A Grammar of the Skou language of New Guinea

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Draft: comments welcome!

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

† 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 is termed 'oblique'. This collapses the distinction between subcategorised non-terms and non-subcategorised non-terms ('adjuncts'), but does so for language-

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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.

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, Dumo, Dutch, 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 typologicalperspective 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 languages, in addition to certain of the above abbreviations that are relevant:

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

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 *hì*, 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
?	question mark	final rising intonation *or* presence of a question word in the sentence serving an interrogative function
' '	(tab)	separates lexically independent and structurally independent roots
[XY]	square brackets	indicates a phrasal or morphological constituent, of the sort *xy*

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 accept it to some degree, 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
?#, !#, #(XY), (#XY)		(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-á*   *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. 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 verb

belongs. 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)

'eat'	SG	PL		'do'	SG	PL		'go'	SG	PL
1	kang	nang		1	li	ti		1	re	ne
2	mang	ang		2	pi	li		2	me	re
3	kang	tang		3	li	ti		3	ti	te
3F	pang			3F	tue			3F	te	

In the verb 'eat' the form [ã] 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 other cells in the paradigm are prefixed, and all the different cells are indicated as prefixal: *m-ang* for mã, glossed as '2SG-eat'. 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], [tu] and [ti]) are each uniquely glossed. On the other hand the form [te] 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

	SG	PL			SG	PL			SG	PL
1	nì	ne		1	nì	nè		1	ne	ne
2	mè	e		2	mè	è		2	me	e
3	ke	te		3	ké	tè		3	ke	te
3F	pe			3F	pè			3F	pe	

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 *tóeùe* would take up (compare with the succinct 'MyZ').

F	father	Z	sister
M	mother	Si	sibling (either sex)
S	son	y	younger
D	daughter	e	elder
P	parent	H	husband
C	child	W	wife
B	brother	Sp	spouse
		o	other's

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. Heel erg bedankt voor alles dat U voor mij gedaan heeft, en ik hoop maar dat deze beschrijving U wat plezier doet.

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 during an elicitation session. To so generously aid someone who you have not 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 own methodology. Thank you, for that introduction to the languages of New Guinea (the Skou family, no less) 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 1999), 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 we'd 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 working 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 will 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.

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.

Picture 12. Theo Kemo and his eldest daughter looking over an early literacy book in Skou.

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 interesting 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)
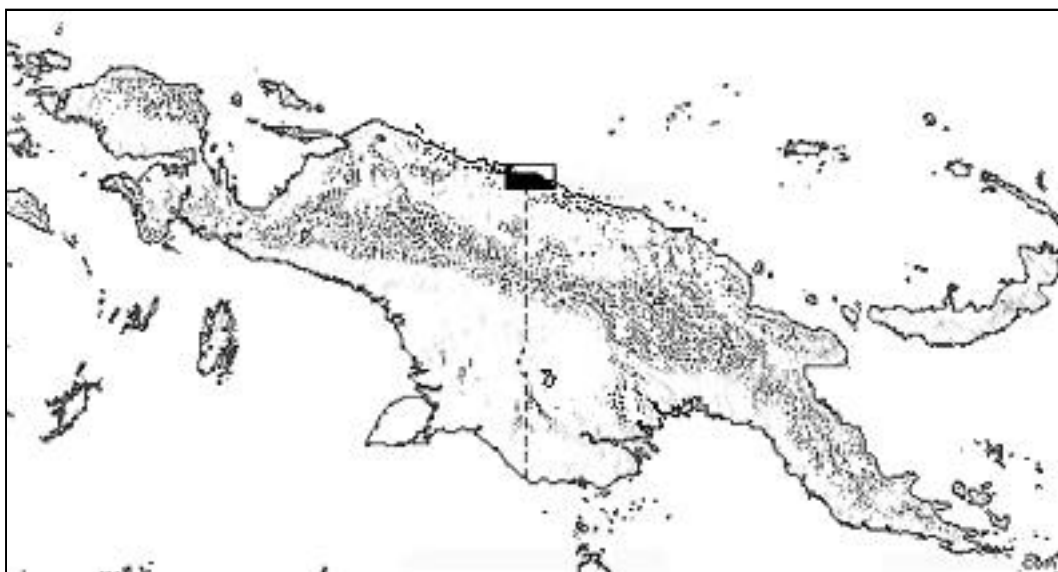
The language described here as Skou, and which has been referred to in the linguistics literature as Sko, Skou, Sǝkou, and Tumawo, is referred to locally as *Te Máwo pílang nè ne* ('Our, the Mabo people's, language'). Skou is related to other languages in the small Skou family of which it is the westernmost 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 Papua, formerly Irian Jaya; see Silzer and Clouse

1991). 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 Səkou 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 *suku*s (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, [sə̆'kow].

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. 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 the 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.

Table 1. Typological differences between Humboldt Bay area languages

	word order	V agr.	NP case?	tones?	vowels?	Gender?
Skou	APV/SV	s-V/p	(ERG)	tonal	7, (ʉ, ɵ)	fem, n-fem
Elseng	APV/SV	s-V-s	ACC	–	7 (ɨ, ə)	–
Sentani	APV/SV	V-s-p	ACC	–	7 (æ, ə)	–
Nafri	APV/SV	V-s(/p)	ACC	–	5	–
Tobati	PAV/SV	s-V-p	ACC	–	5	–
Ormu	APV/SV	s-V-p	ACC	–	5	–
Papuan Malay	AVP/SV	s=V	–	–	5	–
Indonesian	AVP/SV	V	–	–	5/6 (ə)	–

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 [ɓ] and [ɦ] (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 [ɓ] 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 /ɜ/ phoneme (or allophone) in Skou; all the other languages have at least an allophonic [ɜ], but Skou lacks even this, traditionally substituting an /r/ in loan words involving an [ɜ].

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,[2] 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 of a distinction between a more open and a more close mid vowel, both front and back (that is,

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[1] My sources for information on the languages other than Skou in the Humboldt Bay area are: Elseng: Burung 2002, own fieldnotes; Sentani: Cowan 1965, D. Hartzler 1976, M. Hartzler 1976, 1983, 1994, and pers. comm; Nafri: Gregerson and Hartzler 1987, own fieldnotes; Tobati: Donohue 2002; Ormu: Purba et al 1996; (Standard) Indonesian, Papuan Malay: own notes.

[2] Though see 7.2.2.1.

the distinction between eɛ and oɔ, 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 /ɔ/). 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

	V morph.	NP case?	sonorants	clusters?	vowels?	Gender?
Skou	s=s-V/o	(ERG)	r, l	–	7, (ʉ, ø)	fem, n-fem
Nyao	s-V(/o)	–	r	some	8 (ɨ, e, o)	–
Wutung	s-V	–	l	many	8 (ɨ, e, o)	–
Dumo	s-V	–	l (([r]))	some	8 (ɨ, e, o)	–
Dusur	s-V	–	l	some	8 (ɨ, e, o)	–
Leitre	s-V(/o)	–	l ([r])	–	7 (e, o)	–

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 tides 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 toβwæðic and iɲiros 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),[3] 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 Lùng*). 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-migrators 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 or 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

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3   In Skou *pa* is 'water', and *palong* is 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 firther 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 [ʒ] 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'.)

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 unthanked porters, travelled through the Skou village area on her walking 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 *controlleur* 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 'Niŋkra', Nikra', Sangke)[4] 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.[5] 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.

Post 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 [üŋ], 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 Indian islands. 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 Indonesian armed forces, there is every likelihood that an independent state might have resulted from this period of

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4   Niŋkra / 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.

intense development of infrastructure and training. 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 now 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 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 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

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[6]   Despite the printed assurances of the Indonesian Department of Health.

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 1999). 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 Elopi, 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 Bapúbí* 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.[7] 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:

> … 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

> 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 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

> 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

> 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

> 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

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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.

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 kranki ~ 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 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: *Kemo* is a simplification of *Kóemo* for use in a language (Malay/Indonesian) that lacks an [ɔ] (represented here with the digraph <oe>), and *Patipeme* is probably etymologically derived from *bàti 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

	Te Tángpe / Skou Yambe		*Te Máwo* / Skou Mabo		*Te Bapúbí* / Skou Sai	
1	*Te Léti*	Rollo	*Te Málo I*	Mallo I	*Te Lómo*	Lomo
2	*Te Kéfa*	Ramela	*Te Málo II*	Mallo II	*Te Nàli*	Nali
3	*Te Bapóeme*	Patipeme	*Te Wí*	Awi	*Te Múngtang*	Muntang
4	*Te Yálu*	Membilo	*Te Hùepa*	Palora	*Te Hùepa*	Palora
5			*Te Kóemo*	Kemo		
6			*Te Yálu*	Membilo		
7			*Te Tangpúto*	Tangputo		

