| t | á | p | ə | w | a |

Phonological nasalisation: Ø ++ - - - -
Phonetic nasalisation: Ø ++ +/- Ø Ø Ø Ø

[tāmpōwa]

The rightward spreading nature of nasalisation described here contrasts with the widespread appearance of leftward spreading of nasalisation in the other Skou languages. This typological difference is the result of the Eastern Skou languages losing the full contrast in nasalisation that is seen in Skou, where both the onset and the rime in a syllable may be independently specified for nasalisation; in the eastern Skou languages nasalisation is contrastive on the rime only if the onset is not specified as nasal.

2.3.2.3 Stress patterns

Identifying stress in Skou is problematic, since the usual primary phonetic correlate of stress, pitch movement, plays an independent role in Skou as the sole phonetic exponent of the tone system. The generally mono- or disyllabic nature of words in Skou also limits the amount that can be said. Nonetheless, certain stress patterns can be identified, and the (weak) realisation of this stress is independent of pitch assignment due to tonal prosody. There are no examples of words that differ in terms of the stress patterns while retaining the same tonal melodies, but we do find syllables with identical pitch behaviour showing different stress behaviour.

In a monomorphemic word stress is on the initial syllable, as in the following examples (only disyllables have been shown, since only monosyllabic and disyllabic words are unambiguously monomorphemic).

(53) í ‘snake’ [ɪ] [| – ]
(54) e ‘board’ [ɛ] [| – ]
(55) kíngue ‘green tree frog’ [kũû] [| – – ]; *[kũû]
(56) naké ‘dog’ [nAKE] [| – – ]; *[nake]

On these words stress is realised as a slight lengthening of the vowel in the stressed syllable.

Stress is thus completely predictable, and is assigned to the first syllable in a simple word. In a word with proclitics, we find that stress remains on the first syllable of the root, as in (57) - (59), where the 3SG feminine and non-feminine clitics *pe= and *ke= are not in the domain of stress assignment.

(57) pe=p-e ‘she boards’ [pɛ̃pe] [| – – ]; *[pɛ̃ pe] / *[pɛ̃ pɛ] 
(58) pe=ueme ‘woman’ [peueme] [| – – – ]; *[peueme] 
(59) ke=naké ‘male dog’ [kɛnake] [| – – – ]; *[kɛnake]

Under reduplication stress remains with the original root, and not with the reduplicant.

(60) ke=k-a ‘he walks’ [kɛkə] [| – – ]; *[kɛkə] 
(60’) ke=k-a-ka ‘he is walking’ [kɛkəkaka] [| – – – ]; *[kɛkəkaka]
Similarly, with a suffix such as the applicative -na (13.2) we similarly find no change in the position of the stress. Note that in (62) we seen an example of the genitive + dative morphology used to mark possession (6.3.1) not appearing with its own stress domain, even though it does form an independent phonological word for the purposes of tonal association (2.3.1.9).

(61) \(ke=k\-a\-ka\-na\) ‘he is walking to’ [k\(\_\)kakana] [\(-\_\_\_-\)]; *[k\(\_\)ka\(\_\)kana], etc.

(62) \(naké-nì=ne\) ‘my dog’ [nakenine] [\(-\_\_-\)]; *[nake\(\_\)nine], etc.

As mentioned above, the perceptual and acoustic correlates of stress are not very strong, being easily eclipsed by the pitch contours associated with the lexical or grammatical tone associated with the word.

### 2.4 Minimal and near-minimal pairs

The following section exists to exemplify the phonologically distinctive functions of the different phonetic distinctions that have been described in the preceding sections. The contrasts presented here are by no means the only contrasts that could be invoked to illustrate the phonemic assertions made earlier, by they will serve adequately to justify them; further examples can be found in appendix 1.

#### 2.4.1 Segmental minimal pairs

The following tables provide minimal or near-minimal pairs for the segmental distinctions shown earlier (for phonotactic restrictions, see 2.5). In each case only one, common, allophonic variant has been listed for each phoneme, and the orthographic representation has been given as well. In addition to these contrasts many more could be assembled from the lexical materials in appendix 1, and a great many additional ones could easily be put together, especially for consonants, given the material on verbal inflection in appendix 2.

#### Table 63. Consonantal contrasts

<table>
<thead>
<tr>
<th>Vowel</th>
<th>[(-)]</th>
<th>[(-)^a]</th>
<th>Pá</th>
<th>‘house’</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>[(-)]</td>
<td>[ta]</td>
<td>Tá</td>
<td>‘elephant grass, mother in law’</td>
</tr>
<tr>
<td>T</td>
<td>[(-)]</td>
<td>[ka]</td>
<td>Ká</td>
<td>‘ceremonial armband’</td>
</tr>
<tr>
<td>K</td>
<td>[(-)]</td>
<td>[ba]</td>
<td>Bá</td>
<td>‘who’</td>
</tr>
<tr>
<td>B</td>
<td>[(-)]</td>
<td>[d3a]</td>
<td>Já</td>
<td>‘wet’</td>
</tr>
<tr>
<td>J</td>
<td>[(-)]</td>
<td>[fa]</td>
<td>Fá</td>
<td>‘inner house wall’</td>
</tr>
<tr>
<td>F</td>
<td>[(-)]</td>
<td>[ha]</td>
<td>Há</td>
<td>‘nose’</td>
</tr>
<tr>
<td>H</td>
<td>[(-)]</td>
<td>[wa]</td>
<td>Wá</td>
<td>‘carrying basket’</td>
</tr>
<tr>
<td>Y</td>
<td>[(-)]</td>
<td>[dzja]</td>
<td>Yá</td>
<td>‘tall grass’</td>
</tr>
<tr>
<td>R</td>
<td>[(-)]</td>
<td>[ra]</td>
<td>Ra</td>
<td>‘fire’</td>
</tr>
<tr>
<td>L</td>
<td>[(-)]</td>
<td>[la]</td>
<td>Lá</td>
<td>‘outer wall’</td>
</tr>
<tr>
<td>M</td>
<td>[(-)]</td>
<td>[ma]</td>
<td>Má</td>
<td>‘(other’s) mother’</td>
</tr>
<tr>
<td>N</td>
<td>[(-)]</td>
<td>[na]</td>
<td>Ná</td>
<td>‘paddle’</td>
</tr>
</tbody>
</table>
Contrasts between the seven oral vowels are shown in the following table, in both syllables with and without onsets. The choice of the onset $p$ to illustrate the vowel contrasts is not accidental, as this is by far the most phonotactically tolerant consonant.

**Table 64. Vocalic contrasts**

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Orthography</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>$i$</td>
<td>[pʰi]</td>
<td>[ɨ] $pí$ ‘half-ripe’</td>
</tr>
<tr>
<td></td>
<td>[i]</td>
<td>í ‘snake’</td>
</tr>
<tr>
<td>$e$</td>
<td>[pʰɛ]</td>
<td>[ɨ] $pé$ ‘you catch (feminine)’</td>
</tr>
<tr>
<td></td>
<td>[ɛ]</td>
<td>é ‘bone’</td>
</tr>
<tr>
<td>$a$</td>
<td>[pʰa]</td>
<td>[ɨ] $pá$ ‘house’</td>
</tr>
<tr>
<td></td>
<td>[a]</td>
<td>a ‘cloud’</td>
</tr>
<tr>
<td>$o$</td>
<td>[pʰɔ]</td>
<td>[ɨ] $pó$ ‘vegetables’</td>
</tr>
<tr>
<td></td>
<td>[ɔ]</td>
<td>ó ‘lime (for betelnut)’</td>
</tr>
<tr>
<td>$u$</td>
<td>[pʰo]</td>
<td>[ɨ] $pú$ ‘you shoot’</td>
</tr>
<tr>
<td></td>
<td>[u]</td>
<td>ũ ‘smell rotten’</td>
</tr>
<tr>
<td>$ue$</td>
<td>[pʰu]</td>
<td>[ɨ] $púe$ ‘wallaby (sp.)’</td>
</tr>
<tr>
<td></td>
<td>[u]</td>
<td>ūe (te) ‘sink’</td>
</tr>
<tr>
<td>$oe$</td>
<td>[pʰo]</td>
<td>[ɨ] $póe$ ‘heavy’</td>
</tr>
<tr>
<td></td>
<td>[ø]</td>
<td>óe ‘kind of yam’</td>
</tr>
</tbody>
</table>

We have already seen that there is no nasalised high central rounded vowel, $*[aː]$. This gap appears for historical reasons, and has additionally acquired synchronic support; see 2.3.2.1 for discussion. Contrasts involving the six nasalised vowels are shown in table 65.

**Table 65. Vocalic contrasts**

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Orthography</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ing$</td>
<td>[pʰi]</td>
<td>[ɨ] $píng$ ‘bench, table’</td>
</tr>
<tr>
<td></td>
<td>[i]</td>
<td>ing ‘(the)’</td>
</tr>
<tr>
<td>$eng$</td>
<td>[pʰɛ]</td>
<td>[ɨ] $peng$ ‘forget’</td>
</tr>
<tr>
<td></td>
<td>[ɛ]</td>
<td>é ‘bone’</td>
</tr>
<tr>
<td>$ang$</td>
<td>[pʰã]</td>
<td>[ɨ] $pang$ ‘pus’</td>
</tr>
<tr>
<td></td>
<td>[ã]</td>
<td>ang ‘root used to make fish poison’</td>
</tr>
<tr>
<td>$ong$</td>
<td>[pʰɔ]</td>
<td>[ɨ] $pong$ ‘blow (at fire)’</td>
</tr>
<tr>
<td></td>
<td>[ɔ]</td>
<td>ɔng ‘deception’</td>
</tr>
<tr>
<td>$ung$</td>
<td>[pʰʊ]</td>
<td>[ɨ] $pung$ ‘liver’</td>
</tr>
<tr>
<td></td>
<td>[ʊ]</td>
<td>ung ‘now’</td>
</tr>
<tr>
<td>$ueng$</td>
<td>$*[pʰu]$, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$*[ʊ]$</td>
<td></td>
</tr>
<tr>
<td>$oeng$</td>
<td>[pʰɔ]</td>
<td>[ɨ] $póeng$ ‘tongue’</td>
</tr>
<tr>
<td></td>
<td>[ø]</td>
<td>oeng ‘remember’</td>
</tr>
</tbody>
</table>
We have seen minimal pairs differentiating the consonants and the vowels in this section. What remains are minimal pairs to establish the differences between the suprasegmental units, tone and nasalisation.

2.4.1 Suprasegmental minimal pairs

We have seen a six-way set of distinctions maintained only by the suprasegmental features of pitch and nasalisation, on a segmentally identical monosyllable, at the beginning of 2.3. In this section some additional contrasts will be presented.

Recall from 2.3.2.1 that there is no contrast in nasalisation for the \[\text{è}\] vowel, the result of a historical loss of contrast in the central vowels (Donohue 2002b). Note also that, while vowels are contrastively nasalised following nasal onsets, these contrasts are rare, and mostly involve the inflected forms of various verbs. Contrasts in nasalisation following nasal onsets are found in roots (such as shown in table 66 as well as table 69 below), but are rare.

\[\text{Table 66. Contrasts in nasalisation}\]

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Oral</th>
<th>Nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>pì</td>
<td>ping</td>
</tr>
<tr>
<td>e</td>
<td>fé</td>
<td>féng</td>
</tr>
<tr>
<td>a</td>
<td>ha</td>
<td>hang</td>
</tr>
<tr>
<td>o</td>
<td>mo</td>
<td>mong</td>
</tr>
<tr>
<td>u</td>
<td>lú</td>
<td>lúng</td>
</tr>
<tr>
<td>oe</td>
<td>óe</td>
<td>óeng</td>
</tr>
</tbody>
</table>

With tone there are many restrictions on cooccurrence with different vowels or consonants, as detailed in the following section. Only monosyllabic contrasts are shown in the following table. No three-way contrasts for the mid front unrounded vowel \(e\) could be found, since it is the vowel that suffers most from phonotactic restrictions. In some other cases
Table 67. Contrasts in pitch

<table>
<thead>
<tr>
<th>Vowel</th>
<th>High</th>
<th>Low</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>pí</td>
<td>’speech’</td>
<td>pí</td>
</tr>
<tr>
<td>lí</td>
<td>’boil’</td>
<td>li</td>
<td>’rotate’</td>
</tr>
<tr>
<td>e</td>
<td>–</td>
<td>te</td>
<td>’they’</td>
</tr>
<tr>
<td>fé</td>
<td>’tomorrow’</td>
<td>fe</td>
<td>‘fork’</td>
</tr>
<tr>
<td>a</td>
<td>páng</td>
<td>‘husband’</td>
<td>pang</td>
</tr>
<tr>
<td>lá</td>
<td>’wall’</td>
<td>la</td>
<td>’cold’</td>
</tr>
<tr>
<td>o</td>
<td>hó</td>
<td>’strip, peel’</td>
<td>ho</td>
</tr>
<tr>
<td>nóng</td>
<td>’breast’</td>
<td>nongpong</td>
<td>‘four’</td>
</tr>
<tr>
<td>u</td>
<td>pú</td>
<td>‘you shoot’</td>
<td>pu</td>
</tr>
<tr>
<td>húng</td>
<td>‘Sentani’</td>
<td>hung</td>
<td>‘edge’</td>
</tr>
<tr>
<td>uè</td>
<td>rüe</td>
<td>‘rudder’</td>
<td>rue</td>
</tr>
<tr>
<td>hùe</td>
<td>’stomach’</td>
<td>hue</td>
<td>’tread on’</td>
</tr>
<tr>
<td>oe</td>
<td>tóe</td>
<td>‘tree’</td>
<td>toe</td>
</tr>
<tr>
<td>yöng</td>
<td>’tongue’</td>
<td>yöng</td>
<td>‘thick’</td>
</tr>
</tbody>
</table>

Leaving the segmental and suprasegmental description, the next section describes the many phonotactic constraints that pertain in Skou.

2.5 Phonotactics revisited and expanded

We have now seen the segmental (consonantal and vowel) and suprasegmental (tone and nasalisation) features described individually. If we were to examine the permutations of these as they combine to produce syllables, we would naively expect the following number of potentially contrastive phonetic syllable types (I am ignoring the suprasegmental differences created by accent placement, as that is not phonetically manifested on monosyllables):

\[
\text{Position Onsets vowels tone melodies nasalisation} = 980
\]

The number of contrastive syllables is significantly less than this: a total of 413 syllable types are permitted in Skou, a remarkably small number. This can be \textit{ad hoc} compared to Mandarin Chinese, a language that is similarly (approximately) monosyllabic for roots, and which has 383 segmental syllable types, multiplied by four tones (though admittedly with some gaps), yielding approximately 1,500 possible monosyllabic shapes. Some of the reasons for the small inventory in Skou have already been discussed (2.3.1.4, 2.3.2.1):

- u cannot appear nasalised;
- the tonal melodies LH and LHL cannot be instantiated on a single syllable
Even taking these restrictions into account, we would still expect a large number of syllable types, as shown by the following calculation, simply working out the permutations that are phonotactically permitted:

\[
14_{\text{onsets}} \times (7_{\text{oral Vs}} + 6_{\text{nasal Vs}}) \times 3_{\text{pitches}} = 546
\]
different syllable types, which is still significantly greater than the number of possible syllables (30% greater). In this section I shall outline the other phonotactic restrictions that reduce the number of observed syllable types.27

2.5.1 Consonant and pitch

There are two restrictions on the pitch of syllable that are governed by the nature of the onset in that syllable. Since they cover different categories which are not mutually exclusive, one consonant is doubly restricted.

1. Falling pitch does not occur on syllables with an initial consonant that has a [+back] specification; this bars falling pitch from occurring in syllables with \(k, j, w\) or \(y\) as their onset.

2. There is no contrast between high pitch and low pitch on monosyllabic words with voiced stop onsets; put another way, the tone melody \(L\) may not associate with a word with a voiced stop onset in it, while \(LH, HL, LHL,\) and \(H\) are permitted. This reduces the number of contrasts found on monosyllables with \(b\) or \(j\) as onsets.

3. Related to point 2, there are no words with only low pitch (which would be predicated for a \(L\) tone melody) in which any syllable has a voiced stop onset. This means that if there is any \(b\) or \(j\) in an onset, the number of tonal contrasts for that syllable is reduced.

The first of these restrictions is acoustically-motivated: initial voiced stops show a lowered \(F_0\) with respect to their voiceless equivalents, and so there is less acoustic space for the putative contrast between a high pitch and low pitch to be realised, leading to perceptual confusion. The average frequency of the vowel in a syllable with an initial voiced stop would be lower than expected, and so liable to be confused with the typical \(F_0\) associated with a phonologically low-pitched syllable. The actual pitch on these syllables is between that of low pitched and high pitched syllables (judged based on the pitch heard when an equivalent syllable has a nasal onset or is vowel-initial, and so is not subject to \(F_0\) perturbations).

The explanation proposed here is that the reduced \(F_0\) (at least at the onset of the vowel) associated with this muscular action on a syllable that has been specified as having a high pitch has been reinterpreted as in fact showing no contrast with the typical (non-voiced consonant

---

27 The phonotactic constraints presented in the following sections were identified by combing through the existing lexicon of Skou, by attempting to elicit syllables with all of the 980 ‘logically possible’ syllable types described above, and by seeing how Skou speakers reproduced these syllable types when I produced them. For instance, when asked to repeat back the syllable \([bo]\) to me, speakers invariably produced \([b\delta]\), and claimed that this is what I had produced. Similarly \([\delta t]\) would be repeated as \([ti]\), no matter how strongly the nasalisation was emphasised. This shows that there is some psychological reality to the idea that voiced consonants are restricted to non-back or low vowel rimes only (2.5.3), and that what is reported in this section goes beyond finding chance gaps in the phonological resources used in the lexicon.
onset) F₀ patterns found on phonologically low-pitched words (see figures 2 and three in appendix 1 for an example of how close the initial F₀ of high pitched and low pitched words can be). This has then led to a reinterpretation of syllables with this voicing preconditioning of the F₀ as in fact not displaying a phonological, and not just phonetic, contrast between a high and a low pitch. Since the main part of the vowel in these syllables is still greatly higher than in a phonologically low-pitched word, they are still interpreted as being phonologically high, and the phonologically low syllables, having been reinterpreted as not showing a distinction with the high-tone syllables, have been reanalysed as also being phonologically high tone.

The fact that this lack of contrast is extended to create a ban on polysyllabic words with a voiced stop onset anywhere in the word having a plain L tone melody means that there is considerable interaction between segmental and suprasegmental processes in Skou. This is consistent with the apparent lack of a tonal root node intermediate between the tonal melody and the tone bearing units of the word (Donohue 2002d), and the next point, involving a restriction on falling pitch with k or j initial syllables. Note also that in polysyllabic words, including compounds consisting of individual monosyllabic elements, it is possible for a syllable with b or j as its onset to be realised with a low pitch.

A phonetic explanation for the absence of falling pitch on syllables with initial [+back] consonants is more complicated, but a plausible account can nevertheless be motivated. While there are few, if any, acoustic motivations for the restriction, we can formulate a plausible explanation in terms of articulatory gestures (after the manner of Erikson 1993). Firstly, we need to motivate the classification of the consonants in question as [+back]. While this may be obvious and uncontroversial for k, and not particularly questionable for w (it does have [gʷ] allophones following a nasalised vowel – 2.2.1.3), it is less immediately apparent why j and y should be characterised in this way. Again, the allophonic behaviour of these phonemes provides the justification that we need. The palatal stop j shows dissimilatory phenomena with following vowels. When a low, back vowel follows, the realisation is palatal, but with a high front vowel a more backed articulation is heard: thus jā ‘noose trap for a pig’ is heard as [ja], but jíngpa ‘fly (verb)’ is [gÆü)(m)pa]. With y there is not velar allophone, but the typical pronunciation of this phoneme involves a complex gesture, especially when the following vowel is front (again a dissimilatory process). In these environments, we hear [dzj], [dzj], rather than [j]. While these are still not [+back] sounds, according to traditional feature assignments, they do involve a process of backing in their articulation: the muscles that are responsible for the raising of the tongue root in the articulation of [+back] consonants, such as velars and uvulars, are also involved in pulling the tongue root back from the alveolar or alveopalatal position towards the palatal, and thus the muscular gesture is the same, even though the target is quite different.

The [+back] articulation requires a muscular gesture in the sterno-hyoid muscle, which in turn would affect the muscle tension around the vocal cords. This would not restrict a specification for a falling pitch per se, but the higher F₀ that would be induced by the greater muscle activity involved in the tongue body raising has evidently been enough to mean that the overall fall is not sufficient for the phonologically HL syllables to be interpreted as showing a HL pattern, and not simply a H melody pattern, combined with intonational fall (compare figures 2 and 4 in appendix 2 for an appreciation of how much F₀ drop is associated with a phonologically high pitched syllable in any event). In this case, too, the inherent phonetic characteristics have been reinterpreted and reanalysed as phonological constraints. One possible historical pathway for this development is the following set of diachronically-ordered steps:
1. The intrinsic activation of the sterno-hyoid during the articulation of [+back] consonants to effect tongue retraction causes, through the tension transmitted to the muscles around the vocal cords, a reduction in the degree of fall that the $F_0$ contour achieves. Phonologically falling pitches are still realised as falls, but the fall is not as long as that associated with the same phonological pitch articulated with a [-back] consonant.

2. This new, shorter fall, is reinterpreted as not showing a sufficiently salient fall in pitch to be within the target range of a phonological falling pitch;

3. The fall is then reinterpreted as being a simple high pitch (which will, due to intonation phrase-edge effects, often fall somewhat anyway);

4. A phonological constraint is introduced into the phonological system to enforce this new interpretation, leading to a synchronic paradigmatic alternation between HL and H, and not just lexical tendencies in phonotactic combinations.

The only unusual step in this hypothesised pathway involves the reinterpretation of the lesser fall as being a phonologically high pitch. Why would a language allow such variation in its interpretations of phonological units, realised as different pitch contours? The answer is that for Skou, in most cases, the actual pitch contour associated with any given syllable is not such a salient characteristic as to require strict interpretational faithfulness, but rather it is the pitch contour for the word, determined by the lexical melody associated with that word, that counts. So, for instance, given a tone melody of the shape HL, and two syllables to assign to, any of the following pitch contours are acceptable:

$\text{(63) } \begin{array}{l}
\text{pále} \\
\text{[pa lε]} \\
\text{‘pig’} \\
\text{H L}
\end{array} \quad \text{Possible pitch realisations: 44 22, 44 21, 43 22, 43 21}
\quad \text{(not exhaustive)}$

This shows that for the speaker that realising the HL melody can be achieved with or without some degree of fall on either or both syllable. Crucially, the native speakers learns from the input available that level and (slightly) falling pitches can be interpreted as allotones of each other.

Now in most cases a HL melody associated with a single syllable will be part of a longer word; for instance, a word with a HL tone melody and an accent on the initial syllable. Possible contours will include:

$\text{(64) } \begin{array}{l}
\text{ìno} \\
\text{[i  no]} \\
\text{‘banana’} \\
\text{H L}
\end{array} \quad \text{Possible pitch realisations: 42 21, 42 11}
\quad \text{(not exhaustive)}$

Comparing the possible pitches here with those seen in (63) for a non-accented word such as pále ‘pig’, which is not associated as HL L, but as H L, we find that the range of possible falling pitch realisations are not that far apart. So when it came to producing a word with a HL L melody that has an initial $k$-initial syllable, we would have found the following variants, which are easily within the tolerances of variation observed for the H L pattern.

$\text{(65) } \begin{array}{l}
\text{kòepi} \\
\text{[kø pi]} \\
\text{‘grass skirt} \\
\text{H L}
\end{array} \quad \text{Possible pitch realisations: 43 21, 43 11}
\quad \text{(not exhaustive)}$

This account relies on there having been, and still being, some degree of tolerance for the realisation of the tonal contours, combined with a strong degree of historical prejudice for
phonetic norms. Donohue (2002) argues that Skou has shown strong normative traits in its phonological and morphological history.

Evidence for this position is found in the lack of falling pitches on syllables with a [+back] onset is a productive rule, not a lexical or historical accident. When marking the genitive the 3SG.NF pronoun is heard with a high pitch: ké [‘], and not a falling pitch, as is found on the other genitives, such as 3SG.F pè [‘]. This indicates that there is more than just a frequency restriction on the appearance of falling pitch on syllable with a [+ high] consonant in the onset, and that there is a principled rule at work that excludes falling pitches from appearing on syllables with initial [+back] consonants.

Another correlation between consonant type and pitch comes from an examination of loanwords. In general, words that are borrowed (directly or indirectly) from Indonesian/Malay with a penultimate stress pattern show a HL tone melody, if both syllables have onsets. One example is the place name Koya, currently a village area in the transmigration camp south of the Skou villages, and previously the name of a stretch of land in that area. This word is heard with a HL melody as Kóya in Skou (its adaptation to become part of the Skou lexicon, rather than representing an example of code-switching, is shown by the non-Malay pronunciation of the second consonant, [kɔza], with a [‘] pitch, to be compared to the Malay [kɔja]). When, however, a word with voiced initial stop is borrowed, the normal pattern is disrupted by the requirement that the syllable with the contrastively voiced stop should appear with a low pitch association; this can result in complex tone patterns. For instance, the Malay word guru ‘teacher’, [guru], is borrowed as kurù ‘teacher’. In this word the penultimate stress of the original is represented by a HL melody, just as with Koya. The sole Skou velar stop, /k/ is found corresponding to the Malay (voiced) velar stop, but an additional L tone unit is added to the phonological form to represent the voiced stop in the donor language. This results in a LHL tone melody, realised as a [‘] pitch, preserving a trace of the original voiced stop through a reinterpretation of the F0-lowering properties of the voiced stop.

2.5.2 Vowel and pitch
There are no absolute restrictions on which vowels may occur with which lexical pitch values, assigned by the tone melody of the word: vowels of all seven distinctive qualities are found with all three different syllable pitches. There are, however, striking skewings in the frequencies with which the vowels occur with different pitches. Table 68 shows the overall frequencies, in percentage points, of the different pitch contours found in with syllables headed by vowels of different qualities, as well as a break down of the frequency of each vowel with each pitch contour. Values for a particular vowel which are more than 10% deviant from the overall tendencies have been shown in bold.
Table 68. Pitch contour frequencies by vowel quality (percentages)

<table>
<thead>
<tr>
<th>Pitch contour</th>
<th>low</th>
<th>high</th>
<th>fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall:</td>
<td>47</td>
<td>37</td>
<td>16</td>
</tr>
<tr>
<td>Vowels:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i</td>
<td>37</td>
<td>48</td>
<td>14</td>
</tr>
<tr>
<td>e</td>
<td>50</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>a</td>
<td>48</td>
<td>33</td>
<td>19</td>
</tr>
<tr>
<td>o</td>
<td>61</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>u</td>
<td>51</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>ë</td>
<td>57</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td>ø</td>
<td>20</td>
<td>56</td>
<td>24</td>
</tr>
</tbody>
</table>

Despite the fact that all vowels do occur in syllables with each of the different pitch contours, there are clear preferences for high pitch to occur with i and ø, and for low pitch to occur with o. This might be a reflection of the inherent frequency associated with vowels of different heights: low vowels show low frequencies, and higher vowels higher frequencies (recall that in high pitched syllables, /P/ is pronounced [v]). While explanatory of the deviant frequencies observed, it does not explain the highly normal values found for u and ë. The normal values for a can be attributed to its very high frequency, and subsequent skewing of the overall pattern.

2.5.3 Consonant and vowel

There are very pronounced patterns of co-occurrence between the onset of a syllable and its rime. The voiceless consonants show no restrictions, and the non-nasal coronal sonorants l and r show preferential tendencies, though no absolute restrictions. The occurrence of l and r with the different vowels is shown in table 69, and typifies the frequencies found both with these two segments and the voiceless consonants.

Table 69. Non-nasal sonorant and vowel frequencies

<table>
<thead>
<tr>
<th>Vowels:</th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>o</th>
<th>u</th>
<th>ë</th>
<th>ø</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>l</td>
<td>1</td>
<td>3</td>
<td>16</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>59</td>
</tr>
<tr>
<td>r</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>21</td>
</tr>
</tbody>
</table>

The non-occurrence of *[û]* has already been mentioned (see 1.6, 2.3.2.1), as have the productive morphophonological changes that are employed to prevent its realisation synchronically. Additionally, there is an absolute restriction that roots may not appear with a nasal onset and the vowel ø in the rime; this is a phonotactic reflection of the presence of non-contrastive nasalisation on vowels when they occur after a contrastively nasalised segment, namely m or n. The frequencies of the other vowels when they follow nasal onsets are skewed far from the overall frequencies, with a huge preference for the low vowels, as can be seen in table 70.

Table 70. Nasal consonant and vowel frequencies

<table>
<thead>
<tr>
<th>Vowels:</th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>o</th>
<th>u</th>
<th>ë</th>
<th>ø</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>m, n</td>
<td>3</td>
<td>5</td>
<td>23</td>
<td>7</td>
<td>4</td>
<td>–</td>
<td>5</td>
<td>47</td>
</tr>
</tbody>
</table>
The remaining sonorants, \(w\) and \(y\), show even more restrictive patterns with respect to vowel co-occurrence. Neither of them frequently appears with the non-back rounded vowels \(u\) or \(\varnothing\), the sole exception being the word for ‘hat’, \(w\varnothing w\varnothing\). (This restriction is true of lexical roots, though some verbs with a \(u\) or \(\varnothing\) vowel allow these sequences to occur in the 3SG.F or 3PL inflections, such as ‘they squash’, \(yu\), or ‘she waits’, \(w\varnothing\); see 7.2.2 for details on prefixal agreement patterns.) Additionally, \(y\) may not occur with the other front vowels, \(i\) or \(e\). (Again, this is found in some verbal inflection: ‘they ask’, \(t\varnothing e\), or ‘they count’, \(ya\ yi\).) Both of the glides show strong preferences for the low vowel, just as has been seen with the nasals.

**Table 71. Glides and vowel frequencies**

<table>
<thead>
<tr>
<th>Vowels:</th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>o</th>
<th>u</th>
<th>u</th>
<th>(\varnothing)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(w)</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>–</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>(y)</td>
<td>–</td>
<td>–</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>14</td>
</tr>
</tbody>
</table>

Finally, the voiced stops \(b\) and \(j\) are both restricted to appearing only next to either low or front vowels; this means that the only rounded vowel that may follow one of these voiced stops is \(\varnothing\). This, and the other restrictions, are all shown in table 72.

**Table 72. Consonant and vowel restrictions**

<table>
<thead>
<tr>
<th>Consonants:</th>
<th>i</th>
<th>e</th>
<th>a</th>
<th>o</th>
<th>u</th>
<th>u</th>
<th>(\varnothing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(p, t, k, f, h)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>(l, r)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>(m, n)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>–</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>(w)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(y)</td>
<td>–</td>
<td>–</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(b, j)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>√</td>
</tr>
</tbody>
</table>

The arrangement of the table reflects both the fact that the restriction that apply to voiced stop onsets are not in the same ‘continuum’ as those found with the other onsets, and also that there is a track of sonority operating in the co-occurrence restrictions: the more sonorous the onset, the smaller the number of rimes that may appear with it. It is also clear that the palatal glide ‘counts’ as much more sonorous than does the labio-velar glide; see 2.2.4 for discussion of the status of \(/w/\).

### 2.5.4 Vowel and Nasalisation

The only restriction of vowels cooccurring with nasalised syllables is the absolute ban on the appearance of *\([\ddot{u}]\). When called for by synchronic rules, \([\ddot{u}]\) is heard instead. Historically, roots with *\([\ddot{u}]\) show reflexes with \(\varnothing\). Clearly, there has been a reinterpretation of the rules governing the non-appearance of *\([\ddot{u}]\); historically the feature [-back] was preserved over [+high], and synchronically [+high] is favoured over [-back].

### 2.5.5 Consonant, vowel and nasalisation

There is a complex restriction that constrains the high front vowel from appearing nasalised with any onset other than a bilabial or velar onset. That is, \(\varnothing[i]\), \(\varnothing[i]\), \(\varnothing[i]\) and \(\varnothing[i]\) are heard, but none of the other nine onsets that can occur with \(i\) appear with this vowel when nasalised.
Table 73. Restrictions on the vowel [ɪ]

<table>
<thead>
<tr>
<th>Consonant:</th>
<th>p</th>
<th>t</th>
<th>k</th>
<th>b</th>
<th>j</th>
<th>f</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ɪ]</td>
<td>√</td>
<td>–</td>
<td>√</td>
<td>√</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consonant:</th>
<th>l</th>
<th>r</th>
<th>m</th>
<th>n</th>
<th>w</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ɪ]</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>(–)</td>
</tr>
</tbody>
</table>

This unusual restriction does not seem motivated synchronically by phonetic features or on the basis of a particular phonological natural class, but does have a historical basis. The consonants that display the ability to appear with a nasalised [ɪ] are essentially the voiceless stops and the bilabials. This is the same group of stops that could appear as part of an initial cluster in proto-Skou, *pl *tl *kl *bl and *fl, and these clusters are still reflected in the more eastern languages (see Donohue 2002). Modern reflexes of these clusters (*p *t *k *b *m) can appear with a nasalised [ɪ] in their rime in Skou; the absence of a contemporary [ɪ] can be accounted for by noting that all modern occurrences of [ɪ] reflect proto-Skou *s, *d or *j, and not a proto-Skou voiceless stop or bilabial (specifically *t, which is reflected as r in modern Skou). Just why this restriction should apply to one nasalised vowel is unknown, but the well-attested association between (high) front vowels and coronal stops is likely to be a contributing factor.

A second restriction on cooccurrence involves a complex cluster of consonantal and vocalic identity as well as nasalisation. Although sequences of [t] and front non-high vowels are allowed, with both [tɛ] and [tø] acceptable in oral syllables, and while both [ɛ] and [ø] are attested rimes, neither *[tɛ] or *[tø] occur. This shows that non-back mid vowels cannot occur nasalised following a t.

2.5.6 Pitch and Nasalisation

There are no correlations between the pitch found on a syllable and the nasalisation setting for the vowel of that syllable; all contrastive pitch contours are found to occur with both nasalised and non-nasalised vowels (allowing for the constraints described in 2.5.4 and 2.5.5), with the frequencies that would expected based on the frequencies of the different pitch contours and oral versus nasalised vowels. Similarly, there are no correlations between the tone melody associated with a word and the appearance of nasalisation on any of the vowels in that word.

2.5.7 Consonant clusters and unusual onsets

In 2.1 we described the syllable structure of Skou as not allowing complex onsets. This is almost true – no lexical items must be unambiguously specified as having consonant clusters. Nonetheless there are some cases of syllables with complex onsets involving consonant clusters in the language.

The first of these involves the inflection of the verb oeng li ‘remember’. There is a regular inflection, and also an alternative (and very rarely heard) inflectional paradigm which involves the cluster pl for 3SG.F; both of these are shown in (66) and (67) below.

28 These putative syllables are a good example of speakers reinterpreting the material presented to them. Faced with the task of repeating [tɛ] speakers will preferentially produce [tɑ], or say that they had not been given a word to produce, and simply hum in reply. These phonotactic considerations are clearly psychologically real, as discussed in footnote 27.
Regular paradigm

(66)  1SG  2SG  3SG.NF  3SG.F  1PL  2PL  3PL
    Ꞁ mꞀ kꞀ Ꞁ Ꞁ Ꞁ Ꞁ

Alternative paradigm

(67)  1SG  2SG  3SG.NF  3SG.F  1PL  2PL  3PL
    Ꞁ mꞀ Ꞁ Ꞁ pl Ꞁ Ꞁ Ꞁ

The second recorded instance of a consonant cluster involves the lexical item lōpa ‘earlier on’, which has occasionally been recorded as [blōpa], in addition to the more frequent and universally accepted [lōpa]. This accretion of a [b] is not random: the only cluster recorded for this word is [bl], and never [pl], [tl], [kl], [fl], the other possible clusters in proto-Skou. The pronunciation with an initial cluster might reflect an archaic form of the word, a relic from an earlier stage of the language (we lack any attested cognates of this word in related languages, however, so this idea must remain speculative). The presence of a [pl] as an option for the 3SG.F inflection of ‘remember’ is strongly suggestive of an inflectional form that would have been regular in a cluster-permitting stage of the language, and this form has been sporadically retained into the contemporary language, albeit only for some older speakers. This view, the idea that there are some archaic remainders in the language that have been by-passed by the regular sound changes that define the language, is supported by the occasional record of /p/ pronounced as [kʷ], reflecting quite directly the proto-Skou phoneme *kʷ from which many modern Skou /p/ are derived (Donohue 2002). See also 1.7 for discussion on the possibly very recent loss of clusters in Skou.

2.6 Reduplication

Reduplication can apply to words from any of the open word classes, and it has a variety of semantic and syntactic functions depending on the word class to which it applies, despite the invariant phonological form it takes. As such it cannot easily be described simply as a morphological process later in the book, and so it is described here in the chapter on phonology.

Reduplication in Skou involves the copying of one syllable, in both its segmental and suprasegmental features, and placing that copy next to the original. With polysyllabic words, reduplication is occasionally complete: that is, while the more common pattern is for just the final syllable to reduplicate, there are occasional instances of both syllables reduplicating. For instance, in the same sentential slot that requires reduplication in (68), we find the form shown in (69) for a disyllabic verb root (see 7.9 for discussion of the marking of aspect and mood in Skou). Reduplication of the first syllable, shown in (70)a, is ungrammatical; reduplication of both syllables of the disyllabic word is proscribed against, but is occasionally heard.

   3SG.NF=3SG.NF.go  3SG.NF=3SG.NF.go-RED do
   ‘He went.’ ‘He wants to go.’

   3SG.NF=fly  3SG.NF=fly-RED do
   ‘He (a bird) flew.’ ‘He wants to fly.’

(70) a. *ke jíng jíngpa li  b. ?* ke jíngpa jíngpa li
In sentences with verbal collocations (see 7.8), even though both elements present evidence of being (at least diachronically) independently inflecting verbs, only the last syllable shows reduplication. The following examples, using há hi ‘count’, show that the first syllable cannot be reduplicated.

(71) a. Ya ke=k-á k-i.
    thing 3SG.NF=3SG.NF-count 3SG.NF-count
    ‘He counted (the things).’

      b. Ya ke=k-á k-i-ki li.
          thing 3SG.NF=3SG.NF-count 3SG.NF-count-RED do
          ‘He wants to count (the things).’

(72) *ya ke ká ká ki li, *ya ke ká ki ká ki li, *ya ke ká ká ki ki li

Adjunct nominal constructions do not present any special complications for the reduplication template: the last syllable of the inflecting verb is reduplicated, regardless of the presence or position of the adjunct nominal with respect to the verb and its inflections. This is one test for the status of postverbal adjunct nominals (as opposed to disyllabic verbs, described in chapter 14). Examples of predicates with adjunct nominals, in which the verb but not the nominal shows reduplication, can be seen in (73) and (74).

Preverbal adjunct nominal

(73) a. Te=bà ne=nà n-i-ni.
    3PL=person 1PL=hatred 1PL.-hate-RED
    ‘We will hate them.’

      b. *te=bà ne=nà-nà n-i.
          3PL=person 1PL=hatred-RED 1PL-hate

Postverbal adjunct nominal

(74) a. Te=bà te=j-á-já ráue.
    3PL=person 3PL=3PL.-stand-RED laughter
    ‘They will laugh.’

      b. *te=bà te=j-á ráue-ue
          3PL=person 3PL=3PL.-stand laughter-RED

      c. *te=bà te=j-á rá-ráue
          3PL=person 3PL=3PL.-stand laughter-RED

Notice that the process of reduplication involves suprasegmental as well as segmental copying. This is particularly important when we consider that pitch values are associated with syllables by virtues of their being part of a word-length tone bearing unit. In háhi ‘count’, for instance, the predicate is associated with a HL tone melody. When a HL melody is associated with a lexical root that is three syllables long the attested pitch patterns are |− − −|, |− − | and |− |, reflecting words with no accent, a final accent, and a penultimate accent, respectively (see 2.3.1.4 and 2.3.1.5). What we have in the case of a reduplicated ‘count’ is |− − −|, a pattern not otherwise attested. Similarly with náhi ‘hate’ we find a |− | pattern, and | | when reduplicated; antepenultimate accents are not a possibility for well-formed words in Skou. This implies that reduplication falls ‘outside’ the normal bounds of well-formedness constraints, and applies post-lexically, after pitch assignments to syllables on the basis of
underlying tone melodies have already been made. The fact that tone assignment is word-based, not syllable-based, and that reduplication affects a single syllable, means that there is a potential ambiguous area in the application of the two nonconcatenative processes. The two logical possibilities are shown in (75). If reduplication applies before tone assignment then the result is a trisyllabic word that is well-formed by any characterisation of that class of words. If tone assignment applies first then we have a well-formed disyllabic word, which is then effectively suffixed with a prosodically distinct syllable, whose pitch specifications are identical to those of the final syllable in the verb root.

Reduplication applies before tone assignment with háhi

(75)  
\[
\begin{align*}
\sigma_1 \sigma_2 & \rightarrow \sigma_1 \sigma_2 \sigma_2' \rightarrow \sigma_1 \sigma_2 \sigma_2' \\
& \quad \text{HL} \quad \text{HL} \quad \text{H L}
\end{align*}
\]

Tone assignment applies before reduplication with háhi

(75)b is the model that accounts for the forms háhi ‘count’ and náhi ‘hate’ discussed above.

(76)  
\[
\begin{align*}
\text{a. } & \text{Naké ke=yú.} \\
& \text{dog 3SG.NF=look.for} \\
& \text{‘He looked for the dog.’}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{Naké ke=yú-yú li.} \\
& \text{dog 3SG.NF=look.for-RED do} \\
& \text{‘He wants to look for the dog.’}
\end{align*}
\]

\[
\begin{align*}
\text{c. } & \text{*naké ke yú yu li}
\end{align*}
\]

Even if we tried to restrict the ‘toneless suffix’ analysis to disyllables it would not work. Examining a disyllabic expression such as kalèng, which has a LHL tone melody, we see the following behaviour.

(77)  
\[
\begin{align*}
\text{a. } & \text{Naké ke=kalèng.} \\
& \text{dog 3SG.NF=look.around.for} \\
& \text{‘He looked around for the dog.’}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{Naké ke=kalèng-lèng li.} \\
& \text{dog 3SG.NF=look.around.for-RED do} \\
& \text{‘He wants to look around for the dog.’}
\end{align*}
\]

The account of (77)b is that the LHL melody is that shown in (78)b. The only account that successfully models the tonal behaviour in the reduplicated form assumes that the reduplicated syllable adopts the HL part of the melody that is associated with the second syllable of the root, following which the tone sandhi process (2.3.1.1) causes the L of this second syllable to disassociate, leaving a simple high pitch.
Reduplication applies before tone assignment with kalèng

(78) a. $\sigma_1 \sigma_2 \rightarrow \sigma_1 \sigma_2 \sigma_2' \rightarrow \sigma_1 \sigma_2 \sigma_2'$

LHL LHL L H L

Tone assignment applies before reduplication with kalèng

b. $\sigma_1 \sigma_2 \rightarrow \sigma_1 \sigma_2 \rightarrow \sigma_1 \sigma_2 \sigma_2' \rightarrow \sigma_1 \sigma_2 \sigma_2'$

LHL L H L L H L L L H L

Reduplication is less commonly found with adjectives or nouns as it is with verbs, where it is part of the inflectional paradigm for tense/aspect. Reduplicated nouns have a plural or distributed sense, which can be seen as similar to the irrealis sense that is applied to verbs when they are reduplicated in that the event is in that case distributed over time. Adjectives, when reduplicated, show a different pattern. For them reduplication often has an intensifying function, though it is also attested with a sense of reducing the intensity of the adjective.

In the following examples we can see different nominals reduplicated with plural meanings. The first example explains the fate of women whose husbands have died since the ecological destruction brought about by Indonesian colonisation reduced the natural resources that used to be found in the Skou area, and is extracted from text 17. The second example describes the social situation in the Humboldt Bay region before the Dutch era, and comes from text 1.

Nouns showing reduplication

(79) … ne=bàro-ro,
L1PL=widow-RED
‘and us widows, …’

(80) … pìng-pìng nawò te=ti.
war-RED many 3PL=3PL.
‘they fought many wars.’