In each case the first listed clan is the largest clan in that village, and 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 Protestant church (the *Gereja Kristen dalam Irian*, 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
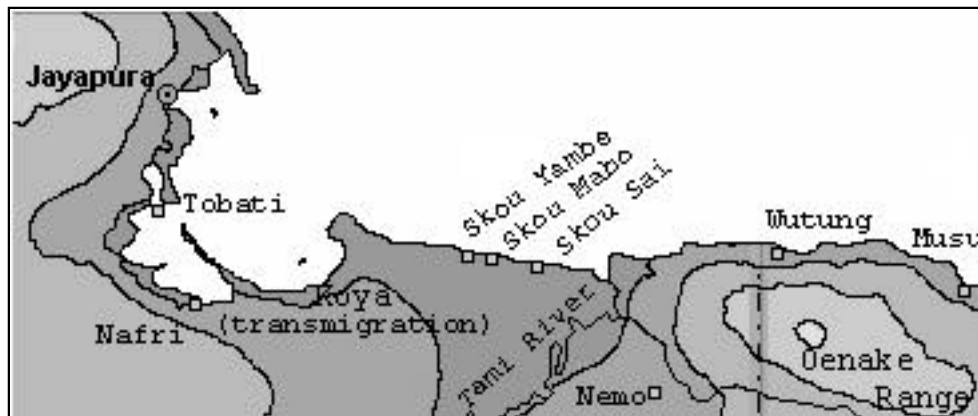
Agriculture is dominated by the work needed for the cultivation of *hòe* sago, which grows in a semi-wild state in the interior between the Skou coast and the Tami river, in those areas that have not yet been affected by Indonesian settlement. This is an area of poor soil due to frequent inundations 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 *rángúeke* sweet potato and *óe* 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 *pói* spinach, as well as a variety of fruits, such as *péngue* 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 *pále* pigs are the target of choice, but more commonly *táng* birds are hunted, and the eggs of the *tangwáue* 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 *pú* 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 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 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 Skou family
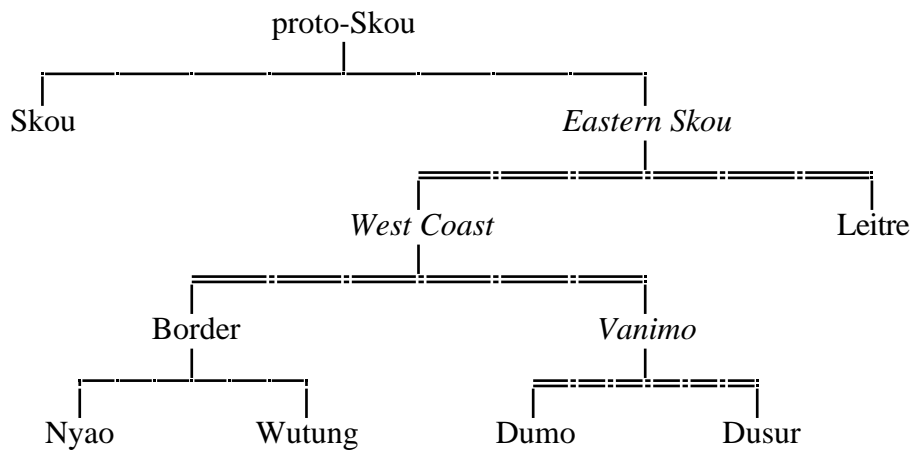
Within the closer Skou family, we must recognise a number of innovations that have spread beyond the language in which they have had their start, some of which group Skou with Nyao and Wutung, and others of which group Skou with Nyao, Wutung and Dumo. (Further groupings based on the spread of various 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 are the absence of /ŋ/ and /ɡ/, and the presence of [ɾ]. 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 Skou family

	Skou	Eastern Skou				Leitre
		West Coast		Vanimo		
		Border		Dumo	Dusur	
		Nyao	Wutung			
*t	ɾ	t	t	t	t	t
*ʉ	ʉ	u/i	u/i	u/i	u/i	u/i
*gʷ	p	tʃ	tʃ	d	d	b
*j	t	t	t	d	d	ʒ
*tl	ɾ	hɾ	hl	t	t	t
*f	f	f	f	ɸ/p	p	p

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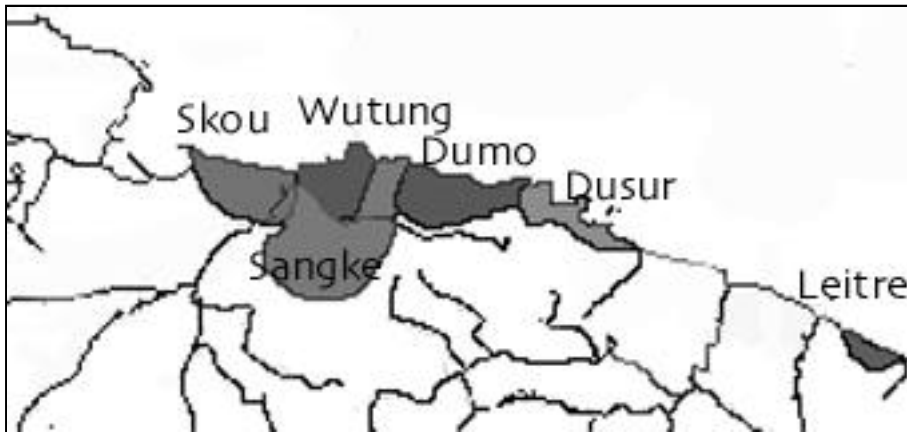
The small Skou language family described above is itself part of a larger genetic grouping of languages that stretch from Skou in the extreme west of its range along the coast and immediate hinterlands of the Serra Hills behind Leitre to Barupu (formerly Warapu), now located inland of Sissano Lagoon,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

Figure 2. The Macro-Skou family

Macro-Skou linkage

Language codes:

Ba	Barupu	Pu	Puari	Su	Sumararu
Mo	Mori	Rm	Ramo	Wm	Womo
No	Nouri	Rw	Rawo	Wu	Wutung
Po	Pou	So	Sumo		
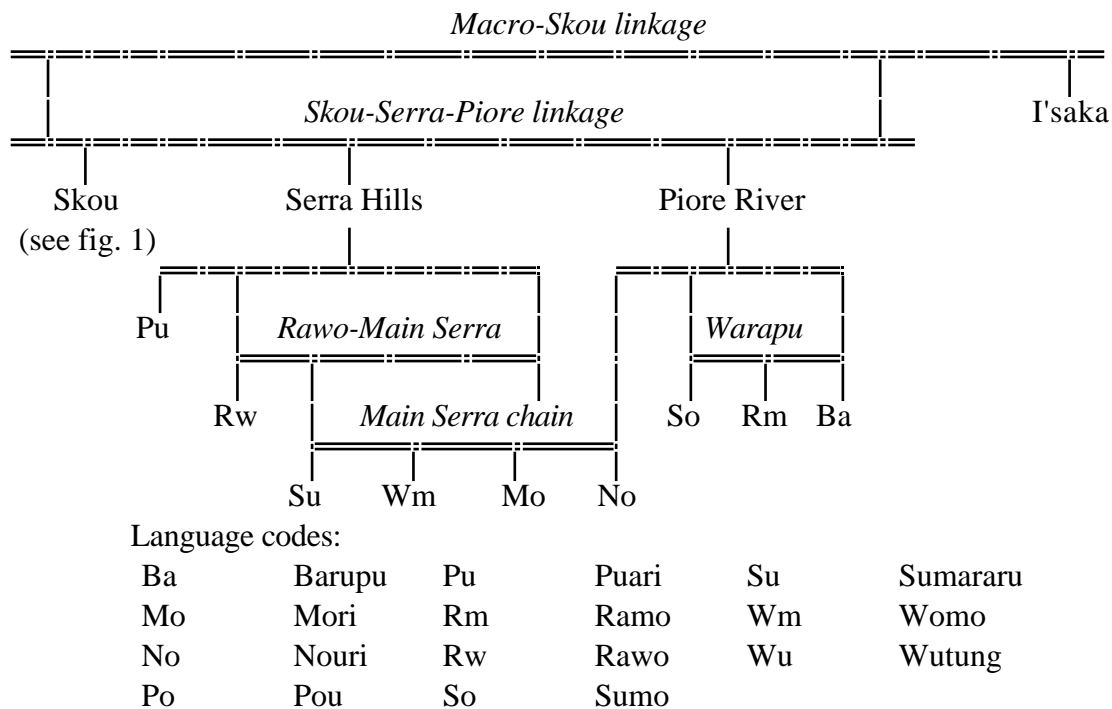
Earlier classifications of languages of this part of New Guinea have treated Skou variously as the western-most relative of the languages of the Torricelli mountains (Ray 1919, who lists 'Seko' and the other languages listed in figures 1 and 2 as belonging to the 'Valman' group); as the northern-most 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. Laycock's classification of the 'Sko Phylum'

SKO PHYLUM-LEVEL STOCK:

Vanimo family:	Krisa family:
Sko	Krisa
Sangke	Rawo
Wutung	Puari
Vanimo	Warapu

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 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 highlands Trans New Guinea family languages as 'typical' exemplars of the New Guinea linguistic stock, 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.

Table 5. Phonology

		Austronesian	Papuan
1	Vowels	5 vowels	5 vowels + ə; (also 7-vowel; front rounded)
2	Places	P - T - K (~C)	P - T - (C/s) - K
3	Manner	P B; B =±MB	no pattern
4	Fricatives	f v - s - ɣ	fricatives equate to stops: p/ɸ/β; t/r/l; k/g/ɣ; few pure fricatives; often just s
5	Liquids	r l	r = l
6	Syllables	(C)V	C(C) V C
7	Stress	ˈ	stress phonemic, unpredictable,
8	Tone	~(tone)	or tone present

The typical Austronesian language is said to have five vowels (*i e a o u*); Skou exceeds this typologically unexceptional system with its two non-back rounded vowels, ʉ and ɶ. While

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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.

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 *ɕ*. 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

		Austronesian	Papuan
1	type	close to isolating	agglutinative
2	inflection	little inflectional morph	strong inflectional categories, often fused with TAM
3	derivation	suffix applicatives prefix causatives reduplicate for intransitive	usually SVCs; derivational morphology usually suffixal
4	nominal categories	no number or gender on nouns	usually no number or gender on nouns
5	case	no case, word order strict	case by suffix/enclitic; ACC = DAT, ERG = INSTR or LOC
6	verbal agr	s=V=o	o=V=s, V=o=s, V=s=o
7	TAM	s=TAM=V	V-TAM, or SVCs
8	categoriality	precategoriality rife	strict root categories

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:

		Austronesian?	Papuan
1	numerals	n/a	based on body parts
2	classification	n/a	based on existential verbs
3	pronouns	n/a	reflect *na ka [y]a* for 1 2 3SG
4	verbal types	n/a	prevalence of light verbs

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, *nì mè ke pe* in the singular (first and second persons, third person non-feminine and third person feminine, respectively) reflect proto-Macro Skou *ŋi, *mi, *kya and *ŋᵂɛ, 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 7. Syntax

		Austronesian	Papuan
1	phrase	left-headed	right headed
2	clause	SVO	SOV (usually allow OSV)
3	PP	PREP N	N POST
4	DP	DET N	no DET
5	modifiers	N ADJ, N RC	ADJ N, also N ADJ
6	sentence	S CONJ S	S S; S-SWITCH S

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), and so cannot be counted as evidence either for or against 'Papuan-ness'. 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 1.