In the next two examples (from texts 21 and 7, respectively) the use of reduplication has a distributed sense: the reference of pèng-peng and nà-na is not simply to ‘outside’ or ‘sago processing place’, but to a variety of possible locations which could be described by these labels. In the first example below the reduplication serves to indicate that, wherever you are, if it is outside a house a ke bàti ‘evil spirit’ will be able to assault you. In the second example the reduplication indicates that there is no one single action that prepares a processing site, but rather a series of actions starting with the separation and trimming of the parts of the sago tree that are used to make the upper and lower troughs, the sharpening and placing of support sticks into the ground, placing the equipment together and aligning all the parts correctly, fitting the strainer, and finally transporting the sago pith and water required to wash the starch out of the wood pith.

(81) mè=bà moeng pèng-peng ung=pa,
2SG=person sit outside-RED now=INST
‘you’ll be sitting down somewhere outside, …’

(82) Pe=ueme pe hòe nà-na pe=tue,
3SG.F=woman 3SG.F.ERG sago processing.place-RED 3SG.F=3SG.F.do
‘The woman prepares the place for processing the sago, …’
Reduplication of adjectives typically shows intensification. Reduplication has only been encountered with adjectives when they are in a predicative function, never when the adjective is used attributively or referentially.

Adjectives

(83) \[ \text{3PL=3PL-get.PL F.sit salty.water=the=OBV long-RED=INSTR 'they leave it in the salty water for a long time,...'} \]

(84) \[ \text{fire burn=OBV garden=DEIC clean-RED=INSTR 'The fire burns in the garden, clears (it) out.'} \]

This following example shows reduplication in a function that is indeterminate between a version of the distributive function seen with some nouns, and perhaps a function of lowering the intensity of the adjective.

(85) \[ \text{1PL=leave 3SG.F.go =OBV thing-or old-RED=INSTR 'we leave it, and, later, when they've more or less all ripened, ...'} \]

There are further examples of reduplication that do not fit the analysis given above. Consider the following example of nominal reduplication, which does not involve ‘plurality’ or ‘distributedness’, but rather seems to intensify the meaning of ráng ‘sun, day’, indicating the noontime, rather than simply any daytime: the most intense, or most prototypical part of ráng. In this intensification the function is more similar to that found with adjectives.

(86) \[ \text{3PL 3SG.NF=the sun-RED 3PL=the 'and over there, in the middle of the day, ...'} \]

There are additionally some few instances in the language corpus of reduplication applying to minor syntactic categories. These include reduplication of the negator, the aspectual marker loeng, and one instance of a numeral being reduplicated. The reduplicated numeral takes the same distributive function that is found with reduplicated nouns and, arguably, adjectives (as described above). Another clearly distributive use is found in the reduplication of né ‘where’, which can be reduplicated to give a ‘wherever’ meaning.

Intensification sense: negator, aspect reduplicated

(87) \[ \text{k.o.net=the 3PL=3PL.do=OBV also NEG-RED=INSTR 'They used to make the tång nets, but no more.'} \]

(88) \[ \text{1PL=plant finish-RED=INSTR 'we plant them all, ...'} \]

\[ \text{Distributive sense: numeral, epistememe reduplicated}^{29} \]

(89) \[ \text{1PL=leave stand yesterday three-RED=INSTR 'we leave it stand for, oh, three days, ...'} \]

---

\[ ^{29} \text{The lack of any proclitic agreement on } \text{i} \text{ ‘stand’ in this sentence can be explained by the fact that it has an inanimate subject.} \]
(90) \[Ke=k-\dot{a}\]
\[hangbang=ko\]
\[ke=k-\dot{a}\]
\[3SG.NF=3SG.NF-walk\]
\[far=OBV\]
\[3SG.NF=3SG.NF-walk\]
\[n\dot{e}-ne=ko\]
\[ke=toe?\]
\[where-RED=OBV\]
\[3SG.NF=3.come\]

‘He came from where is it, where he came from?’

It should be clear that the exemplification of reduplication and its functions on other word classes has, thus far, been only an outline at best (apart from the description of the role of reduplication in the marking of tense/aspect on verbs). This lack has its roots in real language phenomena, and does not simply represent a gap in the elicited data: most Skou people not willing to acknowledge the non-inflectional uses of reduplication. While eliciting paradigms with reduplication in the verbal domain is unproblematic, it is impossible to even get speakers to acknowledge their non-prescriptive use of reduplication on negators or aspect marking (this has consequences for the sketchy analysis of reduplicated auxiliary verbs, seen in 7.9), and speaker acceptance of reduplicated nouns is at best tentative, and usually involves speakers describing an instance of reduplication in a recording as a ‘speech error’, or that the tape was damaged. Thus, for instance, when I have played the reduplicated pingping in (80) to a group of Skou speakers, they reluctantly acknowledged that \[pI)mIpI)\] is what was recorded on the tape, but they would not admit that it could be what the speaker actually said, and that the ‘correct’ phrase both was (on the tape) and is (for my education) ping nawò, not pingping nawò. Certainly I have never met a Skou speaker who could respond to questions about the differences between plain and reduplicated forms of nouns or adjectives. For that reason I can only report some speculations on the function and meaning of reduplication on non-verbs, but not investigate it much more completely.

Some discussion of reduplication has already been seen in 2.3.2.2, and more can be found topically in 7.8, 7.9, 12.3.3, 15.2.2, 19.3.2.

2.7 Orthography

The following sections describe the orthographic representation of the segments and suprasegments of Skou. Most of these conventions have already been seen in use in the previous sections and in chapter 1, but have appeared without formal explanation, which has been reserved until after the exposition of the phonology. In the following account I shall present the conventions used for segments first, and then discuss the representation of tone and nasalisation.

2.7.1 Segmental orthography

The consonants are shown simply with graphemes that most closely represent their IPA norms, the one exception being that \{y\} is used for the phoneme with a palatal glide allophone, in accordance with Indonesian orthographic norms. There is some support for the grapheme \{j\} to be used for this phoneme amongst younger speakers, but these are the ones who are collapsing the distinction between the glide and the stop. In order to give the best record of the most conservative variety of the language, the distinction between the glide and the stop has been maintained here. Finally the non-back rounded vowels are represented by digraphs with \(e\) used to indicate relative frontness, and the vowel symbol with the appropriate height chosen from the normal inventory of back rounded vowels.

The more peripheral vowels are shown with the graphemes most closely corresponding to their IPA norms. The non-back rounded vowels are shown with digraphs, which initially
attracted opposition from speakers, because they have no correspondence in Indonesian or Tok Pisin, the only written languages available to any Skou speakers. The low frequency of these sounds in Skou means that this is not too much of a visual problem, but remains a point of contention. I shall discuss this and other socio-orthographic issues in 2.7.3.

The graphemes used to represent segments, and their phonological correspondences, are shown in table 74.

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Grapheme</th>
<th>Phoneme</th>
<th>Grapheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>p</td>
<td>l</td>
<td>l</td>
</tr>
<tr>
<td>t</td>
<td>t</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>k</td>
<td>k</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>b</td>
<td>b</td>
<td>i</td>
<td>i</td>
</tr>
<tr>
<td>j ~ g̊j</td>
<td>j</td>
<td>e̊</td>
<td>e̊</td>
</tr>
<tr>
<td>f</td>
<td>f</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>h</td>
<td>h</td>
<td>o̊</td>
<td>o</td>
</tr>
<tr>
<td>w</td>
<td>w</td>
<td>ů</td>
<td>ů</td>
</tr>
<tr>
<td>j ~ dʒ</td>
<td>y</td>
<td>u̥</td>
<td>u̥</td>
</tr>
<tr>
<td>r</td>
<td>r</td>
<td>φ̊</td>
<td>oe̊</td>
</tr>
</tbody>
</table>

There are very few word-internal sequences of adjacent syllables with no onset on the second syllable; less than one sixth of syllables lack a consonantal onset, and less than half of all words are two or more syllables in length. This results in maximally 8% of words showing VV sequences. As a result of this the number of VV sequences in the language, particularly the number of oe or ue sequences, is very small. To differentiate these when they do occur, a dot or hyphen has been used to separate the syllables, as in lo.e / lo-e ‘north, deep sea’ and tàru.e / tàru-e ‘chest’, representing [lo] and [taru] respectively, not *[lo] and *[taru]. A sequence of any other two vowels, such as [ai] in ‘father’, is not marked with a dot or hyphen, as there is no potential ambiguity: dã, not *á.i or *á-i.

2.7.2 Tone and nasalisation

Nasalisation is marked in the orthography with the grapheme {-ng} in the coda position of the appropriate syllable. This was universally accepted by speakers, probably reflecting a familiarity with this convention from the pronunciation that many Skou people give to Indonesian words with final -ŋ, such as Indonesian pasaŋ {pasang} ‘high tide’, pronounced in Skou as [pasã] ~ [pasan]. Older speakers pronounce all final nasals in Indonesian as nasalisation on the vowel: Indonesian malam {malam} ‘night’, pronounced in Skou as [mala], Indonesian dʒantan {jantan} ‘male (animal)’, pronounced in Skou as [jântã] (*/#d(z)jântã]). Younger speakers do not have this pronunciation habit, since they have received enough schooling in (standard) Indonesian to have acquired its phonology more thoroughly.

The pitch values for the different syllables of a word are indicated by showing the pitch of each syllable by diacritic: a high pitch is shown with an acute accent ``, low pitch with no marking, and falling pitch is marked with a grave accent `. When the rime of the syllable is represented with a digraph (as is the case for /o/ and /u/, and for the nasalised vowels), the diacritic for high or falling pitch appears on the first element of this digraph. For example, ôe ‘yam’ with a single diacritic represents [ø] [−], and not *öe or *óe, which, logically, would
represent different disyllabic words, \([œ]\) [–] and \([œ]\) [–], respectively; these are not attested words in Skou. The rarity of \(VV\) sequences word-internally, and the relatively low frequency of \(e\) and \(o\) (see table 39) mean that the chance of \(óe\) being mistaken for \([œ]\) [–] is not high enough to worry about. In words of more than one syllable the pitch of each syllable is marked, even though this is not strictly necessary. For instance, on a three-syllable word such as \(\text{patítí} ‘freckle’\), which has a LH tone melody, simply indicating the first and final syllables as displaying low pitch and high pitch, as in \(\#\text{patítí}\), would be sufficient to differentiate this LH tone melody from all others. This practises has not be followed, as it would involve more rules for marking and not marking that would need to be learned, while adding nothing to the ability of the system to adequately represent the underlying contrasts. The current system, while over-differentiating to some degree, is representationally adequate, and does not involve any non-phonetic principles or complicated rules for marking or not marking audible pitch heights. Where a compound combines elements that undergo tone deletion, the original lexical pitches, not the spread compound pitch, is marked on each member of the compound. Similarly, the use of a low tone to mark past tense on verbs is not shown in the orthography. The practical effects of these orthographic choices are shown in table 75.

**Table 75.** Graphemes used for tone and nasalisation: a selection

<table>
<thead>
<tr>
<th>Segments</th>
<th>Pitch</th>
<th>Nasalisation</th>
<th>Orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>'sleepy'</td>
<td>fa</td>
<td>[“]</td>
<td>Ø</td>
</tr>
<tr>
<td>'bad'</td>
<td>fè</td>
<td>[\ ]</td>
<td>N</td>
</tr>
<tr>
<td>'far'</td>
<td>hābā</td>
<td>[–]</td>
<td>N, N</td>
</tr>
<tr>
<td>'valley'</td>
<td>hō</td>
<td>[–]</td>
<td>N</td>
</tr>
<tr>
<td>'green tree frog'</td>
<td>kū</td>
<td>[–]</td>
<td>N Ø</td>
</tr>
<tr>
<td>'heel'</td>
<td>lāitɔ</td>
<td>[–] &lt; F-HL</td>
<td>N Ø Ø</td>
</tr>
<tr>
<td>'peanut'</td>
<td>leu</td>
<td>[\ –]</td>
<td>Ø Ø</td>
</tr>
<tr>
<td>'west'</td>
<td>lōwɔ</td>
<td>[–]</td>
<td>Ø N</td>
</tr>
<tr>
<td>'I'</td>
<td>ni</td>
<td>[\ ]</td>
<td>Ø</td>
</tr>
<tr>
<td>'straight'</td>
<td>tulɔlɔ</td>
<td>[–]</td>
<td>Ø Ø Ø</td>
</tr>
</tbody>
</table>

The writing of tone by using one of the otherwise unutilised letters of the alphabet in the otherwise unoccupied coda position was mooted with some speakers. The fact that \(c\ d\ q\ v\ x\) and \(z\) are all free (\(g\) appears in the nasalisation digraph \(-\text{ng}\)), and that no words end in codas, would make this an attractive choice (mirroring some Hmong orthographies that use roman script). When presented with the possibility of orthographically distinguishing [ta] [–] ‘hair’ from [ta] [–] ‘arrow’ by writing the first as \(\text{ta}\) and the second as (for example) \(\text{taq, taq, or tax}\), or vice versa, the response I received was that, yes, you could write it that way, but that it would (of course) be wrong. It was thought that any of these letters might indicate the pitch (a concept that was treated rather dubiously), but they would still result in the words having to be pronounced [tatʃ], [tak] and [taks]; familiarity with Indonesian orthography, in the case of \(\{c\}\), awareness of the use of \(\{q\}\) in the Koran, and reports of \(\{x\}\) from Papua New Guinea, provided consonantal associations which were too strong to be shaken off for the purposes of tone marking. In Indonesian it represents [tʃ], and it has been used for this purpose in, for instance, the word \(\text{kúci} ‘marbles’\) [of unknown provenance]; the \(\{q\}\) in the Koran is a voiceless uvular stop, but is usually pronounced as a simple \(k\) in Indonesian; and \(\{x\}\) in Papua New Guinea, when used, is pronounced as [ks].
In compounds, in which the tone of the final element prevails over the whole compound, where it is a marked tone (see 2.3.1.8), the tone of the compound as a whole is written, not that of the individual morphemes that make up the compound. This regretfully obscured the underlying forms, but does have the advantage of representing the sounds that are heard more accurately. It remains to be seen whether this is the more or less desirable way to deal with tonal changes in the language. An occasionally-used native orthography already used a diacritic to mark (amongst others) tonal distinctions, so the notion of diacritics was not too foreign. This pre-existing orthography is described in the following section, where it is compared to the orthography used here from a linguist’s representational and a speaker’s learning point of view.

2.7.3 Resolving conflicts in the orthography

In 2.7.1 we discussed the fact that the use of the digraphs \textit{oe} and \textit{ue} has encountered some resistance amongst some Skou speakers, especially the more formally educated people who had experimented with an orthography for the language themselves, which did not employ digraphs for the non-back rounded vowels. The received wisdom on the subject of a Skou orthography was that it was not a problem to write the language, but that there was no point in doing so, since neither you nor anyone else would be able to then read what had been written. This apparent paradox has its roots in the representation for the non-back rounded vowels, and the suprasegmentals.

Allowing for the fact that \textit{ũ} does not occur (2.3.2.1), the following syllable rimes are differentiated in Skou:


table 76. skou rimes

<table>
<thead>
<tr>
<th></th>
<th>High pitch</th>
<th>Low pitch</th>
<th>Falling pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>i u u</td>
<td>i u u</td>
<td>i u u</td>
</tr>
<tr>
<td></td>
<td>e φ ɔ</td>
<td>e φ ɔ</td>
<td>e φ ɔ</td>
</tr>
<tr>
<td></td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>Nasal</td>
<td>õ ü</td>
<td>õ ü</td>
<td>õ ü</td>
</tr>
<tr>
<td></td>
<td>õ φ ɔ</td>
<td>õ φ ɔ</td>
<td>õ φ ɔ</td>
</tr>
<tr>
<td></td>
<td>æ</td>
<td>æ</td>
<td>æ</td>
</tr>
</tbody>
</table>

The locally-developed orthography represents these different rimes as shown in table 77; note the use of \textit{ê} and \textit{Vng}.


table 77. local orthographic representation of skou rimes

<table>
<thead>
<tr>
<th></th>
<th>High pitch</th>
<th>Low pitch</th>
<th>Falling pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>i ë u</td>
<td>i ë u</td>
<td>ë ë ë</td>
</tr>
<tr>
<td></td>
<td>e ë o</td>
<td>e ë o</td>
<td>ë ë ë</td>
</tr>
<tr>
<td></td>
<td>a</td>
<td>a</td>
<td>ë</td>
</tr>
<tr>
<td>Nasal</td>
<td>ing ung</td>
<td>ing ung</td>
<td>ë ë ë</td>
</tr>
<tr>
<td></td>
<td>ë ë ë</td>
<td>ë ë ë</td>
<td>ë ë ë</td>
</tr>
<tr>
<td></td>
<td>ang</td>
<td>ang</td>
<td>ë</td>
</tr>
</tbody>
</table>
While the grapheme ê is used a lot, it is equally clear that its use is not random. It serves several distinct and easily defined functions. This letter+diacritic ê is used:

- to mark the non-back rounded vowels in all environments;
- to mark the falling tone in all environments;
- and
to mark nasalisation on a non-low, non-high vowel.

While consistent, and certainly not hard to learn, this orthography does suffer from the fact that, of the 39 contrasting rimes in Skou, 23 of them are represented by the same grapheme ê. this led, as mentioned above, to a writing system that is easy to learn, but pointless to apply: you can write things down with no difficulty, but noone can then read your composition. An example of this can be seen in the very plausible sentence below:

(91) Written: <Hê pe tê> for Hòe pe=tue.
sago 3SG.F=3SG.F.do
‘She cooked sago.’

Possible lexically instantiated interpretations for orthographic <hê>:


Possible lexically instantiated interpretations for <pe>:

- pe ‘3SG.F’, pé ‘put down’.

Possible lexically instantiated interpretations for <tê>:


Possible plausible interpretations for <hê pe tê>:

(92) a. Hêng pe=tue.
yawn 3SG.F=3SG.F.do
‘She yawned.’
b. Hêng pe=tue.
accuse 3SG.F=3SG.F.do
‘She accused.’
c. Hi pe=tue.
blood 3SG.F=3SG.F.do
‘She bled/menstruated.’
d. Hìng pe=tue.
other 3SG.F=3SG.F.do
‘She did something else.’
e. Hò pe=tue.
roofing 3SG.F=3SG.F.do
‘She make a roof.’
f. Hò pe=tue.
whistle 3SG.F=3SG.F.do
‘She whisted.’
g. Hòe pe=tue.
sago 3SG.F=3SG.F.do
‘She cooked sago.’
h. Hù pe=tue.
hammer 3SG.F=3SG.F.do
‘She hammered.’
i. ?Hùng pe=tue.
vagina 3SG.F=3SG.F.do
‘She had sex with a woman.’
j. Hùe pe=tue.
stomach 3SG.F=3SG.F.do
‘She considered.’

(Example (92)i is deemd to be pragmatically odd in the real world, but was judged plausible for a story about spirits who can change their sex)
Compare this existent, but dysfunctional, system with the 100% of phonologically distinct forms that is found in the current proposed orthography, shown in table 78. While it is 100% representative of all the contrasts, the orthography used here is inferior to the local one in some respects. The digraph representations oe and ue are not intuitive, although they are decipherable even for speakers who have received no orthographic instruction. The use of oeng, four letters, to represent a single vocalic rime is a lot to ask of a newly literate speaker, especially when the speaker is then required to apply a tone mark as well.

### Table 78. Present orthographic representation of Skou rimes
(aligned to match the previous two tables)

<table>
<thead>
<tr>
<th></th>
<th>High pitch</th>
<th>Low pitch</th>
<th>Falling pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral</strong></td>
<td>i  úe  úí</td>
<td>i  ue  úí</td>
<td>i  úe  úí</td>
</tr>
<tr>
<td></td>
<td>é  óe  óé</td>
<td>e  oe  óé</td>
<td>è  óe  óè</td>
</tr>
<tr>
<td></td>
<td>á</td>
<td>a</td>
<td>à</td>
</tr>
<tr>
<td><strong>Nasal</strong></td>
<td>íng  úng  ìng</td>
<td>ing  ung  ìng</td>
<td>ing  ìeng  ìng</td>
</tr>
<tr>
<td></td>
<td>éng  óeng  óng</td>
<td>eng  oeng  ong</td>
<td>èng  òeng  óng</td>
</tr>
<tr>
<td></td>
<td>áng</td>
<td>ang</td>
<td>âng</td>
</tr>
</tbody>
</table>

Another problem with the current orthography is that vowel alternations in verbs are harder to represent. An alternation of any sort in a verb with falling tone needs no orthographic manipulation in the local orthography: the common alternation of ø to u in feminine verbs requires no change in the appearance of the written verb in terms of its rime: the written ò remains ò. Given that the information about the gender of the arguments will be present in the form of, minimally, proclitic pronouns, the marking of agreement by vowel alternation is redundant, and so its overt marking is not necessary for reading (or listening) comprehension. In the current system we would need to mark oe and ue in the different forms of the verb (see 7.2.3 for details).

In table 77 nasalisation was shown, where it is marked in the local occasional orthography, with the use of -ng in the coda of the syllable. While this is a widely-accepted and unchallenged means of representing nasalisation in a final syllable, there is disagreement as to the ‘correct’ representation of nasalisation in a syllable that precedes another consonant-initial syllable. When a phonemically nasalised rime precedes an oral stop, the stop is commonly prenasalised (see 2.3.2.2). This phonetic variation is reflected in the choice of orthographic representation of the nasalisation, with nasalisation that results in prenasalisation being shown by the orthographic prenasalisation of the following consonant, and not with the -ng convention. Examples are shown in (93) - (94). The currently local orthographic convention is shown first in < >, followed by the representation following the orthography used in this book (shown in italics), and following the translation is the phonetic realisation of that word.

<table>
<thead>
<tr>
<th></th>
<th>Final nasal rime</th>
<th>Pre-consonantal nasal rime</th>
</tr>
</thead>
<tbody>
<tr>
<td>(93) a. &lt;tang&gt;</td>
<td>tâng</td>
<td>tângpûto</td>
</tr>
<tr>
<td></td>
<td>‘bird’</td>
<td>‘(clan name)’</td>
</tr>
<tr>
<td></td>
<td>[tâ]</td>
<td>[tâmputo]</td>
</tr>
<tr>
<td></td>
<td>b. &lt;tamputo&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Final nasal rime

(94) a. <lang>, #<lan>, *<lam>
   ‘dish made of pounded taro’
   [là]

   b. <lampi>, #<lanpi>, *<langpi>
   ‘delicious’
   [làmpi]

This convention of marking nasalisation by a prenasalised consonant only applies to words in which an oral stop follows the nasal rime. If the following syllable contains a continuant, the nasalised rime is most likely to be shown with the -ng convention.

Nasal rimes preceding fricatives

(95) a. <lêngfong>, #<lêmfong>
   ‘betel pepper’
   [lômhfɔ̃]

   b. <napanghê>, #<napanhê>
   ‘six’
   [nâpãhi]

Nasal rime preceding sonorants

(96) a. <rangwê>, #<ranggwê>
   ‘lamp’
   [râŋgwí]

   b. <tangjupa>, #<tanjupa>, #<tanyupa>
   ‘blue’
   [tândzupa]

(97) a. <bêngro>, #<bênro>
   ‘tail of fish’
   [bêŋro]

   b. <hangling>, #<hanling>
   ‘roots’
   [hâľí]

If the following syllable does not have any onset, or has a nasal stop for its onset, the orthographic marking of nasalisation is likely to be omitted altogether.

Nasal rime preceding onsetless syllable

(98) a. <muê>, #<mungê>
   ‘deep’
   [müø]

   b. <taung>, #<tangung>
   ‘hornbill’
   [tâːu]

Nasal rime preceding a syllable with a nasal onset

(99) a. <tamê>, #<tangmê>
   ‘traditional ocean-going canoe’
   [tâmõ]

   b. <tana>, #<tangna>
   ‘white cockatoo’
   [tâːnã]

The orthographic convention of writing nasal rimes as the prenasalisation of a following oral stop only applies word-internally, and does not extend across word boundaries in phrases, even when some degree of phonetic prenasalisation is found. Comparing again to the examples in 2.3.2.2, the conventions for writing (or omitting representation of) word-medial nasal rimes

Nasal rime preceding onsetless syllable in a different word

(100) a. <hang e ang>, *<ha e ang>
   coconut 2PL=eat
   ‘You all ate coconuts.’
   [hâjě ámb]

   b. <tang pe wa>, *<tam pe wa>
   bird 3SG.F=hit
   ‘She shot a bird.’
   [tâmpōwa]
Yet another issue in the orthography is the representation of the palatal consonants, here given as j for /j/ and y for /j/. Since in the speech of younger people these two phonemes tend to collapse, there is an understandable tendency to collapse them (as j) if writing. While the differentiated spelling employed here has been judged acceptable, it is not intuitive for most people. This is a difference that is unlikely to survive in any fluently written Skou, since most younger people want to write both phonemes with a j (probably reflecting the fact that, for younger speakers, the two are collapsing to one phoneme), allowing the y only as a concession to the authority of the older Skou speakers.

The orthography, if any, which ultimately gains widespread acceptance in the Skou villages will be the one that is a product of locally-defined useability, not necessarily a linguist’s notion of phonological accuracy, and so will probably be a compromise between the archivally fully representative form used here, and the functional system that was developed earlier. We can only wait and see. (See San Roque (2001) for a detailed study of the marking of tone in the orthographies of two languages related to Skou.)

2.8 A note on difficulties faced in identifying tonal systems

Identifying the Skou tonal system as a word-based one, rather than a syllable-based one, is clearly the best analysis for the data, and preliminary work on other languages related to Skou indicates that these languages, too, have word-tone systems. The analysis has not, however, been unproblematic, and deserves comment in the light of the previous classification of Skou as a model example of a syllable-tone language of New Guinea (Donohue 1997: 354), the description of Skou tonal contrasts in Voorhoeve (1971), and Ross’ similar description of tonal patterns in the closely related language of Vanimo (Ross 1980).

The methodology employed in Donohue (1997) was to examine not just the pitch contrasts that occur in the language, but also the contrasts in patterns of pitch. For example, given a contrast between H and L on monosyllables, we can say almost nothing about the tone system of the language, other than that there is use of pitch to lexically differentiate words (which, it might be parenthetically noted, is not a requirement of a phonological system that is justifiably called ‘tonal’). The appearance of two monosyllabic words in a language with a contrastive H and L could be interpreted as:

1. the appearance of two separate syllable level tones in the language, H and L, which show just this contrast in pitch;
2. the appearance of two separate word-level tone melodies in the language, H and L, which show this contrast on monosyllables, and an identical contrast on polysyllables;
3. the appearance of a pitch-accent system in the language, in which the pitch accent is distinguished by a higher pitch than the other syllables in a word.

To show the argument in extremis, each of the above hypotheses, if applied without any variation from these ideals would yield very different predictions for the analysis of tonal behaviour in trisyllabic words. These predictions can be plotted as shown in table 79, which assumes that none of the potentially complicating factors for each type of system, such as tone sandhi and tonal restrictions that prevent certain logically possible combinations from appearing (Donohue 1997), are present, and that only the two level pitches, High and Low, contrast.
Table 79. Predictions for trisyllabic words based on a H-L distinction in monosyllables

<table>
<thead>
<tr>
<th></th>
<th>Monosyllables</th>
<th>Trisyllables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllable tone</td>
<td>H vs L</td>
<td>HHH HHL HLH HLL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LHH LHL LLH LLL</td>
</tr>
<tr>
<td>Word tone</td>
<td>H vs L</td>
<td>HHH LLL</td>
</tr>
<tr>
<td>Pitch accent</td>
<td>H vs L</td>
<td>HLL LHL LLH LLL</td>
</tr>
</tbody>
</table>

The predictions for trisyllabic words are vastly different depending on the model that we have chosen to represent the simply two-way alternation on monosyllable. The true nature of the tone system is easy to spot when we examine the polysyllabic data, although it is totally masked if we examine just monosyllables.

The complicating factors, such as tone sandhi, minimal word constraints, and variable accents, mask these differences, though it was thought that determining the scope of tonal association was still simply a matter of perseverance. This is indeed, so, though the example of examining tone in Skou has shown that the right tone sandhi can make a word tone system appear remarkably similar to a syllable tone system. Even when examining disyllabic words, where the total number of expected contrasts with three tones would exceed the trisyllable example above, the system is still adequately described as a syllable-tone system. Despite this, it is quite clear, when trisyllabic expressions are taken into account, that the language has a word-tone system, with five contrastive tone melodies. This might seem an unnecessary complication, but the fact that a word-tone system is just the same domain for tone association as is observed in other languages of the Macro-Skou family to the east, such as Barupu (Crowther 2000), and that five tones (or, in some varieties, six) are the number of pitch contrasts found on monosyllables in both the Piore River languages (which include Barupu) and the Serra Hills languages which lie in between the Piore River and the Skou languages, adds further support to the reanalysis of the tonal system.

2.9 Summary of phonetics and phonology

In this chapter we have outlined the major aspects of the Skou phonological system from a synchronic perspective, with occasional diachronic explanation where that has been deemed useful in understanding the synchronic idiosyncrasies. At all levels there are some peculiarities: segmentally, the language is unusual (for the area, and for its family) in having two non-back rounded vowels, and lacking a fricative /s/, while having two other fricatives in the system. The language’s use of tone and nasalisation is not so unusual for a language from New Guinea, but the complex interaction of segmental and suprasegmental constraints, resulting in a very reduced set of possible syllables in the language, makes for some interesting implications for the structure of these suprasegmental elements in a phonological representation. The behaviour of tone with respect to certain consonant types can be explained in terms of articulatoryphonetic gestures, but some of the constraints on nasalisation and vowel types (for instance, the ban on *[ti] in Skou – see 2.5.5) can only be resolved by appealing to the historical phonology of the language (Donohue 2002b), as there are no well-motivated synchronic reasons for the observed patterns. The extremely restricted range of allowed syllable types in Skou is unusual for a language with such a rich inventory of vowels, an at least average number of consonants, and a rich range of suprasegmental processes, and it is surprising that the lexicon is still so largely monosyllabic. One feature of the language that is possibly a response to these phonological restrictions is the extensive use of ‘specifiers’ to denote the generic category to which a noun
belongs (see 2.3.1.3), and historically as class agreement markers with adjectives in some functions (see 10.6 and 10.7).
3 Grammar outline

As discussed in the introduction (especially sections 1.5 and 1.8), many features of Skou are not typical of what is generally thought to be a ‘typical’ Papuan language.\textsuperscript{30} On the other hand, there are many areal traits of the New Guinea region that \textit{are} instantiated in Skou, and these, along with some of the exceptions, will be briefly mentioned in this chapter. This chapter is intended as a ‘road map’ of the contents of the rest of the book. It provides directions to where more details on a given topic may be found, and, along with 1.5, it serves as a typological ‘pit stop’, in the sense that a more complete inventory of the more salient and cross-linguistically comparable typological features that are not found in Skou is presented here than in the rest of the book. Elsewhere the emphasis is describing the structures that the language does possess.

3.1 Word Order

Skou displays a basic SOV word order, typical of many Papuan languages. Examples of this can be seen in the examples (1), (3) and (5). The first sentence shows the normal order with subject preceding object, and the clause ending in a verb (the justification for the labels ‘subject’ and ‘object’ is given at the end of this chapter). The ungrammaticality of these nominals appearing in the reverse order is shown in (2). (Topicalisation can change the apparent word order in sentences, though the word order inside the clause is still intact. See 3.1.1, and chapter 4, for more discussion of this construction, and Donohue (2005a) for discussion of the construction in an areal perspective.) The appropriate sentences with the participants reversed in terms of syntactic roles are shown in (3) and (4).\textsuperscript{31}

\begin{verbatim}
(1)  [A Ái] [p yá-né-nì=ne] ke=yú-yú.
     father sister-1SG.DAT-1SG.GEN=1SG.DAT 3SG.NF=search-RED
     ‘Father will look for my sister.’

(2)  *[p yá ne nì ne] [A ái] ke yú-yú

(3)  [A Yá-né-nì=ne] [A áì] pe=yú-yú.
     sister-1SG.DAT-1SG.GEN=1SG.DAT    father 3SG.F=search-RED
     ‘My sister is looking for (my) father.’

(4)  *[p áì] [A yá nè nì ne] pe yúyú
\end{verbatim}

\textsuperscript{30} Assuming that a non-Papuanist does think about what a Papuan languages is like, they usually mention features of highlands Trans New Guinea languages, in my experience. See 1.5 for discussion.

\textsuperscript{31} The high tone on the first dative morpheme marking \textit{yá} ‘sister’ is present as a result of tone spreading from the high-toned root, \textit{yá}, to the toneless suffix that is part of the same phonological word as it. The genitive suffix projects its own phonological word, and so realises its own tone pattern independently of the tone pattern of the nominal root to which it is syntactically bound (see 2.3.1).
Oblique and adjunct participants generally appear following the verb, except time expressions, which are most unmarked in a clause-initial position (though they can sometimes, for pragmatic effect, be found postverbally – see 4.5).

(5) [\textit{Re-ké}=ke] \[\textit{ke}=ti\] [OBL \textit{Jáwüng}].
father-3SG.NF:GEN=3SG.NF:DAT 3SG.NF=3SG.NF:go Nyao
‘His father went to Nyao.’

(6) [\textit{P hòe}] \[\textit{pe}=tue\] [OBL \textit{nè}=ne].
3SG.F sago 3SG.F=3SG.F:do 1PL.GEN=1PL:DAT
‘She made sago for us.’

(7) \textit{Bàng} [\textit{P hòe}] \[\textit{pe}=tue].
yesterday sago 3SG.F=3SG.F:do
‘She made sago yesterday.’

The only major exception to this principle of obliques occurring postverbally (in non-negative clauses – see chapter 16) concerns the placement of an instrumental NP. Nominals functioning as instruments, perhaps licensed by virtue of having overt case marking, may occur preverbally as well as postverbally.

(8) \textit{Pe tangnófó}=pa móe \[\textit{pe}=r-ú\] .
3SG.F knife=INSTR fish 3SG.F=3SG.F:cut.F
‘She cut the fish with a knife.’

Case marking on instruments and other arguments of the verb is described in 3.2, while the syntax of instrumental roles is discussed in more detail in 11.8. The verbal auxiliary is another postverbal element (see 3.3), as is negation, both of which are exemplified in the following sentence. Here the postverbal \textit{ka} marks negation, and the auxiliary \textit{li} ‘do’, in combination with reduplication on the verb, marks intention.

(9) \textit{Húhúfa} \[\textit{ke}=moeng-moeng \textit{ka} \textit{li}].
slow 3SG.NF=sit-RED NEG do
‘He doesn’t want to sit quietly.’

The other exception to postverbal position of obliques potentially affects all the elements in a clause, and involves topicalisation.

3.1.1 Topicalisation and word order
When a speaker wishes to highlight a particular section of a clause for pragmatic reasons, then it is possible, and indeed usual, for that element to appear sentence-initially (in addition to a rich variety of pragmatic force markers – see 4.7). The conditions on topicalisation, which involve both pragmatic prominence and the given-ness of information, are also discussed in chapter 4). There is no disruption to the order of the other elements of the clause, but the topic element is usually found bearing a pragmatic marker, typically the deictic \textit{=ing}, but acceptable with many of the other markers. In addition, an intonation break is normal between the topic and the clause. Compare (1) and the ungrammatical (2) with the fully acceptable (10).

(10) [\textit{TOP} \[\textit{Yá-né-nì}=ne=ra=\textit{=ing a} \].
sister-1SG.DAT=1SG.GEN=1SG:DAT=also=the father 3SG.NF=search-RED
[\textit{A ú} \[\textit{ke}=yú-yú].
father 3SG.NF=look for (her) too.
‘My sister, Father is looking for (her) too.’

Not only objects, but also subjects, obliques and predicates may appear in this pre-clausal position (though, of course, they do not have to). With a subject, which is typically clause-
initial in any case, we can see that it is in fact in topic position when we have some of the following morphosyntactic indicators:

- an abundance of pragmatic clitics marking its status. In (10) the topic is marked by both =ra and =ing a, in contrast to the other nominal of the clause which has no special marking (for a discussion of which see chapter 4);
- an intonation break separating it from the rest of the sentence (here indicated with a comma – see ‘Abbreviations and Glossing conventions’ under ‘Preliminaries’, following the table of contents at the beginning of the book);
- the subject appearing before a clause-initial time expression.

In the following sentence the fact that Ánì nì ne fa wò precedes bàng is evidence for it appearing in a position other than its normal clause-internal one.

(11) \[
\text{TOP} \left[ \text{Ánì-nì}=ne=fa=wò \right], \quad \text{bàng} \quad \text{[p hòe]} \quad \text{pe=tue}. \\
\text{mother-1SG.GEN=1SG.DAT=only=EMPH yesterday sago 3SG.F.=3SG.F.do} \\
\text{‘It was my mum who made sago yesterday.’}
\]

Obliques and adjuncts in topic positions can be seen in the following sentences.

(12) \[
\text{TOP} \left[ \text{OBL} \text{Te Jàwung}=fue a=wò \right] \quad \text{ne}=ne-ne \quad \text{ti}. \quad \text{Te Jàwung}=a \\
\text{Nyao=that=EMPH} \quad \text{1PL=1PL.go-RED 1PL.do 3PL=Nyao=PROM} \\
\text{te=bà hêfèng}. \quad \text{5PL=person good} \\
\text{‘Nyao, we want to go there. Nyaos are good people.’}
\]

(13) \[
\text{TOP} \left[ \text{OBL} \text{Ke}=ing=ra=wò \right]. \quad \text{e}=moeng-moeng \quad \text{ka}, \quad \text{jéng fèng}. \\
\text{3SG.NF=DECL=also=EMPH 2PL=sit-RED NEG place bad} \\
\text{‘You lot shouldn’t sit there, (it’s) not a good place.’}
\]

A predicate may also be fronted, even if verbal. In this case there is usually some repetition of the predicate, or the light verb li ‘do’, inside the clause.

(14) \[
\text{TOP} \left[ \text{PRED} \text{Pe}=w-á=ing a \right]. \quad \text{ràngleng}=pa \quad \text{hòe} \\
\text{3SG.F.=3SG.F-pound=the afternoon=INSTR sago} \quad \text{pe=tue e}. \\
\text{3SG.F. do 3SG.F.be} \\
\text{‘She pounds it, until afternoon she works the sago.’} \\
\text{(Literally, ‘The she-pounds-(it) \text{i}, having become afternoon she \text{i} to the sago.’)}
\]

As mentioned earlier, further discussion of the role of pragmatic prominence in clausal and sentential syntax can be found in chapter 4. There is not any significant variation at the phrase level as a result of pragmatic factors, however, with pragmatics determining what elements are coded where in the sentence, but not where within the VP or NP.

3.1.2 Word order within the NP

Within the NP the order follows the expected areal norm for New Guinea: despite being an SOV language, most modifiers follow the head in the NP (see Dryer 1988, 1992). Most major modifiers are shown in the non-verbal clause in (15). The first NP, pe angku nì ne bápáli fue a, shows a post-nominal adjective, and an NP-final clitic demonstrative. The possessor of the head noun is shown by a set of suffix and enclitic on the noun. The pronominal clitic at the start of the phrase specifies the gender of the underspecified head noun. The second NP, pe ku
lóelóng lúe ka, displays a relative clause, lóelóng lúe ka ‘ears don’t listen’, modifying the head noun pe ku ‘girl’.

(15) \[ NP Pe=angku-nì=ne bápáli=fue a ] [ NP pe=ku lóe-lóng ]
    3SG.F=child-1SG.GEN=1SG.DAT big=that 3SG.F=‘child’ ear-hole
    lúe  ka ],
    hear  NEG

‘That big girl of mine is a naughty one.’

In this example we might note that both angku and ku have been glossed as ‘child’. The form angku, in addition to the root ku ‘child’ contains an additional morpheme ang ‘unmarried’. This compound has almost completely replaced ku when referring to human children, except in predicates, such as ku lóelóng lúe ka ‘a naughty child’ in the example above. When found with ku the otherwise productive modifier ang has all but been completely bleached of its meaning. When referring to animals ku is more common: naké ku-pè=pe, rather than naké angku-pè=pe dog child-3SG.F=3SG.F.DAT ‘the dog’s puppies’. For the use of the feminine clitics (pe=) on both angku in the first NP and ku in the second, see chapter 10.

Another relative clause type, in which the head of the relative clause occurs inside the boundaries of the relative clause, is only found when the head of the relative clause is an object in that clause. In addition to the possibility of a post-nominal relative clause, the object may also occur in its normal position in the clause. Both possibilities are shown in the following examples:

(16) \[ RC Bàng pumà ke=ká ]=ing a ne=n-ang.
    yesterday wallaby 3SG.NF=hit=the 1PL=1PL-eat
    ‘We ate the wallaby that he shot yesterday.’

(17) Pumà \[ RC bàng ke=ká ]=ing a ne=n-ang.
    wallaby yesterday 3SG.NF=hit=the 1PL=1PL-eat
    ‘We ate the wallaby that he shot yesterday.’

These different types of relative clauses are discussed in more detail in 8.3.

In contrast to the predominantly posthead syntax of NPs, manner adverbs tend to precede a main verb, more in keeping with the head-final order of verbal elements. Sentences with the adverb following the verb are at best only marginally acceptable, and are judged outright ungrammatical if there is a postverbal element, either an oblique nominal or an auxiliary.

Preverbal adverb

(18) Te=bà=fue a háháfa te=y-á.
    3PL=person=that slowly 3PL=3PL-walk
    ‘Those people walked along slowly.’

Postverbal adverb

(19) #/* te=bà=fue a te=y-á háháfa
    3PL=person=that 3PL=3PL-walk slowly
    ‘Those people walked along slowly.’

The following sentences, with an adverb appearing in various postverbal positions in a sentence with both a verb and aspectual auxiliaries, are unambiguously and firmly rejected by speakers.
Postverbal adverb with auxiliary verbs

(20) \( *_{\text{te}=\text{ bà}=\text{ fue}\ a\ \text{te}=\text{ y-á}\ \text{háháfa}\ e\ \text{tî}} \)
  \( 3\text{PL}=\text{person}=\text{that}\ 3\text{PL}=3\text{PL}-\text{walk}\ \text{slowly}\ 3\text{PL}.\text{be}\ 3\text{PL}.\text{do} \)
  ‘Those people are walking along slowly.’

(21) \( *_{\text{te}=\text{ bà}\ \text{fue}\ a\ \text{te}=\text{ yá}\ e\ \text{háháfa}\ \text{tî}} \)
(22) \( *_{\text{te}=\text{ bà}\ \text{fue}\ a\ \text{te}=\text{ yá}\ e\ \text{tî}\ \text{háháfa}} \)

When an adverb is placed postverbally in the same clause as a postverbal oblique, similarly strong reactions of ungrammaticality are found concerning this placement.

Postverbal adverb with location nominal

(23) \( *_{\text{te}=\text{ bà}=\text{ fue}\ a\ \text{te}=\text{ y-á}\ \text{háháfa}\ \text{bâme}} \)
  \( 3\text{PL}=\text{person}=\text{that}\ 3\text{PL}=3\text{PL}-\text{walk}\ \text{slowly}\ \text{village} \)
  ‘Those people walked slowly in the village.’

(24) \( *_{\text{te}=\text{ bà}\ \text{fue}\ a\ \text{te}=\text{ yá}\ \text{bâme}\ \text{háháfa}} \)

For both clauses with auxiliaries and clauses with obliques, the normal preverbal placement of adverbs is grammatical, as can be seen in the fully acceptable preverbal placement of \( \text{háháfa} \) in (25) and (26).

(25) \( \text{Te bà fue a háháfa te yá e tî.} \)
  ‘Those people are walking along slowly.’

(26) \( \text{Te bà fue a háháfa te yá bâme.} \)
  ‘Those people walked slowly in the village.’

Other means of marking the manner in which an event is accomplished include various verb serialisation constructions, for which see chapters 15 and 13.

3.2 Morphological marking

In addition to the use of word order to disambiguate the roles of participants in sentences, morphological case marking strategies and verbal agreement are also found in Skou. The examples in the preceding section have shown sentences without any case marking, except on the instrumental nominal in (8). In addition to this low-frequency case marking possibility it is also possible for a pronoun (agreeing in number and gender with the preceding nominal head) to appear at the end of the NP referring to the subject of a bivalent verb (the A), thus serving the function of an ergative case. (Chapters 6 and 8 have more details on the syntax of these ‘summation pronouns’.) The fact that the ergative is marked by means of pronominal forms means that the ergative option is only possible for third person non-pronominal subjects (a similar ergative marking system, though compulsory rather than optional, is found in Yawa and Saweru – Jones 1986, Donohue 2001b).

The sentences in (27) - (29) present alternatives to the sentences shown in 3.1, differing only in showing the possibility of ergative marking on the subjects of bivalent clauses, but not on objects, or on the subjects of monovalent clauses. This is obviously an ergative pattern.

(27) \( [\text{Yá-né-ní}=\text{ne}\ \text{pe}] \)
  \( \text{sister}-1\text{SG}.\text{DAT}-1\text{SG}.\text{GEN}=1\text{SG}.\text{DAT} 3\text{SG}.\text{F.ERG} \)
  ‘My sister is looking for father.’
sister-1SG.DAT-1SG.GEN=1SG.DAT  father  3SG.NF.ERG  She:searching.for
‘My sister is looking for father.’

(29)  * [s ā ke]  ke=ti  [GOAL Jäwung].
father  3SG.NF.ERG  3SG.NF=3SG.NF.go  Nyao
‘Father went to Nyao.’

Other case marking is present in the form of instrumental marking, with the clitic =pa, and benefactive marking, which is formed by using the possessive pronominal set. Both of these are shown in the following variants of the same sentence. Notice that the possessive set -ké=ke on ā cannot be interpreted as marking the subject as the possessor of ā, since it does not mark the correct set of pronominal features. More details on this construction can be found in 6.3.1 and 11.4, including discussion of cases in which the possessively marked beneficiary is additionally marked as being possessed.

(30)  Pe [INSTR ñí=pa ]  hòe pe=tue
3SG.F stirring.spoon=INSTR sago she:does
[Ben ā̕-ké=ke].
father-3SG.NF.GEN=3SG.NF.DAT
‘She’s preparing sago for father with a stirring spoon.’

(31)  Pe hòe ní pa pe tue ā̕ ké ke.

(32)  Pe hòe pe tue ā̕ ké ke ní pa.

The instrumental NP appears before the verb and after the subject; the instrumental marker =pa is obligatory on any instrumental NP, regardless of its position. In addition to the genitive and dative pronominal marking, the beneficiary is also marked by position, appearing following the verb. This is the typical position for adjunct participants to appear, as can be seen in the following example using a location:

(33)  Pe  hòe  pe=tue  [LOC pā].
3SG.F  sago  she:does  house
‘She’s preparing sago in the house.’

Apart from the beneficiary, the postverbal obliques, which include source, goal, and location (shown above) are not marked by any particular case, only by position. While this leaves the majority of different syntactic relations morphologically undifferentiated, verbal agreement provides the means to disambiguate.

### 3.3 Verbal agreement

In the examples in the last section we saw that the clitic on the verb has the same shape and same meaning as the free pronoun, in terms of the pronominal features specified (though for a more phonetically detailed analysis, see 6.3). Despite this, the sentence is ungrammatical without the proclitic, showing that clitics are fully grammaticalised in the role as agreement marker. The fact that it is an agreement marker, and not in fact a bound pronoun, can be judged from the following sentence (and see the more detailed discussion in 7.3.1).

(34)  * pe hòe tue pā
In addition to the proclitic agreement that is obligatory on all verbs, additional agreement is usually found on the verb in the form of consonantal changes to the onset of the verb. The conditions for the appearance of prefixal agreement are mainly, but not solely, phonologically determined: prefixal agreement is only found on verbs with an initial \( w, l, r, k \) or \( h \), or a vowel (\( i, e, a, o \) and \( oe \)). On a verb that takes prefixal agreement, it is obligatory. Thus for the verb \( \text{ang} \) ‘eat’, both prefixal and proclitic agreement is obligatory. Further, they must agree in person, number and gender with the subject of the clause.

(35) \[ \text{Yá-né-nì=ne ya pe=p-ang.} \]

sister-1SG.DAT-1SG.GEN=1SG.DAT thing 3SG.F=3SG.NF-eat

‘My sister ate.’

(36) \[ \text{Áì ya ke=k-ang.} \]

father thing 3SG.NF=3SG.NF-eat

‘Father ate.’

Various sentences showing that both the clitic and the prefix are required for a grammatical sentence are shown in the following ungrammatical clauses (compare with (33), which has both clitic and prefix, and is grammatical).

(37) * \[ \text{yá ne nì ne ya pe ang} \]

(38) * \[ \text{yá ne nì ne ya pang} \]

(39) * \[ \text{yá ne nì ne ya ang} \]

The ungrammaticality of either a proclitic or a prefix that codes the wrong person, number, or gender feature is shown in (40), in which the non-feminine clitic \( ke= \) and the non-feminine consonantal prefix \( k- \) are used on the verb with a feminine subject.

(40) * \[ \text{yá ne nì ne ya (ke) (k)ang} \]

In these cases we can see that both the proclitic and the prefix mark the same pronominal features on the verb, doubling up on the informational coding. Some verbs do not exhibit changes in the onset of the verb, as seen with \( \text{yú} \) ‘search for’ and \( \text{hí} \) ‘wash’ above, in which case only one agreement marker is found. These, and other types of agreement marking, is discussed in detail in chapter 18. As is suggested by the forms of the prefixes in these examples, the prefixes are also derived from the pronominal stems. This is discussed in more detail in 7.2, where both an overview of the agreement system and discussion of the different conjugations is presented.

### 3.4 The grammaticalisation of pronominal forms

It will have become obvious from the previous sections that much of the bound morphology in Skou is transparently related to, and probably historically derived from, from the free pronouns: we have seen that the markers for ergative, genitive, and dative are all derived, with little

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32 The one major exception to this requirement involves inanimate and indefinite subjects, such as ‘it rained’, expressed in Skou as \( \\text{Fu ma} \) rain rains. These same subjects do take proclitic agreement when the speaker wishes to emphasis the effects of the action, as in the following example:

(i) \[ \text{Fu *(ke=)*ma nì ke=ká.} \]

rain 3SG.NF=rain 1SG 3SG.NF=hit

‘The rain fell on me (soaking me in the process).’

See 7.2.1.1 for more discussion.
change, from the free pronouns, as are the verbal proclitics. Some of these grammaticalisations are probably recent developments in Skou, this recent development evidenced by the very transparent relationship between the various pronominal forms and the free pronouns, and the fact that in many cases the pronominal marking shows a certain degree of redundancy. Comparative studies with other, more eastern, languages related to Skou (see figure 1 in chapter 1.4) also suggests that many of the patterns we can see in Skou are peculiar to Skou itself, though there are attested in other, more distant relatives (figure 2).

Table 80. The elaboration of pronominal forms

<table>
<thead>
<tr>
<th>Function</th>
<th>Differences from free forms</th>
<th>Further discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>free pronoun</td>
<td>(base form)</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>ergative case marker</td>
<td>no change</td>
<td>Chapter 6, 8</td>
</tr>
<tr>
<td>genitive pronoun</td>
<td>HL tone melody</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>dative pronoun</td>
<td>L tone melody, e-vowel</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>verbal proclitic</td>
<td>vowel optionally reduced (to schwa)</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>verbal prefix</td>
<td>vowel lost, evidence of archaic forms</td>
<td>Chapter 7</td>
</tr>
</tbody>
</table>

The forms of most of the base pronouns can be related to proto-Skou forms reconstructable for the entire family (see Donohue 2002b), with the exception of the duals. These pronouns do not appear to be related to those found in other language groups in the Macro-Skou family, and do not have any bound forms corresponding to the free pronouns, suggesting an independent innovation for these pronouns in the languages of the Western Skou family.

3.5 Serial verbs

Verb serialisation is a common feature of verbal complexes in New Guinea, and is also frequently found in Skou, though not as prominently or as pre-eminently as in other languages.

The main use of serialisation is with predicates involving motion. The following textual example shows a not atypical sequence of general motion verbs and direction of motion verbs. We can see that the English translation of ‘bring (back)’ is rendered into the four-verb sequence *r-oe tu me toe* ‘get carry return come’.

(41) a. \(te=r-\i=r=pa\) \(te=r-oe\) \(tu\) \(me\) \(toe,\)
3PL=3PL-get.PL-RED=INSTR 3PL=3PL-get carry.PL 3PLreturn 3.come
‘they get them and they take them home, …’

b. \(te=r-\i\) \(h\i-h\i\) \(t\i,\)
3PL=3PL-get.PL go.down-RED salty.water
‘and when they put them down in the salty water, …’

Serial verb constructions are also found with events denoting the transfer or transport of objects, such as ‘getting’, ‘taking’, ‘acquiring’ or ‘bringing’. A typical example of these verbs in use is shown in (42).

(42) \(Ne=r-oe\) \(na\) \(moe\) \(ne\) \(Te\) \(Jawung=pa,\)
1PL=1PL-get.PL or return 1PL go Nyao=INSTR
‘We got them all and then went back to Nyao, …’

33 The following example also shows an interesting case of disagreement, in that the vowel of the verb *lőe* ‘get’ does not appear in the plural form (*roe* instead of the expected *rį*). See 12.3.2.
A more unusual example of a serial construction to denote ‘getting’ an action can be seen in the second example of the following pair. The first sentence is a typical bivalent construction, and the second shows the same event described in a serial construction:

(43) \( Naké=ing \ pe=w-á. \)
    dog=DEIC 3SG.F=3SG.F-hit
    ‘She hit the dog.’

(44) \( Naké=ing \ pe=w-á \) mòng \( ke=wí. \)
    dog=DEIC 3SG.F=3SG.F-hit affect 3SG.NF=get.F
    ‘She hit the dog and it was hit.’

Serial verb constructions also feature prominently in the marking of aspect, where serialisations with ‘be’, ‘do’, ‘come’ and ‘go’ are used to mark many distinctions. The use of the semantically underspecified ‘be’ and ‘do’ verbs is so common that they can better be termed auxiliaries.

### 3.6 Auxiliary verbs

Serialisation is most commonly attested with the ‘auxiliary’ pair \( i \) ‘be’ + \( li \) ‘do’. These verbs, often used as a single (though individually inflecting) collocational unit (see 7.8), follow the main verb, and must both agree for the features of the subject just as the main verb does. While following the main verb they precede a location, but follow a goal, and so cannot be said to be sentence-final. This can be seen in the following near-minimal pair.

Auxiliary verbs precede nominal: locative interpretation of postverbal nominal

(45) \( Ke=k-á \) \( i \) \( li \) \( báng. \)
    3SG.NF=3SG.NF-walk be do beach
    ‘He’s walking on the beach.’

Auxiliary verbs follow nominal: goal interpretation of postverbal nominal

(46) \( Ke=k-á \) \( ti \) \( báng \) \( i \) \( li. \)
    3SG.NF=3SG.NF-walk 3SG.NF.go beach be do
    ‘He’s walking to the beach.’

The use of both ‘be’ and ‘do’ together in the examples above shows a continuous, non-completed sense. The use of just \( li \) ‘do’ with a reduplicated verb gives a desiderative reading:

(47) \( Ke \) \( k-á-ká \) \( ti \) \( báng \) \( li. \)
    3SG.NF 3SG.NF-walk-RED 3SG.NF.go beach do
    ‘He wants to walk to the beach.’

In addition to the uses of auxiliaries described above, we also find examples of the use of just \( i \) ‘be, stand’ on its own with a non-reduplicated verb. This is strongly proscribed by native speakers, but is nonetheless found in most people’s narrative style. It is associated with a generic and habitual meaning, in the past. The following example shows a typical example of the use of this construction.

(48) \( Lópa \) \( ping \) \( te=tí \) \( e, \) \( hùng \) \( te=tí \) \( e. \)
    earlier war 3PL=3PL.do 3PL.be battle 3PL=3PL.do 3PL.be
    ‘In the olden days they used to fight wars, they’d fight battles.’

More details on the use of the auxiliaries as aspect markers can be found in 7.9. The two separate position, both postverbal yet one being pre-auxiliary and the other following the auxiliary, are discussed in chapter 11.
3.7 Interaction

One typologically quite striking feature of Skou syntax (shared by other languages of North-central New Guinea) is the fact that, in addition to a strict order applying to most of the elements in the clause, the adjunct nodes are not iterative. It is impossible, for instance, for more than one preverbal object to appear in a simply-headed clause (and hence there are no root-trivalent verbs); this is a simple application of the well-known coherence condition. But in Skou there cannot be two locational elements, say a source and a location, in the one clause; only one adverb may modify any one verb; and if there are two morphemes required in a clause which occupy the same structural position, then one will have to be realised in an alternative manner or a second clause, as each position can be filled only once. This extension of coherence to apply not just to argument functions, but to all grammatical functions, can be seen in the requirement that serial verb constructions or conjoined clauses must be used with many sentences expressing motion.

Serialisation with ha ‘from’

(49)  Pe=w-á pá=ké-ke pe=moe w-a tā
       3SG.F=from house-3SG.F.GEN=3SG.F.DAT 3SG.F=return 3SG.F-walk.running
       te pá-pè=pe=wò=we.
       3SG.F.go house-3SG.F.GEN=3SG.F.DAT=EMPH=this

‘She ran from his house back here to her own house.’

Parenthetically we should note that it is extremely likely that há ‘from’ is etymologically related to há ‘walk’. Synchronously they display different personal inflections, but, based on observed patterns in other languages from the New Guinea region, we can presume that historically they were one and the same verb, which has split into two as part of the process of esoterogenisation that has affected the language to such a degree (see 4.8 for discussion of the conflict between the diachronically appealing and the synchronically justified explanation in the semantics of Skou motion verbs).

It is not possible for the source pá ké ke to appear in the clause without this serial verb construction, regardless of the position it occupies in the clause; the ungrammatical sentences in (50) show various (unsuccessful) attempts at encoding a source in different positions of the sentence without using há ‘from’.

(50)  a. * pe moe watā te pá pè pe wò we pá ké ke
       b. * pe moe watā te pá ké ke pà pè pe wò we
       c. * pe moe watā pá ké ke te pà pè pe wò we
       d. * pe moe pá ké ke watā te pà pè pe wò we
       e. * pá ké ke pe moe watā te pà pè pe wò we.

The lack of trivalent verbs is similarly handled effectively by the grammar by serialising with ké ‘get’ (or wè ‘get (feminine object), lóe ‘get (plural object)’, as appropriate, as shown in (51) and (52). The clear lexicalisation of these verbs mean that we can speak of trivalent predicates, even if there are no trivalent verb roots.

ké leng: ‘give’

(51)  Tā ke=wé leng wòwo.
       arrow 3SG.NF=get.F give uncle
       ‘He gave an arrow to his uncle.’


More details on valency and verb types, and their effects on morphosyntactic possibilities, can be found in 5.4.

3.8 Noun classification

There is a primary division of the world into two morphosyntactically-monitored classes, animate and inanimate. Additionally, a gender system, feminine versus non-feminine, operates on all animate nominals, with biological sex determining the gender of some higher-animate nouns, and social and linguistic convention applying to others. The same markers are used to indicate the animate/inanimate distinction as are used for the feminine/non-feminine one. This is not necessarily marked on the noun or in the noun phrase, but is always present in the form of verbal agreement.

In terms of formal morphological marking there are different degrees to which a noun must be formally marked for its gender, with most nouns showing no overt marking on the nominal itself, but the gender becoming apparent only through any verbal agreement. Other nouns allow optional marking by pronominal proclitic: naké ‘dog’ does not usually appear with a proclitic, but ke=naké ‘male dog’, pe=naké ‘female dog’ and te=naké ‘dogs’ are all possible, and attested, forms. Yet other nouns must appear with overt proclitics: pe=ueme ‘woman’ must appear with the proclitic: *ueme. This behaviour is described in more detail in chapter 10, where both descriptive and analytical accounts of the classification system are given, while discussion of the morphology associated with classification can be found in chapters 5, 6 and 7.

3.9 Adjunct nominals

Many predicates appear with not just an inflecting verb, but also with a nominal that can basically be thought of as semantically specifying the action denoted by the verb. This nominal is not a full NP, and does not bear the grammatical function subject, object, or oblique. Typically, such a nominal serves as an immediate-constituent ‘adjunct’ to the verb. In the following example ping ‘bow’ is used with lú ‘release’ to specify the meaning ‘shoot’.

\[(53) \quad Ke \quad pále \quad [\text{ADJ.NOM} \quad \text{ping}] \quad ke=lú \quad hápêng.\]

3SG.NF pig bow 3SG.NF=release bush

‘He shot a pig in the bush.’

Unlike objects, these adjunct nominals may not be separated from the verb by a case-marked instrument. In the example above the rather semantically ambiguous bivalent verb lú is further specified by the addition of the nominal ping ‘bow’.

The position of the adjunct nominal is not completely predictable. In a clause such as that above we can spot a clear VP order as seen in (54) (evidence justifying the assumption of this structure, and for the existence of a VP, will be presented in 3.13).

\[(54) \quad \text{VP} \quad \rightarrow \quad \text{NP}_{\text{OBJ}} \quad \text{ADJ.NOM} \quad \text{proclitic}_{\text{SUBJ}}=V\]
All adjunct nominals occur after a nominal object, and not before it. The position of the adjunct nominal with respect to proclitic agreement is not, however, so fixed. Compare (53) with (55), which shows the proclitic agreement preceding the adjunct nominal.

\[
\text{(55)} \quad \text{Pe } \text{pîlang } \text{pe=[ADJ NOM na] } \text{r-ûng.}
\]

3SG.F language 3SG.F= teaching 3SG.F-teach

‘He taught (them) the language.’

More details on the position and status of different adjunct nominals can be found in chapter 14. We can also see, in the above examples, that the predicative verb appears with a pronoun cliticised to its front. This pronominal clitic is obligatory with all verbal clauses, as can be judged by comparing the sentences above with the following ungrammatical sentences, which are based on the grammatical sentences seen earlier.

\[
\begin{align*}
(1)' & \quad \ast \text{áì ke ŋá ne nì ne yúyú} \\
(33)' & \quad \ast \text{pe hòe tue pà} \\
(53)' & \quad \ast \text{ke pàle ping lû hâpèng}
\end{align*}
\]

The case-marking pronoun is not found with monovalent predicates formed with an adjunct nominal, as can be seen in the following example where the subject of ‘wash’ in a monovalent clause cannot be grammatically followed by a pronoun (the adjunct nominal pa ‘water’ does not ‘count’ as an argument, as it is part of the predicate, albeit an independent and meaningful part – see 14.1 for further discussion of these issues).

\[
\text{(56)} \quad \text{Yá-nê-nì=ne pa pe=hí-hí.}
\]

sister-1SG.DAT-1SG.GEN=1SG.DAT water 3SG.F=wash-RED

‘My sister is washing.’

\[
\text{(57)} \quad \ast \text{[s ŋá ne nì ne pe]} \text{pa pe hí-hí}
\]

We must regard pa and hí as independent words because of their having separate tonal domains, because of their separation from each other by the pronominal agreement clitic, and more importantly, because of the paradigmatic replaceability of pa by another appropriate noun designating a place/means of bathing: tí ‘sea’, for instance (Yá né nè ne tí pe hí hí ‘My sister is washing in the sea.’). More details on adjunct nominals, their syntax, and issues in the analysis of such constructions, can be found in chapter 14.

3.10 Medial clause forms: switch reference marking

In common with many languages of New Guinea, though somewhat unusually for a non Trans New Guinea language, Skou possesses a set of medial verb forms that indicate, roughly, a shared reference between the two conjoined clauses, or its absence (see chapter 19). One major departure from the Trans New Guinea model is that the sentence-medial forms are simply added to the final verb forms: there is no loss in morphological material in a medial form compared to a final form.

The medial verbs are formed with the morphemes =pa (elsewhere used to mark instrumental nouns and to conjoin NPs) and =ko (not attested elsewhere in the grammar), as seen in the following examples:

\[
\begin{align*}
\text{(58)} \quad \text{Ke=toe=pa ke=ta k-ûng.}
\end{align*}
\]

3SG.NF=3.come=INSTR 3SG.NF=sitting 3SG.NF-sit

‘He came and then he sat down.’
The translations given are the most ‘unmarked’ readings of the sentences; that given for (58) is the only likely reading. (59), however, can also be construed with the reading ‘Hei came and then hei sat down.’ if there has been a sufficient lapse of time between the coming event and the sitting down event. For this reason it is better not to refer to the switch reference system encoded in Skou as involving same versus different subject, but rather as involving same versus different reference (of subject or temporal setting, or both).

Another major departure from the canonical Papuan model of medial verbs and final verbs taking different inflectional possibilities is the (frequently heard) option of a non-final verb can appear without either of the ‘medial’ forms being used, in what is clearly not a serial verb construction. 19.5 discusses many of the complications arising from the switch reference system and its interpretation.

3.11 Distinguishing syntactic roles and grammatical functions

The two core arguments of a bivalent clause can be distinguished from each other and from the oblique and adjunct participants on the basis of their behaviour along the following morphosyntactic lines:

- Any of A, S or P, but never an oblique or adjunct, may:
  - depending on the lexical item and the clause in which it is found, be indicated on the verb by means of vowel alternations (see 7.2.3);
  - show raising when the clause they are in is the complement of a psych or perception verb (see chapter 15).

- S and A are:
  - regularly indexed on the verb by means of prefixes and/or proclitics (see 7.2.1, 7.2.2), whereas P is never marked in this way;
  - treated as a single unit for the purposes of determining the choice of obviation marking at the end of a clause in a string of clauses (see 19.5);
  - the only targets of control in complement constructions (see chapter 15);

- S and P may be the restriction of a postverbal floating quantifier fàtù, while this is not possible for an A (see 16.3);

- A is optionally marked by an ergative summation pronoun final in the nominal phrase that indicates this argument, whereas this strategy is not possible for an S or a P (see 3.2 and 6.3.2);

- a possessed P may mark its possessor’s gender or number features on the verb, while this strategy is not possible for an S or an A (see 9.5.2);
We can see that there are no special properties associated with nominals in other than A, S and P functions, and so we may talk of a set of core arguments, defined both positionally and (for those in preverbal position only) morphosyntactically.

In addition to the core arguments A and P, or S, of which there are almost never more than two for a given verb, various extra arguments may appear in a clause. (For strategies involved in translations of verbs which would be treated as ditransitive in other languages, see 5.4.4.) We can identify five categories of nominals in the clause, based on morphosyntactic classification:

- postverbal, unmarked;
- postverbal, genitive marking;
- preverbal, instrumental marking;
- preverbal, unmarked;
- strictly adjacent to verb, unmarked.

The nominals in these four categories are not a unified group in the sense that A, S and P can be thought of as commonly sharing properties associated with core grammatical functions. Rather, the obliques are simply the group of nominals in a clause which are not core. Examples of each of these structural categories are given in the following sentences:

### Postverbal location

(60)  
*Ke ke=moeng bàme.*

3SG.NF 3SG.NF=sit village

‘He’s in the village.’

### Postverbal goal

(61)  
*Ke ke=ti bàme.*

3SG.NF 3SG.NF=3SG.NF.go village

‘He went to the village.’

### Postverbal beneficiary

(62)  
*Ke ke=ti te=bà-tè=te.*

3SG.NF 3SG.NF=3SG.NF.go 3PL=person-3PL.GEN=3PL.DAT

‘He went for the people.’

### Preverbal instrument

(63)  
*Ke tang=pa ke=ti.*

3SG.NF canoe=INSTR 3SG.NF=3SG.NF.go

‘He went by a vehicle.’

### Clause-initial temporal

(64)  
*Fé-ung ke ke=ti-ti.*

morning-now 3SG.NF 3SG.NF=3SG.NF.go-RED

‘He’ll go tomorrow.’

### Adjunct to the verb

(65)  
*Ke kíuhe ke=ti.*

3SG.NF fall 3SG.NF=3SG.NF.go

‘He fell over.’

The matter of applicatives, their postverbal objects, and other atypically coded objects will be discussed with in 5.4.3.3, and in 13.2.
3.12 Changing valency

There is a productive applicative suffix -na in Skou, discussed in 13.2, but there is no morphological causative. The only means of causatizing involves analytical constructions with the ‘generic’ verbs li ‘do’ or leng ‘give’ providing the causation (13.1), or else a more semantically explicit combination with a causing verb and a verb expressing the result. Whichever method is chosen, there is no morphological alternation on the base verb. Additionally, a small number of verbs can be used in either monovalent or bivalent predicates, without any special morphology licensing the choice of number of arguments. These are mentioned in 5.4.2.

There is also a (barely) productive mechanism by which a clause is marked as having a lower valency than is specified in the root. This is, then, in the nature of a passive construction, formed by means of a serial verb construction with wí, related to (but not identical with) ‘get, receive (feminine object)’. This is perhaps not that surprising from a world perspective, but in the New Guinea area, amongst non-Austronesian languages, such examples of genuine syntactic alternation between the grammatical functions assigned to arguments are vanishingly rare, being only reliably reported for Barai (Olson 1981, Foley 1986) and Tanglapui (Donohue 1996) (Examples of voice alternations, without valency reduction, can be found in Papuan Tip Austronesian languages such as Saliba, Misima and Tawala, and in Cenderawasih Bay languages such as Ambai and Ansus, but these are Austronesian languages displaying a reflex of the functional oppositions present in the better-described Western Austronesian languages.)

This passive construction is the subject of much discussion in 13.3, where I argue that, despite being in many ways an atypical exemplar of a voice system, the alternations that we can observe in Skou are in fact a real example of an active:passive system.

3.13 Summary

The essential overview of Skou morphosyntax has already been presented at the end of chapter 1, and is repeated here in more detailed form, with explicit arguments for the decisions that have been made. We can compare the broad morphosyntactic criteria as they apply to the different argument types in Skou. Table 81xx presents an overview of the position, nominal marking, and verbal agreement possibilities as they apply to the different types of participants in the clause.

<table>
<thead>
<tr>
<th></th>
<th>Pre-/postverbal</th>
<th>NP marking</th>
<th>verbal agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A P V</td>
<td>(=PRO.ERG)</td>
<td>PRO= PRE- &lt;V[VOWEL]&gt;</td>
</tr>
<tr>
<td>S</td>
<td>S V</td>
<td></td>
<td>PRO= PRE- &lt;V[VOWEL]&gt;</td>
</tr>
<tr>
<td>P</td>
<td>A P V</td>
<td></td>
<td>&lt;V[VOWEL]&gt;</td>
</tr>
<tr>
<td>ADJ.NOM</td>
<td>AN V / V AN</td>
<td>=pa</td>
<td></td>
</tr>
<tr>
<td>instrument</td>
<td>(INSTR V)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>beneficiary</td>
<td>V BEN AUX</td>
<td>-POSS</td>
<td></td>
</tr>
<tr>
<td>goal</td>
<td>V GOAL AUX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>location</td>
<td>V AUX LOC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time</td>
<td>TIME S/A P V</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There are complications to this neat schema. When we examine instruments in clauses with bivalent verbs, we see that there are in fact two possible positions in which an instrument may appear, either before or after the object:

**Pre-P instrument**

(66)  
\[ Ke=bà=ing a  \quad \text{rangwae}=pa  \quad \text{rí}  \quad ke=lúe. \]
3SG.NF=man=the axe=INSTR tree 3SG.NF=chop.repeatedly  
‘The man is chopping the wood with an axe.’

**Post-P instrument**

(67)  
\[ Ke=bà=ing a  \quad \text{rí}  \quad \text{rangwae}=pa  \quad ke=lúe. \]
3SG.NF=man=the tree axe=INSTR 3SG.NF=chop.repeatedly

Furthermore, we sometimes find instruments in postverbal position: not all speakers accept this, and not in all sentences, though the conditions that make it acceptable or not are, if not idiosyncratic, certainly difficult to determine.

Oblique participants and time adverbs are positioned at the periphery of this nuclear clause, with instruments appearing internally and marked by the case marker =pa. These four different positions can be summarised in the following templatic model of the clause in Skou.

**Positions for oblique participants in the clause**

(68)  
\[ S \rightarrow  \quad * \quad [A/S] ( ) \quad [P] ( ) \quad \text{ADJ} \quad \text{V} \quad \text{ADV} \quad * \quad \text{ASP} \quad * \quad [\text{INSTR}=pa] \quad \text{ALL,ABL,INSTR,BEN} \quad \text{LOC} \]

Unlike other obliques, which are strictly placed in invariant positions, the instrument may appear in any pre-V’ position. It is preferred between the A and the P, but can also appear preceding the A (though this is probably simply the result of the instrument appearing with topicalisation), and has been heard following the P. In these latter cases, following a nominal P, speakers universally ‘correct’ these sentences if the position of the instrument is pointed out to them, moving the instrument to an immediately pre-P position. It seems, then, that the most natural position for the instrument to appear in is adjoined to the VP, preferably left-adjoined. Note that the existence of an instrument in a clause preverbally does not affect the grammaticality of a goal or location following the verb, while it does not seem possible for a postverbal instrument to cooccur with another postverbal oblique. The position of time adjuncts implies that they, too, are left-adjoined. Because they typically precede a nominal subject we must assume that they attach at the IP level rather than simply being adjoined to the VP. Locations, and goals, however, are not represented as instances of the same adjunction rule, since they are mutually exclusive, both with each other and with other postverbal elements of a sentence. For this reason, as well as the constituency tests described in 4.2.2, they appear ‘hard-wired’ into the phrase structure. While unusual from a universalist position, this is not an unusual stance in the (North-Central New Guinean) areal context in which we find Skou.

Adjunct nominals form a very close constituent with the verb, often appearing inside any proclitic inflection, and in some cases assimilating to the verb (see 14.5.1.3). These are then shown as having their own constituent with the verb, inside the VP.

The obligatory realisation of two arguments in clauses with bivalent verbs is not shown in the phrase-structure representation, since it is the product of the interaction of phrase structure.
constituency with the argument structure representation of a particular verb (see 5.4). The pronominal status of some, but not all, elements of the verbal agreement paradigms (see 7.3) provides further proof that the obligatory valency status of certain predicates is not a phrase-structural concern.

We can remodel the flat, templatic structure shown above in the following hierarchical tree, which captures the different levels present in a Skou sentence.

\[ (69) \]

```
CP
  NP_TOP
  IP
    NP_SUBJ
    VP
    NP_LOC
    NP_OBJ
    V'
    NP_GOAL
    (N)
    V
```

Justification for these different phrase-structural levels can be found in the following facts:

- time expressions are left-adjoined to the S-level; they are not commonly found in a sentence that additionally has a (leftward) topicalised nominal;
- instrumentals may appear left-adjoined to either the VP or the V’ level;
- serialisation occurs with coordinate VPs, and allows only object NPs and goal NPs to intrude between the constituent Vs;
- topicalisation applies to VPs, rather than Vs; it includes goals, but excludes locations.
- locations or goals in negated clauses appear preceding the V’, but inside the scope of the VP.
- the V’ unit cannot be intruded upon by any other elements.

On the level of grammatical functions we can posit the functions subject, object and oblique; we cannot motivate a distinction between (subcategorised-for) obliques and completely optional adjuncts, apart from by an appeal to the subcategorisation frame of the verb. The salient morphological tests that identify subject, a grouping of S and A arguments, versus object, the (primary) P in the clause, have already been seen in table 81. In table 82 we can see the syntactic differences between the main grammatical functions.
Table 82. Syntactic tests for grammatical function status

<table>
<thead>
<tr>
<th></th>
<th>Interclausal</th>
<th>Intraclausal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>coreference monitored by</td>
<td></td>
</tr>
<tr>
<td></td>
<td>choice of $=pa$ or $=ko$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>shows raising in jussive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>complements</td>
<td></td>
</tr>
<tr>
<td>Object</td>
<td>shows raising in jussive</td>
<td>alternates with subject in</td>
</tr>
<tr>
<td></td>
<td>complements</td>
<td>a passive construction</td>
</tr>
<tr>
<td>Oblique</td>
<td>raises to object in perception</td>
<td>unmarked position is</td>
</tr>
<tr>
<td></td>
<td>complements</td>
<td>postverbal</td>
</tr>
</tbody>
</table>

In addition to these large syntactic groupings we should note that some syntactic phenomena refer to other groupings, such as quantifier float, which can only be interpreted as referring to an argument that is an S or a P. 3.11 details the more salient of these different configurations.
4 Pragmatic marking

As stated in the previous chapter, and as appears to be true for all natural languages for which we have reports of any depth, variations on sentence structure are common. The ways in which the canonical word order and marking patterns described in brief in the previous chapter (and which are of course elaborated on in more depth in the rest of the book) can be perturbed, and the tendential patterns that are associated with these perturbations, are described in this chapter.

Because topicality is inherently associated with given information, such NPs are often marked with demonstratives, and so these, and the restrictions on their use, are also described in this chapter.

4.1 Parameters of pragmatic variation

In addition to the basic sentence structures shown in the previous chapter, pragmatic factors often cause the sentence to appear in a different arrangement. This was mentioned briefly in 3.1, where the effects of topicalisation on the structure of the clause were described. There are three parameters under which the order and morphological coding of elements in a clause can show variation. These are:

- word order variation
- variation in syntactic status
- explicit marking for pragmatic force

The first two of these parameters will be discussed in detail throughout this chapter. The last parameter, explicit marking for pragmatic force, is tied in to the system of deictic reference, and will be discussed in 4.7.

4.2 Variation in word order: topicality and contrast

As discussed earlier in 3.1, there is a very strict configurationality requirement on clauses in Skou that they must follow an SOV word order; different oblique participants may appear in different positions in the clause, with instruments optionally preverbal and marked for function, and all possibly postverbal, morphologically marked and unmarked depending on semantic role and function. The evidence for a VP constituent is strong.

In addition to this strict interpretation on word order there is a sentence-initial topic position, which may be filled by any of the constituents of the clause when that constituent is pragmatically salient and not predictable. The topicalised phrase does not have any resumptive element in the clause, unless it is an argument that must appear on the verb as an agreement marker. Note that this pre-clausal position is only filled with a topic that represents non-retrievable information; if the topic is old, given information, then it is usually represented in the clause only by its absence. The degree to which this kind of ‘argument-drop’ is due to
topicality, and so represents ‘topic-drop’ (Prince 1998, Sigurdhsson 1993), and to which it is
pro-drop depends to some extent on the argument that is dropped, with first or second persons
showing the only true pro-drop. This is discussed in more detail in 7.3.

(1)  CP
     \( \text{XP}_1 \) \( \text{TOP} \) \( \text{S/XP}_1 \)

The reasons for labelling the topic element as an XP, and not simply an NP, will be
apparent at the end of this section.

4.2.1 NP topics

The constituent most commonly encountered in a topicalised position is the NP. An example of
the variation we encounter can be seen when we examine a P appearing in normal, topicalised,
and focussed contexts can be seen in the following sentences:

Normal pragmatic prominence:

(2)  \( \text{Ke}=\text{húng} \quad \text{ke} \quad \text{táŋrùe}=\text{ing a} \quad \text{ping} \quad \text{ke}=\text{lú}. \)
    \( 3\text{SG.NF-Sentani} \quad 3\text{SG.NF.ERG} \quad \text{cassowary}=\text{the} \quad \text{bow} \quad 3\text{SG.NF}=\text{release} \)
    ‘The Sentani man shot that cassowary.’

Topicalised P:

(3)  \( \text{táŋrùe}=\text{ing a} \quad \text{ke}=\text{húng} \quad \text{ke} \quad \text{ping} \quad \text{ke}=\text{lú}. \)
    \( \text{cassowary}=\text{the} \quad 3\text{SG.NF-Sentani} \quad 3\text{SG.NF.ERG} \quad \text{bow} \quad 3\text{SG.NF}=\text{release} \)
    ‘The cassowary, the Sentani man shot (it).’

Focussed P:

(4)  \( \text{Ke}=\text{húng} \quad \text{ke} \quad \text{táŋrùe}=\text{ing a}=\text{ka} \quad \text{ping} \quad \text{ke}=\text{lú}. \)
    \( 3\text{SG.NF-Sentani} \quad 3\text{SG.NF.ERG} \quad \text{cassowary}=\text{the} =\text{FOC} \quad \text{bow} \quad 3\text{SG.NF}=\text{release} \)
    ‘The Sentani man shot the cassowary.’

The topic need not necessarily be closely connected to the rest of the following clause (in the
sense of being subcategorised for by the verb). Examine the following sentences:

(5)  \( \text{Jéng} \quad \text{yano} \quad \text{nì}=\text{lōe}=\text{ko} \quad \text{pén}: \)
    \( \text{place} \quad \text{work} \quad 1\text{SG}=\text{get.PL}=\text{OBV} \quad \text{tidy} \)
    ‘That place, I cleaned it up and now it’s tidy.’

(6)  \( \text{Jéng}=\text{fue a} \quad \text{ré} \quad \text{nì}=\text{lōe} \quad \text{ka}. \)
    \( \text{place}=\text{that} \quad \text{wood} \quad 1\text{SG}=\text{get.PL} \quad \text{NEG} \)
    ‘That place, I took all the (fire)wood away.’

In (5) the topic is related to the subject of the clause headed by \text{pén}: it cannot be construed as
either the subject (\text{nì ‘I’}) or the object (arguably \text{yano ‘work’}) of the immediately following
clause, but is clearly the subject of the resulting state. This is good evidence that the pragmatic
notion of topicality in Skou is independent of the grammatical notions of subjecthood and
objecthood.

Information which is coded as being highly topical (in the sense employed here) has a
separate structural position, preceding the rest of the sentence. Although there is not a regular
position for contrastive focus or question words (though there are some morphological
possibilities for the marking of questions – see 18.2), we can see that there is a morphological
marker that appears with words that lack inherent focus, and marks them as focussed. Words
with inherent interrogative focus, such as bá ‘who’, do not appear with overt pragmatic markers of focus, as seen in the ungrammaticality of (8).

(7) Bá mè=fue?
   who 2SG=see
   ‘Who did you see?’

(8) * bá=ka mè=fue?
   who=FOC 2SG=see

Despite this such a morphological marker may appear on the informational response to such a question, as in (9), a felicitous response to (7). (10) and (11) present other uses of pragmatic markers.

(9) Ke=a nì=fue?
   3SG.NF=FOC 1SG=see
   ‘I saw him.’

(10) Ke=a=ra pále nawò ke=jí.
    3SG.NF=PROM=also pig many 3SG.NF=hit.PL
    ‘He too, has killed many pigs.’

(11) Nì=lúe tangnófo-nì=ne mè=a=b-é.
    1SG=know knife-1SG.GEN=1SG.DAT 2SG=PROM=2SG-get
    ‘I know that you took my knife.’

Topicalisation that entails the use of this structural position is restricted to highly salient, animate referents, which must be normally marked with a deictic (at least) if it is overtly present in the clause.

(12) Jáwung=ing a, ne=me wówó moe ti,
    Nyao=the 1PL=return.PL uncle return 1PL.go
    =pa ne=ne ti-ti.
    =INSTR 1PL=1PL.go 1PL.do-RED
    ‘Nyao, we went (there), my uncle went there (first), and then we all went.’

(13) … táng=ing, te te=bíng fátà,
    bird=DEIC 3PL 3PL=kill all
    ‘… and those birds, they killed them all, …’

Alternatively, the topical position may be used to code a contrast, which has been established from both the clause-external position and the contrast with a preceding clause:

(14) Yu-né-nì=ne hòe ke=k-ang ka,
    brother-1SG.DAT-1SG.GEN=1SG.DAT sago 3SG.NF=3SG.NF-eat NEG
    kóe=ra=wó=ing a, yu-né-nì=ne
    fried.sago=also=EMPH=the brother-1SG.DAT-1SG.GEN=1SG.DAT
    ke=k-ang-kang li.
    3SG.NF=3SG.NF-eat-RED do
    ‘My brother doesn’t like to eat sago (jelly), but fried sago, my brother would like to eat it.’

The following example starts out with a shift in narrative focus to taíngbe ‘money’ from the first person narrator. This is shown by placing the non-argument taíngbe at the front of the clause ‘My husband died.’ Following this the speaker decides to re-establish herself as a topic. In this topic re-establishment in the second line we can see that there is clearly contrastive
weight given to this new topic, it being marked with a whole string of markers of pragmatic salience. There can be no doubt that the speaker is transferring attention to a new participant, away from either ‘money’ or ‘my husband’.

(15) Taíngbe ke=baléng-nì=ne ke=wáng=ing a, money 3SG.NF=male-1SG.GEN=1 SG.DAT 3SG.NF=die=the a ni=ra=wò=fa=ing a, ni=lóeng ah 1SG=also=EMPH=only=the 1SG=say “Pá hápa ketong li” li=ko, house small little do do=OBV ‘Now money, my husband has died, and me, I said “Make a little house”,…’

It is normal, as in all languages, for a non-contrastive and previously established topic to simply be omitted from the clause, if it can be retrieved from the recent context. The following extract from the text Te Táng pìng-tè, lines 54-55, shows that, having been established as the topic, the NP Amerika is then omitted in the following sentence in which it is still the subject. There is no nominal subject, and the two VPs (including the proclitic agreement on the verbs) are all that is overtly mentioned. The pronominal indexing on the verb is sufficient mention to anaphorically refer to the established topic (though it is infelicitous to begin a stretch of discourse with purely proclitic agreement markers for third persons; see 7.3).

(16) Amerika te=hòe toe pìng te=ti, America 3PL=arrive 3.come war 3PL=3PL.do Ø te=bà Jepang te=jí e, 3PL=person Japan 3PL=hit.PL 3PL.be Ø ne=bà Moe te=jí ka. 1PL=person Papua 3PL=hit.PL NEG ‘America came and waged war, they killed the Japanese, but they didn’t kill us Papuans.’

We have seen that once a topic has been established the NP reference to such an argument, with either nominals or free pronouns, is frequently not required in subsequent clauses. The extent to which different pronominal agreement markers can be considered full (or partial) pronominal elements is discussed in 7.3. We have also seen that, when establishing a new topic, overt mention of the NP, regardless of its syntactic role in the clause, is in a sentence-initial, pre-clausal position.

When we examine the occurrence of topics at the paragraph level, rather than at the sentence level, we find that NP topics often appear one or two clauses into their paragraph. That is, the participant that is identified as an NP topic in the manner described in this section functions as the subject of one or two clauses before being formally identified with an NP. This construction is described further in 19.6.

4.2.2 Non-NP topics

So far we have examined instances of topicalised NPs. We have seen NPs with a variety of different grammatical functions, but all have been structurally the same, NPs. These are not, however, the only constituents that can be found preclausally. The following pair of sentences illustrate first a clause without any topicalisation (elicited subsequent to the discovery of (18)), and secondly a variant of this clause with the predicate as topic.
(17) **Bàng moerító ke=k-ang.**
yesterday fish(sp.) 3SG.NF=3SG.NF-eat
‘He ate some Yellowtail scad yesterday.’

(18) **[TOPIC Moerító ke=k-ang=ing a ] bàng ke=li.**
fish(sp.) 3SG.NF=3SG.NF-eat=yesterday 3SG.NF=do
‘Eating Yellowtail scad, he did (it) yesterday.’

This structure differs from topicalisation structures involving a topical NPs, such as has already
been described, by the fact that, unlike those topicalisation constructions, there is a ‘remnant’
left behind in the normal position in the clause for the predicate to appear. This is the inflected
form of the verb ‘do’, which appears following a subject, and which has been shown in bold in
(18). The sentence is not grammatical without a verbal form appearing inside the clause; compare (16) which shows a topical VP and a remnant ‘do’ verb, with the ungrammatical (17) in which there is no ‘do’.

(19) * moerító ke kang ing a, bàng Ø34

It is quite possible for more elements to be ‘left behind’ in the non-topicalised part of
the clause, but the presence of the verb ‘do’ is still obligatory. In (18) we saw the time adverbial
bàng ‘yesterday’ in place in the non-topical part of the sentence. In (20) we can see that a
nominal subject may also appear in place, with the predicate, both verb and P NP, in the topical
position. The ungrammaticality of the sentence being formed without ke=li ‘he did’ in the main
part of the clause is shown in (21).

(20) **Moerító ke=k-ang=ing a, bàng ke=baléng ke=li.**
fish(sp.) 3SG.NF=3SG.NF-eat=the yesterday 3SG.NF=man 3SG.NF=do
‘Eating Yellowtail scad, the man did (it) yesterday.’

(21) * moerító ke kang ing a, bàng ke baléng Ø

In the examples above we have seen that not only the verb, but also the P of the clause
appear initially. Again, these sentences are only grammatical if the full VP is in the topic
position, and placing the verb, but not the object, in the preclausal position is ungrammatical, as
seen in the following sentence.

(22) * ke kang ing a, bàng ke baléng moerító

The requirement that a VP can only be placed in the pre-clausal topic position as a complete
unit when the V is coded as topical means that goals, too, must appear in the preclausal position
if the predicate is topicalised. The following sentences show a clause without topicalisation, the
same clause with a topicalised predicate, and an ungrammatical attempt to topicalise the verbal
part of the predicate without the goal, structurally part of the VP, being included in the topical
constituent.