The patterns that are typical for languages of the 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 Foley (1998).

Table 8. Skou family and Macro-Skou family linguistic features

		Skou family	Macro-Skou family
1	Vowels	8 vowels	6 vowels
2	Places	P - T (~C) K Kʷ	P - T - K
3	Manner	P B	P B
4	Fricatives	f s h	f s h
5	Liquids	l, no r	l, no r
6	Syllables	(C(C))V	(C(C))V
7	Stress		
8	Tone	tonal, nasalisation	tonal, nasalisation
1	type	close to isolating	close to isolating
2	inflection	little inflectional morph	little inflectional morph
3	derivation	usually SVCs	usually SVCs
4	nominal categories	no number or gender on nouns	no number or gender on nouns
5	case	no case, word order strict	no case, word order strict
6	verbal agr	s=V	s=V=o
7	TAM	V-TAM, or SVCs	V-TAM, or SVCs
8	categoriality	strict root category	strict root category
1	numerals	base-8	?
2	classification	no	?
3	pronouns	*ŋi, *mi, *ke *ŋʷe	*ŋi, *mi, *kya *ŋʷe
4	verbal types	prevalence of light verbs	prevalence of light verbs
1	phrase	right headed	right headed
2	clause	SOV	SOV
3	PP	N POST	?
4	DP	no DET	no DET
5	modifiers	N ADJ, N RC	N ADJ, N RC
6	sentence	S CONJ S	S CONJ S

In this, its own linguistic context, Skou still does not fit very well: it shares only three phonological traits with the 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 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. 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) *tángrùe* 'cassowary' and *tàng* 'canoe', representing [tãĩrɨ] [‾\] and [tɔ̃] [ˍ], respectively.

Anceaux' xxxxxxxxxxxxxxxx

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 ɛ, and between o and ɔ, 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

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[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 èn 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'.

not seem to accord with the data observed here (there are no occurrences of [ṳ̃] other than in fast-speech environments, always adjusted in slow speech),[14] 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 (*táng* '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 *páng* 'chop (PL.P)'. The contrast between Voorhoeve's interpretation of the evidence and the alternativethat presents itself with the benefit of a more detailed morphological analysis of the language is 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 [-áne-] and [-ã́e-].

Table 9. Explaining 'nasal loss': a reinterpretation

	Voorhoeve	Alternative interpretation
Nasal C	ne pánete	ne pã̃ ne ti
	'We are cutting wood.'	*ne pang ne ti*
Nasal V	te paẽte	te pã̃ e ti
	'They are cutting wood.'	*te pang e ti*

An alternative explanation can also be found for the [ã̃ã̃] ~ [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 *táng ing a* 'the bird', which is regularly realised as [tã̃ŋa] (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 ŋ 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:

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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..

        ASP   SUBJ   OBJ   V

(1)   *ja*   *te*   Ø   *tàɽ*

        PERF   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, and so appears in the normal position for an object in this SOV language

        SUBJ   OBJ   V

(1)'   Ø   *Ya*   *te=t-ang*

              thing   3PL=3PL-eat

The fact that the generic object marker can also be used in non-perfective aspects, such as *Ya te tang tang* '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 Skou family. Ross (1980) presents a sketch of the Dumo language,[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.

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[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 Dúsɐ (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 [ɫ] 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 ([ɫ] is found in Dusur, corresponding to Dumo [ʔ]; see Donohue 2002).

Table 10. Skou and Dumo compared

	Skou	Dumo	Comments
1. Stops	p b t j k	b t d ʔ	Dumo lacks palatal or velar stops; Skou lacks voicing in the alveolar or velar places
2. Fricatives	f h	ɸ s	Skou lacks an s; Dumo lacks the glottal fricative h[16]
3. Sonorants	r l	l	Skou has added r
4. Syllable pitches	high, low, fall	high, low, fall	identical, with identical tone sandhi (though see 2.3.1)
5. Lexical clusters	none	pl bl ml ʔl	Skou lacks clusters
6. Case	ergative, instrumental	none	Dumo lacks case
7. Agreement	clitic, prefix, vowel	prefix, (vowel)	Skou has more elaborate agreement
8. Classification	2 genders and 2 classes	2 classes	Skou shows a more elaborate system
9. Word order	SOV OBL	SOV OBL	identical
10. Valency change	applicative, (passive)	none	Dumo has lost the applicative

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 considerably different to Dumo, and the other languages of the Skou family (see also figure 1).

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 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

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[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/.

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 (Laycock [1975: 851] states that there are 'some forty items') of lexical items that can be found in that source.

Table 11. Lexical materials on Skou over five decades: an short sample

	Cowan, Galis '1952', 1953	Voorhoeve 1971	Moxness 1985	Kalmbacher 1985	Donohue 1998+
'head'	-	röbe	xróbì / hróbì	'kríbi	ɾøbi
'bird'	tân	tãã ~ tana	tã̃ː	tã̃ː	tã̃
'wing'	fâ	-	fã̃ː	ɸã̃ː	fã̃
'man'	teba-lên	ba, kébanè	baʔ / baˈlẽ	ba / baˈle	balẽ
'coconut'	hâh	-	-	-	hã̃
'stone'	wung	wũ̃	wũ̃ / wuŋ	wuː	wũ̃
'rain'	fuh	ifo	fũ̃ / ɸu / ɸo	ɸo	fu
'sun'	ráh	rãã	rã̃ː	rã̃ː	rã̃
'fire'	(g)ráh	ra	-	-	ra
'canoe'	tàng	-	-	-	tã̃
'arrow'	tâ	-	-	-	ta
'black'	-	nɛmbi	lɛ̃mbì	'lɛmbi	lɛ̃fi
'two'	hintung	hĩtɔ	hĩ̀tũ̃	hĩtũ̃	hĩtũ̃

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.[17]

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

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[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.

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, [x̟] ~ [ɣ̟] 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 n̪ where other sources have an l̪. 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).

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 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:

Table 12. The Skou segmental system

p	t		k		i	ʉ	u
b		j ~gʲ				ø	
m	n				ɛ		ɔ
f				h		a	
	r l y		w				

Phonotactically only (C)V syllables are allowed; overwhelmingly CV, and not simply V, are found (approximately $5/6$ 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 interesting 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 /ʉ/, 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 ɰ̥ or ɺ) 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 [\], 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.

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 oblique (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).

	Dutch
oto	< *auto* [oːtoː] 'car, vehicle'
	Malay
kurù	< *guru* 'teacher'
kopi	< *kopi* 'coffee' (< Dutch *koffie*) (rarely used; more common is simply *pa tá* (see below) for both 'tea' and 'coffee')
lémong	< *lemun* 'lemon'
	Tok Pisin
tàngmio	< *tamiok* 'axe' (ultimately < English *tomahawk*)
	Hokkien? (Southern Min Chinese)
(pa)tá	< *ta* 'tea (also by extension: coffee, hot drinks)'
	Unknown? (Pan-New Guinea; locally, [saβakaj] in Tobati, Sentani)
rabáka	< *sa[b/v]aka* 'tobacco' (ultimately related to 'tobacco')

It is more than 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 result 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 places a very restricted role in Skou, 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:

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

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 monoconsonantal 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 13. Length of all words

Words	1-	2-	3-	4-	5-	TOTAL	%AGE
TOTALS	256	193	45	2	1	497	100
%AGE	52	39	9	0.4	0.2		

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 ɾ. The absence of an ʒ, either phonologically or phonetically (except in one or two suspected loanwords), is also unusual, both cross-linguistically and in the Skou family.

Table 14. The consonants of Skou

	Bilabial	Labio-dental	Alveolar	Palatal	Velar	Glottal
Voiceless stop	p ~ pʷ		t		k	
Voiced stop	b			ɟ ~ gʲ ~ (ɡ)		
Fricative		f				h
Glide / Affricate	w			(j) ~ ʑʲ ~ dʑʲ		
Lateral			l			
Rhotic			r			
Nasal	m		n			

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 [ʒ] that cannot be assumed to be an allophone of one of these listed phonemes (see 2.2.1.5). These words, *sangbíki* 'pumpkin' and *so* 'well then', are both of (highly) suspected non-Skou origins, but they might presage the return of an /ʒ/ 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 15. Allophony of /p/

	Allophone	Environment
/p/	[p]	/ __ ʉ, ø, ɔ, u
	[pʷ]	/ __ i, ɛ, a

The rounding effects on a /p/ the precedes an unrounded vowel are perhaps more accurately represented as [ʷpʷ], since there is a noticeable [-ʷ] off-glide to any preceding vowel. For instance, /lɔpa/ 'earlier' is heard as [lɔʷpʷa], 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 [ɨ] -MD) after voiced construents (obstruents? -MD) other than velars', suggesting a similar dissimilation for the feature [high] in the syllable.

Another interesting 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 /p̪/ 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 /p̪/ by the speaker giving the text:

[r̃ãl̃ẽmpa ẽwakɔ   r̃ãl̃ẽpa]

[⌐ ⁻ – • ⁻ –   ⁻ ⁻ –]

(1)   *… rángléng=pa,*   **(p)e=w-á=ko**   *rángléng=pa, …*
        afternoon=INSTR   3SG.F=3SG.F-pound=OBV   afternoon=INSTR
        '… until afternoon, she pounds (it) until it's afternoon, and then …'

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 /tɛbapubi/ *Te Bapúbí* 'Skou Sai'. This is, however, exceptional; overwhelmingly, [b] is heard in all positions, with [tɛbapubi] 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 [ɡʷ], 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 16. Pre-stopped allophones of /w/ following V

Pitch		
[∥– ↘]	[r̃ãwi]; #[r̃ãŋɡʷi]	'lamp'
[∥⌐ ↘]	[tẽwa]; #[tẽŋɡʷa]	'tern'
[∥– – –]	[r̃ãwaʉ]; #[r̃ãŋɡʷaʉ]	'axe'
[∥–⁻–]	[kɨ̃ŋɡʷoʉ] ~ [kɨ̃woʉ]	'hermit crab'
[∥–⁻–]	[tẽ̃ŋɡʷaʉ] ~ [tẽwaʉ]	'bush turkey'
[∥–⁻–]	[tẽ̃ŋɡʷatɔ] ~ [tẽwatɔ]	'Cape Jar'

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 /w̃/. Given that proto-Skou had a *ŋʷ 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 /w̃/ is a phoneme in Skou, and that the major realisation of that phoneme is as a labio-velar glide.

2.2.1.4 /m/, /f/, /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 [ʒ]; 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 [ʒ] 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 [ʒ], and some other words that have not been observed with an [ʒ] because of the wrong pitch environment.

Table 17. Fricativisation of /t/

Phonemic form	Pitch		Phonetic form
/nati/	HL	'new'	[nati] ~ [naʒi]
/fati/	HL	'hut'	[fati]; # [faʒi]
/hãti/	FL	'coconut rope'	[hãti] ~ *[hãʒi]
/bati/	LH	'devil, demon'	[bati] ~ *[baʒi]
/tãti/	HH	'cicada'	[tãti]; *[tãʒi]

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 [ʒ], but the infrequency of this allophone makes this speculative.

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/   [tʷ] / V$_{[-\text{round}]}$ __ 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 /ʇ/

Phonemic form		Phonetic form
/tʉtʉ/	'white'	[tʉtʉ]; *[tʉtʷʉ]
/balɛ̃tʉ̃/	'demon'	[balɛ̃tʷʉ̃] ~ [balɛ̃tʉ̃]

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 /ʇ/s in the language.

2.2.1.6   /l/

The lateral is sometimes realised as a nasalised lateral, [l̃], 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

Phonemic form		Nasalised lateral
/kɔ̃lɔ/	'underneath'	[kɔ̃l̃ɔ]
/malɔ/	'(clan name)'	[mal̃ɔ]
/tã̃lʉ/	'eagle species'	[tã̃l̃ʉ]
/tã̃lɛ/	'lorikeet'	[tã̃l̃ɛ]
/tã̃lɯ/	'fishing spear'	[tã̃l̃ɯ]

I have stated above that there are not many unambiguous examples of this nasal spread. It is interesting that sequences of the form /-VlV/ or /(m, n)VlV/ are greatly outnumbered by words with /-Vl̃V/ and /(m,n)Vl̃V/ or /(m,n)VlV/, 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/

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 used by Moxness and Kalmbacher in 1985. For example, the word which is here transcribed as /rɵbì/ 'head' is recorded in 1985 as xɾ̃ȍbì /hɾ̃ȍbì (Moxness) and 'k̃ɨ̈bì (Kalmbacher). Similarly 'fire', heard by me as /rə/, is listed by Galis as *(g)ráh*. 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 [xrə] ~ [rə] (Galis uses a final

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18   For instance, compare Leitre n̄a 'mouth' with Dumo/Dusur lã́, Skou lã̀-ɯ. See Donohue (2002b).

<-h> to mark either nasality or high tone, but not, it seems, aspiration). While different in detail from the forms recorded at the end of the 20th century (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 /ɟ/

The palatal glide shows allophonic variation between a glide, a glide-releaseded alveolar affricate and a glide-released alveopalatal 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 20. Allophony of /ɟ/ and /j/

		Environment	
	Allophone	Older speakers	Younger speakers
/j/	[j]	/ __ front	(unconditioned)
	[ʑ]	(unconditioned)	(unconditioned)
	[dʑj]	(unconditioned)	/ __ back
/ɟ/	[ɟ]	/ __ back	n/a
	[ɡʲ] ~ [ɡj]	/ __ front	n/a
	[ɟ]	/ __ front	n/a

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 /p̪/ and /ɹ̟/

	Onset					
Rime	/p̪/			/ɹ̟/		
i	[p̪ʷ]	[p̪ʷi]	'mountain'	[ɡʲ]	[ɡⁱ̯ʲĩ]	'break'
ɛ	[p̪ʷ]	[p̪ʷɛ]	'smoked'	[ɡʲ]	[ɡⁱ̯ɛ̃]	'place'
a	[p̪ʷ]	[p̪ʷa]	'water'	[ɹ]	[ɹa]	'sea'
ɔ	[p̪]	[p̪ɔ̃]	'edge'			
ʊ	[p̪]	[p̪ũ]	'bamboo'			
ʉ						
ø	[p̪]	[p̪ø̃ɛ̃]	'tongue'			

Neither /p̪/ nor /ɹ̟/ is found with /ʉ/ in the rime, and there are in addition further restrictions on the vowels that may follow /ɹ̟/ (see 2.4.3), accounting for some of the gaps in table 21 above. Note further that both /ɹ̟/ 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 [ɹ̟], 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*). Further, *kung* 'drink' is sometimes heard as *hung*, though this might be contemporary sociolinguistic influence from the languages around Vanimo.

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 *líhi* 'garden', which is often realised simply as [li(ː)], 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.

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

	p	t	k	b	j	f	h	w	y	r	l	m	n
high	-	-	+	-	+	-	-	-	+	-	-	-	-
back	-	-	+	-	-	-	+	-	-	-	-	-	-
coronal	-	+	-	-	-	-	-	-	-	+	+	-	+
continuant	-	-	-	-	-	+	+	+	+	+	+	+	+
sonorant	-	-	-	-	-	-	-	+	+	+	+	+	+
nasal	-	-	-	-	-	-	-	-	-	-	-	+	+
lateral	-	-	-	-	-	-	-	-	-	-	+	-	-
voice	-	-	-	+	+	-	-	+	+	+	+	+	+

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 universalist conditions there are some markedness rankings that apply to Skou, adduced on the basis of the behaviour of the phonemes in the language:

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

	p	t	k	b	j	f	h	w	y	r	l	m	n
high	*u*	*u*	+	*u*	+	*u*	*u*	*u*	+	*u*	*u*	*u*	*u*
back	*u*	*u*	*u*	*u*	−	*u*	+	*u*	*u*	*u*	*u*	*u*	*u*
coronal	−	+	*u*	*u*	*u*	*u*	*u*	*u*	*u*	+	+	*u*	+
continuant	*u*	*u*	*u*	*u*	*u*	+	+	+	+	+	+	+	+
sonorant	*u*	*u*	*u*	*u*	*u*	*u*	*u*	+	+	+	+	+	+
nasal	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*	+
lateral	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*	−	*u*	*u*	*u*
voiced	*u*	*u*	*u*	+	+	*u*	*u*	*u*	*u*	*u*	*u*	*u*	*u*

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

	p	t	l	n	h	k	r	f	b	m	w	y	j
Frequency (%age)	14	14	14	9	9	8	8	7	6	5	3	3	1

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 25. The consonants of Skou II

	Labial	Alveolar	Palatal	Back
Voiceless	p	t		k
Voiced	b	r	ɟ	(ŋ)w
Continuant	f	l	j	h
Nasal	m	n		

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 /r/ is sometimes realised as [d] following a nasalised vowel (eg., *fèng=ra* 'just bad' /fɛ̃ra/ appearing as [fɛ̃nda]) also suggests that this might be a valid analysis. While tempting, this analysis ignores the fact that historically the /r/ is derived from *t, and that the voiced alveolar stop *d has developed into the /t/. While the arrangement does show a 'neater' picture of Skou consonants, it does not explain the borrowing of words with [ɟ] into Skou with a [r], whereas the historical scenario, in which *ɟ > **t > /r/ offers a perfect explanation (see Donohue 2002b for a fuller explication of historical changes in the phonologies of the Skou family languages).

Another organisational option would be to assign the /ɟ/ to the voiced back position (recall that it does show the allophone [ɡʲ], 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 ɟ, 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.

Firstly, there are seven phonetic contrasts in syllables with a high pitch, arranged as follows.

---

[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.

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

i		ʉ	
	ʏ		ʊ ~ u
e			o
		a	

Examples: [fi] 'louse', [fe] 'tomorrow', [fʏ] 'spittle', [fʉ] 'afraid', [fa] 'sleepy', [fʊ] 'blind', [fo] 'corner house post'.

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

ɪ				
	ø̞	ʉ̞	o ~ ʊ
ɛ			ɔ
		a	

Examples (falling pitch unless stated): [ɪ] 'no!', [ɛ] 'cooked', [ø̞] 'ripe (fruit)', [ʉ̞] 'marry' (low pitch), [a] 'rope', [ʊ] 'rotten', [ɔ] 'go seawards (low pitch)'.

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

ɪ			
	œ̝		o
ɛ			ɔ
		a	

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

e			o̞
ɛ̞	œ		ɔ
		a	

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

i	Y	ʉ	ʊ
ɪ	ø̘	ʉ̞	ʊ̘
e	œ̘		o
ɛ	œ		oʳ
ɛʳ			ɔ
		a	

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

	front		back	
high	i		ʉ	ʊ
		ø̘		
	ɛ			ɔ
low		a		

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)   /ʊ/   [o] / low pitch   ([ʊ] elsewhere)

          /ɔ/   [o] / 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, [o]) is being assigned to different phonemes based on the pitch environment is an unnatural stipulation. That is, an alternative analysis would assign the identical [o] vowels to the one phoneme, and the alternation between [ɔ] and [ʊ] would be assigned to another phoneme, as in (4).