(23) **Fetànghapa te=angku nawò te=y-a tà t-o**
morning 3PL=child many 3PL=3PL-walk running 3PL-seaward
te bàng.
3PL.go beach
‘This morning a lot of children ran to the beach.’

34 With the time phrase as an afterthought, this string can be grammatically interpreted: ‘He ate
some Yellowtail scad – it was yesterday.’ This interpretation is not possible when additional
elements are present following the intonation break, however, as in (19) or (21).
Since locations are not inside the VP (see 3.13), they are not part of the topicalised constituent. Take note of the position of pá ‘house’ in the sentences with topicalisation, (25) and the ungrammatical (26).

\[(25) \text{te ya tà to te ing a, fetànghapa te angku nawò te ti bàng} \]

‘Running to the beach, a lot of children did this morning.’

\[(26) \text{È-ke-ké=ke hòe pe=tue pá.} \]

‘His wife is making sago jelly at home.’

\[(27) \text{TOPIC Hòe pe tue ing a, èke ké ke pe tue pá.} \]

‘Making sago jelly, his wife is doing (it) at home.’

\[(28) \text{TOPIC hòe pe tue pé a, èke ké ke pe tue}\]

‘Making sago jelly at home, his wife is doing.’

As well as their different positions with respect to auxiliary placement, these data from topicalisation firmly established the distinct coding of goals and locations. With respect to topicalisation, it also establishes that entire phrasal projections, and not simply individual lexical items, are the elements that may appear preclausally.

The two constituent that we have established as eligible to appear in a topical pre-clausal position, NPs and VPs, are just that: constituents. It is not possible for one element of a phrasal constituent to appear in a topical position while the rest remains inside the clause in a non-topical position. We have seen this with respect to the topicalisation of predicates, but it has not been explicitly demonstrated for elements of an NP. The following grammatical sentences show the appearance of modified nouns in topic position, with ungrammatical paraphrases showing either the noun or the adjective in a clause-internal position while the other element appears in the preclausal position.

**Grammatical: subject topicalised**

\[(29) \text{Naké makí=ing a, ung a ke=angku boeboe ke=lá.} \]

‘The big dog, now it’s growling at the boy.’

**Ungrammatical: Subject N topicalised, Adjective in clause-internal position**

\[(30) \text{* naké=ing a, ung a makí ke=angku boeboe ke=lá} \]

\[(31) \text{* makí=ing a, ung a naké ke=angku boeboe ke=lá} \]

35 It is, of course, possible to topicalise the location without the verb, as in \[(29) \text{TOPIC Pá ing a, èke ké ke hòe pe tue} \] ‘In the house, his wife is making sago jelly.’ One could argue that, given the grammaticality of clauses with multiple topics, (28) could be parsed grammatically as having two topics, hòe pe tue and pá: \[(29) \text{TOPIC hòe pe tue Pá, èke ké ke pe tue} \]. \[(28) \text{TOPIC hòe pe tue Pá ing a, èke ké ke pe tue} \]. This is not accepted by speakers, who find it more acceptable (though still pragmatically unlikely) if both putative topics are marked with deictic clitics: \[(29) \text{TOPIC hòe pe tue ing a, TOPIC Pá fue a, èke ké ke pe tue} \].
Grammatical: object topicalised

(32) *Pulé hápa=ing a, ke=a ping ke=lú.
cuscus small=the 3SG.NF=FOC bow 3SG.NF=release
‘The small cuscus, he’s the one who shot it.’

Ungrammatical: object N topicalised, Adjective in clause-internal position

(33) *pulé=ing a, ke=a hápa ping ke=lú
cuscus=the 3SG.NF=FOC small bow 3SG.NF=release

Ungrammatical: adjective topicalised, Object N in clause-internal position

(34) *hápa=ing a, ke=a pulé ping ke=lú
small=the 3SG.NF=FOC cuscus bow 3SG.NF=release

Another morphologically overt means of coding pragmatic salience is the use of applicatives with goals, to code the goal as an object rather than as an oblique participant. In addition to its syntactic effects, this coding strategy is associated with a higher level of salience in the discourse, as is normal cross-linguistically. These are described in more detail in 13.2. High pragmatic salience may be coded without the use of the preclausal topic position but with a ‘stack’ of pragmatic deictic markers, as described in 4.6.

4.3 Variation in word order: ‘focus’

Unlike many AVP languages, there is not a special structural position for focussed constituents in Skou, in the sense that Wh-questions in English must appear clause-initially, or that focussed material has a special position, as in Hungarian. On the other hand there is certainly a pragmatic salience associated with the postverbal position, with the arguments of some verbs showing alternative codings in this position: when a verb allows this coding (see 5.4.3), the AVP coding option always conveys a slight sense of contrastive focus on the P, while the AVP clause lacks this necessary focussed reading. Focus may be marked on any participant in situ, and inherently focussed material may appear in its normal position (this has been mentioned in 4.2 in passing).

The following sentences show question words for the three core syntactic functions appearing in their normal places in the clause. Notice that there is neither any ‘fronting’ of the question word, evidenced by the constant sentence-initial position of the time expression ung a ‘now’, nor is there any obligatory preverbal positioning, demonstrated by the order of elements in (35) in which the questioned A is separated from the V by the object hòe, and is separated from the start of the clause by the time expression ung a (this is further discussed and exemplified in 18.2).

Questioned A

(35) Ung a bá hòe pe=tue e tue?
now who sago 3SG.F=3SG.F.do 3SG.F.be 3SG.F.do
‘Who’s cooking sago now?’

Questioned S

(36) Ung a bá pe=te e tue fue a?
now who 3SG.F=3SG.F.go 3SG.F.be 3SG.F.do there
‘Who’s going there now?’
Questioned P

(37)  \textit{Ung a mè \textit{ya} mè=pi, me pi?}  
\textit{now 2SG what 2SG=2SG.do 2SG.be 2SG.do}  
‘What are you cooking?’

Not questioned, but morphologically focussed material, also appears in the same position. The usual markers of focus are \textit{=ka} or \textit{=a}; they do not show any difference in syntactic restrictions.

Focussed A

(38)  \textit{Ung a \textit{pe=ing=a} \textit{hoë pe=tue} e \textit{tue!}}  
\textit{now 3SG.F=DEIC=PROM sago 3SG.F=3SG.F.do 3SG.F.be 3SG.F.do}  
‘Now she’s cooking the sago!’

The analysis of the sequence [la] following \textit{pe} as two clitics, not one, comes from the inability of this sequence in this clause to occur with the ‘also’ clitic \textit{=ra}; \textit{=ra} is incompatible with \textit{=a}, but is compatible with \textit{=ing a} ‘the’ (see 4.9).

Focussed S

(39)  \textit{Ung a te=angku=ka te=meng e ti nè?}  
\textit{now 3PL=child=FOC 3PL=sit.PL 3PL.be 3PL.do Q}  
‘And where are those kids now?’

(this example shows that when a location is pragmatically focussed it must appear in its normal postverbal position)

Focussed P

(40)  \textit{Ke=Téme=ing a pe=ueme=ka=fue a ke=láng.}  
\textit{3SG.NF=Nafri=that 3SG.F=woman=FOC=that 3SG.NF=hit.F}  
‘The Nafri guy hit that woman.’

We can show that the position occupied by these focussed NPs is not the same as the preclausal topic position by examining the relative position of time expressions with topics or with focussed elements. Compare (39) above with the analogous (41). While in (39) the temporal \textit{ung a} appears preceding \textit{te angku ka}, in (41) we can see \textit{te angku fa ing a} preceding the same time expression. Swapping the order of the child NP and the time expression in either case would result in ungrammaticality or, at best, infelicity, as seen in (42) and (43).

(41)  \textit{Te=angku=fa=ing a, unga a nà te=oe e ti fue a.}  
\textit{3PL=child=only=the now play 3PL=play 3PL.be 3PL.do there}  
‘Those kids, they’re playing over there.’

(42)  * \textit{te angku ka unga a te meng e ti nè?}  
(43)  */# \textit{unga a te angku fa ing a nà te oe e ti fue a.}

We can discern a clear pattern of competition between different elements in a clause to appear in the postverbal position(s). While obliques, adjunct locations and negation are all postverbal elements of the clause, only one can appear at a time (see chapter 16). While time expressions are typically found clause-initially, they can, when being emphasised, appear postverbally, as in (44). This effectively codes the normally clause-initial temporal in the position that we would expect to find a location. That is, it is an oblique-coding strategy.
When a time expression appears postverbally like this it is not necessarily separated from the rest of the clause by any special intonation break, but is frequently (in the context of a highly limited number of naturally occurring examples) marked with one of the demonstrative clitics, be it locative, referential or pragmatic. A wide variety of morphological markers are used to show degrees of pragmatic salience. These are described in 4.7 and 4.9.

4.4 The grammaticalisation of pragmatic variation

Pragmatic functions such as ‘focus’ are expressed by morphological means, with the particles a or ka, and these can be applied typically to a core argument. The expression of topicality is also usually associated with overt morphological marking, but this is not compulsory.

While a non-core argument may be pragmatically salient, it is preferable to code a salient argument as a core. For instance, a question (or answer) about the identity of an instrument can be coded with the instrument marked as an oblique:

(45) Ya=pa ke=Húng-tè=ing ke=kí?
what=INSTR 3SG.NF=Sentani-3PL.Gen=DEIC 3SG.NF=stab
“What did he stab the Sentani man with?”

It is more natural, however, to mark the focussed nominal as a direct argument of a verb, even if this entails complicating the clause with a serial verb construction.

(46) Ya ke=ké=ko ke=Húng-tè=ing ke=kí?
what 3SG.NF=get=OBV 3SG.NF=Sentani-3PL.Gen=the 3SG.NF=stab
“What did he stab the Sentani man with?”

From these examples we can see a degree of grammaticalisation operating in the way identificational focus is marked: there is a preference for more salient information to be coded as a core grammatical function, thus object rather that oblique. Obliques carry less pragmatic force than do core arguments, and so are less suitable for coding inherently salient information, such as focussed information marked by question words.

4.5 The postverbal position and the coding of transitivity

A very small number of verbs allow for variation in the position in which their object is coded, in that it can appear either before or after the verb. Appearing before the verb is the normal position for a nominal object in Skou (3.1), and the only nominals that regularly appear in a postverbal position are goals and locations (chapter 11).

I have described the preverbal positions in terms of grammatical functions, and the postverbal position in terms of semantic roles. This is not accidental. There are strong correlations between position in a clause with respect to the verb and grammatical function, as described in 3.13. For the small number of verbs described in 5.4.3.3 there is variation in the position taken by the P with respect to the verb. With both hí ‘throw (at goal)’ and hêng ‘ask’ the P may occur either before or after the verb. While both positions are possible, they are not equal. There is a clear correlation between the position of the NP and the degree of implied affect. This phenomenon is discussed in greater detail in 5.4.3.3.
One other option peculiar to this position deserves mention, and that is the optional genitive coding for postverbal pronouns. This is also described in 5.4.3.3.

4.6 The deictic system

Apart from the use of the pronominal system, reference to a specific set of locations or spatial points can be accomplished in Skou by the use of three different paradigmatic systems:

- the non-pronominal demonstratives (which appear encliticised to the NP);
- the use of deictically-oriented verbs to indicate direction;
- the use of locative adverbs that specify where, or which part, with respect to an object, an action or event is situated.

While these are all separate systems they can be treated together because of co-occurrence restrictions: a deictically-oriented verb is only rarely used in the same sentence as a locative adverb, for instance. Additionally, the marking of focus, although serving a different function to locational deixis, is treated in this section, since it appears in the same paradigmatic position in the NP as do the demonstratives (though there are some complications when combined with other clitics, as described in 4.7.3).

4.7 Demonstratives

The words that fit into the class of demonstratives in Skou are used to mark not only deixis in space, but also more purely pragmatic notions such as definiteness and focus (there is no conclusive evidence that the deictics are used for temporal reference). While they are separate semantic groups, the morphemes listed here occur in the same syntactic positions, and so can be justifiably listed as one lexical class, despite there being some variation within that class (see 4.7.3). The morphemes found in this structural position are shown in table 83xx, split into three groups, those referring to more exclusively locative reference ideas, those that take the discourse context as their determining factor, and those that are pragmatically motivated, and so reflect the speaker’s evaluation of the relative salience of different participants in the speech act.

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<th>Table 83. Deictics</th>
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The first four of these markers, those labelled ‘locative’ and ‘referential’, are fairly standard demonstratives, any of which may appear with any noun. In addition to their common use on
regular NPs, and two of these demonstrative, the referential demonstratives, may also appear with pronouns. The demonstratives wi a and fue a show different degrees of distance from the speaker; there is no third component of deixis, common in many languages in Melanesia, that includes reference to the hearer’s position (near or distant from hearer, as another dimension). Nor are there elevationally explicit demonstratives: there are no terms for ‘up there’ and ‘down there’, for instance. These demonstratives, as well as the discourse deictic ing a, all contain the element a, which also occurs on NPs without the more specific meanings associated with wi, fue, or ing. This general deictic a is simply a device used to flag the fact that the referent it is attached to is in some way ‘given’ and not a completely new element of the discourse. When combined with ing, as ing a, the sense appears to be one similar to that associated with definiteness in English or Indonesian. The combined form ing a is often used as a ‘general purpose’ demonstrative, superseding the more locationally-bound wi a and fue a when the referent is not visibly at a near or far location.

The demonstrative and pragmatic clitics are not restricted to appearing on words of any particular class as their hosts; in this they differ sharply from the pronominal clitics, which are strongly constrained to either verbal or nominal hosts (for proclitics and enclitics, respectively – see chapter 6). The following sentences (as far as possible drawn from the texts included at the end of this book) illustrate the appearance of various demonstrative and pragmatic clitics on words of different classes (see chapter 5 for a discussion of the morphosyntactic grounds for establishing different word classes).

Noun:

(47) nále-tong=pa, pó-weng-tong=ra, rângueke=pa, taro-shoots=INSTR vegetable-gedi-shoots=also sweet.potato=INSTR
taro shoots, even gedi shoots, sweet potatoes, …

ne=r-óe-róe líhi ri-rong=pa.
1PL=1PL-get.PL-RED garden tree-old=INSTR
‘we get them (all) from the old garden.’

Possessed noun:

(48) Kóeng-ni=ne=we=pí=ra bàng tue=ko ka
tooth-1SG.GEN=1SG.DAT=this=even=also break 3SG.F.do=OBV NEG
‘And (my) teeth broke, they were no more.’

(49) Kóeng-ni=ne=we(=ra) fèng, wi tají.
tooth-1SG.GEN=1SG.DAT=this=also bad shatter
‘My teeth were ruined, they shattered.’

Adjective:

(50) fèng=ra ka.
bad=only NEG
‘there’re not bad at all.’

(51) móe hápa=ra te=r-í e ti.
fish little=also 3PL=3PL-get.PL 3PL.be 3PL.do
‘they get little fish too.’

(52) ya hêfèng=ra te=ti ka.
thing good=also 3PL=3PL.do NEG
‘they don’t do anything worthwhile, …’
Verb:

(53) \( \text{Ne}=r-\text{oe}=\text{ra} \) ne,
1PL=1PL-get.PL=also 1PL-go
‘we get them, and then go, …’

Medial verb:

(54) \( \text{... hòe te}=t-\text{ang}=\text{ko}=\text{ra} \) ka.
sago 3PL=3PL-eat=OBV=also NEG
‘they all eat the sago, eat it till it’s all gone.’

Pronominal clitic:

(55) \( \text{Ni}=\text{ra}=\text{ue} \) ka.
1SG=also=hear NEG
‘I don’t know either.’

Pronoun:

(56) \( \text{ne}=\text{Máwo} \) \( \text{ne}=\text{ra} \) \( \text{Te Õeti} \) \( \text{pi-tè} \) \( \text{ne}=\text{ti} \)
1PL=Skou Mabo 1PL=also Wutung language-3PL.GEN 1PL=1PL.do
ne ti. 1PL.be 1PL.do
‘we Mabos too can understand the Wutung language, …’

Time adverbial:

(57) \( \text{Fe}=\text{ra} \) \( \text{te}=\text{te} \) \( \text{báng}=\text{fue} \),
tomorrow=also 3PL=3PL-go beach=that
‘The next day they went to the beach as well, …’

Numeral:

(58) \( \text{Te}+#=\text{ueme} \) \( \text{hingtung}=\text{ing} \) \( \text{te}=\text{a} \),
3PL=woman two=DEIC 3PL=PROM
‘And those two women, …’

Negator:

(59) \( \text{ya}=\text{lilip}=\text{ka}=\text{ra} \) \( \text{ka} \),
thing=all.things=NEG=also NEG
‘there wasn’t a shortage of things, …’
(literally ‘a lack of all things, too, was not (present)’, or ‘things did not (exist), that too was not (present)’)

Quantifier:

(60) \( \text{bépú} \) \( \text{fátù}=\text{we} \) \( \text{pe}=r-\text{úe} \) \( \text{pú} \) \( \text{mong-mong} \) \( \text{tue} \).
lay all=this 3SG.F=3SG.F-lay nest sit.F-RED 3SG.F.do
‘she lays them all, and there they are.’

The remaining two demonstratives have quite different uses. The focus marker \( \text{ka} \) is used in exactly those circumstances that preclude the use of \( \text{a} \): when the referent is new, unexpected, or in some other way surprising or unpredictable.

The verb \( i \) ‘be at’ functioning as a locative demonstrative is used purely postverbally to indicate pronominal reference to a location. It cannot be used in conjunction with a locative nominal in the same clause, as can be seen in the ungrammaticality of (62).
This last sentence illustrates contrastive focus on the subject, even though both the subject and this focus are only overtly represented by clitics. More details of the behaviour or contrastive focus can be found in 4.3 and 4.9.

4.7.1 Demonstratives with pronouns

In general the only deictics that can appear on pronouns are the pragmatic markers, but in addition to these the deictic =ing is also found, as in (65). Using a locative demonstrative, even where that would be semantically compatible, such as the use of the proximate demonstrative with a 1SG pronoun in (67), is not acceptable, as can be seen in (66) - (67).

(65) Mè=ing tata u-ké.
    2SG=DEIC grandfather child-3SG.NF.GEN
    ‘You (Jesus) are God’s son.’

(66) * pe=fue a pe=angku-nì=ne
    3SG.F=that 3SG.F=child-1SG.GEN=1SG.DAT
    ‘She there is my daughter.’

(67) * nì=wi a pe áì-pè=pe
    1SG=this 3SG.F father-3SG.F.GEN=3SG.F.DAT
    ‘I here am her father.’

More typical examples of pragmatic demonstratives appearing with pronouns include the following sentences. Note that when the sole exponent of the pronominal argument in the clause is the proclitic on the verb the pragmatic clitics will appear on this position, showing once again that the proclitics cannot be considered to be affixal in the same sense as the prefixes are, shown by the ungrammaticality of a clause with a pragmatic clitic intervening between the prefix and the verb root, seen in (69)' (and further described in the following section, 4.7.2).

(68) Mè=pi=ra àng mè=m-e-me lóe m-á p-o.e.
    2SG=even=also dry.wood 2SG=2SG-go-RED get.PL 2SG-carry 2SG-come
    ‘You too have to go and collect some firewood.’

(69) Kóe=we=ing a ke=fa=k-ang.
    baked.sago=this=the 3SG.NF=just=3SG.NF.eat
    ‘Just he ate that sago we were talking about.’

OR ‘He was the only one who ate that sago we were talking about.’

(69)’ * kóe we ing a ke k=fa-ang
One collocation involving a pronoun and a pragmatic clitic appears to be lexicalised. The 3SG.NF pronoun ke frequently appears with =ing a ‘the’, and the combination has acquired a sense similar to a distal demonstrative pronoun, ‘that one’. Proof of the lexicalisation of this combination can be seen in the fact that it can be used to refer to feminine, as well as non-feminine, nouns, as in (71), in which processed sago, hòe, is assigned feminine gender, as is morphologically evidenced by the choice of the u vowel in fue ‘see’ (see 7.2.3).

(71) Ke=ing a hòe pe=tue=ing a, mè=fu, ka?
3SG.NF=the sago 3SG.F=3SG.F.do=the 2SG=see.F NEG
‘That is the sago she made, you can see it, can’t you?’

In this example pe tue =ing a functions as a relative clause modifying hòe.

4.7.2 Demonstratives with proclitic agreement

Deictic clitics may appear on the proclitic agreement markers that are attached to a verb. This means that they form a single grammatical word with the verb, though prosodically they are not necessarily one unit. In the example below =wò, for instance, appears with its own HL tone melody.

(72) Nì=ra=wò=fa=re.
1SG=also=EMPH=just=go
‘I went by myself.’

Since the verb is itself without any tonal associations, the fact that the clitics form a prosodic word separate from the verb root is not immediately apparent, though it is distinct from the pronominal clitic, which also carries a HL melody. Similarly, in an example like (73), in which the clitics, both pronominal and pragmatic, do not carry their own tone, and neither does the verb, there is no striking evidence of the existence of multiple prosodic words.

(73) Pe=a=te.
3SG.F=PROM=3SG.F.go
‘She went.’

The prosodic independence of various parts of the same grammatical word can be demonstrated dramatically, however, with an example such as the following, in which one grammatical word, segmentally [mɛpɪpæ], shows three tonal melodies, HL, H and HL, respectively, yielding a pitch contour of \[\markdown{-\downarrow\downarrow}\] on the single syntactic word (as judged by tests for word status within the clause – see 5.1) /mɛpɪpæ/.

(74) Ke mè=pl=p-à.
3SG.NF 2SG=even=2SG-help
‘Even you helped him.’

The use of clitics with pronouns, free or bound, is thus not problematic (though we are forced to recognise two separate heads within the one word). When demonstrative or pragmatic clitics appear with pronominal markers of possession we find a more complicated state of affairs, described in the following section.
4.7.3 Demonstratives with possession

Deictic clitics can be found on nouns that are also marked for possession, and in these environments we can see the basis for the division in table xx83 between the pragmatic clitics and the referential and locative clitics. The deictic marker is found inside the marking for possession if it is a pragmatic marker, but is outside the possession if it is a locative clitic, showing that there are two separate positions in the word template for these two classes of clitics. The referential clitics can occur in either position.

In (75) and (76) we can see that the only position in which =ra can occur is inside the genitive and dative marking; placing this same clitic outside these morphemes results in ungrammaticality.

(75) \[ Pá=ra-nì=ne \quad (fèng). \]
\[ \text{house=also=1SG GEN=1SG DAT = bad} \]
\[ \text{‘My house too (is in bad condition).’} \]

(76) * pá-nì=ne=ra

On the other hand a locative clitic such as =fue (a) can only appear following all possessive clitics.

(77) \[ Pá-nì=ne=fue a \quad \]
\[ \text{house=1SG GEN=1SG DAT=that} \]
\[ \text{‘That house of mine.’} \]

(78) * pá=fue (a)-nì=ne

Despite these clear grammatically distinct positions, the referential clitics are free in their positioning, as seen in the equal grammaticality of both (79) and (80).

(79) \[ Pá=ing-nì=ne. \]
\[ \text{house=DEIC=1SG GEN=1SG DAT} \]
\[ \text{‘My house.’} \]

(80) \[ Pá-nì=ne=ing. \]
\[ \text{house=1SG GEN=1SG DAT=DEIC} \]
\[ \text{‘My house.’} \]

While the referential clitics are free in terms of position, there are preferences. If a referential clitic occurs in the same noun phrase as a pragmatic or locative clitic on a noun marked for possession, there is a strong tendency for the referential clitic to appear away from the other clitic. Taking the case of a pragmatic clitic and a referential clitic to start with, while both (81) and (82) are grammatical, (82) is judged as not sounding as good as (81), and was only produced with reluctance.\(^{36}\)

(81) \[ Pá=ra=nì=ne=ing. \]
\[ \text{house=also=1SG GEN=1SG DAT=DEIC} \]
\[ \text{‘My house too.’} \]

(82) ?/# \[ Pá=ra=ing-nì=ne. \]
\[ \text{house=also=DEIC=1SG GEN=1SG DAT} \]
\[ \text{‘My house too.’} \]

\(^{36}\) The reaction of informants was reminiscent of the famous ‘You could say it that way, sure. We wouldn’t. But we won’t mind if you do.’ quote.
Turning now to combinations of referential and locational clitics, we find that the judgements are more mixed. The most preferred pattern (other than having but a single clitic on the NP) is for the two clitics to occur on opposite sides of the possessive cluster. Failing that it is tolerated to have both clitics outside the possessive marking, but judged to sound somewhat odd.

(83)  \(Pá=îng-nì=ne=fue a.\)
     house=DEIC=1SG, GEN=1SG, DAT=that
     ‘That house of mine.’

(84)  \(# Pá-nì=ne=îng=fue a.\)
     house-1SG, GEN=1SG, DAT=DEIC=that
     ‘That house of mine.’

When the NP contains a modifying adjective these alignment issues disappear, as the possessive marking is bound to the noun, while the clitic marking applies to the NP as a whole, and so must appear hosted by the post-nominal adjective. The combination of these two facts about morphological position yields the following phrases.

Noun, possession, adjective and pragmatic clitic

(85)  \(Pá-nì=ne \quad máki=ra.\)
     house=1SG, GEN=1SG, DAT  big=also
     ‘My big house too.’

(86)  \(* pá-nì=ne=ra \ máki\)

(87)  \(* pá=ra=nì=ne \ máki\)

Noun, possession, adjective and locational clitic

(88)  \(Pá-nì=ne \quad máki=fue a.\)
     house=1SG, GEN=1SG, DAT  big=that
     ‘That big house of mine.’

(89)  \(* pá-nì=ne=fue a \ máki\)

Noun, possession, adjective and referential clitic

(90)  \(Pá-nì=ne \quad máki=ing a.\)
     house=1SG, GEN=1SG, DAT  big=the
     ‘The big house of mine.’

(91)  \(* pá-nì=ne=ing a \ máki\)

(92)  \(* pá=ing (a)=nì=ne \ máki\)

Noun, possession and adjective with both pragmatic and locational clitics

(93)  \(Pá-nì=ne \quad máki=ra=fue a.\)
     house=1SG, GEN=1SG, DAT  big=also=the
     ‘That big house of mine too.’

(94)  \(* pá-nì=ne=ra \ máki=fue a\)

(95)  \(* pá-nì=ne=ra=fue a \ máki\)

37 This string of morphemes is grammatical with a clausal, not phrasal, interpretation (and appropriate intonation), as ‘That big house of mine, (it’s) big.’
From these examples we can see that the clitics, both demonstrative and pragmatic, are primarily constrained to appear NP-finally; that is, the clitics are attached at the level of the NP node, not to individual words. Of course they must be hosted by a particular word, and here the conditions on relative ordering with respect to possessive marking apply, coming in to play only when the word to which the clitics attach is marked with genitive and dative morphemes.

The focus clitic =ka conforms to the principles described above for positioning within the NP, but additionally has other constraints on its appearance. Because there is no clause-external focus position in Skou, it can only appear clause internally.

This is not a special clause-external structural position, as can be seen by the following example, in which a time expression appears preceding the focussed NP.

Further discussion on the implications of focussing for phrase-structural configurations can be found in 4.3.

### 4.7.4 Emphatic marker

The emphatic marker =wò appears in a variety of constructions, from some purely pragmatic functions, to some cases where it is required by a particular syntactic construction. In addition to the morphological survey presented here, details on the use of =wò in different constructions can be found in 13.4.

One syntactically function of the emphatic marker is to shift the scope of an oblique participant by restricting it to refer to the subject of the clause in which it appears, much as the...
reflexive may be used in English. The following sentence shows that the subject of the controlling clause is interpreted as the beneficiary of the action of the subordinate clause.

(103) Theo ku-nì=ne ke=lóeng=ko te=Táng hòe-tè
Theo ‘child’-1SG.GEN=1SG.DAT 3SG.NF=tell=OBV 3PL=bird sago-3PL.GEN
yata ke=li=ko ke=ke.
transact 3SG.NF=do=OBV 3SG.NF=3SG.NF.DAT ‘Theo told my child to buy some rice for him.’

When the emphatic clitic is added to the beneficiary, then the scope can only be interpreted as applying to the subject of the clause ‘My child buys some rice.’

(104) Theo ke=lóeng=ko ku-nì=ne te=Táng hòe-tè
Theo 3SG.NF=tell=OBV ‘child’-1SG.GEN=1SG.DAT 3PL=bird sago-3PL.GEN
yata ke=li=ko ke=ke.
transact 3SG.NF=do=OBV 3SG.NF=3SG.NF.DAT ‘Theo told my child to buy some rice for him.’

The appearance of ‘my child’ in the embedded clause or as object of the controlling clause does not affect the interpretation of the scope of the pseudo-reflexive.

(105) Theo ku-nì=ne ke=lóeng=ko te=Táng hòe-tè
Theo ‘child’-1SG.GEN=1SG.DAT 3SG.NF=tell=OBV 3PL=bird sago-3PL.GEN
yata ke=li=ko ke=ke=wo.
transact 3SG.NF=do=OBV 3SG.NF=3SG.NF.DAT=EMPH ‘Theo told my child to buy some rice for himself.’

The emphatic marker is usually encountered on its own in this construction, but in its other uses it is often found in combination with other markers of pragmatic salience. This is discussed in 4.9.

The other salient uses of the emphatic marker, in the reflexive construction and marking a comparative or superlative degree on an adjective, are discussed in 13.4 and 17.4 respectively.

(106) Bá=moe k-a tà i li?
who=return 3SG.NF-walk running be do ‘Who’s running this way?’

(see 6.3.3.1 for a discussion of the unusual agreement pattern on moe here)

(107) Ku-nì=ne=wo moe-k-a tà i li.
‘child’-1SG.GEN=1SG.DAT=EMPH return-3SG.NF-walk running be do ‘My child’s the one who’s running over here.’

(108) Ni nalé lang=ing ni=li=ko, ni=wo k-ang-kang li.
1SG taro lang=DEIC 1SG=do=OBV 1SG=EMPH 1SG-eat-RED do ‘I made this taro, and I will eat it.’

This is the same =wo that appears emphatically with nouns (see 4.7), and which can be used in the reflexive construction (see 13.4).

4.8 Direction
The orientation towards which a motion is directed is a salient category in Skou, expressed by the use of specific directional motion verbs and, less commonly, in a series of directional nouns. The categories that are relevant include an east-west axis, and a seawards-landwards axis, which, given the geographical location of the Skou villages corresponds to north-south
quite closely. The following motion verbs include an element of direction in their semantic specification:

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Directional verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>westwards</code></td>
<td><em>hí</em></td>
</tr>
<tr>
<td><code>eastwards</code></td>
<td><em>e</em></td>
</tr>
<tr>
<td><code>northwards, seawards</code></td>
<td><em>o</em></td>
</tr>
<tr>
<td><code>southwards, landwards</code></td>
<td><em>hoe</em></td>
</tr>
</tbody>
</table>

While direction is salient, orientation or location is less important. The motion verbs listed in table 84xx are frequently employed in discourse, but there are no corresponding locational markers that differentiate location in different directions with respect to the speaker, or at different heights.

The verb *hí* ‘go westwards’ seen in table 84xx is identical in form and in inflection to the verb *hí* ‘descend, go downwards’, showing the very general (in eastern Indonesia and New Guinea, at least) equation of westward direction with a lower elevation. It would make iconic sense for us to equate *e* ‘go eastwards’ with the phonologically identical *e* ‘ascend, go up, board’, but these verbs are in fact not identical. While their roots are homophonous, they inflect in different ways (see appendix 2), showing that, no matter how compelling the historical reasons for considering them to be related both in terms of form and semantic function, and in terms of fitting into the ‘system’ that equates spatial and elevational deixis, they are synchronically distinct verbs. This is a recurrent theme in the verbal lexicon of Skou, the minimal differentiation of two or more semantically related verbs by minor inflectional variation.

### 4.9 Other marking of focus

In addition to the use of the dedicated pragmatic deictic clitics described in 4.7, there are other grammatical means which can be used to mark pragmatic focus in Skou. Pragmatically highlighted arguments are often coded in appositional NPs. In the following example (taken from the text *Tangí*, lines 21-24) we can see how there are three independent NPs, the last marked with two pragmatic deictic clitics, referring to the same two women. They are first mentioned as *te ueme hìngtung* ‘the two women’, then their names are mentioned, *Tóe tena Háue* ‘Tóe and Háue’ and finally they are referred to with a pronoun, *tena pí a*, ‘those two’.

(109) Ing a te=ueme hìngtung Tóe tena Háue, tena=pí=a, the 3PL=woman two Tóe 3DU/GDR Háue 3DU/GDR=even=PROM te=te, tilong te=nà pe=jí toe, …
3PL=3PL go doorway 3PL=open 3SG.F=open 3.come
‘And because of that the two women, Tóe and Háue, those two, they went, and they opened the door,…’

As can be seen in this extract, more than one marker of pragmatic prominence may appear on a given nominal (we have already seen examples of this in 3.1.1). The sequences that have been observed in naturally-occurring speech are shown in table 85xx.
Table 85. Attested sequences of pragmatic markers

| =we =ra | =we =ing a | =we =pí =a | =ing =a | =ing =pí =a | =ing a =pí =ra | =fue =ra =wò =fa =ra =fa =ra =wò =fa =ra =fa =fa =fa =fa =pí =ra =pí =a |

We can clearly see that the locative demonstratives ‘bracket’ the pragmatic markers, when they appear in sequence, appearing either at the beginning or the end of the string. Furthermore, the clitic =ra ‘also’ is the most peripheral of the pragmatic clitics, also being able to appear either towards the front or towards the back of the string. Inside this is a tightly-ordered set, wò fa pí, that must appear in this relative order.

It is at least equally instructive to examine which sequences are not found. The following table shows the negative information that is the other side of table 83xx.

Table 86. Generalised template for the pragmatic markers

<table>
<thead>
<tr>
<th>NP</th>
<th>=DEM</th>
<th>=also =EMPH</th>
<th>=only =even</th>
<th>=also, =PROM</th>
<th>=DEM =PROM</th>
</tr>
</thead>
<tbody>
<tr>
<td>=we, =ing a, =fue</td>
<td>=ra =wò =fa =pí =ra =a</td>
<td>=fa =ra =fa =fa =ra =fa =pí =ra =pí =a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In terms of their constituent positions, we can justify the following model. In the case of the daughters of D’ and of “rest-bar” only one branch is allowed: there can be either a left- or a right-headed node at each level, but not a head that is surrounded by modifiers. Distinctions between the levels can easily be found: the lowest level contains the only tone-bearing morphemes, =wò and =pí, and is the only level which shows no variation in position.
If the nodes in this tree (or, alternatively, the template seen in table 86xx) was fully productive, then we should expect more forms than are actually attested. Ignoring the spurious (such as =ra=ra ‘also also’), the combinations shown in table 87xx are those that we would also predict, but which are not found.

Table 87. Predicted, but non-attested sequences of pragmatic markers

<table>
<thead>
<tr>
<th>NP</th>
<th>DEM:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>▲</td>
<td>=we</td>
<td>=wò</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(P)</td>
<td>=we</td>
<td></td>
<td>=fa</td>
<td></td>
</tr>
<tr>
<td>(P)</td>
<td>=ra</td>
<td></td>
<td>=fa</td>
<td></td>
</tr>
<tr>
<td>(P)</td>
<td>=ra</td>
<td></td>
<td></td>
<td>=pí</td>
</tr>
<tr>
<td>(P)</td>
<td>=ra</td>
<td>=wò</td>
<td></td>
<td>=pí</td>
</tr>
<tr>
<td>▲</td>
<td>=wò</td>
<td></td>
<td></td>
<td>=wi a</td>
</tr>
<tr>
<td>(P)</td>
<td>=pí</td>
<td></td>
<td>=pi</td>
<td>=wi a</td>
</tr>
<tr>
<td>(P)</td>
<td>=pí</td>
<td>=pi</td>
<td>=ing a</td>
<td></td>
</tr>
</tbody>
</table>

Not all of these ‘missing’ combinations have the same status. Those marked as ‘▲’ are combinations which are not attested, and for which the reverse ordering is also impossible. Neither of =DEM=EMPH or =EMPH=DEM are found, with the sole exception of one instance of =ra=wò=fa=ing a, occurring on a pronoun; there are no instances of =we=wò / =wi=a=wò or =wò=we / =wò=wi a. This appears to be a genuine gap in the data, and one that needs some explaining.

Similarly, =wò=pí ‘=EMPH=even’ is not attested, and there is not a (templatic) possibility of =even=EMPH. The explanation might be phonological, not allowing the sequence of HL and H in the same phonological word.

The other apparent gaps, marked by (P), are instances of positioning, rather than semantic incompatibility. For instance, while =ra=fa ‘also-only’ is not attested, =fa=ra ‘only-also’ is. There can be no semantic constraint again the =ra=fa order, but rather there appears to be an ordering constraint on these two morphemes. This applies to the other combinations marked as (P) in the table: the opposition order is attested, but the relative positions shown in table xx87xx are not. From this information we can construction a positional hierarchy, as seen in (111), reflecting the preference for certain clitics to display an alignment close to the noun.

Left alignment and clitic ordering in the deictics

(111) {=ra » =fa, =we » =fa}, =ra » =pí, =pí » =DEM
While clitic ordering constraints are not unusual, what is remarkable here is that we have only four relative orderings that seem to be relevant; other combinations, such as =ra and =wò, can occur in either order, without restriction: both =ra=wò and =wò=ra are attested, though =ra=wò is more frequent, and tends to occur with both transitive and intransitive subjects, while =wò=ra has only been attested with intransitive subjects in non-elicited data. The following textual examples illustrate these two possible orderings.

=ra=wò on an intransitive subject (from the text Tangí)

(112)  Te=ume hìngtung=ing te=a,  te=ra=wò te=me
3PL=woman two=DEIC 3PL=PROM 3PL=also=EMPH 3PL=return.PL
‘And those two women, they returned, …’

te te=meng pa-rong fue te=tì e.
3PL 3PL=sit.PL river-bank cry 3PL=3PL.do 3PL=be
‘and sat on the bank of a river and cried.’

=ra=wò on a transitive subject (from the text Te bà pílang te ti e húhú)

(113)  … te=ra=wò,  te=r-i=pa ya,
3PL=only=EMPH 3PL=3PL-get.PL=INSTR thing
‘that lot, they took it, and, whatsit, …’

te=t-ang e ti=pa
3PL=3PL-eat 3PL=be 3PL=do=INSTR
‘they ate it, and …’

=ra=wò on an intransitive subject (from the text Te Táng)

(114)  Bí=ra te=pang=ko ka,  hòe=wò=ra,
flooring=also 3PL=chop.PL=OBV NEG sago=EMPH=also
‘The trees we use for flooring, too, they’ve chopped them all down, and even
the sago stands…’

je=pang=ko ka,
3PL=chop.PL=OBV NEG
‘they’re all gone, …’

A more detailed investigation into the behaviour of the clitics is required, examining their appearance with different arguments and in different orders. Problematically, under elicitation most combinations, on most arguments, are deemed acceptable, and so real investigation must be based on a larger corpus of texts. At the present time only the collection given in this book as appendix 4 is available in easily usable form, and so they will have to serve as the basis for any more detailed examination of the clitics.

4.10 Topic

As with all languages, the notion of pragmatic or discourse topic plays a salient part in Skou sentence and text structure. We have already seen data on basic overt topicalisation in 4.2, and here shall continue with a discussion of sentences with more than one topical element, or unusual topicalisation.

4.10.1 Multiple topics

There are cases of what seem to be two topics on the one clause. The status of the nominals in this construction can be diagnosed by the fact that both a non-subject and a subject appear sentence-initially. Examine the following textual example:
In this example the goal *Te Tângpe* would normally appear postverbally, as in (115)', the normal position for oblique participants.

(115)' *Ne Mâwo ne ne Te Tângpe ne ti.*

The only means by which a goal may appear preverbally is by topicalisation, which we would expect to result in the clause in (115)"

(115)" [*TOPIC Te Tângpe*], *ne Mâwo ne ne ne ti.*

This would be an example of a normal clause with a single topicalised argument, the goal. The actual textual sentence in (115), however, while presenting the goal in a preverbal position nonetheless has the subject preceding the goal. Assuming that this is not simply a case of a false start (which does not, based on the intonation heard on the sentence, seem to be the case), we have two possible analyses for this sentence, shown below. In the first analysis the goal is simply preposed to a preverbal, but not pre-clausal, position. This is modelled in (116).

(116) Putative analysis of (115): I

CP

/\  
|   |   |
| IP | NP | TOPa |

[IP …NP | TOPa V | GOAL Øa ]

In the second analysis there are two topicalised constituents, the goal NP, and additionally the subject NP as well.

(117) Putative analysis of (115): II

CP

/\  
|   |   |
| NP | CP | TOPb |

/\  
|   |   |
| NP | IP | TOPa |

[IP [SUBJ Øb] V [GOAL Øa ]] 

Since there is no evidence from other constructions that would lead us to posit a topical preverbal, but yet clause-internal position as seen in (116), and since there are clear topic-like intonation cues for the separateness of both the subject *ne Mâwo* and the goal *Te Tângpe* in (115) from the verbal remainder of the predicate, the analysis in (117) is favoured here. Further support for this position comes from the position of time expressions: non-topicalised and non-contrastive time expressions must follow all the topics; that is, they occur clause-initially, as in (118).

(118) *Hòe, ne=bà-moe, ung a fitong hápa.*  
`sago IPL=person-Papua now land small`  
‘As for sago, us Papuans, now we have only a small amount of land (to grow it on).’
The structure of (118) parallels that shown in (115), with *ung a* serving to delimit the left edge of the clause, giving evidence that the clause-internal topic analysis shown in (116) must be considered false.

4.10.2 ‘Extra-sentential’ topics

While most topics appear in structures of the kind seen in (117), outside the nuclear clause but inside the boundaries of the sentence, there are also cases of clearly topical elements that are better analysed as being in a completely separate sentence. Not only are they displaced away from a prototypical clause-internal position, they are displaced away from the sentence to which they belong. These structures consist of firstly a simple presentative clause indicating the topic, and then a clause with a comment on that new topic. Other structures have explicit marking that in other contexts shows separate clausal status.

An example of a possible extra-sentential topic is shown in the following lines from text 20 in the appendices. The separate lines mark distinct intonation breaks.

(119) a. *Ing a te=ue=me hìngtung Tóe tena Háue,*
   
   the 3PL=woman two Tóe 3DU/GDR Háue
   
   ‘And because of that the two women, Tóe and Háue, …’

b. *tena=pí=a,*
   
   3DU/GDR=even=PROM
   
   ‘those two, …’

c. *te=te,*
   
   3PL=3PL=go
   
   ‘they went, …’

d. *tílong te=nà pe=jí toe,*
   
   doorway 3PL=open 3SG.F=open 3.come
   
   ‘and they opened the door, …’

It is possible that the first two lines of this example, (119)a and (119)b, are instances of multiple topic reference to the same participant, as in (119)’.

(119)’

```
CP
   CONJ
   CP
   ing a
      NP_TOP_a
         i
           NP_TOP_a
               Pro
                   IP
                       IP
                           [IP [SUBJ Ø] V [IP [SUBJ Ø] [OBJ NP] V V V]
```

This sort of structure, with multiple topical reference to the same participant, would also account for sentences such as (120), which shows the opposite trend in terms of NP complexity to that shown in (119). In (119) the first topical NP (*te=ue=me hìngtung Tóe tena Háue*) is considerably more complex than the second, a modified pronoun *tena=pí=a*. In (120), on the other hand, we can see that the size of the NP increases: *ni > ne=ba > ku [Patipeme] ne*. 
(120) a. \( \text{Ya ni,} \)
\( \text{thing 1SG} \)
‘So, what’s it, I, …’

b. \( \text{ne=bà} \)
\( \text{1PL=person} \)
‘all of us, …’

c. \( \text{ku [PatiPeme] ne,} \)
\( \text{‘child’ [PatiPeme] 1PL} \)
‘us PatiPeme clan descendants, …’

d. \( \text{ápólè-ha ne=n-ang ka.} \)
\( \text{tulip-leaf 1PL=1PL-eat NEG} \)
‘we can’t eat tulip leaves.’

Again, though, we must consider whether a closer translation of (120) might not be that shown in (120)’, with a presentative first clause, followed by a clause with multiple-topics. Of course, other possibilities are also sensible, one of which is shown in (120)”. Here we can posit two clauses, one with the nominal ‘PatiPeme clan descendants’, and a new clause with the subject ‘we’; this is in contrast to the version shown in (120)’, in which ‘PatiPeme clan descendants’ is part of an appositional NP headed by ‘we’.