(4)   /ʊ/   [ɔ] / low pitch   ([ʊ] elsewhere)

          /o/   [o] / 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

			Analysis:	
Phonetic forms			(3)	(4)
[kɔ]	[|–]	'east'	/kɔ/	/ku/
[ko]	[|–]	'child'	/ku/	/ko/
[ko]	[|⌐]	'kind of armband'	/kɔ/	/ko/
[ku]	[|⌐]	'dew'	/ku/	/ku/

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 /ɛ/ 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 /ɛ/, the vowel of most pronouns, is raised:

Table 32. Allophony of /ɛ/

		Environment:		
		basic pronoun; low pitch	genitive pronoun; high or falling pitch	
/pɛ/	3SG.F	[pɛ] [|–]	[pe]	[|\]
/tɛ/	3PL	[tɛ] [|–]	[te]	[|\]
/kɛ/	3SG.NF	[kɛ] [|–]	[ke]	[|⌐]

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', *kó* 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)

	Non-nasalised		Nasalised	
	High pitch	other	High pitch	other
/i/	i	ɪ	ɪ	e
/ɛ/	e	ɛ	ɛ̃	ɛ̃ˠ
/a/	a	a	ã	ã
/ɔ/	o	ɔ	ɔ̃	ɔ̃
/u/	u, ʊ̃	ʊ̃, o	õ	õˠ
/ʉ/	ʉ	ʉˠ	–	–
/ø/	ʏ	ø	œ̃	œ̃

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, =ĩ 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 [j̃a]. A further development of this desyllabification is for the nasalised palatal glide to be realised, unsurprisingly, as a palatal nasal, thus [ɲa]. This has been observed to be particularly common after a /ʊ/ 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 [ɲ] allophone appearing.

(5) /peãkuĩ a/   'the girl'   {*pe=angku ing a*}
     [psã̀ŋkuĩ̀a] ~ [psã̀ŋkuj̃a] ~
     [psã̀ŋkuɲa]

(6) /ha ĩ a/   'the bag'   {*ha ing a*}
     [ha ĩ̀a] ~ [ha j̃a] ~
     [ha ɲa]

(7) /hã ĩ a/   'the coconut' {*ha ing a*}
     [hã ĩ̀a] ~ [hã j̃a] ~
     ±/# [hã ɲa]

Only three monomorphemic words are known with to have the syllable / ĩ / (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 ĩ/. 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 ĩ/ is another onsetless syllable, making for another ĩV/ environment. In this word we also find the palatal nasal allophone in variation with nasalised vowel or nasalised glide allophones.

(8) ĩ/   'dig up'   {*ing*}
     [ĩ̀]

(9) /taĩbɛ/   'money'   {*taíngbe*}
     [taĩbɛ] ~ [taĩmbɛ]

(10) /ĩɛɔ̃/   'cat'   {*ingéong*}
     [ɲẽɔ̃] ~ [j̃ẽɔ̃] ~
     [ĩɛɔ̃]

In all cases described here the spread of nasality is optional, and never compulsory. The version of *taíngbe* with no prenasalisation 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)iCɛ, (C)ʉCɛ, or [(C)ʏCɛ] (< /(C)øCɛ/) are present, and [ɛ] is heard for /ɛ/ when the preceding vowel is anything else.

Table 34. Vowel allophony and preceding vowels in V_bCV_a template

	Vowel in preceding syllable (V_b)						
V_a:	i	ɪ, e, ɛ	a	ɔ, o	ʊ	ʉ, ʏ	ø, œ
i	i	i	i	i	i	i	ɪ
ɛ	e	ɛ	ɛ	ɛ	ɛ	e	ɛ
a	a̝	a	a	ɒ̝	a	a	a
ɔ	ɵˀ	ɵˀ	ɔ	ɔ	ɔ	ɔ	ɔ̝
ʊ	ʉ	ʉ	ʊ	ʊ	ʊ	ʊ	ʊ̝
ʉ	ʏ	ɵ	ʉ	ɯ	ɯ	ʉ	ʉ
ø	ø	ø	œ	œ	ø	ø	ø

In addition to the allophony shown in table 34xxx, which is 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

	Vowel in preceding syllable (V_b)						
V_a:	i	ɛ	a	ɔ	ʊ	ʉ	ø
i	e	i	i	i	i	(i)	ʏ, ø
ɛ	ɛ	e	ɛ	ɛ	ɛ	ø	œ̝
a	a	a	a	a	a	a	a
ɔ	ʌ	ʌ	ɔ	ɒ	ɔ	ɔ	ɔ
ʊ	ɯ	ɯ	ʊ	ʊ	ʊ	ʊ	ʊ̝
ʉ	y	ʏ	ʉ	ʉ	ʉ	ɵ	ʉ
ø	ʏ	ø	ø	ø	ø	œ	œ

Combining the allophones in the preceding two tables 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=inga*, 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 [ɣ] 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 [œ̃ø̃ã], or equally [ø̃ẽã], 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.

Table 36. Vowel allophones (complete)

	— Possible allophones —																	
i	i	ɪ	e												ɣ		ø	
ɛ			e	ɛ	ɛ̆											ø	œ̞	
a					ä̞	a	ɑ̞											
ɔ							ɒ	ʌ	ɔ	ɔ̞	o					θ̆		
u									θ̆	o	ʊ	ɯ	ʊ̞	u				
ʉ													ɰ	ʉ	ʉ̆	ɣ	y	θ
ø															ɣ		ø	œ̞ œ

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 37. Features of vowels in Skou

	i	ɛ	a	ɔ	u	ʉ	ø
high	+	−	−	−	+	+	−
back	−	−	−	+	+	−	−
front	+	+	−	−	−	−	+
round	−	−	−	+	+	+	+
(low	−	−	+	−	−	−	−)

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

	i	ɛ	a	ɔ	u	ʉ	ø
high	+	−	*u*	−	+	+	−
back	*u*	*u*	*u*	+	+	*u*	*u*
front	*u*	*u*	*u*	*u*	*u*	−	*u*
round	*u*	*u*	*u*	*u*	*u*	+	+

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

	a	i	ø	ɛ	u	ɔ	ʉ
Frequency (%age)	29	24	16	13	7	7	3

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 ø and ɛ appear, followed by the back vowels and finally the highly specified high mid rounded vowel ʉ.

This feature system establishes the following set of natural classes:

Figure 6. Simple natural classes

There are some 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

Class	Defining features	Includes	Referred to by:
non-front round	+ round, -front	ʉ u ɔ	marking feminine
front *or* low	front, – low	i ɛ ø a	co-occurrence with voiced stops
front unrounded	+ front, -round	i ɛ	marking plural
non-back, rounded	- back, + round	ø ʉ	non-occurrence with [j]

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:

(11)   front   – front
            back   –   back
                          –   high

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

(11)'   i   ʉ ʉ   u   li 'do'   tʉ 'she does'   fʉ 'see'   fu 'she sees'

        ø   ʉ u   ɔ   lø 'shave'   rʉ she shaves'   fu 'fear' fɔ 'she fears'

        ɛ   ʉ (u)   lɛ̃ 'give'   nũ̈ 'she gives'

   (the consonant changes are regular and semi-regular alternations found with most verbs; see 7.2.2)

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:

(12)   [back]   + front
                                         (– back)
                                         (– round)
                                         –   high

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

(13)   ʉ   i   lʉ 'hear'   ri 'they hear'
       ø   i   lø 'shave'   ri 'they shave'
       ɛ   i   kɛ 'get'   ki 'they get'
       u   ɛ   fu 'fear'   fɛ 'they fear'
       ɔ   ɛ   kɔ 'hide'   kɛ 'they hide'

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   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 [fɛü] 'tomorrow', the two vocalic segments will never be realised as *[fɛw̃] or *[fɛ̃w̃]; 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.

Table 41. Segmental phonemes and their allophones

Place:	Bilabial	Labio-dental	Alveolar	Palatal High	Velar	Glottal
Feature:	Bilabial		Front	Back		
Voiceless stop	p [pʷ]		t ([tʷ ~ s])		k [ɣ ~ h]	
Voiced stop	b			ɟ ~ [gʲ ~ ɡ]		
Fricative		f				h
Lateral			l			
Rhotic			ɾ			
Nasal	m		n			
Glide				j [ʝ ~ dʑj]	w [ɡʷ]	
High			i [e]	ɨ [ə ~ ɤ]	u [o ~ ɯ]	
			ɛ [e]	ø [œ]	ɔ [o]	
Low				a		

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 42, which all use the segments [ta].

Table 42. Tonality and nasality contrasting on monosyllables

Pitch		Nasalisation oral	nasal
low	[|–]	ta 'hair'	tã 'canoe'
high	[|⌐]	ta 'grass'	tã 'bird'
falling	[|\]	ta 'arrow'	tã 'machete'

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)   *Hòe   pe=há   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)   *Hòe   pe=hà   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), *logat tengah* 'middle tone' or 'average tone', and *logat tekan* 'pressed/stressed tone', respectively.[21] Tone is independently affiliated with each word, not to each syllable, as has previously been thought (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

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[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 benefitted 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 Syuntarô has provided valuable comments concerning various aspects of tone and analysis.

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   H / __H, F

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.

(17)   hɯ́ a [42 22] / [42 21]   pa a [44 22]   fɛ a [22 22]
        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)   hɯ́ ni [44 41]   pa ni [44 41]   fɛ 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. 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 43.

Table 43. Pitch contours associated with phonological tonal units on monosyllables

	__L	__H, F	##__	__##
High	44	44, 34, 445	33, 3(4)4	43, 42
Low	22	22	22	21, 11
Fall	41	44	341	41

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 44. Pitch contours in Skou Yambe

	__L	__H, F	__##
High	45	44	43
Low	22	22	21
Fall	342	34	41

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 syllable based, 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, multiplied by three for the second syllable, and 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 45; 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 45. Pitch contrasts on disyllabic roots

Length	Pitch contour	Tonal melody	Example	
2-	3(4)4-43	HH	lɛ̃fi	'black'
	43-21, 343-21	HL	kĩʉ	'green tree frog'
	44-41	HF	fũlì	'scorpion'
	22(3)-(3)44	LH	nəkɛ	'dog'
	22-21	LL	pɛ̃rɔ	'lip'
	23-(3)41	LF	pã̀bi	'bamboo pig arrow'
		*FH	–	n/a
	41-21, 42-11	FL	lɛʉ	'*ketapang* fruit, peanuts'
		*FF	–	n/a

Combining the information in tables 43, 44 and 45, 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 45. 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 ꟾꟷꟷꟷ HHH 'dolphin', composed of the specifier ꟾꟷ H 'fish', and the disyllabic genus name ꟷꟷ '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 46. 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 46. Specifier + specific trisyllabic lexemes

Specifier			Specific type		
mø	H	fish	møbi	HH	'flying fish'
			møhaba	HHH	'whale'
			møhi	HH	'eel'
			møi	HH	'turtle'
			møli	LF	'stingray'
			mølie	HHH	'dolphin'
			møma	HL	'shark'
			mønø̃	HF	'crocodile'
			møyã	LH	'catfish'
tã	H	bird	tãbɛɔ	LHL	'butterfly'
			tãɛ	HH	'eagle'
			tãfømɔ	HFL	'dragonfly'
			tãfi	HH	'black bat (sp.)'
			tãrere	LHH	'willy wagtail'
			tãpa	HH	'heron'
			tãre	HL	'praying mantis'
			tãre	HF	'cassowary'
			tãü	HL	'hornbill'
tã	F	blade	tã	F	'machete'
			tãlilɔ̃	LHL	'scissors'
			tãmiɔ	LHL	'axe' (< Tok Pisin *tamiok*)
			tãnɔfɔ	LHH	'knife'
			tãre	HH	'handle of a machete'

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 ifãfɔ̃ HHL 'spit(tle)', or pirara LHH 'scar', there are no morpheme breaks, and so no paradigmaticity: the first syllable of ifãfɔ̃ cannot be heard in any context other than a following high tone, and so (keeping the two hypotheses presented for tonal melodies on disyllabic roots above in mind) we would not be able to determine whether this was underlyingly '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 and thus predicting that we should find seventeen contrastive melodies. The following results emerge; putatively illicit melodies (following the tone sandhi rule proposed in (13)) have been marked with an asterisk.

Table 47. Tonal melodies on trisyllabic roots

Length	Pitch contour	Tonal melody	Example	
3-	3(4)4-44-43	HHH	lĩbãbã	'sandfly'
	34-43-21 / 34-33-21	HHL	hahafa	'slow'
	34-44-41 / 33-44-41	HHF	apɔlɛ	'Gnetum sp.'
		HLH	–	n/a
		HLL	–	n/a
		HLF	–	n/a
		*HFH	–	n/a
	44-41-11	HFL	nahipa	'eight'
		*HFF	–	
	23-34-43 / 23-33-44	LHH	mabiri	'twenty-four'
	23-43-21	LHL	kũpaʉ	'spider, octopus'
		LHF	–	n/a
		LLH	–	n/a
	22-22-21	LLL	rãwaʉ	axe
		LLF	–	n/a
		*LFH	–	n/a
		LFL	–	n/a
		*LFF	–	n/a
		*FHH	–	n/a
		*FHL	–	n/a
		*FHF	–	n/a
		FLH	–	n/a
		FLL	–	n/a
		FLF	–	n/a
		*FFH	–	n/a
		*FFL	–	n/a
		*FFF	–	n/a

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 48xx presents them again in a different arrangement to that seen in table 47xx, in that the attested melodies are shown by the overall shape of their contour.

Table 48. Melodies associated with trisyllabic roots

Attested:					Not attested
[⌐¯ ¯ ¯]	[⌐¯ ¯ _]	[⌐_ ¯ ¯]	[⌐_ ¯ _]	[⌐_ _ _]	[⌐¯ _ ¯], [⌐¯ _ \],
[⌐¯ ¯ \]	[⌐_ _ ¯]				[⌐_ ¯ \], [⌐_ _ \],
[⌐¯ \ _]					[\ _ ¯], [\ _ _],
					[\ _ \], [_ \ _]
high	fall	rise	rise-fall	low	[⌐¯ _ _]

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 *[\ _ ¯] and *[⌐¯ _ \], 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 49. Melodies associated with disyllabic roots

Attested:					Not attested
[⌐¯ ¯]	[⌐¯ _]	[⌐_ ¯]	[_ \]	[_ _]	[\ ¯], [\ \]
	[⌐¯ \]				
	[\ _]				
high	fall	rise	rise-fall	low	fall-high, fall-fall

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.[22]

The second factor is also suggestive of an underlying tonal contrast that has collapsed some distinctions on monosyllables. While some degree of homophony is to be expected (the phonological resources of Skou only allow for 149 segmentally contrastive syllables,[23] 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 50.

Table 50. Predictions of relative frequency of monosyllabic homophones

Underlying tones:	X	Y	Z
Surface pitches:	X	Y	
Homophones?	*n*	*2n*	

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 700 words (a subset of the words listed in appendix 1) are presented in table 51. 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 51xx below we can see that the monosyllable [ɔ] 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)' (different conjugations means that some of the verbs are differentiated in other person/number/gender combinations; 'close' is *yá* in 3PL, whereas 'walk' is *tá*, for instance.

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22 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.

23 Given tonal restrictions and restrictions on consonant and vowel cooccurrences, the total number of phonetically contrastive monosyllables is only 413.

Table 51. Homophones in monosyllabic roots: high pitch

Pitch	Homophones						
High (26)	bi	'tree sp.'	bi	'empty'			
	fi	'louse'	fi	'meet'			
	ha	'close'	ha	'nose'	ha	'stand'	ha	'pound'
	hẽ	'yawn'	hẽ	'oSpSi'			
	i	'snake'	i	'SpF, CH'			
	ja	'cup, glass'	ja	'sea'	ja	'wet place'	ja	'noose'
	ka	'hit'	ka	'armband'			
	kã	'I eat'	kã	'tusk'			
	kɛ	'catch'	kɛ	'k.o. rope'			
	kẽ	'ask'	kẽ	'shaman'			
	kø	'beetle sp.'	kø	'fence'			
	kõ	'thorn'	kõ	'under'			
	ku	'frog'	ku	'k.o armband'	ku	'fall'		
	la	'roast'	la	'exterior wall'†			
	lɔ	'wash'	lɔ	'bud'*			
	lø	'shave'	lø	'ear'			
	lu	'release'	lu	'cough'			
	lɨ	'hear'	lɨ	'chop branch'	lɨ	'blow'	lɨ	'ashes'
	na	'splash'	na	'sago bundle'			
	ɔ	'big wave'	ɔ	'lime'	ɔ	'sago grub'		
	ø	'black ant'	ø	'yam'			
	pã	'bedbug'	pã	'chop.PL'	pã	'husband'		
	pi	'full'	pi	'half-ripe'	pi	'language'		
	pø	'endure'	pø	'thick'			
	rɔ	'cloth'	rɔ	'matoa tree'			
	tø	'beads'	tø	'hot ashes'			

† Also *láho*. * Also *ríló*, with *rí* 'tree'.

With low pitch we again see an impressive range of homophones, and again some syllables are up to four-ways ambiguous.

Table 52. Homophones in monosyllabic roots: low pitch

Pitch	Homophones							
Low	a	'cloud'	a	'blackpalm'				
(19)	fa	'betelnut'	fa	'inner wall'				
	fu	'rain'	fu	'see.F'				
	fʉ	'see'	fʉ	'that'				
	ha	'bag'	ha	'star'				
	hã	'coconut'	hã	'peel'				
	hũ	'drink'	hũ	'edge'				
	i	'well'	i	'young'	i	'pool'	i	'line'
	ku	'dew'	ku	'stab'	ku	'child'		
	lã	'clay'	lã	'mixing bowl'	lã	'tuber meal'	lã	'hit.F'
	lø	'work'	lø	'ant'				
	lu	'full'	lu	'narrow'				
	ø	'burp'	ø	'bamboo sp.'				
	pa	'water'	pa	'INSTR'				
	põ	'edge'	põ	'blow at fire'				
	tã	'canoe'	tã	'fish net'	tã	'gall'	tã	'last night'
	ti	'hot'	ti	'arrow shaft'				
	ya	'grass'	ya	'sister'				
	yu	'cousin'	yu	'brother'				

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 53. Homophones in monosyllabic roots: falling pitch

Pitch	Homophones					
Fall	ɛ	'cooked'	ɛ	'wife'		
(10)	la	'help'	la	'prawn'	la	'HM'
	lã	'chop'	lã	'foot'		
	lɛ̃	'red ant'	lɛ̃	'fin'		
	na	'flesh'	na	'left(hand)'		
	ø	'ripe'	ø	'house part'	ø	'penis'
	pa	'scratch'	pa	'right(hand)'		
	pã	'flower'	pã	'steam'		
	pi	'dry in sun'	pi	'mountain'		
	ta	'bow'	ta	'SpM, SW'		

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 ɖu and ɖi 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 [ø] [|\] 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 [jɐ] [|‾] 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 [lã] [|_]. (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 54. Quite clearly the high pitch [|‾] and low pitch [|_] show twice as many homophones as does the falling pitch [|\].

Table 54. Frequency of homophones on monosyllables

Tones:	H	L	F
Raw homophones:	26	19	10
Revised homophones:	21	20	9

The simplest conclusion, given the suggestion that we are actually dealing with five underlying contrastive tonal melodies, is that phonetic [|‾] and [|_] 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 [|‾] and [|_]?