(120)’ ‘So then there’s me. All of us, us PatiPeme clan descendants: we can’t eat tulip leaves.’

(120)” ‘And, well, me, there’s all of us. Us PatiPeme clan descendants, we can’t eat tulip leaves.’

While these sentences are ambiguous, the following sentence explicitly marks the apparent topic with \( =\text{pa} \), the instrumental marker that is used to show same reference (in time or in terms of subject – see 19.5). In (121) both intonation units appear with \( t\̆\text{e} \) and an instrumental marker. It appears that we have strong grounds for considering \( t\̆\text{e}=\text{pa} \) to be a separate clause entirely; a possible alternative translation is given in (121)’. This takes \( t\̆\text{e}=\text{pa} \) to be a presentative, or topic introducing, clause of its own, linked to the main clause by the ‘same reference’ marker \( =\text{pa} \), not the obviative \( =\text{ko} \).

(121) a. \( \text{T\̆\text{e}=\text{pa ya-lilipa ka me,} \)
\( \text{beads=INSTR thing-all.things NEG return.PL} \)
‘The beads, those things aren’t (here) any more, they’ve gone back, …’

b. \( \text{t\̆\text{e}=\text{pa héfèng ke=loe ka moe.} \)
\( \text{beads=INSTR good 3SG.NF=get.PL NEG return} \)
‘and the beads, the good ones, he took them all (so there aren’t any more when he) went back.’

(121)’ ‘And there are the beads. There aren’t any things (here any more), they’ve gone back. There were the beads. The good ones, he he took them all (so there aren’t any more when he) went back.’

This could, of course, reflect a further aspect of the multifunctionality of \( =\text{pa} \), which is attested marking instruments, coordination of NP, and same-reference coordination of sentences, as well as a non-productive use on many lexical adverbs. If it has developed another function, that of marking topics, this would not be completely surprising.
4.11 Summary of pragmatic coding strategies

As in all languages, the coding of pragmatic information plays an important role in the formation of sentence structures in Skou. There is little morphology uniquely associated with pragmatic functions outside the preferential use of the pragmatic clitics described in 4.7, but there is a special pre-clausal position which is strongly associated with topics. Furthermore, there is a strong possibility that the instrumental marker =pa has been reanalysed as a topic marker. There is ample evidence of multiple topics occurring in the same sentence, sometime being multiple reference to the same participant, giving an NP-level approximation of the multiple marking of subjects on verbs, or of possessors on nouns.
While the division of the lexicon into different word classes, as assessed by morphosyntactic criteria involving distribution and co-occurrence restrictions, is a (near-?) universal property of languages, the criteria for those divisions, the make-up of those divisions, and indeed the nature of those divisions varies from one language to the next. This chapter sets out the language-internal evidence in Skou for different lexical classes.

5.1 The notion of ‘word’ in Skou

Before we discuss different categories of words in Skou, we need to consider the term ‘word’ itself, and how it can be adequately defined phonologically, prosodically, and grammatically. The word in Skou may be defined primarily as the domain of the realisation of word-tone, using an implicit phonological criterion. This is not, however, always entirely congruous with the definitions that we would arrive at if we examined morphological or syntactic criteria. The different criteria that turn out to be relevant to a discussion of the boundaries of the notion of ‘word’ are the following (presented alphabetically):

- orthographic preferences.
- phonological range: the domain of the spread of tone melodies;
- possessive marking and its influence on the phonological and orthographic behaviour of ‘words’;
- syntactic behaviour: pragmatic variation, substitutability;

Phonologically, the best definition of the word comes from an examination of the domain of tonal prosody. Since tone in Skou is not syllable-based (see 2.3.1), but rather the same number of pitch contour distinctions are found regardless of the number of syllables, the domain of tonal spread is an effective tool for gauging the length of the word. Other phonological criteria are not so useful, since they are either syllable based (the constraint against nasalisation on è, for instance) or non-contrastive: there are no restrictions on word-final versus word-initial vowels, and no word-final consonants that might be used to define the likely possible ends of words.

Data describing the domain of tonal spread does not entirely agree with the definition of word that we would arrive at by looking at syntactic behaviour, and it is primarily in the area of possessive marking on nouns that the two criteria diverge. This has been described in 2.3.1.9.

Syntactically we find that the usual tests for wordhood, applying the criteria of substitutability, alternative positions in pragmatically distinct contexts, and replaceability apply to Skou as they do to most (all?) languages. The marking of possession, however (see 6.3.1, 9.1), presents challenges. The possessive is indicated by a combination of the genitive and the dative pronominal morphemes following the nominal root. These form a syntactically
indivisible unit with the noun root. Compare the following phrases, which show the difference between possessive marking of nouns and deictic marking of nouns. Here we can see that deictics, which are marked by clitics, do not form a syntactic unit with the noun, since a modifying adjective will intervene between the noun and the deictic. On the other hand possessive marking cannot be realised separately from the noun.

Position of demonstratives with respect to N-modifying adjectives

(1) naké=ing a
dog=the
‘the dog’

(2) naké hápa=ing a
dog small=the
‘the small dog’

(3) * naké ing a hápa

Position of possessive marking with respect to N-modifying adjectives

(4) naké-ké=ke
dog-3SG.NF.GEN=3SG.NF.DAT
‘his dog’

(5) naké-ké=ke hapa
dog-3SG.NF.GEN=3SG.NF.DAT small
‘his small dog’

(6) * naké hapa ké ke

Words consisting of two independently attested morphemes do not show two tone contours (with the exception of words with possessive marking such as those above – see below). An example of this can be seen when we combine the root tàng ‘blade’, with a HL tone, with rúe ‘handle’, which has a H melody. The compound, tángrúe ‘handle of a machete’, displays only the H tone of the final element of the compound, and does not show any evidence that there was a falling HL melody once associated with the first syllable: it is phonetically indistinguishable from monomorphemic disyllabic words with a H melody, such as tànglé ‘fishing spear’.

With possessive marking, however, it is clear that two tonal melodies can be found on the one syntactic word. Since the genitive suffixes always have a HL melody associated with them (the sole exception being the 3SG.NF form, which has a H melody), and since they do not form independent words, the addition of genitive marking to a nominal with a tone melody assigned to it creates a single word, morphosyntactically, which is the domain of two tone melodies, a criterion that otherwise identifies (phonological) words.

5.1.2 Clitics functioning ‘independently’ of a host

There are some cases in which what has been and is described here as bound morphology appears to behave independently, in that there is no obvious syntactic host. Examples of these sort of cases can be seen in (8) and (9), in which the possessive marking sequence [nine] [\=ne] ‘mine’ has the same form as would be expected from the two bound morphemes -ni ‘1SG.GEN’ and =ne ‘1SG.DAT’, which when used together mark ‘my’ in a phrasal possession construction, as in (7), where these morphemes appear bound onto the nominal móe ‘fish’, in a ‘well-behaved’ NP construction. In (7) and (8), on the other hand, the putative clitic+suffix combination appears without any nominal host.
(7) \textit{Móe-nì=ne} \\
fish-1SG.GEN=1SG.DAT \\
‘my fish’

(8) \textit{Pá=fue a nì=ne.} \\
house=that 1SG=1SG.DAT \\
‘That house is mine.’

(9) \textit{Móe pe=w-á nì=ne.} \\
fish 3SG.F=3SG.F-fry 1SG=1SG.DAT \\
‘She fried some fish for me.’

The apparent quandary of a sequence of bound morphemes appearing without any host could be resolved by considering the fact that phonologically the genitive+dative combination is a separate word (see 5.1.2), in terms of being a separate domain for the purposes of association for tonal melodies. We might argue that, despite being part of a syntactic unit quite distinct from the NP \textit{pá fue a} the \textit{nì=ne} is phonologically attached to it, but bears a different tone (we have already seen that the prosodic definition of word and the word as defined by domains of tone melody association are different entities – see 2.3.2.2). This is shown for \textit{Móe pe wá nì ne} in (9)’

Putative word boundaries for (9)

(9)’ Prosodic: W W W

\[ [mø̝ pwa nìne] \]

Syntactic: W W W

This data would ignore examples such as (10), in which a plural or third person beneficiary (or possessor) shows us that rather than being a genitive+dative combination, what we have is a free pronoun+dative. The genitive pronouns are all associated with a HL melody (except for the 3SG.NF) – see 6.3 – and so appear with falling pitch. Of the free pronouns, only the 1SG and 2SG have falling pitch. This means that for 1SG and 2SG beneficiaries the free pronoun+dative sequence would be predicted to have the same form as the genitive pronoun+dative. When we examine (10), with a 3PL beneficiary, we can see that there is no falling pitch, only the low pitch that is associated with the free pronoun. Pronouncing the sentence with a falling pitch associated with the first \textit{te} is ungrammatical, as shown in (10)’.

(10) \textit{Móe pe=w-á te=te.} \\
fish 3SG.F=3SG.F-fry 3PL=3PL.DAT \\
‘She fried some fish for them.’

(10)’ * \textit{móe pe=w-á te=te} \\
fish 3SG.F=3SG.F-fry 3PL.GEN=3PL.DAT

Similarly, clausal possession such as (8) does not involve a genitive pronoun, as shown by the version in (8)’ with a 3PL possessor. Pronouncing the possessive cluster with a falling pitch on the first syllable is not grammatical for any other than first or second person singular possessors; this is a strong indicator that they are not genitive, but simply basic, pronouns.

(8)’ \textit{Pá=fue a te=te.} \\
house=that 3PL=3PL.DAT \\
‘That house is theirs.’
In short, there are no functions of affix+clitic sequences as independent words, but rather instances of free pronouns with clitics appear to be cases of this when they involve first or second person singular referents.

5.2 **Kinds of words: syntactic categories**

We can recognise the open categories of noun, verb, adjective and adverb; the closed functional categories of demonstrative and postposition can also be established. The open categories also show subclasses, as follows:

- **noun**
  - common nouns;
  - inalienable nouns.

- **pronouns**
  - a closed class of fourteen free forms, and four paradigms of bound forms (in addition to fused prefixes, historically derived from pronouns – Donohue 2002b), described in chapter 6.

- **verb**
  - simple verbs;
  - complex verbs (serial verb constructions and verbal collocations).
  (In addition to these parameters, verbs can also be divided into morphosyntactically-arranged inflection classes depending on the amount and type of inflection they display, or into classes according to the number and kind of arguments they take.)

- **adjective**
  - common property.

- **adverb**
  - apparently fossilised adjective+suffix units.

- **numerals**
  - a closed class consisting of 9 roots that combine in limited and somewhat idiosyncratic ways, and the lexical item *nawò* ‘many, all’.

- **quantifier**
  - the quantifier *fàtà* ‘all’, which shows unique syntactic properties, despite its semantic overlap with *nawò*.

We can investigate the syntactic categories of the language according to the criteria described in Croft (1991) and Donohue (1999c). This entails examining the morphological marking associated with different semantic prototypes (physical objects, observable properties, and punctual actions) when they appear in different discourse functions: referring to real-world entities, modifying reference to such a real-world entity, or predicking a clause. Importantly, there is a non-random assignment of morphologically unmarked functions to semantic types. Croft presumes that the pattern seen in table xx88 will emerge.
Examining these different factors, discourse function, semantic type, and morphological markedness, in terms of Skou-specific morphosyntactic criteria, we arrive at the data presented in table 89xx. Here both the type and either the paradigm name plus morpheme name, or else the individual morpheme itself, is shown.

**Table 89. Morphological marking in Skou**

<table>
<thead>
<tr>
<th>Nouns</th>
<th>Reference</th>
<th>Modification</th>
<th>Predication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>unmarked</td>
<td>possessive: GEN + DAT</td>
<td>unmarked</td>
</tr>
<tr>
<td>Adjective</td>
<td>dummy: YA</td>
<td>unmarked</td>
<td>unmarked, 38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or CLITIC=)</td>
<td></td>
</tr>
<tr>
<td>Verbs</td>
<td>dummy: YA</td>
<td>relative clauses: CLAUSE + ING A</td>
<td>agreement: CLITIC=</td>
</tr>
</tbody>
</table>

The use of lexemes of the different major syntactic categories, appearing in different functional positions, is shown in the following sentences, the syntactic category being discussed is shown in bold.

For the putative class of nouns, we can see that there is no special morphological marking for referential and modificational functions, but that there is an obligatory possessive strategy, using the genitive and the dative morphemes, when one noun is used to modify another. This is true regardless of whether or not the noun is human or non-human, animate or inanimate. The following sentences illustrate the essential morphosyntax of members of this word class, using the morphologically complex noun pe=ueme ‘woman’ to illustrate; using a simple nominal root reveals identical patterns of behaviour.

**Noun: referential**

(11) \[ NP Pe=ueme-ni=ne \]  
\[ 3SG.F=woman-1SG.GEN=1SG.DAT 3SG.F=person \]  
\[ pe=bà héfèng. \]  
\[ 3SG.F=good \]  
‘My wife is a good person.’

---

38 It appears that historically Skou employed noun class agreement proclitics on predicative adjectives. This is discussed in 5.5, 10.6 and 10.7.
Noun: modificational

(12)  Ke=angku=ing a
3SG.NF=child=the
[NP pe=ueme-ni=ne  ke=angku-pè=pe  ].
3SG.F=woman-1SG.GEN=1SG.DAT 3SG.NF=child-3SG.F.GEN=3SG.F.DAT
‘That boy is my wife’s son.’

Noun: predicative

(13)  Pe=bà=ing a  [PRED pe=ueme-ni=ne ].
3SG.F=person=the 3SG.F=woman-1SG.GEN=1SG.DAT
‘That person is my wife.’

With adjectives we find a different pattern of morphological markedness. Adjectives are at their least morphologically saturated when they are used as modifiers within the NP, describing an attribute of the head noun. In this position no special morphology is required, and the adjective simply appears following the noun in the NP. When adjectives are used referentially, that is inside an NP but with no semantically contentful noun heading that NP, a dummy noun, ya ‘thing’, must be used as the head. The adjective cannot head an NP on its own, and is restricted to appearing in an attributive role. When the adjective is used predicatively it may be used as a bare word, or, if used with an inchoative sense (‘become ADJECTIVE’), it may display agreement clitics. These are the same set of agreement clitics that are used with verbs, and it might be productive to speculate that in this usage the adjective has been transferred to the class of verbs, in keeping with the more typically verb-like aspectual structure that is associated with the inchoative use, as compared to the temporally undifferentiated static sense that is the default with this class. (This feature, the lack of any aspectual definition to the lexical item, is what differentiates the class of adjectives from non-agentive state-denoting verbs such as yáng ‘be sick, be sore, hurt’, which have aspectual structure.)

Adjective: referential

(14)  [NP Ya  rong=fue a ] pà-nì=ne.
thing old=that house-1SG.GEN=1SG.DAT
‘The old one is my house.’

Adjective: modificational

(15)  [NP Pá rong=fue a ] pà-nì=ne.
house old=that house-1SG.GEN=1SG.DAT
‘The old house is mine.’

Adjective: predicative, stative

(16)  Pá=fue a  [PRED  rong ].
house=that old
‘That house is old.’

Adjective: predicative, inchoative

(17)  Pá=fue a  [PRED  ke=rong ].
house=that 3SG.NF=old
‘That house is getting old.’

Verbs are the most morphologically marked of the open word classes in Skou. In all functional uses a verb must select from an inflectional paradigm to display agreement with its subject, whether the verb is functioning as a predicate, a modifier, or in a referential sense
(though some cells in the inflectional paradigm, and indeed some verbs, are not affixed. See 7.2 and 7.3 for discussion on the morphological patterns and their syntactic consequences). When in either of these last two functions, however, the verb must also include additional marking. Just as with adjectives, a referential verb requires the use of a dummy noun ya ‘thing’, since it cannot stand alone as head of the NP. Additionally, a verb appearing inside an NP, whether in a referential role or serving to modify another head inside that NP, must take the definite determiner =ing a ‘the’, or one of the other demonstratives =wi a ‘this’ or =fue a ‘that’. These are obligatory, and are bleached of much (or all) of their deictic meaning when used with a modificational verb. (Despite this, they occupy the phrase-structural position for demonstratives, and may not cooccur with another, semantically ‘full’, demonstrative.)

\[
\text{Verb, referential:} \\
(18) \begin{align*}
\text{[NP } & \text{Ya } \underline{nì} \text{ ke=ká}=\text{ing a } \text{]} \text{ fu.} \\
\text{thing } & \text{1SG } \underline{3SG.NF}=\text{hit=the rain} \\
\text{‘The thing that struck me was the rain.’}
\end{align*}
\]

\[
\text{Verb, modificational:} \\
(19) \begin{align*}
\text{[NP } & \text{Fu } \underline{nì} \text{ ke=ká}=\text{ing a } \text{]} \text{ fu bápàlì.} \\
\text{rain } & \text{1SG } \underline{3SG.NF}=\text{hit=the rain big} \\
\text{‘The rain that struck me was a heavy rain.’}
\end{align*}
\]

\[
\text{Verb, predicative:} \\
(20) \begin{align*}
\text{Fu } & \text{[VP } \underline{nì} \text{ ke=ká }] . \\
\text{rain } & \text{1SG } \underline{3SG.NF}=\text{hit} \\
\text{‘The rain struck me.’}
\end{align*}
\]

The tests applied above are enough to establish that there are language-internal reasons to recognise the categories ‘noun’, ‘adjective’ and ‘verb’ as distinct lexical classes. In the following sections I shall examine some more finely-grained distinctions within those word classes, especially verbs, and finish with a discussion of some of the smaller, ‘closed’ lexical categories in the language, which we have not yet dealt with.

### 5.3 Subclasses of nouns

Just as nouns are a distinct class of words, based on observable morphosyntactic patterns, so too can we talk of different classes of nouns, based on the morphosyntax that they display.

The primary division, because it is the only division that is regularly marked in a variety of places in the clause with dedicated morphological material, is the gender system. Discussed in more detail in chapter 10, there is a two-way split that can best be described as involving objects that are classed as feminine-gendered, and those that are not (henceforth, non-feminine). In some cases a particular lexical item is not inherently gendered on way or the other, and may acquire a gendered reading through the overt marking for gender that it takes, in the pair in (21) and (22).

\[
(21) \text{pe=angku} \\
\text{3SG.F=}\text{child} \\
\text{‘girl’}
\]

\[
(22) \text{ke=angku} \\
\text{3SG.NF=}\text{child} \\
\text{‘boy’}
\]
In other cases the nominal is inherently gendered, and there is not need for any overt specification. Examples of this sort of lexical items include *bålèŋ* ‘man’, which is classificatorily non-feminine, and *púwa* ‘sugar glider (sp.)’, which is feminine. These are not identical, however. While *bålèŋ* ‘man’ may appear with the non-feminine clitic, *ke=bålèŋ* ‘man’, it would take exceptional discourse circumstances for the same morphological behaviour to be observed with *púwa* and nouns of its sort: */# pe=púwa*. More details of the morphological realisation of the gender distinction, and discussion of the semantic factors behind the divisions, can be found in chapter 10.

In addition to this distinction, there is an additional division between alienable and inalienable nouns. Discussed in more detail in chapter 9.3, inalienable nouns have a more complex, and obligatorily instantiated, system for marking possession. Examples can be seen in (23) and (24); note the additional dative morpheme in the inalienably possessed *yu(ne)* ‘brother’.

(23) `yu-ne-nì=ne
brother-1SG.DAT-1SG.GEN=1SG.DAT
‘my brother’

(24) `yu-nì=ne
cousin-1SG.GEN=1SG.DAT
‘my cousin’

Finally, the difference between animate and non-animate nouns is also marked in the grammar, though not with a dedicated construction. The differences can be seen in the optional prefixation of the human class markers *bà=* to adjectives in predicative function that refer to animates (and, less commonly, *ya=* on adjectives that refer to an inanimate subject). More discussion of this follows in 5.5, and later in 10.6; an example of this optional prefixation can be seen in the following sentence.

Animate noun: *bà=* optionally (but preferably) prefixed on a predicative adjective

(25) `Ke=bà=we=ra=wò=fa=ing a (bà=)máki=wò.
3SG.NF=person=this=also=EMPH=only=the ANIM=big=EMPH
‘He is the one who is really big.’

The number of pragmatic markers on *ke=bà* in this sentence might seem unusual, but is in fact not really that uncommon in natural speech.

Inanimate noun: *ya=* optionally prefixed

(26) `Wàng=we=fa=ing a (ya=)máki=wò.
stone=this=only=the INAN=big=EMPH
‘This stone is just really big.’

The opposite coding choices, with *ya=* on the adjectival predicate of a clause with an animate subject or *bà=* on the adjectival predicate of a clause with an inanimate subject, are not grammatical, as seen in (25)’ and (26)’.

(25)’ * ke=bà=we=ra=wò=fa=ing a ya=máki=wò
(26)’ * wàng=we=fa=ing a bà=máki=wò

The animate/inanimate distinction is more covertly realised in the choice of existential verbs (see 10.5.2), the optionality of subject proclisis for verbs when inanimates serve as subject (see
7.2.1.1), and the inapplicability of plural marking on verbs by means of vowel alternations when these alternations index an inanimate entity (see 7.2.3.1).

5.4 **Verbal categories**

As with all languages, not all verbs behave identically in terms of the syntactic frames they appear in. The morphology of verbs is discussed in detail in 7.2 and appendix 2; we can recognise the following broad categories of verbs:

- monovalent verbs
- monovalent directional verbs or motion
- bivalent verbs
- trivalent verbs

These different categories, along with sub-types, will be briefly discussed in the following sections, with both partial lists of membership, as well as exemplification of some of the morphosyntactic tests that distinguish them from other verb types.

5.4.1 **Monovalent verbs**

Many verbs in Skou, as in all languages, subcategorise for only a single core argument. Testing for core or oblique status is unproblematic in Skou (see 3.11). We can recognise a three-way division in these verbs, based on the kind of core argument that they subcategorise for, and testable with a set of morphosyntactic constructions. These three different verbal types will be discussed in the following sections.

5.4.1.1 **Agentive verbs**

What are here termed ‘agentive verbs’ are the set of monovalent verbs that take an argument that is either agentive, in the sense that it volitionally and intentionally carries out an action, and is in control of it, or else is potentially agentive. More importantly, they display morphosyntactic behaviour distinct from the nonagentive verbs described in 5.4.1.2. The agentive verbs form the majority of the monovalent verbs.

These verbs can be recognised as a morphosyntactic class distinct from the nonagentive verbs on the basis of their treatment in switch reference environments (this is discussed in 19.5.2). Examples of such verbs include bóe ‘fight’, fé ‘lay down’, fi ‘meet’, ha ‘walk’, i ‘stand’, lèng ‘hide (self)’, loe ‘come’, moeng ‘sit’, òe ‘jump’, pi li ‘speak’, rapue ‘descend’ (and the other motion verbs listed in 5.4.1.3), re ‘go’, and in fact most of the simple monovalent verbs in the Skou lexicon. These verbs do not present the active end of an ‘active-stative’ continuum: verbs such as moeng ‘sit’ or i ‘stand’ are neither active nor dynamic. They are, however, verbs denoting situations which are at least potentially agentively controlled, and this appears to be the factor that is crucial for the morphosyntactic classification of these verbs in Skou.

Compare the following sentences, involving switch reference forms and a first clause with a motion predicate of some sort. The use of the (lexicalised) complex endpoint-marking sequence *wa ko te* is not permitted with non-agentive verbs, which simply use *te*, as seen in (27).
Agentive verb in first clause

(27) * Lòeng ke=k-a w-a=ko te pá.
‘road’ 3SG.NF=3SG.NF-walk 3SG.F-walk=OBV 3SG.F.go house
‘He walked to the house.’

Nonagentive verb in first clause

(28) * ke=ku ti w-a=ko te pá.
3SG.NF=fall 3SG.NF.go 3SG.F-walk=OBV 3SG.F.go house
‘he fell to the house’

(29) Ke=ku ti te pá.
3SG.NF=fall 3SG.NF.go=INSTR 3SG.F.go house
‘He fell to the house.’

Tests for the status of the subject of non-motion verbs as agentive or nonagentive involves their appearance with certain aspect marking, where nonagentive verbs cannot occur with the aspectual/resultative marker toe, as described in the following section.

5.4.1.2 Nonagentive verbs

Nonagentive verbs are the verbs that do not fit the criteria for being classed as agentive verbs, as described in the previous section. These verbs do not show any potential volitionality or control in the action/event, and the argument does not exhibit any signs of it. Typically a nonagentive verb takes a theme or patient as its subject, since a change of location or a change of state are part of the defining criteria in being a monovalent predicate without an agentive subject: if not acting, then being acted upon (and so being affected) is the only other option. Verbs that exemplify this class include: báng ‘crack’, fí ‘run into’, fu ‘be afraid’, jí ‘break’, lú (fi) ‘cough’, lú weng ‘sleep’, wang ‘die’, yáng ‘be sick’. They embrace both dynamic and non-dynamic predicates, as can be judged from the partial listing above.

A morphological test for nonagentivity is the inability to occur with a resulting state coded by use of the aspectual marker toe (see 7.9.4). Compare the grammaticality of the two sentences in (30) and (31).

Agentive verb allows a resulting state

(30) Lòeng ke=k-a toe nòe ná pi.
‘road’ 3SG.NF=3SG.NF-walk RESULT body tired
‘He walked such that he was tired.’

Nonagentive verb does not allow a resulting state

(31) * ke=ku ti toe yáng
3SG.NF=fall 3SG.NF.go RESULT sore
‘He fell such that he was sore.’

There is in addition one attested bivalent predicate, mòng wí ‘be affected by’, that may take a non-agentive subject in one of its uses; this is mentioned in 5.4.3.4, and is discussed in detail in 13.3 as an instance of a passive in the language.

5.4.1.3 Motion verbs

In addition to the unproblematic classes of agentive and nonagentive verbs, the verbs of motion present a case of definition by mutually exclusive overlapping criteria. On the one hand a verb such as ha ‘walk’ takes an volitional, controlling, intentional subject, and so could be classed as
an agentive verb; on the other hand, the subject of the verb clearly undergoes a change of location in the process of the verb being accomplished, and so counts as being nonagentive. What are we to do with this apparent dilemma?

The unusual morphosyntactic nature of verbs of this sort in this region has been acknowledged at least since Pawley (1973), who dubbed them ‘intradirective’ verbs. Motion verbs show a division into those that subcategorise for a goal oblique (at least optionally), and those that do not. Compare the following sentences. In (32) the goal appears postverbally, while in (33), which is identical except for the choice of verb, this is ungrammatical. The only way to grammatically express the notion of walking to a goal in Skou is by using one of the alternatives in (34), with either serialisation with a verb that subcategorises for a goal, or affixation with an applicative, to license the postverbal oblique participant.

(32)  *Ke=k-a pá.
3SG.NF=3SG.NF-walk house
‘He walked to (someone else’s) house.’

(33)  *Ke=k-a pá.
3SG.NF=3SG.NF-walk house
‘He walked to (someone else’s) house.’
(possibly grammatical, but pragmatically unusual, with the reading
‘He walked [around inside] [someone else’s] house.’)

(34)  a.  Ke=k-a ti pá.
3SG.NF=3SG.NF-walk 3SG.NF-go house
‘He walked to (someone else’s) house.’

b.  Ke=k-a-na pá.
3SG.NF=3SG.NF-walk-APPL house
‘He walked to (someone else’s) house.’

It is possible for a verb that subcategorises for an oblique goal to appear without a goal: Ke ti ‘He’s (already) gone.’ is a perfectly acceptably sentence. The verbs, such as ha ‘walk’, that may not appear with a goal are also also grammatical with no specified location or goal: Ke k-a ‘He’s (already) walked.’. The verbs in the next section, however, are distinguished by the obligatory use of serialisation with other motion or manner of motion verbs when expressing a goal.

5.4.1.4 Direction verbs

Directional verbs are a sub-class of motion verbs, but are treated separately because they almost invariably appear in serial verb constructions with other verbs of motion, something that is not true of motion verbs in general. This small closed class is composed of the verbs o ‘seawards’, hi ‘westwards’, höe ‘landwards’ and e ‘eastwards’, which appear following manner of motion verb, and preceding a simple motion verb. Some examples are shown in the following sentences:

(35)  Amerika=ing a höe [landeng] te=toe te=ti
America=the come.landward [landing] 3PL=3.come 3PL=3PL.do
ping te=ti=ko, ...
war 3PL=3PL.do=OBV
‘America came, they arrived, and they waged war, …’
(36) **Pe=w-a hòe-pa**
3SG.F=3SG.F-from sago-water

**pe=moe w-a hi bàme, ...**
3SG.F=return 3SG.F-walk westwards village

‘She walked back from the sago swamps west to the village.’

More discussion of the behaviour of these verbs in serialisations used to expressing (decompositionally) the elements of a motion predicate can be found in 12.4. The strategies, involving serialisation, that are use with verbs expressing manner of motion, that do not allow for a simple postverbal goal, are discussed in that chapter.

5.4.1.5 N+V complex predicates

There are many clear cases where we find verbs with two non-oblique nominals (as judged by any of the tests for grammatical status that have been presented in 3.11), and further discussion of the syntax of these bivalent verbs will be presented in 5.4.3. There are additionally predicates in which we can identify two preverbal nominals, but which we classify as monovalent. One such example is shown in (37) and (38).

```
(37) **Pe=angku=ing a pa pe=pi.**
3SG.F=child=the water 3SG.F=swim
‘The girl swam.’

(38) **Pe=angku=ing a tí pe=pi.**
3SG.F=child=the sea 3SG.F=swim
‘The girl swam in the sea.’
```

This construction appears at first glance to present two core nominals, since neither of them appear postverbally (the normal position for oblique participants), and neither of them are marked with the instrumental case =pa. Given the agreement on the verb, and the clause-initial position, we can safely assign **pe=angku** to the function of subject. Where does that leave **pa** ‘water’ in (37) and **tí** ‘sea’ in (38)? This nominal would be logically thought to be the object of a bivalent clause, by virtue of being not the subject, and also not an oblique participant (as seen in its preverbal position). This is not, however, the case – a literal translation of this analytical assumption would be something like ‘The girl swam the (water/sea).’, just as in English we can say ‘The girl swam a lap.’ These nominals, however, lack the positional variation under topicalisation that is enjoyed by objects (as well as subject and obliques). Compare the grammaticality of the sentences with an immediately preverbal **pa** and **tí** in (37) and (38), with the unacceptability of their appearing sentence-initially in (37)' and (38)'.

(37)' * **pa ing a, pe angku pe pi**
(38)' * **tí ing a, pe angku pe pi**

In addition to subject and object there are other core grammatical functions in Skou, namely the roles played by the so-called ‘adjunct nominals’, which are present in a large number of verbal predicates with a variety of semantic functions. They are discussed in more detail in chapter 14, but they do not appear with the positional freedom and modificational possibilities that are associated with most objects, and so, while clearly not oblique participants, cannot be assumed to be objects themselves.
5.4.2 Ambi-valent verbs

There is a small number of verbs that, without any additional marking, can appear in either a monovalent or a bivalent frame. This is not by any means a common morphosyntactic pattern in the language, but some examples can be found. Examine, for instance, the following verbs.

Table 90. Ambi-valent verbs

<table>
<thead>
<tr>
<th>monovalent reading</th>
<th>bivalent reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>fé</td>
<td>‘perch on, be at (a surface)’</td>
</tr>
<tr>
<td>jí</td>
<td>‘break, snap’</td>
</tr>
<tr>
<td>wépu</td>
<td>‘be covered’</td>
</tr>
</tbody>
</table>

Examples of the use of these verbs in both monovalent and bivalent uses can be seen in (39) - (43).

Monovalent

(39)  
Tang=pa ne=fé ne-ne já.  
‘We anchored out at sea in (our) canoe.’

(40)  
Lang-nî=ne jí.  
‘My pots’re broken.’

Bivalent

(41)  
Ne=r-oe ne=moe ne bàme ne=fé.  
‘We took them and went back to the village, and put them (up on platforms).’

(42)  
Lang-nî=ne ke=jí.  
‘He broke my pots.’

(43)  
Lúe ni=wépu fàtà ko tue.  
‘I covered all the baskets.’

It is more normal for a concept that employs an ambi-valent verb in English, such as ‘open’, to use two distinct verbs in Skou, as in (44) - (45). (45) also illustrates the monovalent use of wépu.

(44)  
Tîlong=fue a fâfà.  
‘That doorway is open.’

(45)  
Fu bápâli ma e tue, kúfong ni=wé=ko,  
‘It was pouring down, so I took my umbrella, opened it up above, and covering myself I went home.’

This minor ambivalent pattern is not productive in Skou. The examples listed above are all that have been found.
5.4.3 Bivalent verbs

The class of verbs that take two core arguments, which are traditionally labelled ‘subject’ and ‘object’, is quite large in Skou. We can recognise certain subtypes of bivalent verbs that, because of their atypical morphosyntax, deserve special attention within this set. We shall discuss the majority case first, and then proceed to subclasses of bivalent verb types.

The typical bivalent verb presents the word order arrangement discussed in chapter 3, and, as expected, normal mapping conventions apply to assign the most agentive argument to the A role, and the most patient-like argument to the P role.

\[ \text{Ke=balèng=fue a nì ke=ká.} \]
\[ 3SG.NF=man=that 1SG 3SG.NF=hit \]

‘That man hit me.’

Not all verbs obey these default mapping conventions. At least one verb, \textit{mòng wí} ‘get, be affected by’, shows opposite mapping principles. An example of its use can be seen in (47), where the patient is coded (obligatorily, for this verb) as the subject, and the agent is coded (if at all) as an oblique participant.

\[ \text{Ke=balèng=fue a mòng ke=wí pe.} \]
\[ 3SG.NF=man=that wound 3SG.NF=hit 3SG.F \]

‘That man got hit by her.’

This behaviourally unique verb, and the morphosyntax associated with it is described in 12.6 and 13.3. But, apart from this, we find that almost all bivalent verbs can be described with the same frame as described \textit{ká}, and exhibit the same morphosyntactic behaviour as is found for the clause in (46). Some important variants include the use of verbal collocations (akin to lexicalised serial verb constructions), and predicates involving adjunct nominals (already seen in 3.9, more details can be found in chapter 14). For instance, compare (46) with the following clause, in which most of the elements are the same:

\[ \text{Ke=naké=fue a nì kóeng ke=ká.} \]
\[ 3SG.NF=dog=that 1SG tooth 3SG.NF=hit \]

‘That male dog bit me.’

Despite the addition of a new nominal, \textit{kóeng} ‘tooth’, the clause is still best regarded as being bivalent, and not trivalent. This is because \textit{kóeng} in (48) does not exhibit all the properties of a core (or, for that matter, oblique) argument, as described in 3.11.

The following sections describe some of the other constraints that are placed on bivalent clauses in Skou, and some of the more marked subclasses of bivalent clauses that are found.

5.4.3.1 Animacy and As

In some languages of the New Guinea / Pacific Rim region there are restrictions on the animacy of arguments that may appear as the A of a bivalent clause. This can be realised in two ways (from a cross-linguistic perspective); either there can be a restriction barring inanimate As from appearing in that role in a clause, or there can be a cultural interpretation that all causers are animate.

The following sentence might appear to support the latter option:
(49) *Anábi rí ke=lúe.
machete wood 3SG.NF=chop
‘The machete chopped the wood.’

In fact, this is not quite a simple as it might at first appear. The alternative to the animate machete’ option is that anábi in the sentence above is in fact a pre-clausal topic, appearing without its case marker =pa (see 3.13 and chapter 11).

The first option, not allowing inanimate As, does not seem to be required by Skou, though it is striking how many of the verbs that take inanimate As are marked with atypical Ps (see 5.4.3.3). Examples of this sort of restriction can be seen in other languages, such as Japanese or Tukang Besi. In Japanese inanimate causers of events must appear in instrumental case, marked by de, with monovalent verb roots, and not in nominative case with accusative objects for their bivalent verbs (younger speakers of Japanese find sentences such as (51) acceptable, but they are ungrammatical in the language of more conservative speakers).

Japanese: no inanimate As

(50) Kaze=de ki=ga taor-ta.
wind=INSTR tree=NOM topple.INTR-PAST
‘The tree fell because of the wind.’

(51) */# Kaze=ga ki=o taos-ta.
wind=INSTR tree=NOM topple.TR-PAST
‘The wind felled the tree.’

(52) Ooko=ga ki=o taos-ta.
man=INSTR tree=NOM topple.TR-PAST
‘The man felled the tree.’

In Tukang Besi a similar restriction holds: an inanimate may act as a an instrumental causer of an event, but cannot be coded as the A. In the examples below we can see that nominative case is not an option for iri ‘wind’ in Tukang Besi as the A of a bivalent clause, nor is the bivalent tu’o possible as a verb choice for the meaning intended when the causer is inanimate.

Tukang Besi: no non-agentive As

(53) No-buti te hu’u nu kau (ako) te iri.
3R-fall CORE tree GEN wood BEN/PURP/INSTR CORE wind
‘The tree fell because of the wind.’

(54) * No-tu’o te hu’u nu kau na iri.
3R-fell CORE tree GEN wood NOM wind
‘The wind toppled the tree.’

(55) No-tu’o te hu’u nu kau na mo’ane.
3R-fell CORE tree GEN wood NOM man
‘The man felled the tree.’

Examining further evidence, we can state that Skou is not a language that absolutely restricts the semantic roles of its syntactic functions. Examine the following two sentences, both using the verb ku ‘stab, pierce’, but the first with a human, animate A, and the second with an inanimate A. When the A is inanimate, the P appears postverbally, an oblique-coding strategy (see 5.4.3.3). When, on the other hand, the A is animate the P appears in the normal (for core arguments) preverbal position, and the verb takes agreement clitics.
Skou: Inanimate A correlates with postverbal P

(56)  
\textit{Kong ku nì.}  
thorn  
\textit{stab}  
\textit{1SG}  
‘I got poked by a thorn.’

(57)  
\textit{Pe=angku=ing a nì pe=w-u.}  
\textit{3SG.F=child=the}  
\textit{1SG}  
\textit{3SG.F=3SG.F-stab}  
‘The girl poked me.’

Further discussion of other instances of postverbal Ps can be found in 5.4.3.3.

5.4.3.2  Bivalent verbs with a restricted P

A small class of verbs inflect as normal through consonant alternations and proclitics (7.2.1, 7.2.2), and take the normal two arguments of a bivalent verb, but are restricted as to the semantic nature of the object that may appear overtly. One such verb is \textit{lúe} ‘hear’, which cannot (in most usages) appear with plain nominal objects, but must take either a complement or a noun modified by a relative clause. Compare the differing grammaticality judgements of the following sentences.

(58)  
\textit{Mè pí mè=pi nì=lúe.}  
\textit{2SG}  
\textit{speech}  
\textit{2SG=2SG.do}  
\textit{1SG=hear}  
‘I can hear you talking.’

(59)  
\textit{* mè nì=lúe}  
\textit{2SG}  
\textit{1SG=hear}  
‘I can hear you.’

Sentence (59) is in fact grammatical with the reading ‘I know you.’, or ‘I am following what you are saying.’ (as a discourse marker), but not with the intended reading as given above. The ungrammaticality of (the ‘hearing’ reading of) (59) is based on the fact that it takes a human object, not the clausal complement seen in (58). Similar, non-human object sentences can be seen in (60) - (61), showing that a clausal complement is the preferred object of \textit{lúe}, and a nominal one is ungrammatical.

(60)  
\textit{Nì naké=ing a bóeboe ke=lá nì=lúe.}  
\textit{1SG}  
\textit{dog=the bark}  
\textit{3SG.NF=make.noise}  
\textit{1SG=hear}  
‘I heard the dog barking.’

(61)  
\textit{Nì nì lúe naké ing a bóeboe ke lá.}  
‘I heard the dog barking.’

(62)  
\textit{* nì naké=ing a nì=lúe}  
\textit{1SG}  
\textit{dog=the}  
\textit{1SG=hear}  
‘I heard the dog.’

These verbs can take nominal objects of the sort shown above only when that objects is a participant that has been raised from a subordinate complement (see chapter 15). This results in clauses such as (62)‘.

(62)‘  
\textit{Nì naké=ing a nì=lúe hòe ke=k-ang}  
\textit{1SG}  
\textit{dog=the}  
\textit{1SG=hear}  
\textit{sago}  
\textit{3SG.NF=3SG.NF-eat}  
‘I heard the dog eating the sago.’
5.4.3.3 Verbs with an atypical P: oblique coding strategies

Another way in which a verb may be non-typical in terms of the morphosyntactic treatment of the core arguments is by adopting an oblique coding strategy for the P. There are some verbs, such as héng ‘ask’, in which the P can be either pre- or postverbal; postverbally it appears as a locative, not as a goal. This can be seen in the following examples.

(63) Ke=ing a nì ke=k-éng.
3SG.NF=the 1SG 3SG.NF=3SG.NF-ask

‘He asked me.’

(64) Ke ing a ke kéng nì.

The morphosyntactic coding status of the addressee P as a locative, rather than goal, can be shown by the fact that it follows an auxiliary, if an auxiliary is present and the P is postverbal. This can be seen in (65).

(65) Ke=ing a ke=k-éng-kéng li nì.
3SG.NF=the 3SG.NF=3SG.NF-ask-RED do 1SG

‘He asked me.’

(66) * ke ing a ke kéng kéng nì li

The status of an ‘obliquely-coded’ object is the same as the prepositionally-marked objects of, for example, English: they are grammatically objects, but share some of the morphosyntactic coding strategies of oblique or adjunct nominals. Just as a verb such as listen in English requires that its object be marked with the preposition to, even though it does not display the properties of phrasal verbs such as see to ‘look after, take care of’, so too the postverbal objects in Skou share a coding property of obliques, but the syntactic status of objects.

With any pronoun other than a first or second person singular one we can see a further consequence of postverbal position: the pronoun used can optionally be drawn from the genitive set. Compare (63) and (64) with (63)’, (63)”’, (64)’ and (64)”’. While preverbal coding options are only grammatical if the pronominal form used is that of a free, unmarked, pronoun, a postverbal locative coding strategy reveals that either the free pronominal form or the genitive form may be used. This difference in behaviour is not apparent with first or second person singular pronominal Ps because of the syncretism between the unmarked form and the genitive form for those pronouns, which lexically have a falling tone identical to that found on genitive cased pronouns.

A P V

(63)’ Ke=ing a ne ke=k-éng.
3SG.NF=the 1PL 3SG.NF=3SG.NF-ask

‘He asked us.’

A P V

(63)” * ke ing a nè ke kéng.
1PL_GEN

A V P

(64)’ Ke ing a ke kéng nè.
1PL_GEN
If the thing asked about is expressly mentioned as well, then the addressee must appear preverbally, and the information sought is coded postverbally.

(67)  
Ku-nì=ne  
nì=héng  
li pe=te  
nè.

‘child’-1SG.GEN=1SG.DAT 1SG=ask be do 3SG.F=3SG.F.go Q
‘I’m asking my daughter where she’s going.’

(67)’  
* nì=héng  
li  
ku-nì=ne  
pe=te  
nè

1SG=ask be do ‘child’-1SG.GEN=1SG.DAT 3SG.F=3SG.F.go Q
‘I’m asking my daughter where she’s going.’

More commonly only the thing asked about is mentioned, and the addressee is omitted, through coreference with the subject of the subordinate clause. The reading of (67) in which the subject of the subordinate clause is not coreferential with the askee of the main clause is not supported by (68).

(68)  
Nì  
pí  
nì=héng  
pe=te-te  
nè  
tue.

1SG speech 1SG=ask 3SG.F=3SG.F.go-RED Q 3SG.F.do
‘I asked (her) where she was going.’

The same morphosyntactic pattern is found with the semantically more generic verb lôeng when it is used with the sense ‘answer’ (though not when it simply means ‘say’ or ‘tell, order’, providing some evidence that these may perhaps be better thought of as representing lexically separate albeit phonologically undifferentiable verbs). The question described in (68) could be replied to with lôeng ‘answer’ as seen in (68)’, which has only one possible reading, but (69) shows that a use of lôeng to mean ‘say, tell’ out of a question:answer context is ambiguous.

(69)  
Nì  
pe=n-úng  
pe=te-te  
báng  
tue.

1SG 3SG.F=3SG.F-say 3SG.F=3SG.F.go-RED beach 3SG.F.do
‘She answered (to) me that she wanted to go to the beach.’

(69)  
Nì  
pe=n-úng  
pe=te-te  
báng  
tue.

1SG 3SG.F=3SG.F-say 3SG.F=3SG.F.go-RED beach 3SG.F.do
‘She told me that she wanted to go to the beach.’