Given that a LH sequence is barred from appearing on the one syllable, we can propose a rule that dissociates LH from a syllable when it is associated with it. This would operate as follows:

(20)

L   H   L   L   H   L
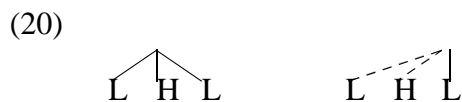
This would predict that an underlying LHL tone melody would be realised as [|_] on a monosyllable. The other 'missing' melody, LH, is slightly more complicated. Simply dissociating the LH part of the melody is not a sufficient explanation, since that would leave no tone to be associated with the lexeme. Since a word is not phonologically well-formed without a lexical tone being associated with the syllabic tier, the rule of dissociation is blocked form applying completely, and only the first component of the melody is dissociated, leaving H free to associate with the syllable.

(21)   *

L   H   L   H   L   H

We can now update table 54 to reflect our understanding of the mechanics of Skou tone association with monosyllabic words. Table 55 shows the collapse in phonetic terms of different tone melodies when they are associated with monosyllables.

Table 55. Homophones and the predictions of absolute neutralisation in monosyllables

Underlying tones:	LH	H	LHL	L	HL
Surface pitches:	[⌐]		[–]		[\\]
Homophones?	*20*		*20*		*10*

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, ꜰꜰ [_] 'bag' and ꜰꜰ [_] 'star', or ꜰꜰ [_] 'child' and ꜰꜰ [_] '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, ꜰ 'penis, dowel in floorboards', and the phonetic identity of the semantically unrelated set ꜰꜰ 'canoe' / ꜰꜰ 'gall bladder' / ꜰꜰ '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 [kǐ̵] [⌐ _] 'green tree frog', [fǔlǐ] [⌐ \\] 'scorpion' and [lɛ̵] [\\ _] 'peanut', which would all logically be based on the tonal units H and L in that same sequence,

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[24]   Crowther reports for Barupu, which also has a process of tonal simplification on monosyllables (unlike Skou, this simplification is in Barupu), that the tonal melodies are also dissociated from the left, matching the Skou analysis presented here.

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 56. Homophones and absolute neutralisation in monosyllables

		Syllable	Tone association	Pitch contour
'frog'	[kǐʉ]-HL		H L	[⌐ _]
'scorpion'	[fǖî]-HL	*	H L	[⌐ \ ]
'peanut'	[lɛʉ]-HL	*	H L	[\ _]

Since it is impossible to determine the tone melody associated with a monosyllable with a high or low phonetic pitch in most cases, and since the notational diacritics ´ and ` adequately describe the patterns found in Skou (both the underlying tone melody, where it can be determined, and the inflection point 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 lexical distinctions being marked by tone, 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.

Non-past tense forms

(22) nì hu [44 41] (< [41 41])   nì ha [44 44]   nì hʉ̀ [44 21] (< [41 22])
     fall-fall   fall-high   fall-low
     'I sew'   'I stand'   'I drink'

Past tense forms

(23) nì hʉ̄ [44 21] (< [41 22])   nì hā̃ [44 21] (< [41 22]) nì hʉ̄ [44 21] (< [41 22])
     fall-low   fall-low   fall-low
     'I sewed'   'I stood'   'I drank'

The change 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

(24) ... [autosegmental tone diagrams for ní + hú forms]

```
n  i        h  u            n  i    =  h  u            n  i  h  u
 \/    +     \/              \/        \/               \/    \/

 /\          /\              /\        /\               |__   __|
H  L        H  L           H (L)      H  L             H        L
[|\]        [|\]                                       [|‾ \ ]
'1SG'       'sew'
```

Past tense

(25) ... [autosegmental tone diagrams]

```
n  i        h  u                    n  i        h  u       n  i  h  u
 \/    +     \/    +                  \/     =    \/         \/    \/

 /\          /\          O           /\        /\           |  /
H  L        H  L                    H  L     (H) (L)        H L
[|\]        [|\]                                            [|‾ _]
'1SG'       'sew'       '[PAST]'
```
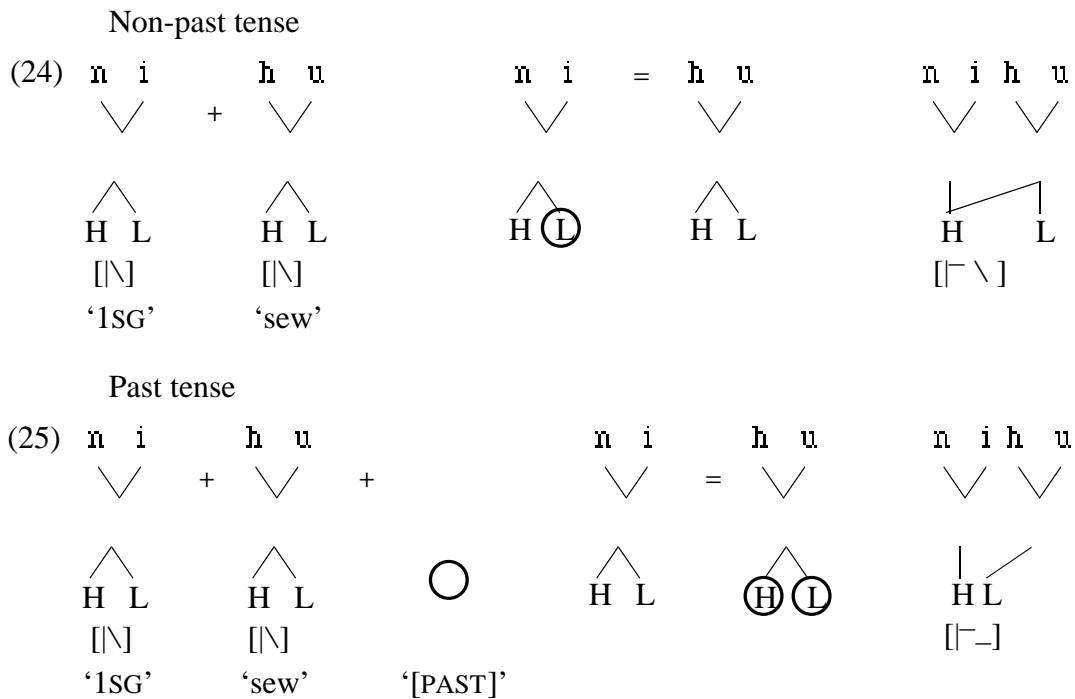
More details on the formal characteristics behind tonological processes can be found in the following sections. The following section deals with the phonetic effects of phonological nasalisation, and the differences between phonetic and phonological nasalisation.

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 57, from which we can see that the similarities shared in the tonological systems of the different (related) languages far outweigh the differences.

Table 57. Tonological systems of different Skou languages compared

	Skou	Puare	Sumo	I'saka
Underlying melodies	L, H, LH, HL, LHL	L, H, LH, HL, LHL	L, H, LH, HL, LHL	L, H, LH, HL, LHL
Monosyllabic contrasts	L, H, HL	L, H, LH, HL	L, H, LH, HL	L, H, LH, HL
Accent domain	… [ ] #	… [ ] #	… [ ] #	… [ ] #
Accent/Tone cooccurrence	HL	LH, HL, LHL	LH, HL, LHL	LH, HL (LHL?)

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 pLP *fli 'louse', pSkou *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 *táng* 'bird', which has a high pitch, [|⁻]. The name of a particular species of large bats is *tangóe*, with a low, then high, pitch: [|_⁻]. This can be assumed to be the result of the H tone melody of 'bird' being overwritten by a LH melody that is associated with the specifier *-oe* 'bat species'. The process can be modelled as follows:

(26)

A complex tone melody may also be overwritten in this way. In the following example the compound *tángrúe* 'handle of a machete' displays a [|⁻ ⁻] contour, reflecting a H melody. When it is independent of the compound the element *tàng* '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.

(27)

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: *tíná*.

(28)

```
  t   i        n   a           t   in  a         t   i   n   a
   \/       +   \/              \/  \/             \/     \/

   |            |               \   ↗              \     /
   H            L               H   Ⓛ               H
  [⌐]          [⊢]             [⌐   ⌐]             [⌐   ⌐]
 'sea'     'content, flesh'
```
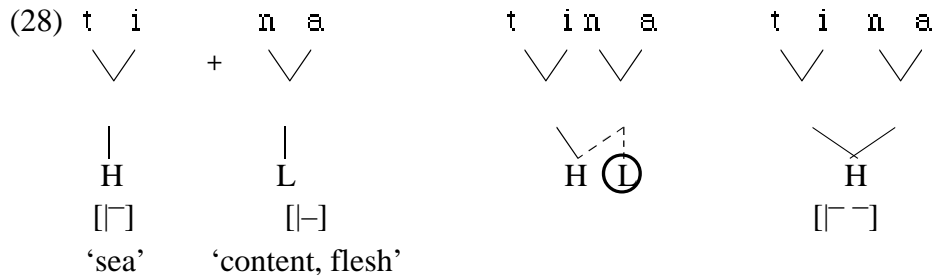
This is suggestive of an analysis by which a L tone melody affiliated with a word is in fact the absence of an assigned H tonal unit, in isolation or in combination with other tonal units. This is an analysis to which I shall return in chapter 7, where I discuss the behaviour of apparently toneless clitics.