When lôeng is used with these other senses, such as ‘say’, ‘tell’, ‘order’, and with other verbs of speaking, the addressee is likely to be coded as a preverbal argument unless the speaking complement is mentioned, in which case the addressee appears postverbally and the complement of speech is marked as the object of the verb. Compare the contrastive position of ‘child’ in the following examples. In (70), as the sole argument other than the subject, it appears preverbally. In (71) on the other hand the communication appears preverbally, and the child spoken to is coded in the position accorded to locations, postverbally.

(70)  
Ku-nì=ne  
pí  
nì=li  
li.

‘child’-1SG.GEN=1SG.DAT speech 1SG=do be do
‘I spoke to my child.’

(71)  
Pì=ha  
mè=pi  
me  
pi  
kù-mè=me.

speech=what 2SG=2SG.do 2SG.be 2SG.do ‘child’-1SG.GEN=1SG.DAT
‘What did you say to your child?’
Since the addressee in these examples can be coded either pre- or postverbally, we must ask whether it is a P that can acquire exceptional positional freedom, or an oblique that may appear preverbally (or is the verb has two subcategorisation frames, one that allows for a preverbal object, and one that allows for a postverbal oblique). The second possibility would be unprecedented in the language: there is no exceptional morphological marking of the construction, regardless of the position of the addressee, and there is no evidence for a general process analogous to the dative shift construction in English. The first possibility, that the addressee is a P that can, exceptionally, appear postverbally, seems the more plausible of the two options, and Ps are attested in both (usually) preverbal as well as (rarely, but robustly) postverbal positions, and the speaking verbs feature in the list of verbs with postverbal Ps (an example is hêng ‘ask’, earlier in this section).

The complex predicate pílang li ‘curse’ also allows for an apparently postverbal object of a sort. The postverbal P clause is an alternative to the use of a complex predicate with ko ‘be at’, and tue, the 3SG.F form of li ‘do’ following the simple monovalent predicate pílang li ‘curse’. In this case of the non-complex predicate with a postverbal P the cursee is marked as an oblique location, not as a postverbal object (the tests are elaborated on in 5.4.3.3). Both options are shown below.

Bivalent clause with postverbal object

(72) \[Te=Bapúbí pí-lang te=ti àì-nì=ne.\]
3PL=Skou Sai speech-curse 3PL=3PL.do father-1SG.GEN=1SG.DAT
‘The Skou Sais cursed my father.’
(here pílang li means ‘place a curse on’, not simply ‘swear at/insult’)

Monovalent first predicate serialised with monovalent, location-specifying ko li

(73) \[Te=Bapúbí pí-lang te=ti ko tue àì-nì=ne.\]
3PL=Skou Sai speech-curse 3PL=3PL.do be.at 3SG.F.do father-1SG.GEN=1SG.DAT
‘The Skou Sais cursed my father.’

An example of a postverbal P with interesting behaviour is found in the predicates ‘bump into, collide with’ and ‘meet’, both of which are expressed with the form fí. Certainly both predicates are encoded with the same phonological form, and I argue that it is in fact the same lexical entry as well, and hence gloss both as ‘meet’. Compare the following two sentences, neither of which can show the word order of the other without the interpretation changing.

OBJ V

(74) \[Mè ni=fí.\]
2SG 1SG=meet
‘I met you.’
* ‘I bumped into you.’

V OBJ

(75) \[Nì=fí mè.\]
1SG=meet 2SG
‘I bumped into you.’
* ‘I met you.’

While not exemplified here, the status of mè in (75) as an object, and not a (more common) postverbal oblique, can be demonstrated by its ability to participate in the same behaviour
exhibited by preverbal objects (including that of mè in (74)) in certain complementation constructions, as described in more detail in 15.5.7.

In examples such as these it is not straightforward to know what kind of syntactic construction we are confronted with. Are there two phonologically identical (both [fi], [‘-’]) and semantically very closely related verbs which, by virtue of their semantics, have different case frames, or if there is only one lexical entry, and the semantic interpretation of the verb varies depending on the case frame that is used with the arguments? I shall treat this pair as two lexically linked verbforms that share a common semantic (and phonological) base, but which specify two different subcategorisation frames (approximately ‘meet (SUBJ, OBJ)’ and ‘bump into (SUBJ, OBL)’, respectively). Speaker attitudes provide some support for this stance, and this can be taken as reasonably strong evidence, given the firm reactions speakers have to the differentiation of other phonologically identical lexical items (fí is also the phonological form of the words ‘louse’ and ‘muddy’, which speakers insist should be treated as different).

5.4.3.4 ‘Inverted’ predicates
Another group of verbs which display a non-typical P are those that show inverted behaviour, such as is also found in the coding of psych-verbs in various western European languages (though not in modern English; relics remain in expressions such as methinks, with the experiencer subject coded in a non-nominative case). These clauses show atypical behaviour because the arguments in the clause are very far removed from the prototypical agent and patient that characterise (indeed, define) primary transitive verbs. In inverted-behaviour clauses the two core arguments are an experiencer and an effector. The experiencer is coded as the P of the clause, unlike the coding choice found for most predicates involving experiencers, such as perception predicates such as ‘see’ and ‘hear’. Because of this, the morphosyntactic behaviour of the elements of the clause is at odds with the majority coding strategies encountered, including those coding primary transitive verbs.

This same inverted-coding strategy is employed in many languages of New Guinea, including Skou. One simple example is shown in (76). Here we can see that, assuming that the normal SOV word order is exemplified here as well as elsewhere, oe ‘burp’ is the subject of the sentence, and pe ‘she/her’ is the object. Apparently confirming this hypothesis, the verb shows agreement for a third person non-feminine argument, not the third person feminine argument that represents the burper. From the clause-internal evidence, then, the subject of this clause is unambiguously the inanimate burp, oe.39

(76)  Oe pe ke=atég
       burp 3SG.F 3SG.NF=burp
       ‘She burped.’
       (Literally, ‘(A) burp burped her.’)

(77)  * oe pe pe=atég, * pe oe (pe=ke)=atég

This coding strategy is similar to that found in many New Guinean or western European languages, such as can be seen in the following Dutch sentence. Here again the experiencer is

39 Several doubts can be raised about this analysis. A characteristic of the subject of a transitive clause is that it can occur with a copy pronoun at the end of the NP, marking it as ergative. This is not possible with predicates such as oe ká: * oe ke pe ke=atég. Furthermore, the switch reference mechanism does not track the burp, but the burper (see 19.5).
coded in the position normally reserved for objects of transitive clauses, and the effector appears preverbally, and apparently with subject agreement on the verb.

Dutch

(78) * chocolade melk beval mij best.
    hot.chocolate please-2SG best
    ‘I like hot chocolate (drinks).’

(79) * chocolade melk beval mij best, *(miijk) beval(t) chocolade melk best
    please(1SG) 1SG/1SG.NOM

This pattern is not found in modern English (or indeed in many languages), but is a widely attested coding strategy in New Guinea generally. Inverted predicate constructions are found in Skou, though it is not as prevalent in Skou as it appears to be in other languages of the area. Some other examples of verbs that are used with this sort of inverted matching of semantic roles to the grammatical functions subject and object, such that the more agentive experiencer is coded as object while the apparently effector-like argument is coded as subject.

(80) Fu nì ke=ká.
    rain 1SG 3SG.NF=hit
    ‘I got soaked in the rain.’

(81) Nì lóengri tue e tue.
    1SG snot 3SG.F.do 3SG.F.be 3SG.F.do
    ‘I’m full of snot.’

(82) * nì lóengri (nì=) li li

This construction has more in common with the external possession constructions, particularly topic possessors. These are covered in more detail in 9.5.2.1.

5.4.3.5 A highly atypical, inverted predicate: mòng wí ‘be hit’

One bivalent predicate shows inverted behaviour of a verb unlike kind. While the verbs described in the previous section all code the more animate argument as the object of the clause, mòng wí goes beyond this in that both the arguments are animate, and there is a controlling, volitional argument which is not coded as subject. Examine the following clause:

(83) Mòng ke=wí nì.
    wound 3SG.NF=get 1SG
    ‘He got hit by me.’

In this clause both participants are animate; the agent, nì, is volitional and in control of the event. It is, however, not coded as an A, but as a postverbal oblique. At the same time the patient, ke, is coded as a subject. In effect this predicate seems to function as a passive counterpart to the more ‘normal’ verb ká ‘hit, kill’. Compare (83) with the following sentence, which shows a ‘normal’ active configuration:
More discussion of the mòng wí ‘be hit’ predicate, and the arguments for and against analysing it as a lexical passive counterpart to the verb ká ‘hit, kill’, can be found in 13.3.

5.4.3.6 Subcategorisation frames

Different verbs take not only a different number of arguments, but also subcategorise for different types of arguments. In this section a brief summary of the different kinds of monovalent and bivalent verb types will be given.

We have seen that the basic bivalent verb subcategorises for two arguments, a subject and an object, and that these are realised in preverbal positions (see 5.4.3). Some (very few, but areally predictable: ‘hear’ is often restricted as to the object it takes in the New Guinea region) verbs are not free with respect to the objects that they may appear with, but that object will still be coded preverbally (see 5.4.3.2). More significantly, there are various predicates which coded their second argument postverbally, and tests applied to these verbs show that this argument is an oblique participant, not an object (see 5.4.3.3). Yet other verbs show alternate coding for their second argument: the second argument may appear either preverbally or postverbally, with a corresponding change in semantic transitivity associated with the clause (see 5.4.3.3). The final class of bivalent predicates (see 5.4.3.4) is unusual only from the perspective of the normally animate subject background that Skou, and most Papuan languages, display. In terms of subcategorisation frames they do not show any unusual properties.

Taking the assignment of the subject grammatical function to the highest role and the assignment of object to the second argument to be a default setting, we can specify the different predicate types that we have described and defined in 5.4.1 – 5.4.4, in terms of the different argument structure configurations that they display, as shown in (85) - (91).

Verb types and argument structure

(85) plain monovalent 〈__〉 eg., ta hùng ‘sit’
(86) directional monovalent 〈__, OBL〉 eg., ha ‘walk’
(87) ambi-valent 〈__, (__)〉 eg., jí ‘break, snap’
(88) plain bivalent 〈__, __〉 eg., ká ‘hit’
(89) low-transitivity bivalent 〈__, OBL〉 eg., léng ‘give to’
(90) variable bivalent 〈__, __〉 ~ 〈__, OBL〉 eg., fi ‘meet, bump into’
(91) ‘trivalent’ 〈__, __, OBL〉 eg., na lùng ‘teach’

Inverted predicates (5.4.3.4, 5.4.3.5) are assumed to be a variant of the plain bivalent category, but with unusual linking between the argument structure and the level of semantics. The mòng wí predicate is argued in 13.3 to be in fact a lexical passive, with the same subcategorisation frame as the low-transitivity bivalent verbs, separated from them only by the linking to the semantic roles, being inverted for the passive. We have examined the characteristics of the various monovalent and bivalent verb types in the preceding sections, and the following section describes the morphosyntax of trivalent predicates.
5.4.4 Trivalent verbs and verbal collocations

There is a small number of verbs that initially appear to subcategorise for three arguments. One such verb, typical of other members of its small class, is the verb *na lùng* ‘teach, instruct’. This verb subcategorises for three participants:

- an agent who carries out the instruction
- a theme that is the subject taught, and
- a goal that is the destination of the teaching.

Rather than being a true trivalent verb, these three nominals are coded as subject, object and oblique, respectively, as can be seen in the following sentence. Here we see the teacher, *nì*, as subject, shown by its clause-initial position and the agreement marking on the verb. The subject of instruction is the Wutung language, *te Óeti pí te*, and it is the object, adduced by its preverbal position. The learner, *ku nì ne* ‘my child’, is coded postverbally: it may not appear in a preverbal position, as it is an oblique participant.

(92) *nì te=Óeti pí-tè nì=na lùng ku-nì=ne.*

1SG 3PL=Wutung language-3PL.GEN 1SG=teach ‘child’-1SG.GEN=1SG.DAT

‘I taught the Wutung language to my child.’

(93) * nì ku nì ne nì na lùng

The standard tests for objecthood and core status (see 3.13) indicate that *ku nì ne* in the sentence above is neither an object nor an adjunct, and so must be regarded grammatically as a subcategorised-for oblique. Although the verb subcategorises for three participants, not all of them have core arguments status, similar to the behaviour of verbs like ‘put’ or ‘place’ in English which take one subcategorised-for partipicant which is neither the subject nor the object.

A more cross-linguistically typical example of a trivalent verb is the translation equivalent of ‘give’ (see Newman 1996, 1998). In Skou this is not a simple lexical item, being rather composed of ‘get’ and then a bivalent verb of giving (see 7.8 for more information on these sort of lexicalised verbal collocations). Nonetheless, the syntax of the construction has some complications, and is best analysed as a predicate with three arguments. Examine the following sentence:

(94) *Bápáne taíngbe ke=wé leng nì.*

friend money 3SG.NF=get.F give 1SG

‘My friend gave me some money.’

In this sentence the recipient, *nì*, appears following the verbal sequence *wé leng*, and so might be construed as an oblique participant, just as the instructee *ku nì ne* ‘my child’ in (92) was considered oblique. We can, however, show that the recipient, as well as the theme, is a core argument of the serial verb construction. In a raising structure (see chapter 15) the recipient, as well as the subject and the theme, is eligible for raising to be marked as the object of the matrix clause, an option that is allowed only to core arguments, and not to obliques. More detailed argumentation and documentation of this construction can be found in chapter 15, but an example illustrating the ability of the recipient to appear raised is given below.

(95) *Nì pe=r-ú bápáne taíngbe ke=wé leng.*

1SG 3SG.F=3SG.F-know.F friend money 3SG.NF=get.F give

‘She knew that my friend gave me some money.’
Not all predicates which appear to take three arguments show this kind of symmetrical behaviour, syntactically (though not morphosyntactically). Examine the following sentence:

(96) \( Rópu-\text{ni}=\text{ne} \quad \text{yata} \quad \text{ni}=\text{li} \quad \text{te}=\text{bà}. \)

book-1SG.GEN=1SG.DAT transact 1SG=do 3PL=person

‘I sold my book to someone.’

In this case the same test can be used to show that \( \text{te}=\text{bà} \) is not a core argument, and that the verb only subcategorises for two core arguments, a subject and an object, and that the person to whom the book is sold is an oblique.

(97) \* \( \text{te}=\text{bà} \quad \text{pe}=\text{r-ú} \quad \text{ni} \quad \text{rópu-\text{ni}=\text{ne} \quad \text{yata} \quad \text{ni}=\text{li} } \)

1SG 3SG.F=3SG.F-F.know 1SG book-1SG.GEN=1SG.DAT transact 1SG=do

‘She knew that I sold my book to someone.’

(raising \( \text{rópu ni ne} \) or \( \text{ni} \) is also perfectly grammatical: \( Rópu \text{ ni ne pe rú ni yata ni li te bà} \), or \( \text{Ní pe rú ni rópu ni ne yata ni li te bà} \))

Similarly, a construction analogous to (97) with \( \text{na lùng} \) as the predicate in the subordinate clause is not eligible for raising of the goal:

(98) \* \( \text{ku-\text{ni}=\text{ne}} \quad \text{pe}=\text{r-ú} \quad \text{ni} \quad \text{te}=\text{Óeti \text{pí tè} \text{ni}=\text{na lùng}} \)

‘child’-1SG.GEN=1SG.DAT 3SG.F=3SG.F-F.know 1SG te=Óeti pí tè ni=na lùng

‘She knew that I taught the Wutung language to my child.’

(again, raising the agent or theme of the subordinate clause is acceptable: \( \text{Ní pe rú te Óeti pí tè pe rú ni na lùng ku ni ne} \), and \( \text{Te Óeti pí tè pe rú ni na lùng ku ni ne} \))

When \( \text{wé leng} \) is used in serial construction with \( \text{re} \) ‘go’ with the sense of ‘send’, the recipient is not a core argument. Here the non-core status of the goal of ‘go’ overrides the core status assigned to a recipient of the predicate \( \text{wé leng} \).

(99) \( Rópu \quad \text{ni}=\text{wé leng} \quad \text{te}=\text{te} \quad ke=\text{angku-\text{ni}=\text{ne}}. \)

book 1SG=get.F give 3SG.F.go-RED 3SG.NF=child-1SG.GEN=1SG.DAT

‘I sent a book to my child.’

Similar behaviour is found with other three-participant verbs or verbal expressions, such as \( \text{á re lolo lì} \) ‘exchange’, which takes an oblique recipient.

(100) \( \text{Ní tàng} \quad \text{ni}=\text{á} \quad \text{re} \quad \text{lolo} \quad \text{ni}=\text{li} \quad \text{Te Húele} \)

1SG bird 1SG=carry go exchange 1SG=do Sangke

‘I exchanged a bird with the Sangkes.’

With verbs of throwing things at goals, the basic verb \( \text{lú} \) ‘release, throw’ takes only two arguments, the agent and the theme thrown.

(101) \( \ldots \text{wúng} \quad \text{te}=\text{r-ú}. \)

stone 3PL=3PL-release

‘… they threw stones.’

In order to express the goal, a complex serialising construction is used, seen in (101), in which the oblique goal is marked with the serialisation \( \text{lú hí} \) ‘release’ + ‘hit’, following a clause headed only by \( \text{lú} \).
Wúng nì=lú=ko nì=lú hí naké.

‘I threw a stone at the dog.’

It is also possible for this same meaning to be expressed without a serial verb construction involving two instances of lú, but not with the verb lú alone. Thus (103) is grammatical, while (104) is not.

(103) Wúng nì lú hí naké.
(104) * wúng nì lú naké

More discussion of verbal predicates that inherently specify an instrument, and so do not require an intermediary-agent type instrument to appear with the normal instrumental marker =pa, is given in the following section.

5.4.5 Verbs with inherent instruments

A small set of verbs are semantically specified to require a means in order to be successfully carried out. In this case the instrument is not marked with =pa, and the ‘instrumental’ nominal appears immediately preverbally, as in the following sentence, in which te=Máwo pí-tè is the ‘instrument’.

(105) Nì te=Máwo pí-tè nì=li i li.

1SG 3PL=Mabo language-3PL.GEN 1SG=do be do

‘I’m speaking (in) the Skou language.’

These predicates do not require the instrumental NP to appear with the normal marker for instruments, =pa, when there is no theme present. When there is an explicit object, however, then the means must be marked as instrumental:

(106) Nì te=Máwo pí-tè=pa húhú nì=li i li.

1SG 3PL=Mabo language-3PL.GEN=INSTR story 1SG=do be do

‘I’m telling a story in the Skou language.’

(107) * nì te Máwo pí tè húhú nì li i li

(Good with the reading ‘I’m telling the story of the Skous’ language.’)

This restriction might simply reflect the fact that they are not instruments in the sense of being a physical object that is used to carry out an action. These predicate types are nonetheless remarkable for allowing three different preverbal NPs, though one of them, the instrumental NP, must be case marked for its semantic role in order to be present grammatically in the sentence. An example of a two-place verb that can take an instrument with the same morphosyntactic coding as pí in (106) above can be seen in (108), where anábi appears with the same =pa.

(108) Rí=ing a ke anábi=pa ke=lúe

wood=the 3SG.NF machete=INSTR 3SG.NF=chop

‘He cut the wood up with a machete.’

More examples of the use and syntactic status of the different coding strategies for instruments can be found in 11.6

5.5 Adjectives

Adjectives are an open class of words in Skou. They can be distinguished from verbs in that when they appear inside an NP to modify nouns they do not need to be in a relative clause.
When predicative, they do not require subject agreement (unless they have an inchoative interpretation). They can be distinguished from nouns by their inability to head an NP, to appear as the possessor of another noun, and the relics of a classification system that applies still most frequently when they are predicative, but also sometimes when they are NP-internal modifiers.

Examples of non-subject agreeing predicative adjectives have already been seen in 5.2. The fact that adjectives are not required to appear inside relative clauses can be adduced by the relative independence of the deictics and demonstratives from the presence of adjectives. In relative clauses the presence of a deictic is near-obligatory (see 8.3), and in many cases has little semantic content: the deictic is simply part of the list of structural requirements for a relative clause, and not an independent NP modifier. With adjectival modification, however, the presence of a deictic is not mandated by the presence of a modifying adjective, and when one is present is always carries full semantic weight, as can be seen in the following pairs of sentences, which contrast phrases with adjectives and verbs modifying nouns.

Adjectival modifier, morphological deictic

(109) ke=balèng máki=ing a
     3SG.NF=man big=the
     ‘the big man’

(110) ke=balèng máki
     3SG.NF=man big
     ‘a big man’

Relative clause modifier, morphological deictic

(111) ke=balèng yáng=ing a
     3SG.NF=man sick=the
     ‘a/the sick man’

(112) #/? ke=balèng yáng
     3SG.NF=man sick
     ‘a sick man’

The position of the adjective in the NP is also different to that of relative clauses. Although both modificational adjectives and modificational relative clause follow the noun that they modify, numerals may follow an adjective, but may not follow a relative clause (see 8.3.5). Examples can be seen in the following sentences; notes that the order Noun-Relative clause-Numeral, seen in (115), is ungrammatical regardless of the placement of =ing a.

Noun-Adjectival-Numeral

(113) te=balèng máki héngtong=ing a
     3PL=man big three=the
     ‘the three big men’

Noun-Numeral-Relative clause

(114) te=balèng héngtong yáng=ing a
     3PL=man three sick=the
     ‘three sick men’
These restrictions indicate that there are in fact two different structures involved; we may simply represent them templatically as shown in (109)/(113)' and (111)/(114)'.

NP: Noun Adjective Numeral Relative clause Demonstrative
(109)' / (113)' te=balèng máki (héngtong) =ing a
(111)' / (114)' te=balèng (héngtong) yáng=ing a

It is worth noting that the word class of adjectives is the only part in the language in which we can see overt and dedicated morphological evidence for the animate/inanimate classification system (see chapter 10 for further discussion). This is accomplished by the use of classificatory proclitics, similar to the verbal proclitics but of different source and with different forms, that attach to the front of the adjective; they may be found when the adjective is either predicative or attributive. Examples can be seen in the following sets, showing the plain adjective, and then the form used with animate nouns, and the form used with inanimate nouns.

<table>
<thead>
<tr>
<th>Plain</th>
<th>Animate</th>
<th>Inanimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>rong</td>
<td>bá=rong</td>
<td>ya=rong</td>
</tr>
<tr>
<td>náfeng</td>
<td>bá=nafeng</td>
<td>yá=náfeng</td>
</tr>
<tr>
<td>bí</td>
<td>bá=bí</td>
<td>yá=bí</td>
</tr>
</tbody>
</table>

‘old’

‘strong, hard’

‘empty, valueless, unsophisticated’

It is not, synchronically at least, completely obligatory to realise the classification system morphologically (synchronically at least): in many instances a speaker will omit the classificatory proclitic on an adjective, with little or no apparent change in sense or meaning. Further evidence for the idea that this classification system is being lost synchronically can be found in the presence of some unusually long (three-syllable, as opposed to the more normal two-syllable) adjectives that begin with the syllable ba-, such as bápáli ‘big, great’ and bamúa ‘true, real’. With these adjectives there is no variation in the presence or absence of the ba-, though these words are pragmatically restricted to apply to humans (the homonym máki ‘big’ is used with non-human reference; it is unrestricted, and may be used with human reference as well). This suggests strongly that they originally had the forms páli and muà respectively, and that an earlier class marker has become fused onto the root to yield the modern trisyllabic forms. There is also one adjective, yali ‘short’, which has a form that might suggest an initial frozen prefix ya-, possibly related to ya ‘thing’ and the inanimate class marker. Since this adjectival root is only disyllabic, a common root size in Skou, the case for this being diachronically multimorphemic is weak. Still, monosyllables are still the most common root type in Skou, so yali must be treated with suspicion.

The classification system is clearly made up of two morphemes, bá= for animates and the more optional, and more rarely attested, ya= for inanimates (we do not have to consider there to be a third choice, that involving an uncliticised verb, because it does not contrast in the same construction with the two overt morphemes). These are clearly etymologically related to the independent nominals bá ‘human, person’ and ya ‘thing, what’, though in their classificatory function we can see that the scope of the morphemes is somewhat different. While bá the free nominal can only refer to humans, it is clear that bá= the classificatory proclitic can refer to any animate referent, as is made clear by the following example:
bà= used with human reference

(117) Ke=ing a  bà=ikáféng.
3SG.NF=the  ANIM=tall
‘He’s tall.’
(also grammatical: Ke ing a ikáféng)

bà= used with non-human, animate reference

(118) Í=ing a  bà=ikáféng.
snake=the  ANIM=tall
‘The snake’s really long.’
(also grammatical: Í ing a ikáféng)

The use of ya= with inanimate reference is shown below. Ya= cannot be used with animate modified nouns, whether they are human or non-human.

ya= used with inanimate reference

(119) Rítóe=ing a  ya=ikáféng.
tree=the  INAN=tall
‘The tree’s tall.’
(also grammatical: Rítóe ing a ikáféng, with no animacy marking)

The following three examples, analogous to (117) - (119), show that the choice of bà= and ya= on a predicative adjective is not context-dependent, but is set lexically. Using ya= with an animate argument, or bà= with an inanimate one, is ungrammatical.

(120) * ke ing a ya ikáféng
(121) * í ing a ya ikáféng
(122) * rítóe ing a bà ikáféng

This classificatory use of proclitics to divide the world into animate and inanimate groups is only found with adjectives, though the application of the gender system, and the way it is marked on verbs, also reveals this same division. There is evidence, from preferences in coding predicative adjectives, that a larger system once operated. This is discussed in 10.7.

Another piece of morphology that is unique to adjectives is the semi-frozen suffix -fa, which is not largely productive synchronically, but can only appear on adjectives. Examples of its use can be seen in the following sentences.

(123) Móe  ni=láng=ko  atáléle(-fa).
fish  1SG=chop.F=OBV  small-'ADJ'
‘I chopped the fish up into small pieces.’

(124) Móe=wi a atáléle  pe=p-áng.
fish=this  small  3SG.F=3SG.F-chop.F
‘She chopped the fish up into small pieces.’

It might be that the use of fa with adjectives, indicating perhaps a small clause function, is related to the bound verb root fa ‘use, employ’ – see 13.8. More discussion of this affix can be found in the next section.

5.6 Adverbs

It is not simple to distinguish adverbs from adjectives, and any such differentiation relies more on diachronic than synchronic methodology. The -fa suffix/formative is particularly prominent with modifiers that appear in ‘adverbial’ functions. The analytical problem is that the -fa, while
optional in some environments (such as those detailed in the previous section), is obligatory on most lexical items that can, because of their semantic content, be used as predicate-level adverbial modifiers.

With these predicates the suffix must be thought of synchronically as being truly frozen and no longer productive. Examples of this sort of word include kúkúfa ‘quick’, láláfa ‘slow, repeated’, éfa ‘ripe’ (clearly related to è ‘cooked, burned’), fáfà ‘open’, péfa ‘smoked (meat, fish)’, bòengfa ‘light’, háháfa ‘slowly, carefully’, and rírífa ‘short’, for which the unaffixed forms *kúku, *lála, *bòeng and *háha are not found. Some other adjectives can appear with or without the suffix, with no apparent change in meaning: these include predicates such as (h)úe, úefa ‘old’. These alternations do not correspond to the discourse function of the lexical item in contemporary Skou, but simply reflect the synchronic detritus of what must have been a productive process in pre-Skou.

Adverbs typically appear adjacent to or inside the verb phrase, in the same positions that instruments may appear (see 3.13), most felicitously preverbally (as is also the case with instruments). Examples of adverbs appearing immediately preverbally (really pre-predicate, as an adverb may not intrude between an adjunct nominal and a verb) in both monovalent and bivalent clauses, and also an example of an adverb appearing before the object in a bivalent clause, are shown in (125) - (127).

(125) Pe=angku=ing a kúkúfa pe=w-a tà e tue. 3SG.F=child=the fast 3SG.F=3SG.F-walk running 3SG.F.be 3SG.F.do ‘The girl is running quickly.’

(126) Pe=angku naké náfeng pe=w-é. 3SG.F=child dog strong(ly) 3SG.F=3SG.F-get ‘The girl held the dog firmly.’

(127) Pe=angku náfeng naké pe=w-é. 3SG.F=child strong(ly) dog 3SG.F=3SG.F-get ‘The girl held the dog firmly.’

A typical way to code what would be marked with adverbs in many languages is to use a small clause resultative construction in Skou. In the following sentence the small clause yong atáléle is marking the result of the eating (‘(only) a little food’), and is preferred to an overt adverbial coding, as in (129) (which is also grammatical, but less frequently heard where a small clause result coding option is available).

(128) Nì=k-ang=ko yong atáléle. 1SG=1SG-eat=OBV food small ‘I only eat a little.’ (literally, ‘I eat such that the food is little.’)

(129) Atáléle nì=k-ang. small 1SG=1SG-eat ‘I only eat a little.’

Note that the small-clause construction in (128) cannot be interpreted as a postverbal adverbial. Evidence against this analysis comes from the fact that the first verb is marked with the switch reference clitic =ko, clearly signalling the end of one clause. Further support for the biclausal analysis can be seen when the subject of the small clause is animate, or when the small clause has an inchoative sense. In these cases the adjective/adverb must be marked with proclitic
agreement markers (see 7.2.1), an option which is never possible for a word truly functioning adverbially in a preverbal position, as seen in (132).

(130)  \textit{Ke=k-a tå=ko} \textit{tångé ná ke=pi.}  \\
3SG.NF=3SG.NF-walk running=OBV leg tired 3SG.NF=tire  \\
‘He ran until his legs were tired.’

(131)  \textit{Ke=k-a tå=ko} \textit{ke=kákáfa.}  \\
3SG.NF=3SG.NF-walk running=OBV 3SG.NF=fast  \\
‘He ran such that he was fast.’

(132)  * \textit{ke=kákáfa ke=k-a tå}  \\
3SG.NF=fast 3SG.NF=3SG.NF-walk running  \\
‘He ran quickly.’

Many of the words often considered ‘adverbial’, in that they are clausal adjuncts without clearly referring to any particular nominal with a defined semantic role, are not included in the category ‘adverb’ here. Lexical or phrasal items denoting time expressions are thus treated as a separate word class, since their behaviour is distinct to that of the words described in this section 5.8 contains a representative list of time expressions.

Another point of note is the fact that there are several other uses of the ‘adverbialising’ morpheme *fa. In addition to the (no longer productive) adverbialising functions that have been described here, it is highly likely that the clitic =pa, used to mark an instrumental noun phrase and to show same-subject switch reference between clauses (approximately; see 19.5) is historically related to the same morpheme. In this way we attest a range of functions and range of degrees of grammaticalisation of the one morpheme from adverbial to instrumental, and then as a clause-linking device.

There are additional constructions that would be translated into English or Indonesian as adverbials, such as ‘quickly’ or ‘suddenly’. A simple example is shown in (133).

(133)  \textit{Nì kákáfa nì=re-re fue a li.}  \\
1SG quick 1SG-go-RED that do  \\
‘I’m going to go there quickly.’

An alternative way to present the same semantic combination is to split the two predicates, the verbal and adverbial, over two clauses.

(134)  \textit{Nì=re-re fue a li=pa kákáfa nì=li..}  \\
1SG-go-RED that do=INSTR quick 1SG=do  \\
‘I’m going to go there, (and) quickly.’

5.7 Numerals
The counting system of Skou shows a series of bases, most of which revolve around multiples of four. The first base is reached at \textit{ná pang} ‘five’, which is used to form the numbers up to \textit{ná hípa} ‘eight’, but not beyond. Numbers from nine to eleven are formed on the basis of \textit{ná hípa} plus additions, but then \textit{hang pá} ‘twelve’ appears as a new base, rather than running up to the logical ‘8+7’, ‘2 x 8’. The numbers above twelve are not used very commonly – a glance at the forms in table xx91 shows the cumbersomeness of the Skou forms, compared to the Indonesian numerals. The limit of the Skou counting system is \textit{mabírí} ‘twenty-four’: attempts to elicit ‘twenty-five’ (and other higher numbers), with forms such as *\textit{mabírí pa áling} ‘twenty-four and one’ or *\textit{mabírí hi} ‘twenty-four one’ (formed on the basis of the formation of ‘six’ from ‘five’
by the putative formative -hì), *mábíríhì ‘twenty-four-one’, or even less likely forms like *hangpà pa hangpà pa áling ‘twelve and twelve and one’, or *hangpà pa náhipa pa nápang ‘twelve and eight and five’, were all solidly rejected. Attempts to multiply mábírí were also not successful, and the suffering informants explained to me that there was no need to count past twenty-four (if even that far). I do not believe that this is a language death phenomenon, as even speakers who fluently use the language for the majority of their interactions each day insist that it is limited to twenty four. Given that the only likelihood of counting past twenty or so comes with people, and that they will always be split into kin groups or clan groups, the limitation has traditionally of little practical consequence. In the modern world people who deal with larger numbers use Papuan Malay terms.

Perhaps the most surprising feature of the Skou counting system is the composite numeral nápang héngtong ‘seven’, which is composed of nápang ‘five’ and héngtong ‘three’. Skou people, when questioned, are quite clear on the meanings of the individual parts of the compound, but also clear that the compound refers to ‘seven’, and not ‘eight’ (for which the term náhipa is used). A possible explanation for this mathematical oddity is given below.

<table>
<thead>
<tr>
<th>Skou</th>
<th>English</th>
<th>Papuan Malay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 áling</td>
<td>1 one</td>
<td>satu</td>
</tr>
<tr>
<td>2 hìngtung</td>
<td>2 two</td>
<td>dua</td>
</tr>
<tr>
<td>3 hìngtong</td>
<td>3 three</td>
<td>tiga</td>
</tr>
<tr>
<td>4 nongpong</td>
<td>4 four</td>
<td>ampa(t)</td>
</tr>
<tr>
<td>5 nápang</td>
<td>5 five</td>
<td>lima</td>
</tr>
<tr>
<td>6 nápánghì</td>
<td>5+n</td>
<td>anam</td>
</tr>
<tr>
<td>7 nápang hìngtong</td>
<td>5+3</td>
<td>tuju(h)</td>
</tr>
<tr>
<td>8 náhipa</td>
<td>8 eight</td>
<td>delapan</td>
</tr>
<tr>
<td>9 náhipa pa álìng</td>
<td>8+1</td>
<td>sambilan</td>
</tr>
<tr>
<td>10 náhipa pa hìngtung</td>
<td>8+2</td>
<td>sepulu(h)</td>
</tr>
<tr>
<td>11 náhipa pa hìngtong</td>
<td>8+3</td>
<td>seb(e)las</td>
</tr>
<tr>
<td>12 hangpà</td>
<td>12 twelve</td>
<td>duab(e)las</td>
</tr>
<tr>
<td>13 hangpà pa álìng</td>
<td>12+1 thirteen</td>
<td>tigab(e)las</td>
</tr>
<tr>
<td>14 hangpà pa hìngtung</td>
<td>12+2</td>
<td>ampab(e)las</td>
</tr>
<tr>
<td>15 hangpà pa hìngtong</td>
<td>12+3</td>
<td>limab(e)las</td>
</tr>
<tr>
<td>16 hangpà pa nongpong</td>
<td>12+4</td>
<td>anamb(e)las</td>
</tr>
<tr>
<td>17 hangpà pa nápang</td>
<td>12+5 seventeen</td>
<td>tujub(e)las</td>
</tr>
<tr>
<td>18 hangpà pa nápang pa álìng</td>
<td>12+5+1</td>
<td>d(e)lapamb(e)las</td>
</tr>
<tr>
<td>19 hangpà pa nápang pa hìngtong</td>
<td>12+5+3</td>
<td>sambilamb(e)las</td>
</tr>
<tr>
<td>20 hangpà pa náhipa</td>
<td>12+8 twenty</td>
<td>duapulu(h)</td>
</tr>
<tr>
<td>21 hangpà pa náhipa pa álìng</td>
<td>12+8+1</td>
<td>duapulu(h) satu</td>
</tr>
<tr>
<td>22 hangpà pa náhipa pa hìngtung</td>
<td>12+8+2</td>
<td>duapulu(h) dua</td>
</tr>
<tr>
<td>23 hangpà pa náhipa pa hìngtong</td>
<td>12+8+3</td>
<td>duapulu(h) tiga</td>
</tr>
<tr>
<td>24 mábírí</td>
<td>24 twenty four</td>
<td>duapulu(h) ampa(t)</td>
</tr>
<tr>
<td>25+ –</td>
<td>– twenty five</td>
<td>duapulu(h) lima</td>
</tr>
</tbody>
</table>

(etc.)

Table 91. The Skou numerals (exhaustive)
We can represent the system behind the Skou numeral system as shown in table xx92. The change in counting at each step up is shown in bold, and the start of a new column. Thus the first counting increment is up to five, which forms the base for the next, short increment, terminating at eight. From eight we can count with this base, náhipa, until twelve, hangpà, at which point the counting up to 24 uses a base of twelve.

<table>
<thead>
<tr>
<th>Increment</th>
<th>Base-5</th>
<th>Base-8</th>
<th>Base-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5+1</td>
<td>8+1</td>
<td>12+1</td>
</tr>
<tr>
<td>2</td>
<td>‘5+3’</td>
<td>8+2</td>
<td>12+2</td>
</tr>
<tr>
<td>3</td>
<td>=8</td>
<td>8+3</td>
<td>12+3</td>
</tr>
<tr>
<td>4</td>
<td>=12</td>
<td></td>
<td>12+4</td>
</tr>
<tr>
<td>=5</td>
<td></td>
<td></td>
<td>12+5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12+5+1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12+5+’3’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12+8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12+8+1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12+8+2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12+8+3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>=24</td>
</tr>
</tbody>
</table>

These numbers are those that belong to the class and are used with fixed values, though the higher numbers, hangpà ‘twelve’, and mabírí ‘twenty-four’, are often somewhat confused. Many, particularly younger, speakers confuse hangpà with ‘ten’, a result of interference from their knowledge of Malay or Indonesian, which has a base-ten system, and reduced fluency with their own base-12. Mabírí is rarely used in practice, and the fact that it is not used in any bases, but is rather an endpoint, means that it is not frequently encountered even in the speech of the older, more fluent, members of the community.

In addition to these numbers there is also nawò ‘many, all’. This word, although synchronically felt to be a single unit by Skou speakers, is clearly made up of the morphemes na ‘flesh (of a fruit)’ and =wò ‘emphatic clitic’, does not have a fixed numerical value. It behaves as a numeral, even though its nearly homonymous partner fátà does not (see 16.3 for a discussion of the unique behavioural properties of fátà).

Many of the numerals in Skou are not cognate with those found in Skou’s eastern relatives (for the relationship between these languages, see 1.4 and Donohue 2002b). The typical system from a Skou-family language east of the border can be seen in the following set of numerals from Leitre and Dusur; Wutung shows a system that is more in line with Skou’s. (The Serra Hills and Piore River languages, as well as I’saka, all more distantly related to Skou, have base-2 systems, a pattern which matches the areal patterns shown by their Kwomtari and Torricelli neighbours inland. The use of base-4 systems seems to be a Western Skou family innovation; the motivation for this is not known, since there are no other languages with base-4 languages in the area.)
Table 93. Numerals in closely related languages

<table>
<thead>
<tr>
<th></th>
<th>Dusur</th>
<th>Dumo</th>
<th>Leitre</th>
<th>Wutung</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>opa</td>
<td>oFa</td>
<td>oFa</td>
<td>oFa</td>
</tr>
<tr>
<td>2</td>
<td>yumono</td>
<td>yumOno</td>
<td>yumonu</td>
<td>hnyOmO</td>
</tr>
<tr>
<td>3</td>
<td>édu</td>
<td>enu</td>
<td>ino</td>
<td>heno</td>
</tr>
<tr>
<td>4</td>
<td>noO</td>
<td>noO</td>
<td>noO</td>
<td>noO</td>
</tr>
<tr>
<td>5</td>
<td>no mIø o</td>
<td>no mIø oFa</td>
<td>no kà be</td>
<td>noI</td>
</tr>
<tr>
<td>6</td>
<td>no mIø yumono</td>
<td>no mIø yumOno</td>
<td>no kà u</td>
<td>nOtIó</td>
</tr>
<tr>
<td>7</td>
<td>no mIø édu</td>
<td>no mIø enu</td>
<td>no kà yumonu</td>
<td>nOtIó nyû</td>
</tr>
<tr>
<td>8</td>
<td>buyø</td>
<td>nuyu</td>
<td>nOo kà ino</td>
<td>nOtIó heno</td>
</tr>
<tr>
<td>24</td>
<td>buBI</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

The proto-Skou system was probably base-four, as is reflected in Dusur, and that there has been a shift towards a typologically more widespread base-5 or base-10 system, such as is found in the genetically unrelated languages to the west (Tobati, Sentani), which can be shown to have had a social and linguistic influence on Skou (see chapter 1). This offers some explanation for the odd form for ‘seven’ in Skou, morphologically made up of ‘five’ and ‘three’. If the form that is now used with the sense of ‘five’, nápang, was originally a form meaning ‘four’, then the use of nápang hêngtong ‘5+3’ to mean ‘seven’ makes sense, since it would have originally been composed of ‘4+3’, following the patterns seen in the related languages. The cognacy of nápang with the numerals in the other languages is doubtful at best, but the systemic similarities are too great to be ignored.

5.8 Time expressions

Time expressions appear to belong to a different lexical category to other words by virtue of their phrase structural possibilities. Some time expressions are themselves composed of several words, and so represent phrasal categories.

Some of the more commonly encountered time expressions are shown in table xx94.

Table 94. Time expressions

<table>
<thead>
<tr>
<th></th>
<th>translation</th>
<th>literal gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>rang</td>
<td>‘day, today’</td>
<td>sun</td>
</tr>
<tr>
<td>rangpang</td>
<td>‘night’</td>
<td>sun+night</td>
</tr>
<tr>
<td>tang</td>
<td>‘last night’</td>
<td></td>
</tr>
<tr>
<td>rangleng</td>
<td>‘afternoon’</td>
<td>sun+afternoon</td>
</tr>
<tr>
<td>fetànghapa</td>
<td>‘morning’</td>
<td></td>
</tr>
<tr>
<td>ung, ung a</td>
<td>‘now’</td>
<td></td>
</tr>
<tr>
<td>lópa</td>
<td>‘earlier, in the past (any length of time)’</td>
<td></td>
</tr>
<tr>
<td>ké</td>
<td>‘month’</td>
<td>moon</td>
</tr>
<tr>
<td>féng langro</td>
<td>‘season with eastern winds, roughly’</td>
<td>March to October’</td>
</tr>
<tr>
<td>fu wa ro</td>
<td>‘season with western winds, heavy waves at sea, approximately’</td>
<td>November to February’</td>
</tr>
<tr>
<td>félangro</td>
<td>‘year’</td>
<td>tomorrow+?</td>
</tr>
</tbody>
</table>
The time expressions are normally found unmarked, as the first element of an NP, as in (135). It is also possible to use pronominal clitics with them in order to show inception, a property that they share with adjectives. This is shown in (136).

(135) a. Hòe ne=n-ang-nang ti.
    sago 1PL=1PL-eat-RED 1PL.do
    ‘We want to eat sago.’

    b. Rángleng hòe ne=n-ang-nang ti.
    afternoon sago 1PL=1PL-eat-RED 1PL.do
    ‘We want to eat sago (this) afternoon.’

(136) Pe=rángpang-pang=pa ne=moe-moe pá ti.
    3SG.F=night-RED=INSTR 1PL=return-RED house 1PL.do
    ‘When it’s getting on for night, then we want to go home.’

Unlike adjectives there is no question of them appearing with the light verb li, or inside an NP, so the inceptive use of agreement clitics must be regarded as a shared property based on their similar gradable semantic states, rather than being a morphosyntactic fact about word classes.

5.9 Other minor word classes

We have discussed the major word classes of nouns, verbs, adjectives (including the subclasses found in these groups), as well as the closed group of numerals. Other minor word classes, which may be uniquely defined on morphosyntactic grounds, include:

- pronouns

Chapter 6
• place names Section 8.7
• deictics Chapter 4
• interrogatives (epistememes) Section 18.2
• the quantifier fātà Section 16.3

Most of these different minor word classes are described in separate sections in other chapters of this grammar; the bound forms of pronouns are the subject of chapter 6, but also receive more than passing mention in chapters 7 and 12. The place names that were more commonly used at the time of writing are given in 8.7. While the set of place names does represent a (nearly-)infinite set in theory, in practise only a small number of them achieve currency in the community. Deictics, mostly bound, serve a range of functions, and are described in chapter 4. The interrogatives are discussed in chapter 6 and 18.2, and also, as far as they affect verbal agreement, in 7.2. The only discussion here is that concerning the quantifier fātà ‘all’.

Unlike the numerals (see 5.7), the quantifier has the unusual property of appearing outside the NP that it serves to quantify. In order to do this without ambiguity in clauses with more than one NP, there must be strict conditions on the restriction of the quantifier, and these are discussed in 16.3.

5.10 Summary: word classes in Skou

In this chapter we have seen that there are morphological and syntactic reasons to establish different word classes in Skou, and that these reasons do not need to appeal to any universalist tendencies observed in other languages, but are based on language-internal evidence. In addition to the (cross-linguistically widely attested) open classes of noun, verb and adjective, and various subdivisions within the first two of these, there are also a range of smaller, less productive word classes. Adverbs are a small class, but whether they are better thought of as being a small, but open class, or a small closed class of words is a moot point.

Other word classes can less problematically be described as closed word classes: these include the pronouns, to be discussed in more detail in the following chapter, demonstratives and other ‘semi-bound’ markers of pragmatic salience of one sort or another, and numerals. Interestingly the numerals do not combine indefinitely, and are quite definitely restricted to counting up to twenty-four, and not beyond. This is despite having the combinatorial mechanisms and the basic units necessary to count as far as 575 (24 x 24, - 1; that is, 23 x 24, + 23), or even without multiplication certainly 47 (24 + 23). The varied history of the numerals attests to their regrammaticalisation, and the almost total proficiency of Skou speakers in Papuan Malay as a second language means that there are linguistics resources available to them to express themselves numerically above twenty-four. In pre-Malay times they presumably had other means at their disposal for expressing the products of counting inside their own group. The common proficiency that Skou speakers continue to display in neighbouring languages that possess open counting systems, such as are found in Tobati, might have satisfied this need.
6 Pronouns

The categories of pronouns are not complicated in Skou, in the sense that there is not a large number of completely distinct pronominal forms differentiating syntactic or pragmatic functions (such as *I* and *me* in English, which share no phonological similarities). On the other hand there are a number of distinct paradigms of bound pronominal forms, phonologically only minimally distinct from each other and each used in morphosyntactically restricted environments. Interrogative pronouns are discussed in chapter 18, while the purely personal pronouns are the subject of this chapter.

6.1 Pronominal sets in Skou

The several pronoun sets in Skou are built around a core set of distinctions present only in the independent forms. There is plentiful evidence that in the recent past there was only a simple system of free pronouns, and somewhat related verbal prefixes, but that in recent times there has been a period of intense grammaticalisation, resulting in the current profusion of pronominal sets.

Primary among the different sets of pronouns, and showing the greatest number of distinctions, are the free pronouns. Since there are more category distinctions in the free pronouns, and since the other pronoun sets are plainly derived from them in very transparent ways, it makes sense to begin a description of the Skou pronouns with the free forms. Following this, the various bound pronominal sets will be described in 6.3, and then mention of non-personal pronouns in 6.4.

6.2 Free pronouns

The free pronominals distinguish singular, dual and plural numbers, have three distinct persons, and show gender distinctions, though the degree to which gender is differentiated varies from one number to another in the paradigm. Gender distinctions are limited to third person pronouns in the singular, and in all persons in the dual; gender is not marked at all in the plural. Additionally, the first person shows an inclusive/exclusive distinction in the dual. While all fourteen forms serve as free pronouns, the duals are clearly derived from elements found in the singular and plural pronouns, as will be discussed in this section. The complete set of pronouns is shown in table xx95.
Some unusual points present themselves concerning the arrangement of these pronominal forms:

- there is no gender marking in the plural;
- gender is marked in the third person only for singular pronouns;
- gender is marked on all persons in the duals, except the first person inclusive;
- the inclusive/exclusive distinction is only marked on the first person in the dual.

The first of these points, the lack of gender in plural pronouns, is not surprising, nor the second, the fact that 1SG and 2SG pronouns do not mark gender. So far, the description of the distribution of gender matches that in most western European languages, such as English, perfectly. The fact that, despite the lack of gender marking in first or second persons elsewhere, and the lack of any gender marking in the plural, all pronouns other than the 1DU.IN show gender distinctions is surprising from a typological perspective, though not irretrievably so (see Schlessinger and Plank 1996 for a survey of unexpected patterns involving gender marking).

The lack of an inclusive/exclusive distinction in the plural is also unexpected. The following ‘universals’ are listed as applying to the question at hand (Plank: Universals Archive).

Universal Number 578

*If* a dual and a plural are distinguished in the 1<sup>st</sup> person exclusive form of a pronoun, *then* they are also distinguished in the inclusive.

Universal Number 716

*If* any further grammatical oppositions are expressed in forms marked for dual number, *then* the same oppositions will also be expressed in forms marked for plural number (Uspensky 1968: 9, cited on the Universals Archives).

The pronouns presented in table xx95 are not marked for any case or pragmatic function, and so can appear in any syntactic or pragmatic role called for. This can be seen in the following four sentences, which show the same pronoun appearing as A, S, P and subject of a nominal clause.

Pronoun as A

(1) **Pe**  nì  pe=fu.

3SG.F  1SG  3SG.F=see.F

‘She saw me.’
Pronoun as S

(2) **Pe**  
\[pe=w-a \text{ tà.}\]  
3SG.F 3SG.F=3SG.F-walk running  
‘She is running.’

Pronoun as P

(3) **Ke=naké=ing a pe kóeng ke=ká.**  
3SG.NF=dog=that 3SG.F tooth 3SG.NF=hit  
‘That dog bit her.’

Pronoun as subject of nominal clause

(4) **Pe**  
\[pe=\text{ueme-}nì=ne.\]  
3SG.NF 3SG.NF=woman-1SG.GEN=1SG.DAT  
‘She’s my wife.’

The dual forms are clearly formed from combinations of the singular and the plural pronouns, with the addition of a formative -na-, independently attested in disjunctive lists of exactly two nominals with the sense ‘or’ (see chapter 19), and used with the sense of ‘dual’ here, though most likely related to the conjunction ‘and, or, with, other alternative’.

(5) **e-na-pe**  
\[2\text{PL-}DUAL-3SG.F\]  
‘you two females’

The fact that these pronominal formatives, such as e and pe in (5) above, can combine, without irreconcilable clashes of features, suggests that the ‘plural’ set is not in fact explicitly marked as plural, but rather is simply not marked as singular: it is underspecified for number. The pe form simply bears the feature [feminine], with no underlying specification for singular or plural (or even third person). The following features hold for the pronominal formatives:

<table>
<thead>
<tr>
<th>Table 96. Pronominal features</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERS</td>
</tr>
<tr>
<td>nì</td>
</tr>
<tr>
<td>mê</td>
</tr>
<tr>
<td>ke</td>
</tr>
<tr>
<td>pe</td>
</tr>
<tr>
<td>ne</td>
</tr>
<tr>
<td>e</td>
</tr>
<tr>
<td>te</td>
</tr>
<tr>
<td>-na-</td>
</tr>
</tbody>
</table>

This set of features would allow the combinations seen in the duals to take place freely, without leading to parsing violations. The combination of elements that make up the dual pronoun in (5) is as shown below, with no clash of features in the combination.

<table>
<thead>
<tr>
<th>Table 97. Feature composition for the 2DU.F pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERS</td>
</tr>
<tr>
<td>-na-</td>
</tr>
<tr>
<td>e-</td>
</tr>
<tr>
<td>-pe</td>
</tr>
</tbody>
</table>
Compare this seamless fit with the rather unwieldy feature clash that would occur if we were to use more traditional, fully specified feature categories with each of these morphemes (feature clashes have been shaded to indicate the problems with this analysis).

Table 98. Attempt at feature composition without underspecification

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>F</th>
<th>SG</th>
<th>DU</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>-na-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>-pe</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>e-na-pe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The feature system proposed in table xx96 will also allow for the fact that the NF forms are used when there is a mix of masculine and feminine items that must all be summed up with one pronominal form. When all the referents are feminine, the feminine forms may be used, but when it is inappropriate to attribute feminine gender to all elements of the entity the unmarked gender forms are used. Compare, for instance, the grammatical use of unmarked gender in (6) with the ungrammatical parsing of feminine gender on the pronoun to summarise the same mix of male and female referents in (7).

(6) *Ke =angku-ni=ne, pe =angku-ni=ne, 3SG.NF-child-1SG.GEN=1SG.DAT 3SG.F-child-1SG.GEN=1SG.DAT
te-na-ke te=te=loeng. 3PL-DUAL-3SG.NF 3PL=3PL.go=finish
'My son and my daughter, they have both left.'

(7) *ke angku ni ne, pe angku ni ne, tenape te te loeng

Keeping in mind the feature categories shown in table xx96, more appropriate than those used in table 98xx, I shall gloss simply with PL to indicate the nonsingular category, either two or more than two, in the prime pronouns, NF to indicate ungendered (specifically, not feminine), and 3SG to indicate unmarked number (specifically, not first or second person).

The fact that the more general plural forms can be used in place of the morphologically more highly specified dual forms is taken to reflect not an incompatibility of the glosses with the functions of the pronouns, but rather a realisation of the specific/generic pattern of parallelism in discourse that is common in Skou. The following textual extract (lines 6-7 from the text Hòe from appendix 4) show the plural forms used as a general non-singular, even when the reference is clearly to only two referents. Here we can hypothesise that the plural pronouns serve as the more generic version of the nonsingular pronominal sets, while the duals are highly marked not just morphologically, but also in terms of their usage.

(8) *tenake te hòe-pa, te=te hòe-pa, ...
3DU.NF 3PL.go sago-water 3PL=3PL.go sago-water
'the two of them go to the sago swamps, they go to the sago swamps, and …'

Here the second reference to the subjects is by regular bound clitic, and there is only a singular: nonsingular distinction maintained for these bound forms (as discussed in the following section). This extract counts as an instance of the generic form serving for the dual, since in the
first clause the dual pronoun is used in place of a more generic nonsingular pronominal clitic on the verb. There is no grammatical reason why the whole extract presented above could not have been uttered as shown in (9).

(9)  … tenake te hòe-pa, tenake te hòe-pa, …
     3DU.NF 3PL.go sago-water 3DU.NF 3PL.go sago-water
‘the two of them go to the sago swamps, they go to the sago swamps, and …’

In (9) the subject has been coded with explicitly dual number marked on both verbs, but this is not the option chosen by the speaker in the attested (8), nor is it the preferred coding option when presented to speakers. Clearly marking for dual number is not as strongly integrated into the agreement system, even where it is allowed, and stylistically it is not the preferred option. One early use of a dual pronoun, to establish the dual reference, is then followed by a more general use of the generic nonsingular forms.

Another extract (from Te bà pilang te ti e húhú: lines 10-12) shows the same pattern of initial use of a dual pronoun, followed by subsequent marking simply with the generic nonsingular.

(10) … anake moeng=moeng=ing a, ke=ing a=pa húhú
     1DU sit-RED=the 3SG.NF=the=INSTR story
     ne=ti ne-ne. Húhú roro=pa ne=ti ne-ne.
     1PL=1PL.do 1PL.be-RED story quiet=INSTR 1PL=1PL.do 1PL.be-RED
‘… we’d be sitting down together, I’d talk with him. We’d just chat quietly.’

While there are three numbers distinguished in free pronouns, only a two-way distinction is made in the bound forms, and this is another reason to suppose that the pronouns glossed as ‘plural’ are in fact a more generic nonsingular. This is discussed in the following section.

6.3 Bound Pronominals

The other pronominal sets in Skou are all bound, either prefix, clitic or suffix. In no case do they distinguish dual from plural; only a contrast between singular and nonsingular is marked. This additionally means that gender is only marked in the third person singular, since no plural forms show gender, nor do first and second person in the singular. All but the verbal prefixes are transparently derived from the free pronouns, with some regular phonological changes:

- The dative pronouns uniformly display the vowel [e], whereas the prime free pronouns show both (according to the person and number encoded) [e] and the high vowel [i];
- The genitive pronouns all appear with a falling pitch; the only exception to this is the 3SG.NF, which occurs with a high pitch. This is not morphologically irregular, as falling pitch cannot occur with a [+high] consonant – see 2.4.1.
- Nominal clitics are identical in form to the prime pronouns.
- The verbal clitics all show (optionally) reduced vowels, except for the 1SG and 2SG forms. Thus 3SG.NF is heard as [pe] or [pa]. In this description they are invariently written with an e: pe=, te=, etc.
- The verbal prefixes are the pronominal form that is most divergent from the free pronouns. In most cases they represent simply the initial consonant of the free pronoun, but the 3PL and 1SG display features not seen in modern Skou – the variation between Ø, k and n in the 1SG forms reflect irregular developments from
Pre-proto-Skou *ni ‘1SG’, and the velar allomorph at least cannot be derived modern Skou ni. Furthermore, the 3PL shows a conjugation split which comparative evidence suggests was present in proto-Skou. There is, however, one use of prefixes that is not derivable from the free forms, that being the use of the superficially 2SG m-V prefix as an interrogative marker – see 7.3.4.

It is altogether plausible to interpret the strong formal similarities between the free form pronouns and the dative and genitive forms as involving, at least historically, a grammatical morpheme (which is, synchronically, perhaps only a formative, part of a non-productive paradigm-like pattern). We can account for these data by assuming, following 2.3.1.8, that the genitive pronouns are formed by the addition of a morpheme (‘formative’), ‘genitive’, [\|], and the dative set if formed by the addition of a frozen dative morpheme, ‘dative’, -e, [\| – [. The combination of the first person singular pronoun and the dative formative is shown in (11), from (36) in chapter 2. We can see both the absence of a marked tone melody, and the overwriting of the lexical vowel as well.

\[
\begin{align*}
(11) & \quad \text{n} \quad \text{i} \quad \varepsilon \quad n \quad \varepsilon \\
\sigma & \quad \downarrow \quad + \quad \begin{array}{c}
\phi
\end{array} \quad \rightarrow \quad \sigma
\end{align*}
\]

\[
\begin{array}{cccc}
\sigma & \quad \downarrow \quad + \quad \begin{array}{c}
\phi
\end{array} \quad \rightarrow \quad \sigma
\end{array}
\]

‘1SG’ [DATIVE]

The different bound pronouns are shown in table xx99. Most of the paradigmatic sets bear obvious resemblances to the free pronouns, with complications.

<table>
<thead>
<tr>
<th></th>
<th>dative</th>
<th>genitive</th>
<th>N(P) clitic</th>
<th>V clitic</th>
<th>prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>ne</td>
<td>nì</td>
<td>nì</td>
<td>nì</td>
<td>Ø-, k-, n-</td>
</tr>
<tr>
<td>2SG</td>
<td>me</td>
<td>mè</td>
<td>mè</td>
<td>mè</td>
<td>m-</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>ke</td>
<td>ké</td>
<td>ke, kə</td>
<td>kə</td>
<td>k-</td>
</tr>
<tr>
<td>3SG.F</td>
<td>pe</td>
<td>pè</td>
<td>pe, pə</td>
<td>pə</td>
<td>p-</td>
</tr>
<tr>
<td>1NSG</td>
<td>ne</td>
<td>nè</td>
<td>nè, nə</td>
<td>nə</td>
<td>n-</td>
</tr>
<tr>
<td>2NSG</td>
<td>e</td>
<td>è</td>
<td>e, ə</td>
<td>ə</td>
<td>Ø-</td>
</tr>
<tr>
<td>3NSG</td>
<td>te</td>
<td>tè</td>
<td>te, tə</td>
<td>tə</td>
<td>t-, y-</td>
</tr>
</tbody>
</table>

We have already seen that the free pronouns can occur in any syntactic position, serving as subjects, objects, or obliques. The different sets of bound pronouns are used in the following ways:

dative obligatorily suffixed to inalienable nouns (see 5.3, 9.3); with other nouns, it is the second element of possession as an enclitic.
genitive first suffixed element of possession in all alienable possessive; second element in inalienable possession, following a dative.
the genitive+dative morphemes together also serve to mark beneficiary. In some cases (see 9.4.1) the genitive alone may appear. The genitive may be occasionally used with the prominence marker =a to indicate an emphatic pronominal argument, or a salient P in a postverbal position.

N(P) clitic used to specify the gender identity of a third person human nouns as a proclitic, or to summarise the person/number/gender information for an ergative NP.

V clitic obligatorily used with all verbal predicates, adjunct nominal predicates or with inchoative adjectival predicates (inchoative nominal predicates require a light verb, which takes the clitic).

prefix prefixal agreement marker on some (most) verbs, fuses with an initial consonant if present to yield irregular conjugations. See 7.2.2.

The different pronominal forms and functions shown above are described in the sections that follow. The features which we established for the free pronouns are not entirely transferable to the bound pronouns, because of a change in the reference of the third person markers for some inanimate referents, and the particular use of the erstwhile 2SG m- prefix in interrogative clauses.

6.3.1 Genitive and Dative pronouns

The genitive and dative pronominals are most frequently found together, with only occasional exceptions arising that see the genitive without the dative, or the dative without the genitive. When used together they allow for the expression of possession and are one of the means of coding a beneficiary in a clause.

Possession and the beneficiary both show several complications in terms of the ability of the genitive+dative pronouns to express them, and alternative strategies used to express the same functions, depending on various features of the noun that they modify. These complications are described in chapter 9 (‘Possession’) and chapter 11 (‘Non-subcategorised participants’). In this section the basic uses of the two pronoun sets will be illustrated.

Possession

(12)  
i  yaramenà-ne-nì=ne  nì=loe.  
1SG  song-1SG.DAT-1SG.GEN=1SG.DAT  1SG=sing  
‘I sang my song.’

In this sentence the first pronominal is a free pronoun marking the subject of the sentence. The object nominal yaramenà(ne) is inalienably possessed, and so obligatorily appears with a dative suffix, and is then followed by the genitive and dative combination that marks possession (see 9.1 for more discussion). The verb takes an agreement proclitic, described in 6.3.3 and 7.2.1).

In addition to appearing on a noun to index the person, number and gender features of its possessor, these pronominals may also be used to mark non-possessed beneficiaries.
Beneficiary

(13) Pe hòe pe=tue e tue
3SG.F sago 3SG.F=3SG.F.do 3SG.F.be 3SG.F.do
ke=bà-ké=ke.
3SG.NF=person-3SG.NF.GEN=3SG.NF.DAT
‘She’s cooking sago for the man.’

In this example the beneficiary is coded as an oblique by its postverbal position, and is further marked for its semantic role by the combination of genitive+dative pronominal affixes on it. Other means of marking beneficiary are to simply code the object of the clause as being possessed by the beneficiary; the morphology employed is then identical to a normal possessive construction:

(14) Pe hòe-nì=ne pe=tue e tue.
3SG.F sago-1SG.GEN=1SG.DAT 3SG.F=3SG.F.do 3SG.F.be 3SG.F.do
‘She’s cooking sago for me.’

(15) Ánì-nì=ne då nalé lang-ké pe=tue.
mother-1SG.GEN=1SG.DAT father taro dish-3SG.NF.GEN 3SG.F=3SG.F.do
‘My mother is making pounded taro for Dad.’

This is the normal means of expressing a first or second person beneficiary. More detailed discussion of the means of encoding beneficiaries can be found in chapter 11.

6.3.2 N(P) clitics

Pronominal clitics are often found in the NP serving either semantic or syntactic roles. There are two positions in which the N(P) clitics can appear, proclitic to a nominal, or enclitic to a whole nominal phrase. They serve different functions in these different positions, and are not mutually exclusive.

When proclitic, the function is to specify a feature of the head noun, typically the gender or plurality (this is described in more detail in 10.5.1). For instance, the noun angku ‘child’ is not inherently specified as singular or plural, nor masculine or feminine. With a proclitic on the noun, these features can be made explicit, as can be seen in the following set, differentiated only by the pronominal clitic:

(16) angku ‘child’
    ke=angku ‘boy’
    pe=angku ‘girl’
    te=angku ‘children’

In these examples the third person singular unmarked, third person singular feminine, and third person plural clitics are used with the noun angku ‘child’ to give varying semantically explicit readings for which no more explicit term is available lexically in the language. In some cases the use of the proclitic appears redundant, but is nevertheless usual:

(17) pe=ueme ‘woman’
    # ueme
    * ke=ueme
    te=ueme ‘women’

Even though ueme is ungrammatical with the unmarked (for gender) singular pronoun ke=, and gains no new semantic content by its appearance with the feminine pronoun pe=, since it is
explicitly feminine in its lexical specification, it is normally found with a proclitic. The only cases in which *ueme* can be uttered without a proclitic are those involving direct elicitation by myself, from speakers who are used to dealing with me and my reductionist ways; instruction of children, or correction of speech, for instance, will always use the cliticised form *pe=ueme*, and this is the most likely citation form that speakers will give (the next most likely being *te=ueme*). In short, this lexeme is only used grammatically with a proclitic. This proclitic will be the 3SG.F *pe=*, if it is used with singular reference, and the 3PL *te=* if it is used with plural reference. This can be explained by assuming that *ueme* is lexically and semantically specified as [female], but lacks the grammatical feature [+ feminine], and so must appear with some means of parsing this pronominal feature. This use of proclitic pronouns on nouns appears to be restricted to human nouns, and to very high-animate non-humans (supernatural beings and animals to which gender is being assigned as a discourse priority). Another example, closing the ‘set’ of typical nouns of human reference, can be seen with *bà* ‘person’. Here we can see that the existence of *pe=ueme* ‘woman’, with the highly specified root *ueme*, means that the feminine clitics are not normally used with *bà*, which only has male reference when explicitly so marked with a clitic.

(18)  

\[
\begin{align*}
ke=bà & \quad \text{‘man’} \\
& \quad \text{‘person’} \\
# \quad pe=bà & \quad \text{‘people’} \\
& \quad \text{‘people’}
\end{align*}
\]

The three lexical items *angku*, *ueme* and *bà* seen in (16) - (18) show us the range of possibilities for overt gender specification on nominal roots. In the case of *angku* there is no predetermined lexical preference for feminine or non-feminine gender, with either of the two gendered clitics being able to appear with the root. *Ueme* is specified as having feminine reference, but still requires the presence of a feminine clitic to realise that gender. Since the root is specified as only being compatible with feminine gender (as evidenced by the female interpretation of the plural *te=ueme* as ‘women’, even though the clitic does not provide any specified gender), it cannot appear with the non-feminine clitic *ke=*. Finally *bà* is not lexically specified as either feminine or non-feminine, but because of the existence of a more highly marked form in *pe=ueme*, which is already semantically (though not morphologically) feminine, *#pe=bà* is blocked from appearing, while *ke=bà* is acceptable. In the plural form *te=bà* is allowed, though it does not have a lexically-specified feminine or non-feminine reading.

The same set of clitics may be used as enclitic to the whole NP. In this case they indicate explicitly the gender of the NP as a whole, and also that the NP is the A of a bivalent clause, as in the following example:

(19)  

\[
\begin{align*}
\text{Naké} & \quad \text{ke} & \quad \text{hang} & \quad \text{ke=k-ang.} \\
\text{dog} & \quad \text{3SG.NF.ERG} & \text{coconut} & \text{3SG.NF=3SG.NF-eat} \\
\quad & \quad \text{‘(The) dog ate a coconut.’}
\end{align*}
\]

When serving as an S or a P, the NP enclitic may not be used. (21) shows the ungrammaticality of summation pronoun in an monovalent clause, while (23) and (24) show

---

40 Not necessarily simply the feature [+ feminine], parsed by the 3SG.F pronoun. There are textual examples of this noun appearing with, for instance, a 1PL pronoun (see appendix 4, texts 12, 13, and 18).
that in a bivalent clause the summation pronoun is only acceptable on the A NP, and is
ungrammatical on a P.

(20) Naké pa ke=pi pa-lóng
dog water 3SG.NF=swim river-gap
‘(The) dog swam in the river mouth.’

(21) * naké ke pa ke pi palóng

(22) Naké ingéong kóeng ke=k-ang.
dog cat tooth 3SG.NF=3SG.NF-eat
‘(The) dog bit a cat.’

(23) * naké ingéong ke kóeng ke kang

(24) Naké ke ingéong kóeng ke kang.

The ungrammaticality of (21) and (23), which show a summation pronoun on the S and P NPs
respectively, shows us that the enclitic position for an N(P) clitic is available for nominals in the
syntactic role of A alone, and so can best be characterised as an (optional) ergative marker.

I propose that this ergative marker has its origins in the usage, not uncommon in many
languages of New Guinea, of coreferring a topical argument with a coreferent pronoun in the
clause. Since the typical clause-internal case marking pattern for New Guinea languages is an
ergative one (see Donohue 2005a), we would find the following coding alternations for basic
bivalent clauses:

\[
\begin{array}{cccc}
\text{TOPIC} & \text{SUBJECT} & \text{OBJECT} & \text{VERB} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\end{array}
\]

With a growing predominance of the topic-coding patterns, and the pattern shown in (25)d
becoming favoured over that in (25)b in order to preserve consistent ergative case marking in
the sentences, we can imagine the ergative-marked pronoun being reanalysed as a unit. In fact,
given that disambiguation is only necessary for third persons (because of sufficiently individual
agreement morphology on the verb), the presence of the pronoun alone is enough to mark the A
of the clause. This would lead to an intermediate stage, seen in (26), which is attested in
languages such as Tauya (MacDonald 1990).

\[
\begin{array}{cccc}
\text{TOPIC} & \text{SUBJECT} & \text{OBJECT} & \text{VERB} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\end{array}
\]

From these patterns, it is a short step to reanalyse the basic clause along the template seen in
(26)b, at which point it replicates the pattern in (25)a, but has transferred the case marking
burden from a dedicated ergative case marker to an NP-enclitic use of the pronouns.

\[
\begin{array}{cccc}
\text{TOPIC} & \text{SUBJECT} & \text{OBJECT} & \text{VERB} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\text{NP} & \text{NP} & \text{V-AGR} \\
\end{array}
\]

A second use of NP-final pronouns is found in Skou, in which a pronoun ‘sums up’ the person, number and gender features of the whole (conjoined, either overtly or covertly) NP. This is not the same usage as the ergative enclitic seen above, in that it can function on non-ergative NPs, and it includes any free pronoun, particularly the duals as well as the prime pronouns, as can be seen in the following:

(28)  
\[
\begin{align*}
\text{Ke} & \quad \text{yá-né-ni=ne}, \\
3\text{SG}, \text{NF} & \quad \text{sister-1SG.DAT-1SG.GEN=1SG.DAT} \\
yu-ne-nì=ne & \quad \text{tenake} \\
\text{brother-1SG.DAT-1SG.GEN=1SG.DAT} & \quad 3\text{DU}, \text{NF} \\
& \quad 3\text{SG}, \text{NF}=\text{meet} \\
\text{‘He met my brother and sister.’}
\end{align*}
\]

In this example tenake serves to sum up the person (third), number (dual) and gender (not completely feminine, therefore unmarked) of the conjoined NP. This pronominal bundle is not the bound pronominal clitic on the verb, as it appears in the dual form, which are only found as free pronouns.

Compare the sentence above with a free pronoun and a conjoined NP with the ones below, which have a bound ergative NP-clitic, which is from the set of prime pronouns even when referring to a dual number. When the two referents of the subject NP are expressed by just one noun, this is the only way a NP-final pronominal may appear.

(29)  
\[
\begin{align*}
\text{Te}=\text{bahúe-nì=ne} & \quad \text{híngtung} & \quad \text{te} \\
3\text{PL}=\text{elder.sibling-1SG.GEN=1SG.DAT} & \quad \text{two} & \quad 3\text{PL}.\text{ERG} \\
\text{ke} & \quad \text{te}=\text{fi}. \\
3\text{SG}, \text{NF} & \quad 3\text{PL}=\text{meet} \\
\text{‘My elder (brother and sister) met him.’}
\end{align*}
\]

(30)  
* \text{te báhúe nì ne híngtung tenake ke te fi}

(31)  
* \text{te báhúe nì ne tenake ke te fi}

When the two referents bearing the subject function are expressed by two nouns in conjoined NPs, either the ergative clitic option or the summarising free pronoun option may be used. In the first of the sentences below the clitic \text{te} 3\text{PL} is used, despite the fact that the NP refers to only two participants; this is an ergative marker, and cannot be a summarising clitic. In the second example the dual pronoun tenake is used, which could be used for any NP regardless of its syntactic role.

(32)  
\[
\begin{align*}
\text{Yá-né-nì=ne} & \quad \text{yu-ne-nì=ne} & \quad \text{te} \\
\text{sister-1SG.DAT-1SG.GEN=1SG.DAT} & \quad \text{brother-1SG.DAT-1SG.GEN=1SG.DAT} & \quad 3\text{PL}.\text{ERG} \\
\text{ke} & \quad \text{te}=\text{fi}. \\
3\text{SG}, \text{NF} & \quad 3\text{PL}=\text{meet} \\
\text{‘My brother and sister met him.’}
\end{align*}
\]

(33)  
\text{Yáne ni ne, yune ni ne tenake ke te fi.}

Further details on the syntax of conjunction, and the function of special reduced forms of the dual pronouns in these constructions, can be found in chapter 19.
6.3.3 Verbal clitics

All verbs show agreement for their subject by overt pronominal clitic. The position of these clitics is not entirely predictable: while the clitic always follows an object or instrument in the clause, and usually intrudes between an adjunct nominal and the inflecting verb, there are some cases in which the adjunct nominal follows the clitic, and there are yet other cases in which there is variation in the position of the clitic.

The following examples are fixed in the order of the clitic. With ku li ‘give birth’, the clitic must occur directly on the verb, and the adjunct nominal cannot intrude (this is the most frequently attested position for a clitic in an adjunct nominal construction. With lú weng, on the other hand, the clitic must precede the adjunct nominal.

\[
\text{[ADJ.N] clitic=\{V\}}
\]

(34) \(ku\) pe=tue

‘child’ 3SG.F=3SG.F.do
’she gave birth’

(35) * pe=ku tue

clitic=[ADJ.N] [V]

(36) pe=ló weng

3SG.F=eye.F sleep
’she slept’

(37) * ló pe=weng

The next examples show that for some predicates we find variation in the positioning of the clitic with respect to the adjunct nominal and verb: the clitic may either precede or follow the adjunct nominal.

\[
\text{[ADJ.N] clitic=\{V\}}
\]

(38) nà pe=òe

play 3SG.F=play
’she played’

clitic=[ADJ.N] [V]

(39) pe=nà oe

3SG.F=play play
’she played’

The meaning of the predicate does not directly dictate the location of the clitic in the predicate, as the following paraphrase of the above sentence ‘she played’ shows. Although the (reported) meaning of (40) is identical to that of (38) and (39), only one position for the clitic is grammatical, as seen in the ungrammaticality of (41).

\[
\text{[ADJ.N] clitic=\{V\}}
\]

(35) nà pe=tue

play 3SG.F=3SG.F.do
’she played’

41 With a few exceptions – see 7.2.1.1.
The appearance of the verbal clitic is obligatory, regardless of the presence or absence of any other verbal agreement morphology, as discussed in more detail in 7.6. In the example below we can see that the person, number and gender of the subject ‘uncles’ is clearly retrievable from the NP *te kóko nì ne*, yet it must still be marked on the verb by means of the proclitic.

Verbal clitic as sole agreement marker

(42) *Te=kóko-nì=ne nì te=fì.*

3PL=FyB-1SG.GEN=1SG.DAT 1SG 3PL=meet

‘My uncles met me.’

In the following example the verb is fully marked for person, number and gender of this subject by prefixation, but still the proclitic is obligatory:

Verbal clitic appearing in conjunction with other agreement marker(s)

(43) *Te=kóko-nì=ne móe te=t-ang.*

3PL=FyB-1SG.GEN=1SG.DAT fish 3PL=3PL-eat

‘My uncles ate (some) fish.’

The status of the verbal clitics, as well as the other agreement markers, is addressed in 7.3.

An alternative to the proclitic coding option on an NP for the subjects of bivalent verbs is to mark the gender by means of the ergative clitics (summation pronouns) at the end of the NP, rather than, or in addition to, gender-marking proclitics. The various options are shown in the following sentences, from most to least ‘natural’:

(44) *Naké ke móe ke=wé ti=ko ke=k-ang.*

dog 3SG.NF.ERG fish 3SG.NF=GET.F 3SG.NF.GO=OBV

‘The dog took the fish away and ate it.’

(45) # *Ke naké móe ke wé ti ko ke kang.*

(46) ?#/ *Ke naké ke móe ke wé ti ko ke kang.*

Here the gender of the dog is indicated by the pronoun *ke* at the end of the nominal phrase, which is more normal than a proclitic (# *ke=naké*) would be, given the non-human nature of a dog. This is not to say that *ke=nake* is ungrammatical, as it would be a perfectly acceptable way to refer to a dog embodying supernatural properties, or one possessed by a spirit, in which case the level of animacy would be high enough to allow human-type reference by means of proclitics.

6.3.3.1 Interrogative clitics

Just as the basic pronouns can all be used, with minor phonological modification, in clitic form on the verb to index the pronominal features of the subject, so too can the animate interrogative pronoun also be used as a verbal clitic when the subject of the sentence is not identified, and this construction serves as one way of questioning a subject.

The basic construction for a question about the identity of an animate subject in Skou has no particular differences from the normal word order encountered in declarative clauses, as can be
gauged by comparing (47) with any of the declarative clauses scattered throughout this book (or, for explicit discussion, see 4.3).

(47)  Bá  hòe-nì=ne  ke=k-ang?
    who  sago-1SG.GEN=1SG.DAT  3SG.NF=3SG.NF-eat
    ‘Who ate my sago?’

While it is not ungrammatical, it is certainly unusual and for some speakers infelicitous to use the feminine clitics on the verb to refer to an interrogative pronoun. Plural marking, on the other hand, is more generally accepted, but is still less likely to be used than the 3SG.NF clitics.

(48)  #/? Bá  hòe-nì=ne  pe=p-ang?
    who  sago-1SG.GEN=1SG.DAT  3SG.F=3SG.F-eat
    ‘Who _FEMININE_ ate my sago?’

(49)  # Bá  hòe-nì=ne  te=t-ang?
    who  sago-1SG.GEN=1SG.DAT  3SG.NF=3SG.NF-eat
    ‘Who _PL_ ate my sago?’

The conditions under which the feminine clitic and agreement prefix may be used are restricted: the situation must be one in which the question-posing speaker knows that the only possible subjects (such as the sago-eaters in the examples above) must be either female of a group. In the absence of this certainty on the part of the questioner, the unmarked prefixes based on the singular non-feminine (see 7.2 for the feature analysis that places the non-feminine as the least-marked pronominal set).

The second way of forming questions involves the verbal prefixes following the pattern seen above, but using a verbal clitic based on the interrogative pronoun. In this case the interrogative pronoun does not appear independently:

(50)  (* bá)  hòe-nì=ne  bá=k-ang?
    who  sago-1SG.GEN=1SG.DAT  who=3SG.NF-eat
    ‘Who ate my sago?’

This analysis is not the same as positing a preverbal focus position, with an inverted OSV word order. The bá= in the example above is not an independent word, but rather a bound clitic, and so the only phrasal constituents are P and V. This will be discussed further in 8.3.4 and 18.2.

One final complication about the marking of interrogative subjects is an extra elaboration on the above pattern. When the interrogative pronoun is used as a verbal clitic, either the ‘normal’ 3SG.NF set of prefixes may be used on the verb, as in the previous example, or else an alternative verbal prefix may be used. This alternative prefix takes the underlying shape of an m- (though showing all the morphophonological variation expected of this inflection – see 7.2.2). This is identical in form to the 2SG prefixal forms, and its use can be seen in (51).

(51)  Hòe-nì=ne  bá=m-ang?
    sago-1SG.GEN=1SG.DAT  who=2SG?-eat
    ‘Who ate my sago?’

This use of apparently 2SG subject inflectional prefix (but not the 2SG inflectional proclitic) on a content question initially appears to be an odd strategy. It might be thought, based on an analogy with the optional use of 3SG.F or 3PL forms on the verb in questions when we wish to delimit the set of questioned participants, that this is a form of question that is asking (in the above questions) which of the addressees ate the sago. The flaw in this argument is that the prefix used is identical in form to the SINGULAR, not the plural, prefix, and so would not be
appropriate for questioning a group (and of course a true content question about the identity of the subject cannot be formed with only one possible (assumed) subject).\footnote{Indirect speech acts, such as a scolding mother speaking to her child and saying “I wonder who ate all the biscuits, hmm?”, are not a feature of Skou speech acts, which generally show a one-to-one correspondence with grammatical form. See chapter 18 for discussion.}

Furthermore, questions formed with the specific interrogative clitic \textit{bá=} and lacking a verbal prefix (as is appropriate for a 2\text{PL} subject, and for most 1\text{SG} subjects), are not grammatical, as seen in (52) (compare to the fully acceptable (46), which has a prefix identical to the normal subject-marking 2\text{SG} prefix on the verb – see 7.2.2).

\begin{equation}
\begin{aligned}
\text{hòe-ni}=\ne & \quad \text{bá=}=[]\text{-ang}?
\text{sago-1SG.GEN}=1SG.\text{DAT} & \quad \text{who}=[2\text{PL}]-\text{eat}
\end{aligned}
\end{equation}

‘Who of you lot ate my sago?’

While this interrogative agreement is highly unusual, the distantly related I'saka language (see 1.4 for a discussion of the relationship) shows an identical pattern of questioned subjects being marked on the verb by forms identical to the 2\text{SG} inflectional paradigm, though in I'saka this is the only way to form a question (Donohue and San Roque 2004). Unlike the other verbal clitics, which may also be used as nominal clitics to specify gender on some nouns, this is not possible for \textit{bá=}; that is, there are no grammatical forms such as that in (53),

\begin{equation}
\begin{aligned}
\text{bá}=\text{ue} & \quad \text{pe}=\text{toe}?
\text{who}=\text{woman} & \quad \text{3SG.F}=3\text{.come}
\end{aligned}
\end{equation}

‘Which woman came?’

(cf., \textit{Peue}em\textit{e pe} \textit{toe}? ‘Has the woman come?’)

in which the interrogative clitic replaces another pronominal clitic on a nominal, in the above example \textit{pe=} from \textit{pe}=\text{ue}em\textit{e}. Even in the case of nouns that only optionally appear with gender-specifying pronominal clitics, it is not possible for the interrogative to appear:

\begin{equation}
\begin{aligned}
\text{bá}=\text{naké} & \quad \text{hòe} & \quad \text{ke}=\text{k-ang}?
\text{who}=\text{dog} & \quad \text{sago} & \quad \text{3SG.NF}=3\text{.NF}-\text{come}
\end{aligned}
\end{equation}

‘Which dog ate the sago?’

(cf., \textit{Naké hòe ke} \textit{kang}? ‘Has the dog eaten the sago?’ , and also \textit{Ke naké hòe ke} \textit{kang}? ‘Has the male dog eaten the sago?’ and \textit{Pe naké hòe pe} \textit{pang}? ‘Has the female dog eaten the sago?’)

\begin{equation}
\begin{aligned}
\text{Ánì, mè} & \quad \text{nalé} & \quad \text{lang}=\text{ing} & \quad \text{bá-ké} & \quad \text{mè}=\pi
\text{mother} & \quad \text{2SG} & \quad \text{taro} & \quad \text{dish}=\text{DEIC} & \quad \text{who}=\text{3SG.NF.GEN} & \quad \text{2SG}=\text{2SG}\text{.do}
\text{me} & \quad \text{pi} & \quad \text{2SG}\text{.be} & \quad \text{2SG}\text{.do}
\end{aligned}
\end{equation}

‘Mother, who are you making the pounded taro dish for?’

More details on the I'saka patterns can be found in Donohue and San Roque (2004). A more general discussion of interrogative constructions, subsuming this particular discussion of questioned subjects and their verbal indexing, can be found in 17.2.

\subsection{6.4 Non-personal pronouns}

Apart from the personal pronouns described in this chapter, there are also pronominal forms that, in terms of frequency of use at least, serve a primarily interrogative function. Interrogatives in Skou form a word class that is better termed \textit{episteme} (after Mushin 1995), in that they are used not only for questions, but also for generic reference (anyone, anything,
something). Furthermore, this class of words serves, by means of the different morphology or lexical form used, to separate the world into different emic categories, which correspond to the word classes or subclasses established elsewhere in the language (see chapter 5). The human interrogative pronoun shares some properties with the personal pronouns described here in that it also has a clitic form as well as a free form.

In addition to the non-personal interrogative pronouns we also find deictic pronouns, which are formally identical to the locative and referential demonstratives, and which are discussed in 4.5. These do not have the same option of appearing as an NP-final clitic, summarising the pronominal features of the NP, nor can they appear cliticised to nouns or verbs.
This chapter primarily describes the agreement morphology which is found on the verb and its status, as well as the morphological means employed for marking tense/aspect/mood. The structure of the verb phrase, and the arguments used to establish the constituents posited, can be found in chapter 3, and is assumed here. Other predicate-deriving processes are detailed in chapter 13, while the adjunct nominal construction is the subject of chapter 14, and predicates with clausal complements are examined in chapter 15.

7.1 The verbal template

The total amount of possible morphology on the verb is considerable, though in practice most verbs appear with just pronominal agreement markers (for subject or, exceptionally, object). Additional morphology that can appear is in the nature of tense and aspect marking, which is non-concatenative, and the use of auxiliary verbs, also with an aspectual function. The position of the adjunct nominal, if any, is also a variable that needs to be stipulated lexically (see chapter 14).

The verb itself can be described with the following template (including clitics, though these can be separated from the verb by some adjunct nominals; see 7.8 and 14.5):

Morphological template for the inflected verb in Skou

(1)\[ \begin{array}{c}
V \rightarrow \text{CL} = [\text{PREF-V-RED-APPL}] \\
\text{APPL} \rightarrow \text{applicative suffix} \\
\text{CL} \rightarrow \text{clitic} \\
\text{PREF} \rightarrow \text{pronominal prefix} \\
\text{RED} \rightarrow \text{reduplication on verb root marking aspect} \\
\text{FEM} \rightarrow \text{vowel alternation marking singular feminine (animate)}' \\
\text{PL} \rightarrow \text{vowel alternation marking plural (animate)} \\
\text{TNS} \rightarrow \text{tone suppletion on verb root marking tense} \\
\end{array} \]

Some examples of verbs illustrating various of these morphological devices can be seen in the sentences in (2) - (6).
Simple verb with clitic and prefixal agreement

(2)  \(Mè=m-í.\)  
2SG=2SG-westwards  
‘You go west!’

Verb with reduplication

(3)  \(Mè=m-í-mí.\)  
2SG=2SG-westwards-RED  
‘You will go west.’

Verb with tonal stripping

(4)  \(Mè=m-i_L.\)  
2SG=2SG-westwards<LOW.TONE>  
‘You went west.’

Verb with applicative (and goal inside VP)

(5)  \(Mè=e_L-na \text{ Te Bapúbi}.\)  
2SG=board-APPL Skou Sai  
‘You boarded (a vehicle to go) to Skou Sai.’

Verb with vowel alternation (and ex-VP location)

(6)  \(Pe=\text{mong} \text{ Te Bapúbi}.\)  
3SG.F=F=sit Skou Sai  
‘She stayed at Skou Sai.’

The morphological structure of the verb shown in (1) appears inside a V’ unit, which can, in addition to the verb, also accommodate an adjunct nominal or another part of a verbal collocation. If there is an adjunct nominal, it can appear either before or after the verb. If the adjunct nominal comes before the verb, then there are some cases in which the proclitic agreement marker appears outside the adjunct nominal; this is determined lexically.

Syntactic template for the V’ constituent in Skou

(7)  \[
\text{V’} \rightarrow \text{[CL=AdjN [affixed verb]]} \\
\text{CL=[affixed verb]} \\
\text{AdjN} \\
\text{CL=[affixed verb]} \\
\text{AdjN} \\
\text{CL=[affixed verb]} \\
\text{AdjN} \\
\text{CL=[affixed verb]} \\
\text{AdjN} \\
\text{CL=[affixed verb]} \\
\text{AdjN} \\
\text{CL=[affixed verb]} \\
\text{AdjN} \\
\text{CL=[affixed verb]} \\
\text{AdjN} \]

Abbreviations as for (1), with the addition of:

AdjN → adjunct nominal

Some examples of sentences exemplifying these possibilities are shown in (8) - (11):

V’ with preverbal AdjN and V

(8)  \(Pe=\text{angku=ing a} \text{ [VP [v’ pa pe=hi ] ]}.\)  
3SG.F=child=the water 3SG.F=wash  
‘The girl washed.’
V' with preverbal AdjN and V; clitic precedes the AdjN

(9) \( Pe=angku=ing \ a \ [VP \ ke=yu-pe-pè=pe] \)
\[ \begin{align*}
3SG.F & = \text{child} = \text{the} & 3SG.NF & = \text{brother} = 3SG.G.DAT = 3SG.F.GEN = 3SG.F.DAT \\
pe & = [V' na \ r-àng ]] .
\end{align*} \]
\( 3SG.F = \text{teaching} \)
\( 3SG.F = \text{teach} \)
‘The girl taught her brother.’

V' with postverbal AdjN and V

(10) \( Pe=angku=ing \ a \ [VP [V' pe=w-a \ ta]] \)
\( 3SG.F = \text{child} = \text{the} & 3SG.F = 3SG.F = \text{walk running} \)
‘The girl ran.’

V' with collocationary V+V construction

(11) \( Pe=angku=ing \ a \ [VP ya [V' pe=w-á \ w-i]] \)
\( 3SG.F = \text{child} = \text{the} & 3SG.F = 3SG.F = \text{count} \\
3SG.F = 3SG.F = \text{count} \)
‘The girl counted things.’

The V’ unit which we have seen above in turn fits into a complete VP in a way that may be represented templatistically as shown in (12). Here we can see that the V’, with clitics, is iterative, allowing for serial verb constructions. The presence of a nominal object, however, is restricted to VP-initial position, and the aspectual auxiliaries are differentiated from other serialised verbs by their unique position.

Template for the VP in Skou

(12) \[
\begin{array}{c}
\text{VP} \\
\rightarrow \text{NP} \rightarrow \text{NP} \rightarrow \text{NP} \rightarrow \text{NP} \rightarrow \text{NP} \rightarrow \text{NP} \\
\rightarrow [V'] \rightarrow \text{NP}_{GOAL} \rightarrow \text{AUX} \\
\end{array}
\]

The additional abbreviations used here are:

AUX \( \rightarrow \) li ‘do’, i li ‘be’ + ‘do’, li ‘do’

CL_\( \alpha \) \( \rightarrow \) clitic; only if no clitic on the affixed verb

NP_\( \rightarrow \) NP object

NP_{GOAL} \( \rightarrow \) NP goal (or postverbal A or P coded as goal)

VP/CL \( \rightarrow \) VP without a pronominal clitic

The expansion of the VP to include an NP serving as the P of the clause, or a goal, is unproblematic. The appearance of the auxiliaries as tense-aspect markers is discussed in 7.9, and the appearance of additional VP-like units in (12) is included to account for serial verb constructions, the subject of chapter 12. The adjunct nominal constructions are discussed in chapter 14. Some examples of some of the possibilities can be seen in (13) - (15).

VP with P and V

(13) \( Pe=angku=ing \ a \ [VP móe \ pe=p-ang] \)
\( 3SG.F = \text{child} = \text{the fish} & 3SG.F = 3SG.F = \text{eat} \)
‘The girl ate a fish.’

VP with V and auxiliaries

(14) \( Pe=angku=ing \ a \ [VP pe=w-a \ e \ tue] \)
\( 3SG.F = \text{child} = \text{the} & 3SG.F = 3SG.F = \text{eat} & 3SG.F = \text{be} & 3SG.F = \text{do} \)
‘The girl is walking.’
VP with P, Adj N and V

(15)  \( \text{Náke}=\text{ing a} \ [\text{VP móe} \ [\text{V}\ kóeng \ pe=p-á}] \).  \\
      dog=the fish tooth 3SG.F=3SG.F-hit  \\
      ‘The dog bit a fish.’

VP with multiple Vs

(16)  \( [\text{VP Móe} \ [\text{V}\ ke=ké} \ k-á \ \text{moe ti}] \ ) \ pá].  \\
      fish 3SG.NF=get 3SG.NF-carry return 3SG.NF.go house  \\
      ‘He took the fish home.’

The primary, and most regular, morphological complication on the verb involves agreement of different sorts. We have seen instances of agreement for subject in the examples above, by clitic, prefix and vowel alternation, but there are further complications beyond this simple listing. Because agreement is an all-pervasive aspect of the verb in Skou, it is dealt with in the first of the sections that follow, followed by a discussion of the syntactic status of the agreement markers in the language. After discussing the various irregularities in verbal agreement in Skou, both internally and in comparison to related languages, and details of the verbal collocations alluded to above, the tense/aspect/mood system is presented, with a summary of the chapter to finish. Other following chapters with a large amount of content relevant to a discussion of verbs and verbal constituency are chapters 12, 13 and 14, dealing with Serial verbs, Valency-changing processes, and Adjunct nominal constructions, respectively.

7.2 Verbal agreement

There are four ways in which person, number and/or gender features of subject or object may be indexed on the verb. These different agreement strategies can sometimes both be found on the same verb, marking different categories, subject and object. More commonly, however, more than one of these marking strategies is used to show multiple exponence of the same grammatical category, subject. The four morphological means employed are:

- proclitic to the verb to mark subject;
- prefix on the verb to mark subject;
- vowel shift to mark a feature of the subject or object;
- suppletion of the verb stem to agree with the subject or object.

The different morphological strategies, and the conditions on their selection, where this can be stated, will be examined one by one in the following sections.

7.2.1 Proclitic agreement

All verbs are mark their subject by a proclitic. This indexes the prime pronominal features of the subject, and typically appears between an adjunct nominal and the verb.

The proclitics differentiate gender only in the third person singular, and distinguish only two numbers, singular and non-singular. The forms have already been described in 6.3, and are set out again in table xx100. In all cases the proclitic has the same form as the free pronoun, with the optional change of an /e/ vowel to [ə] in the clitic.
Table 100. Pronominal clitics

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ni-</td>
<td>ne-, nɔ-</td>
</tr>
<tr>
<td>2</td>
<td>mè-, mɔ-</td>
<td>e-, ɔ-</td>
</tr>
<tr>
<td>3. NF</td>
<td>ke-, pɔ-</td>
<td>te-, tɔ-</td>
</tr>
<tr>
<td>3. F</td>
<td>pe-, pɔ-</td>
<td></td>
</tr>
</tbody>
</table>

Although proclitic agreement is a diagnostic characteristic of all verbs, being obligatory on verbs whether they are finite or non-finite, predicative or attributive, it is not entirely restricted to verbs. Verbs always mark their subject with a proclitic, whether referential, attributive or predicative. However, proclitic agreement is also found attached to the following non-verbal predicates:

- adjectives with an inchoative sense;
- adjunct nominal (+ inflecting verb as a complex predicate)
- predicative nominal (+ inflecting verb as a complex predicate) with an inchoative sense

When attributive, adjectives do not require a proclitic, and when denoting a state adjectives appear without a clitic (though the preferred way for an adjective to appear predicatively is for it to modify a predicative nominal – see 5.5). Compare the following sentences, both using the same subject and the same predicate; when the predicate is durable, static and invariant, the adjective appears without any verbal proclisis. On the other hand when the aspect of the situation calls for an inceptive, non-static change, all processes better associated with prototypical verbs than with adjectives, then we see the appearance of verbal proclitics on the adjectival stem.

Stative adjective predicate

(17) *Péngue=*ing a ðe.
    mango=the ripe
   ‘The mango is ripe.’

Inchoative adjective predicate

(18) *Péngue=*ing a ke=ðe.
    mango=the 3SG.NF=ripe
   ‘The mango has become ripe.’

It is not unusual for proclitics to appear as well as free pronouns, though first and second persons, especially non-dual, are often represented by the clitic alone (see 7.3.1). The only other instance of a word class that optionally appears with proclitics involves time expressions, which, as discussed in 5.8, may appear with clitics in precisely the same aspeccual environment: when they describe the inception of a state, rather than the state itself.

There is just one circumstance in which proclitic agreement is not obligatorily found on verbs. This is not a morphosyntactic restraint, but rather a phonological one, as I shall demonstrate in the following section.
7.2.1.1 Exceptions to the obligatoriness of agreement: the lack of proclitic agreement

There are four circumstances in which the normally obligatory verbal proclitic can be omitted from the clause. In all cases it is possible, and grammatically unmarked, for the proclitic to appear, but not usual; in one case there is a meaning difference associated with the presence or absence of the clitic.

The first exception to obligatory procliticisation is found when a clause consists of a dual pronominal subject in an monovalent clause with no adjunct nominal. In this environment proclitic agreement may be dropped, though it appears that this does not apply equally to all dual subjects.

Recall that there is an asymmetry in the function of pronouns, in that first and second persons are more likely to appear only as clitic on the verb, where third persons are more likely to be represented as both independent pronoun and bound clitic (see 7.3.1). The following sentences illustrate the normal appearance of an independent pronoun with a third person subject, and the normal appearance of no independent pronoun with a first person subject. The opposite arrangement is asymmetrical: the lack of an independent pronoun for a third person subject is at best infelicitous, but the presence of an independent pronoun for a first person is acceptable. This pronoun is not a topic, since it lacks the intonation break that is obligatory with core arguments serving as topics, and lacks the near-obligatory use of the deictic a with topic pronouns. (See 3.1.1 and 4.2.1 for more discussion on topic-marking.)

(19) Pe móe pe=p-ang.
    3SG.F fish 3SG.F=3SG.F-eat
    ‘She ate (some) fish.’

(19)’ # Móe pe pang.

(20) Móe nì=k-ang.
    fish 1SG=1SG-eat
    ‘I ate (some) fish.’

(20)’ Ni móe nì kang.

When the subject is dual in number, the use of a free pronoun as well as the clitic is more likely, even with first and second person subjects, as can be seen in the following sentences. This is simply because the free pronouns present a greater informational content than the clitic pronouns, which do not have dual forms (see 6.3).

(21) Enake móe e=ang ná?
    2DU fish 2PL=eat Y/N
    ‘Did you (two) eat the fish?’

(21)’ # Móe e=ang ná?
    fish 2PL=eat Y/N
    ‘Did you (two) eat the fish?’
    (Good for: ‘Did you (all) eat the fish?’)

This exception to obligatory procliticisation occurs when the clause is monovalent, there is usually no adjunct nominal (if there is, the adjunct nominal must be one that at least optionally follows an agreement clitic – see chapter 14), especially if the subject is first person dual inclusive. Some examples of first person dual subject, with the normal nonsingular (glossed as PL) agreement proclitics, can be seen in the following sentences.
If the subject of the sentence was simply plural, such as ‘We (all) sat.’, we would predict, and find, the following two alternative means of expressing the concept (analogous sentences apply for the second and third persons).

(25) a. \textit{Ne} \textit{ne}=\textit{ta n-ìng}.
\begin{tabular}{ll}
1PL & 1PL=sitting 1PL-sit \\
\end{tabular}
‘We (all) sat.’

b. \textit{Ne}=\textit{ta n-ìng}.
\begin{tabular}{ll}
1PL=sitting 1PL-sit \\
\end{tabular}
‘We (all) sat.’

In addition to these two grammatical alternatives, we would correctly predict that the clause with a free pronoun, but not clitic pronoun, would be ungrammatical, as in (26).

(26) * \textit{ne} \textit{ta n-ìng}.
\begin{tabular}{ll}
1PL & sitting 1PL-sit \\
\end{tabular}
‘We (all) sat.’

The lack of a distinct category [dual] in the clitic pronouns makes the sentence in (25)b unlikely as an alternative structure for the sentence \textit{Amanè ne}=\textit{ta n-ìng}, and it is in fact dispreferred, for the reasons of contentful information loss given above. There is, however, an alternative, in which the free pronoun appears, and the clitic does not:

(27) \textit{Amanè} \textit{ta n-ìng}.
\begin{tabular}{ll}
1DU,IN & sitting 1PL-sit \\
\end{tabular}
‘You and I (both) sat.’

(28) \textit{Enake} \textit{ta hìng}.
\begin{tabular}{ll}
2DU & sitting 2PL-sit \\
\end{tabular}
‘You both sat.’

(29) \textit{Tenape} \textit{ta y-ìng}.
\begin{tabular}{ll}
3DU,F & sitting 3PL-sit \\
\end{tabular}
‘Those two women both sat down.’

At first sight these data appears to contradict the statement that clitic pronouns are obligatory with all and any verbal predicates. These are, indeed, situations in which the verbs appears without the clitic pronouns. There are, however, reasons to believe that it is a purely phonological process that creates (26), and not a morphological one. These reasons are:

1. Clitic omission is only found with monovalent verbs; a bivalent sentence always requires the use of the bound pronoun:
(30) \textit{Amanè móe ne=n-ang.}
\begin{tabular}{ll}
1DU.IN & fish \\
1PL=1PL-eat & \\
\end{tabular}
\begin{tabular}{l}
‘We (both) ate some fish.’
\end{tabular}

\begin{tabular}{l}
(30)’ * \textit{amanè móe nang}
\end{tabular}

This suggests that immediate adjacency must hold between the free pronoun and the clitic in order for the clitic to be omitted.

2. Clitic omission is only found with \textit{amanè} 1DU.IN as subject; a sentence with any other dual pronoun (including the other 1DU forms: \textit{anake} 1DU.EX, \textit{anape} 1DU.EX.F) requires the pronoun:

(31) \textit{Anake ne=ta n-ùng.}
\begin{tabular}{ll}
1DU & 1PL=sitting \\
1PL=sit & \\
\end{tabular}
\begin{tabular}{l}
‘We both sat.’
\end{tabular}

(32) * \textit{anake ta nùng}

The same phenomenon of clitic omission is also found with the feminine pronouns, illustrated here, and the non-first persons (not illustrated here).

(33) \textit{Anape ne=ta n-ùng.}
\begin{tabular}{ll}
1DU.F & 1PL=sitting \\
1PL=sit & \\
\end{tabular}
\begin{tabular}{l}
‘We (women) both sat.’
\end{tabular}

(34) * \textit{anape ta nùng}

This suggests that clitic omission can only occur when the two adjacent syllables are identical: \textit{amanè ne=ta nung}, and is blocked from occurring in any other environments. A similar, and similarly optional, process is found in other instances of two identical morphemes coming together when not reduplicate: ‘close’, for instance, \textit{lalapalíli}, is optionally realised as \textit{lalapáli}, with the sequence of two identical syllables reduced to one.

It seems that this apparent exception to the presence of clitics on verbs in fact confirms their obligatoriness: the only circumstances in which the clitic may be dropped are when a more semantically specified pronoun, with an identical last syllable to the clitic, immediately precedes it; in this case, a purely phonological reduction of two otherwise identical adjacent syllables, attested as a phonological rule elsewhere in the language, occurs.

The next instance in which a verbal clause may appear without any proclitic agreement is when the subject is both inanimate and there is not a strong degree of affect implied by the verb. Compare, for instance, the lack of agreement in (35), which has a low-affect (monovalent) verb, with the obligatory agreement in (36), in which there is a strong (from the speaker’s perspective) level of affect associated with the predicate.

(35) \textit{Fu ma (ni).}
\begin{tabular}{ll}
rain & rain.falls \\
1SG & \\
\end{tabular}
\begin{tabular}{l}
‘It’s raining (on me).’
\end{tabular}

(36) \textit{Fu nì *(ke=)ká.}
\begin{tabular}{ll}
rain & 1SG \\
3SG.NF=hit & \\
\end{tabular}
\begin{tabular}{l}
‘The rain’s soaking me.’
\end{tabular}
Clearly the nature of the subject is not a contributing factor to the obligatoriness or otherwise of the proclitic agreement. In (35) the affected participant (the object) is postverbal, whereas in (36) it is preverbal. This does form a strong correlation with the lack of proclitic agreement with this predicate; other examples of sentences lacking proclitics on their verbs can be seen in (37) - (38). In all cases there is no preverbal object, and an inanimate causee. In (38) we can see that the addition of a proclitic renders the bivalent clause ungrammatical.

(37) Kong ku ni.
    thorn stab 1SG
    ‘I got poked on a thorn.’

(38) * kong ke ku ni

Example (39) shows a monovalent clause without proclitic agreement on the verb hóe. It also, by default and following from the discussion and predictions arising from examining (35) - (38), lacks a preverbal object, and is not grammatical with proclitic agreement. (41) is a similar example with a single-verb predicate (discounting the aspect-marking auxiliaries), which also cannot appear with proclitic agreement.

(39) Rángkue ti ni=hl=pa, ó bápáli hóe toe, ...
    time sea 1SG=wash=INSTR wave big landwards 3.come
    ‘When I was washing in the sea, a big wave came…’

(40) * ó bápáli pe hóe toe

(41) Ó bápáli e i li.
    wave big ascend be do
    ‘A big wave is coming (up).’

(42) * ó bápáli pe e i li

In this last example, (42), not only is there no proclitic on the verb, but also that the main verb and the auxiliaries do not show any agreement marking at all. Compare this to the use of toe in (39), the third person form, rather than loe. In (41) the auxiliary verb forms i li could be considered the non-femine third person singular inflection, but if we were marking this pronominal category e ‘ascend’ should be prefixed: ke. There is clearly an asymmetry between prefixal agreement (at least the more easily segmentable prefixal agreement seen in e : ke ‘(He) ascends.’ and proclitic agreement on the one hand, and stem-suppletive, irregular, or vowel-alternation types of agreement. See 7.8 for further discussion of these asymmetries, as well as references to where such discussion is found elsewhere in this book.

A final instance in which proclitic agreement is not found involves lexicalisations and definitions in which verbs are part of what functions as a nominal compound, but is structurally a syntactic phrase. Occasionally statements about ‘the way things are’ also appear without any proclitic agreement marking. For instance, in the following definition of húhú ‘inheritance’, the second clause has no proclitic; the ‘expected’ position of the 3SG.NF clitic ke= is shown with empty brackets, [ ].

(43) ya-lílípa áì ke=li=ko mong tue-tue=ing
    thing-many.things father 3SG.NF=do=OBV F.sit 3SG.F.do-RED=DEIC
    ke=bahùefa [ ] loe-loe li
    3SG.NF=eldest.child get.PL-RED do
    ‘All the things that fathers leave behind, the eldest child gets them.’
Other examples of lexicalised collocations, or predicates involving defining characteristics, in which the verb appears without proclitics include the following (again, the ‘expected’ position of the subject clitic is shown in square brackets). The following were offered as definitions of some words or as defining characteristics of a person.

(44)  
\[
\text{\textit{keng, te=ba yá-mo}} \quad \text{[ ] ti e ti}
\]
shaman 3PL=person medicine-potion 3PL.do 3PL.be 3PL.do
‘Shaman, a person who uses potions (Malay \textit{dukun})’

(45)  
\[
\text{\textit{tàng=ing, te=ueme}} \quad \text{[ ] ti e ti}
\]
k.o.net=DEIC 3PL=woman 3PL.do 3PL.be 3PL.do
‘the tang nets, the women make them’

(46)  
\[
\text{\textit{pumà}} \quad \text{[ ] òe i li fítong}
\]
wallaby jump be do ground
‘Wallabies jump (about) on the ground’

(47)  
\[
\text{\textit{Ke=k-a tà ana=ra naké}} \quad \text{[ ] k-atà}
\]
3SG.NF=3SG.NF-walk running like=also dog 3SG.NF-walk running
i li
be do
‘He runs like a dog runs.’

Compare this last sentence with the following, in which the use of a proclitic ensures a specific subject, rather than the generic one that is the normal interpretation for the sentence without proclitics.

(48)  
\[
\text{\textit{Pumà ke=òe i li fítong.}}
\]
wallaby 3SG.NF=jump be do ground
‘(The) wallaby is jumping (about) on the ground’

This omission of proclitic agreement is not the rule for all lexicalisations; compare the lack of proclitics in the above example with their presence in the following lexicalised collocation.

(49)  
\[
\text{\textit{te=t-ang fé-tè}}
\]
3PL=3PL-eat spoon-3PL..GEN
‘eating spoon’

An example of the omission of proclitics in a non-lexicalised statement of ‘the way things are’, with complete habitual aspectual interpretation, is the following, taken from the last line of text 17 in appendix 4. The speaker is describing how widows make do after their husbands have died, and how their children become frequent visitors, taking care of everyday needs. Importantly, this is a habitual event, not a single occurrence.

(50)  
\[
\text{\textit{ung a=we ke=ba angku}} \quad \text{[ ] toe=ing}
\]
now=this 3SG.NF=person child 3.come=DEIC
\[
\text{\textit{ara ni ya ke=loe léng.}}
\]
like 1SG thing 3SG.NF=get.PL give
‘now the children come, and I, he gives things (to me).’

Further discussion on other aspects of the status of verbal agreement can be found in 7.9, where the asymmetry between first and second person agreement on the one hand, and third person agreement on the other, is discussed and analysed.
7.2.2 Prefixal agreement

Prefixing is the most common means employed to mark subject agreement on the verb, after the obligatory proclitic marking described in the previous section. Although we can posit a consistent set of subject prefixes at an abstract level, these prefixes interact with the initial consonant of the verb (if there is an onset) to yield somewhat opaque allomorphs. In fact, an abstract analysis would treat the inflection as underlyingly suffixal, but constrained by phonotactic constraints in Skou to appear further left in the word, thus being realised as prefixal on vowel-initial syllables and as a merged series of features for syllables with an overt onset. Only when we are dealing with a monosyllabic vowel-initial verb are the posited abstract prefixes completely obvious and transparently realised. The realisation of ‘prefixation’ on the second, but not first, syllable of words such as kalèng ‘look around for’ (see appendix 2) indicates that the affixation is inherently right-aligned. In all discussion that follows I shall refer to this agreement as ‘prefixal’, describing the surface nature of the affixation being realised in the onset of a syllable, not in the coda. In addition to the sometimes covert nature of ‘prefixation’, the esoterogenic nature of Skou society has resulted in many near-identical verbs being coined on the basis of previously semantically underspecified light verbs, with the differences residing solely in some aspect of their conjugational paradigm. These cases shall be highlighted here, and in appendix 2.

Prefixal agreement is found with approximately two-thirds of all verb roots, unlike proclitic agreement, which appears with all verbs. Partly this restriction is phonologically based: only verbs stems that begin with a vowel or w, k, h, l (and perhaps r; this is only attested in only one verb, re ‘go’) show prefixal inflection. That said, not all verbs with these onsets show prefixation, so the specification of a verb as taking or not taking prefixes must be lexical, and thus stipulative. Examples of verbs showing the forms of the major regular inflectional patterns are given in table 101; additional examples of the inflectional patterns of different verbs can be found in appendix 2.

<table>
<thead>
<tr>
<th></th>
<th>vocalic</th>
<th>bilabial</th>
<th>alveolar-l</th>
<th>alveolar-r</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>e</td>
<td>wè</td>
<td>lú</td>
<td>re</td>
<td>ké</td>
<td>ha</td>
</tr>
<tr>
<td>2SG</td>
<td>me</td>
<td>pé</td>
<td>pú</td>
<td>me</td>
<td>bê</td>
<td>ma</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>ke</td>
<td>wè</td>
<td>lú</td>
<td>ti</td>
<td>ké</td>
<td>ka</td>
</tr>
<tr>
<td>3SG.F</td>
<td>pe</td>
<td>wè</td>
<td>rú</td>
<td>te</td>
<td>wè</td>
<td>wa</td>
</tr>
<tr>
<td>1PL</td>
<td>ne</td>
<td>wè</td>
<td>rú</td>
<td>ne</td>
<td>ké</td>
<td>na</td>
</tr>
<tr>
<td>2PL</td>
<td>e</td>
<td>wè</td>
<td>lú</td>
<td>re</td>
<td>ké</td>
<td>ha</td>
</tr>
<tr>
<td>3PL</td>
<td>te</td>
<td>wè</td>
<td>rú</td>
<td>te</td>
<td>ké</td>
<td>ya</td>
</tr>
</tbody>
</table>

While there is considerable irregularity in the initial consonant patterns seen in table 101, we can discern a common pattern of ‘underlying’ consonantal prefixation based around six affixes that attach to and merge with any onset that the verb root might supply. (This analysis was first proposed for Dumo by Ross in 1980. It applies just as well to Skou, eliciting the same underlying regularities that Voorhoeve (1971) suggested might be the case.) These prefixes occur in the pattern shown in table 102; the data in table 101 does not allow us to infer the non-zero variants of the 1SG, though both conjugations of the 3PL are apparent in the contrast...
between the 3PL of ‘go east’, with a $t$-, and the 3PL of ‘walk’, with a $y$-.

Evidence for the alternative conjugations of the 1SG will be presented in the exposition that follows.

Table 102. Inferred underlying prefixes

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$\emptyset$, $k$, $n$</td>
<td>$n$</td>
</tr>
<tr>
<td>2</td>
<td>$m$</td>
<td>$\emptyset$</td>
</tr>
<tr>
<td>3.NF</td>
<td>$k$</td>
<td>$t$, $y$</td>
</tr>
<tr>
<td>3.F</td>
<td>$p$</td>
<td></td>
</tr>
</tbody>
</table>

As mentioned above, the putative underlying prefixes shown in this table all demonstrate a range of allomorphs based on the phonological environment they appear in, specifically based on their interaction with a verb stem-initial consonant. In combination with consonant-initial verbs, a considerable number of cluster simplifications are found, shown in table xx103. This arranges the verbs according to the onset that they display for the 2PL form, which appears to be the root form of the verb. While there are five different columns, they are not represented equally in the lexicon (see appendix 3.3 for more detailed information on the membership of different verbs to the different subclasses of the conjugations).

Table 103. Underlying prefixes and phonological conjugations

<table>
<thead>
<tr>
<th></th>
<th>vocalic</th>
<th>bilabial</th>
<th>alveolar</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>$\emptyset$ + $V$ = $V$</td>
<td>$\emptyset$ + $w$ = $w$</td>
<td>$\emptyset$ + $l$ = $l$</td>
<td>$\emptyset$ + $k$ = $k$</td>
<td>$\emptyset$ + $h$ = $h$</td>
</tr>
<tr>
<td></td>
<td>$k$ + $V$ = $k$</td>
<td>$k$ + $w$ = $w$</td>
<td>$k$ + $l$ = $l$, $t$</td>
<td>$k$ + $k$ = $k$</td>
<td>$k$ + $h$ = $k$</td>
</tr>
<tr>
<td></td>
<td>$n$ + $V$ = $n$</td>
<td>$m$ + $V$ = $m$</td>
<td>$m$ + $w$ = $p$, $m$</td>
<td>$m$ + $l$ = $p$</td>
<td>$m$ + $k$ = $b$</td>
</tr>
<tr>
<td>2SG</td>
<td>$p$ + $V$ = $p$</td>
<td>$p$ + $w$ = $w$, $p$</td>
<td>$p$ + $l$ = $r$, $t$, $w$, $p$</td>
<td>$p$ + $k$ = $w$</td>
<td>$p$ + $h$ = $w$</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>$n$ + $V$ = $n$</td>
<td>$n$ + $w$ = $w$</td>
<td>$n$ + $l$ = $r$, $t$, $l$</td>
<td>$n$ + $k$ = $k$</td>
<td>$n$ + $h$ = $n$, $b$</td>
</tr>
<tr>
<td>3SG.F</td>
<td>$t$ + $V$ = $t$</td>
<td>$t$ + $w$ = $w$</td>
<td>$t$ + $l$ = $r$, $t$, $l$</td>
<td>$t$ + $k$ = $k$</td>
<td>$t$ + $h$ = $t$</td>
</tr>
</tbody>
</table>

There may be (underlying, historical) variation in the 1SG prefix for the alveolar and velar paradigms as well, but this is not recoverable from the synchronic evidence. Regular sound changes show the reduction of initial clusters [voiceless stop + lateral] in favour of the lateral alone. Of particular relevance to the analysis of the alveolar paradigm, we have attested instances of $*kl$ > $l$, which would operate to obscure any difference between an original $*k$-$l$ for 1SG and a historical $*\emptyset$-$l$, both of which would be predicted to show simple $l$ reflexes in contemporary Skou. Most of the other cluster reductions in the verbal paradigms are also compatible with regular historical changes.

Examining table 103xx we can see that the $w$-initial verbs show a very reduced paradigm, with only 2SG being differentiated from the other cells. The forms for 2SG, 3SG.NF, 3SG.F, 1PL and 2PL in the different paradigms above are relatively uncomplicated. The lack of a prefix on 2PL means that querying the verbs in the 2PL form is the simplest means of eliciting the root form, though speaker preference lists words in the dictionary, and here in the wordlist, under
their 1SG forms. The 3PL has two allomorphs, which do not follow any strict phonological conditioning, and simply reflect a conjugation split in proto-Skou (The same allomorphy for the 3PL inflection can also be observed in the other closely related Skou languages, Nyao, Wutung, Dumo, Dusur and Leitre). There is a tendency for the less frequent y- allomorph to occur with h-initial stems, and for the t- allomorph to appear elsewhere (and exclusively with vowel-initial stems), but t- is also found with h-stems. The following l-initial stems, làng ‘chop’ and lá ‘roast’ show that representatives of either allomorph may occur. In combination with the initial alveolar lateral of the stem in the second example, lá ‘roast’, the (putative underlying) combination t-l surfaces as [ɾ], reflecting a synchronic continuation of the diachronic *tl > r change that has applied in Skou (Donohue 2002).

y-allomorph: ‘chop’
(51) Te rí te=y-àng.
3PL tree 3PL=3PL-chop
‘They’re chopping the wood.’

(52) Te móe te=r-á.
3PL fish 3PL=3PL-roast
‘They’re roasting the fish.’

t-allomorph: ‘roast’

With two different h-initial verb stems, há ‘laugh’ and há ‘stand’, we find an otherwise homophonous pair of verbs differentiated only in their third person plural form, where the different conjugations allow for different inflections.

y-allomorph: ‘laugh’
(53) Te=a te te=y=á.
3PL=PROM 3PL 3PL=3PL-laugh
‘They’re laughing.’

t-allomorph: ‘stand’

(54) Te=a te te=t=á.
3PL=PROM 3PL 3PL=3PL-stand
‘They’re standing.’

The other major area of variation that we can see in these inflectional paradigms involves the 1SG cell of the paradigm. Synchronically there are three allomorphs for 1SG: Ø- (the majority case), k- and n-. The consonantal allomorphs reflect pre-proto-Skou *ŋ, which has been lost in most daughter languages (see Donohue 2002b). In Skou *ŋ has been lost (> Ø) in nominals, but is (barely) retained, irregularly, in the verbal paradigm. In verbal inflection for 1SG the original *ŋ is either lost (the majority case), is realised as an alveolar nasal (*ŋ > n), preserving the feature [+nasal] but losing the back place features, or else is preserved without nasality but retaining the velar place (*ŋ > k).43 Exemplars of this variation can be seen in the following three verbs, which show the three allomorphs of the first person singular inflection:

43 Nyao, the neighbouring relative to the south-east (see 1.4 and 7.8.1.3), also shows a k- in the 1SG form of the verb ‘eat’, suggesting that this variation in inflection for the 1SG part of the paradigm reflects an irregularity in the proto-Skou paradigm, and not simply an idiosyncrasy of Skou morphology. See figure 1 in section 1.4 for an idea of the ‘genetic distance’ between Nyao and its western neighbour, Skou.
Ø-allomorph: ‘seaward’

(55) Nì=re o.
1SG=go seaward
‘I went towards the sea.’

k-allomorph: ‘eat’

(56) Rámángku ni=k-ang.
rice 1SG=1SG-eat
‘I ate rice.’

(rámángku is a lexicalised compound composed of the roots rámang ‘ant (sp.)’ and ku ‘child, egg’, now conventionalised as the word for ‘rice’, by analogy with the appearance of cooked rice: ‘ant’s eggs’)

n-allomorph: ‘forget’

(57) Pe ong ni=n-e.
3SG.F memory 1SG=1SG-forget
‘I forgot her.’

In some verbs we find alternation between the k-allomorph and the Ø-allomorph. This can be seen in verbs such as a ‘carry’, which can appear (with roughly equal frequency) as either a or ka in the 1SG form, showing inflection according to either the Ø-paradigm or the k-paradigm. The verb ‘drink’, the root of which is hung, is usually inflected as kung in the 1SG, showing a k-inflexion on the root, but some younger speakers have the form hung, showing Ø-inflexion. This newer innovation is thought by the older speakers as having arisen from contact with speakers of related languages across the border in Papua New Guinea, which inflect this verb (and others) without a consonant for 1SG: Waromo, Lido /hù/ ‘I drink’.

An alternative arrangement for the occurring initial consonants of verbs shows the correspondence of initial consonant to agreement function, revealing which functions an initial consonant (or its absence) is used for. This is shown in table 104xx – this table only lists the verbs that do inflect by consonant prefixation, and does not include the verbs which are uninflecting, and so obviously show the same initial consonant with reference to all pronominal inflections (see ‘wash’ in 7.2.2.2, and the verbs in table 103). Appendix 2 lists further verbal paradigms, both the regular and the irregular. From this table we can see that for most initial consonants there is more than one possible referent. Only the palatal consonants j and y uniquely refer to one pronominal argument (3PL), though most of the other consonants there do show clear preferences in their coding choices. The rightmost column of this table lists the total number of agreement cells that are marked by the consonant in the leftmost cell, combining the information for the four major inflectional conjugations. Thus, for instance, the consonantal onset t is used to mark the third person plural in vocalic verbs, it can (depending on the verb in question) be used to mark 3SG.F, 1PL, or 3PL in an alveolar verb; it is not part of the inflectional paradigm of any velar verbs; and it is used to mark the third person plural in glottal verbs. In total the onset t is used in five instances, out of a total of 41 filled (possibly multiple times) cells. It is particularly prevalent in the alveolar paradigms, with three out of eleven possible onsets, 27%, being t, and it is completely absent from the bilabial and velar paradigms, where w and k, respectively, predominate.
Table 104. Initial consonants and agreement features

<table>
<thead>
<tr>
<th>Ø</th>
<th>W</th>
<th>L</th>
<th>K</th>
<th>H</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>3SG.F</td>
<td>2SG</td>
<td>2SG</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>t</td>
<td>3PL</td>
<td></td>
<td>3SG.F, 1 PL, 3 PL</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>k</td>
<td>1SG, 3SG.NF</td>
<td></td>
<td>1SG, 1 PL, 2 PL, 3 PL</td>
<td>1SG, 3SG.NF</td>
<td>8</td>
</tr>
<tr>
<td>b</td>
<td></td>
<td></td>
<td>2SG</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>j</td>
<td></td>
<td></td>
<td>3PL</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>m</td>
<td>2SG</td>
<td></td>
<td>2SG</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>n</td>
<td>1SG, 1 PL</td>
<td></td>
<td></td>
<td>1PL</td>
<td>3</td>
</tr>
<tr>
<td>h</td>
<td></td>
<td></td>
<td></td>
<td>1SG, 2 PL</td>
<td>2</td>
</tr>
<tr>
<td>w</td>
<td>1SG, 3SG.NF, 3SG.F, 1 PL, 2 PL, 3 PL</td>
<td>3SG.F</td>
<td>3SG.F</td>
<td>3SG.F</td>
<td>9</td>
</tr>
<tr>
<td>r</td>
<td></td>
<td></td>
<td>3SG.F, 1 PL, 3 PL</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>l</td>
<td></td>
<td></td>
<td>1SG, 3SG.NF, 2 PL</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>y</td>
<td></td>
<td></td>
<td></td>
<td>3PL</td>
<td>1</td>
</tr>
</tbody>
</table>

Yet another possible arrangement of this data, also useful for determining the functioning of the agreement system in Skou, is to arrange the consonants that are used to encode each of the person/number/gender combinations. This is shown in table 105xx.

Table 105. Pronominal features and consonant encoding

<table>
<thead>
<tr>
<th>Ø</th>
<th>W</th>
<th>L</th>
<th>K</th>
<th>H</th>
<th>Sum of onsets</th>
<th>Number?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>k n Ø</td>
<td>w</td>
<td>l</td>
<td>k</td>
<td>k h</td>
<td>k n h w l Ø</td>
</tr>
<tr>
<td>2SG</td>
<td>m p</td>
<td>p</td>
<td>b</td>
<td>m</td>
<td>p b m</td>
<td>3</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>p</td>
<td>w</td>
<td>w t r</td>
<td>w</td>
<td>w</td>
<td>p t w r</td>
</tr>
<tr>
<td>3SG.F</td>
<td>p</td>
<td>w</td>
<td>w t r</td>
<td>w</td>
<td>w</td>
<td>p t w r</td>
</tr>
<tr>
<td>1PL</td>
<td>n w</td>
<td>t r</td>
<td>k</td>
<td>n</td>
<td>t k n w r</td>
<td>5</td>
</tr>
<tr>
<td>2PL</td>
<td>Ø</td>
<td>w</td>
<td>l</td>
<td>k</td>
<td>h</td>
<td>k h w l Ø</td>
</tr>
<tr>
<td>3PL</td>
<td>t</td>
<td>w</td>
<td>r</td>
<td>k</td>
<td>t</td>
<td>t k w r</td>
</tr>
</tbody>
</table>

Yet another possible arrangement of this data, also useful for determining the functioning of the agreement system in Skou, is to arrange the consonants that are used to encode each of the person/number/gender combinations. This is shown in table 105xx.

Table 105. Pronominal features and consonant encoding

<table>
<thead>
<tr>
<th>Ø</th>
<th>W</th>
<th>L</th>
<th>K</th>
<th>H</th>
<th>Sum of onsets</th>
<th>Number?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>k n Ø</td>
<td>w</td>
<td>l</td>
<td>k</td>
<td>k h</td>
<td>k n h w l Ø</td>
</tr>
<tr>
<td>2SG</td>
<td>m p</td>
<td>p</td>
<td>b</td>
<td>m</td>
<td>p b m</td>
<td>3</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>p</td>
<td>w</td>
<td>w t r</td>
<td>w</td>
<td>w</td>
<td>p t w r</td>
</tr>
<tr>
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<td>p</td>
<td>w</td>
<td>w t r</td>
<td>w</td>
<td>w</td>
<td>p t w r</td>
</tr>
<tr>
<td>1PL</td>
<td>n w</td>
<td>t r</td>
<td>k</td>
<td>n</td>
<td>t k n w r</td>
<td>5</td>
</tr>
<tr>
<td>2PL</td>
<td>Ø</td>
<td>w</td>
<td>l</td>
<td>k</td>
<td>h</td>
<td>k h w l Ø</td>
</tr>
<tr>
<td>3PL</td>
<td>t</td>
<td>w</td>
<td>r</td>
<td>k</td>
<td>t</td>
<td>t k w r</td>
</tr>
</tbody>
</table>
except those expounding 2SG, and so must be thought of as the least explicit consonant to find at the onset of a prefixally inflecting verb.

One final note on the comparison of the relative ‘weight’ of ambiguity carried by the different possible verb onsets: there are many verbs that show defective prefixal agreement, described in 7.2.2.1, or no agreement at all, described in 7.2.2.2. In most cases this is a result of the verb starting with a consonant that does not allow for variation in the paradigm, but also includes verbs that must simply be annotated as not showing the expected variation, or showing it to a lesser extent than is predicted.

7.2.2.1 Defective prefixal agreement

In the previous section we saw a model for the most common, and most regular (in terms of recurring and phonetically and/or diachronically explicable patterns) forms of the agreement paradigm that are found with prefix-taking verbs when they are inflected for subject. In addition to these regular patterns, taking into account the conjugation variation that is present in the alveolar, velar and glottal members of that set (the difference between verbs that take a _t_-conjugation or a _y_-conjugation in the 3PL, and the various, essentially unpredictable, allomorphs of the 3SG.F found in the alveolar verbs), various other verbs show defective paradigms, or alternatives. These ‘partial paradigms’ will be described here, and in section 7.2.2.4 I shall offer a possible model that shows underlying regularity in the ways the inflectional system of the irregular verbs develops in complexity. They are termed ‘defective’ paradigms because, in all cases, they are not so much alternatives to the major inflectional conjugations, but rather subsets of the information that is present in those paradigms; in other words, they represent various incomplete applications of the regular inflectional rules.

The most common pattern of irregularity involves just one or two cells of inflection being at variance from the expected pattern, as seen in the verbs in table 106xx, with the unexpected inflection, or lack of inflection, shown in shaded cells. For instance, in the verb ‘stand’, the 3SG.NF does show inflection, but only by means of vowel alternations (see 7.2.3), and not through the expected use of the consonantal prefix _k_- on the stem, as described in 7.2.2. Given that inflection by means of prefix is attested in this verb for the 2SG and the 1PL, the absence of prefixal inflection in the 3SG.NF, 3SG.F and 3PL cells is inexplicable. The only cells that do not show ‘defective’ agreement patterns are those that are typically expounded by Ø-prefixation: the 1SG and 1PL cells never show irregular additional prefixation, and since they typically show none, it cannot be omitted. The verbs below show that all other cells can be defective, though there is a clear preference for any defective inflectional cells to centre on the third persons. Of course, the presence of a ‘defective’ inflection for a 1SG or 2PL subject would not be detectable, since verbs with those subjects typically display an uninflected form of the verb root.
I have recorded one verb in two different inflectional paradigms, one more ‘regular’, and accepted by all speakers, and the other highly irregular, and only heard from some older speakers. The ‘regular’ paradigm for *oeng ‘remember’ does not conform to the norms seen in the previous section, in that many of the expected inflections are missing (the prefixes for 3SG.F, 1PL and 3PL; we might expect *pong, *noeng and *teng for these forms, but the prefixes are missing). We can only call this the ‘regular’ paradigm by comparison with the alternative ‘irregular’ paradigm, which has been heard from, and is accepted by, only by some older speakers (who also, in the main, accept the ‘regular’ paradigm as well). The irregular paradigm deviates from our expectations for a ‘normal’ inflecting verb in lacking the prefixes for the plural numbers, and also 3SG.NF, but most strikingly in allowing an unexplained consonant cluster for the 3SG.F inflection.

Further examples of verbs with defective inflection paradigms can be found amongst the sample verb paradigms listed in appendix 4. In addition to these verbs that show defective or irregular agreement patterns, there is also a large (approximately one third of all verb roots) group that show no variation in their onset at all for agreement. For some verbs this can be ascribed to phonological constraints (the verb root does not begin with a consonant from the regular phonological classes, Ø w l (r) k or h. For other verbs the right phonological conditions are met, but the verb stipulatively lacks any alternations that might be ascribed to underlying prefixation. These are, in a sense, 100% irregular verbs, in that they satisfy all the phonological conditions for prefixal inflection but, just as with the verbs discussed in this section, stipulatively lack some prefixal inflectional categories. While the verbs escribed here show at least some regular inflection, the verbs described in the following section show a complete lack of prefixal agreement.

**Table 106. Defective inflection paradigms**

<table>
<thead>
<tr>
<th></th>
<th>vocalic</th>
<th>velar</th>
<th>glottal</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>i</td>
<td>wung</td>
<td>hi</td>
<td>hue</td>
</tr>
<tr>
<td>2SG</td>
<td>me</td>
<td>wung</td>
<td>mi</td>
<td>mue</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>i</td>
<td>wung</td>
<td>ki</td>
<td>kue</td>
</tr>
<tr>
<td>3SG.F</td>
<td>e</td>
<td>pung</td>
<td>wi</td>
<td>wue</td>
</tr>
<tr>
<td>1PL</td>
<td>ne</td>
<td>wung</td>
<td>ni</td>
<td>bue</td>
</tr>
<tr>
<td>2PL</td>
<td>e</td>
<td>wung</td>
<td>hi</td>
<td>hue</td>
</tr>
<tr>
<td>3PL</td>
<td>e</td>
<td>bung</td>
<td>hi</td>
<td>yue</td>
</tr>
</tbody>
</table>

‘stand’ ‘die’ ‘go west’ ‘tread on’

**Table 107. Defective inflection in the verb ‘remember’**

<table>
<thead>
<tr>
<th>‘remember’</th>
<th>regular</th>
<th>irregular</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>oeng</td>
<td>oeng</td>
</tr>
<tr>
<td>2SG</td>
<td>moeng</td>
<td>moeng</td>
</tr>
<tr>
<td>3SG.NF</td>
<td>koeng</td>
<td>oeng</td>
</tr>
<tr>
<td>3SG.F</td>
<td>ong</td>
<td>plong</td>
</tr>
<tr>
<td>1PL</td>
<td>oeng</td>
<td>oeng</td>
</tr>
<tr>
<td>2PL</td>
<td>oeng</td>
<td>oeng</td>
</tr>
<tr>
<td>3PL</td>
<td>eng</td>
<td>eng</td>
</tr>
</tbody>
</table>