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 *kúng* the LHL melody spreads over the resulting three syllables, surfacing as L, H and L.
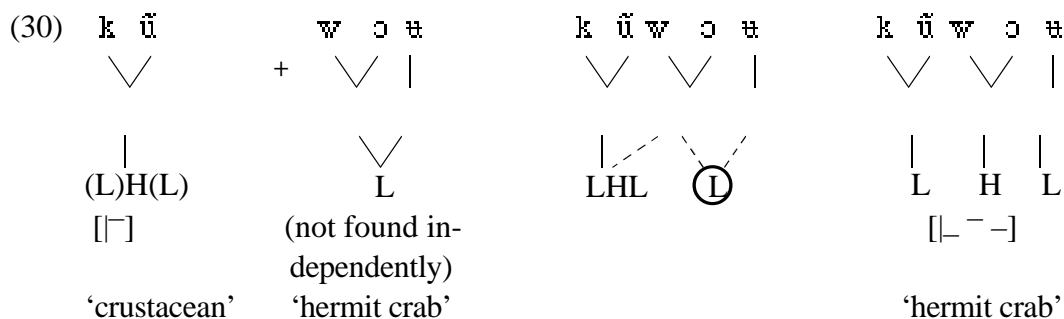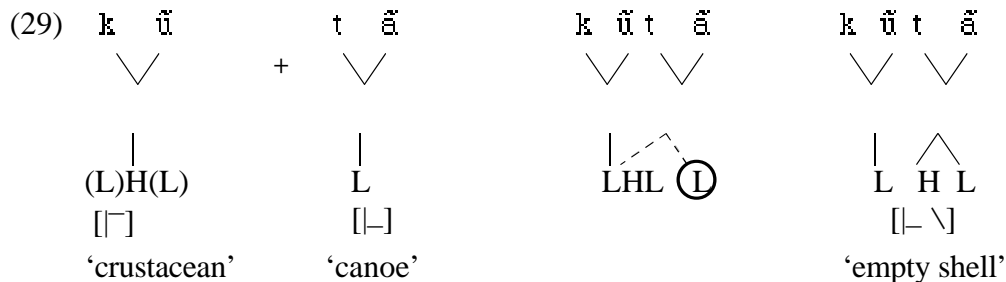
(29)

```
  k̬   ṳ̃         t   ã̬          k̬  ṳ̃ t   ã̬       k̬  ṳ̃ t   ã̬
   \/       +   \/             \/  \/            \/  \/

   |            |              |  ↗               |  /\
 (L)H(L)        L              LHL  Ⓛ             L  H  L
  [⌐]          [⊢]             [⌐   ⌐]           [⊢  \]
 'crustacean'  'canoe'                           'empty shell'
```

(30)

```
  k̬   ṳ̃            w   ɔ   ꭒ        k̬  ṳ̃ w  ɔ  ꭒ      k̬  ṳ̃ w  ɔ  ꭒ
   \/       +      \/  |             \/  \/  |          \/  \/  |

   |               \/                |  ↗  \             |  |  |
 (L)H(L)            L                LHL     Ⓛ           L  H  L
  [⌐]          (not found in-        LHL                [⊢  ⌐  ⊢]
               dependently)
 'crustacean'  'hermit crab'                            'hermit crab'
```

Further examples of different tones being overwritten by others in lexical compounds can be found in appendix 3.

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 [[[root₁] root₂] root₃] . One such compound is *tángrángpoe* [|⎺ − ⎦] 'twelve-wired bird of paradise', which is composed of *tángráng* [|⎺ ⎺] 'bird of paradise' and *poe* HL 'twelve-wired bird of paradise', where *tángráng* is itself a compound of *táng* [|⎺] 'bird' and *ráng* [|⎺] 'sun'. When *táng* and *ráng* combine there is no change in tone, since both specify a H melody. The final compound has a single H melody, that which is lexically associated with *ráng*. When combined with the species name, *poe* [|\], which does not occur on its own, the HL pitch of this element overwrites the H associated with the compound *tángráng*.

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 *ápólè* 'kind of edible leaf; tulip', with a H'L melody resulting in a [|⎺ ⎺ \] pitch contour, and *ha* 'leaf', which has a L melody and so a [|⎦],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: [|⎺ ⎺ ⎺ \].

(31)
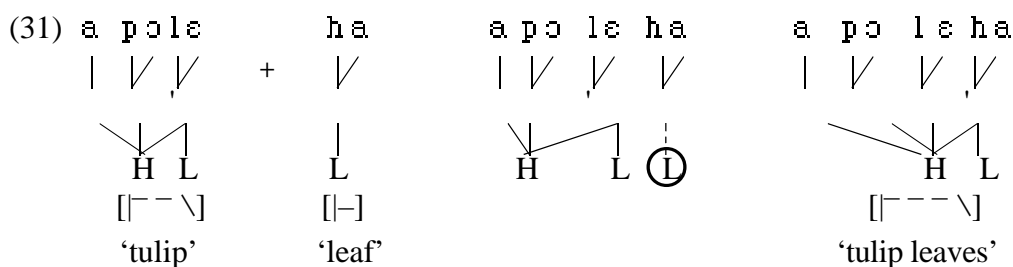
Not only is the HL tonal melody of *ápólè* spread over the entire compound, but also the information regarding the final position of the accent is now applied to the compound as a whole, with a constant final-syllable placement. Clearly not on the tone melody must be thought of as being autonomous from the syllables to which it is assigned (and so *a*-H, *po*-H, *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 *le* syllable of *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 *pátángke* 'kingfisher', which is morphologically composed of the roots *pa* L 'water', *táng* 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 useful consequence of this rule of tonal suppletion in compounds 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* [|\]. 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)

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'[26] 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.

(33)

---

[26] This morpheme is not found as an independent lexical item: *kúeé* '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.

h ø n a

H   L

[⌐⌐_]

h ø n a

H   L

[⌐⌐\]
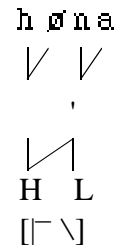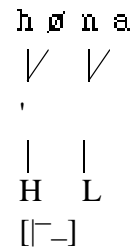
Three-syllable (and longer) words show exactly the same pitch contour possibilities as are found for two-syllable words; furthermore, when observing trisyllabic (and longer) words we find that there are no accents located further than two syllables from the right edge of the word. Examine the following 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.

(34)	No accent	[⌐⌐_], [⌐⌐_]		*kúkúfa* 'quick'
			H L	
	Accent on the ultimate syllable	[⌐⌐\]		*nápánghì* 'six'
			H L	
	Accent on the penultimate syllable	[⌐_]		*hátòpu* 'comb'
			H L	
*	Accent on the antepenultimate syllable	[\ _ _]		–
			H L	

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, *ibábúeli* '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 58. Pitch correlates for tense

	future		past	
'roast'	lala	[⌐ ¬]	la	[⊢–]
'vomit'	ỹãỹã	[– –]	ỹã	[⊢–]
'scratch'	papa	[⌐ \\]	pa	[⊢–]

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 lexeme with a falling pitch, as shown in (35).

(35)
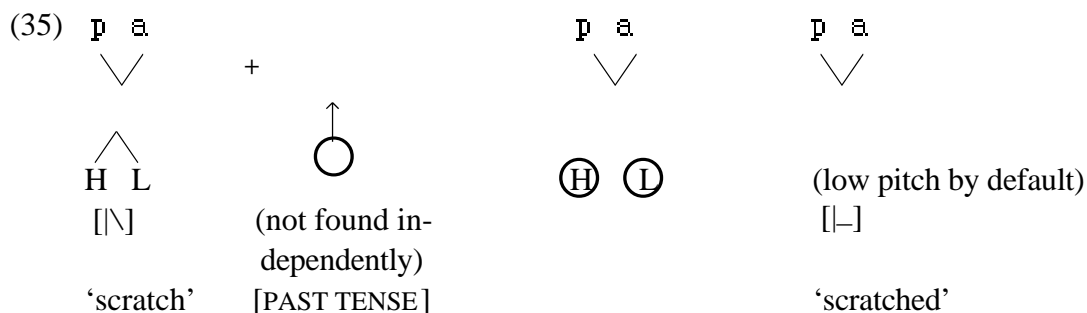
This 'tonal stripping' model suggests an answer to the question of why the low tone manages to overwrite a lexically specified tone here, but in compounds is always overwritten, regardless of its position in the string of morphemes. While the compounding places two melody + segment units in a single 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 is found 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 59.

Table 59. Free, genitive and dative pronouns compared

	Free pronoun		Genitive Pronoun		Dative pronoun	
1SG	ni	[|\\]	ni	[|\\]	nɛ	[–]
2SG	mɛ	[|\\]	mɛ	[|\\]	mɛ	[–]
3SG.NF	kɛ	[–]	kɛ	[⌐]	kɛ	[–]
3SG.F	pɛ	[–]	pɛ	[|\\]	pɛ	[–]
1PL	nɛ	[–]	nɛ	[|\\]	nɛ	[–]
2PL	ɛ	[–]	ɛ	[|\\]	ɛ	[–]
3PL	tɛ	[–]	tɛ	[|\\]	tɛ	[–]

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 -ɛ, 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 ɛ, 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.

(36)

H L		(not found in-
[|\\]		dependently)
'1SG'	[DATIVE]	1SG.DAT
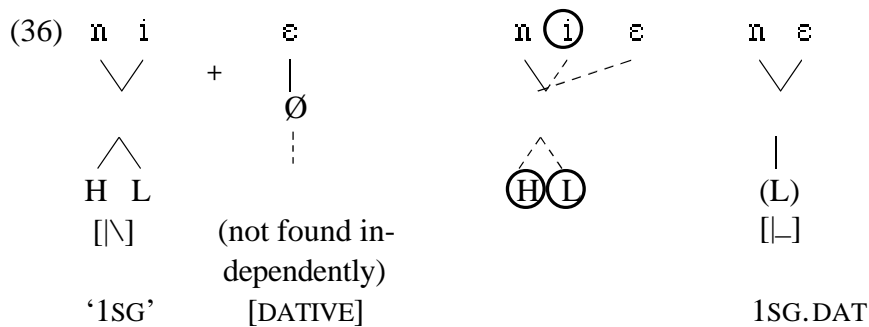
We can demonstrate the need to posit a segmentally specified, but syllabically deficient morpheme by contrasting the dative morpheme with the focus marker *=a*. This morpheme does not supplete the vowel of a pronoun to which it attached: *mè a* 'you PROM', not **mà*, as shown in (37). Alternative explanations for the realisation of the lexical vowel in *mè=a* could be that it is it a clitic boundary, not an affix boundary, which separates the two morphemes, or that the dative morpheme has been unproductive for so long that a degree of grammaticalisation has applied between the original suffix and its host. xxxxxxx on nominals? xxxxxx

(37)

H L		H L	H L
[|\\]	(not found in-		
	dependently)		
'2SG'	[PROMINENT]		'You!'
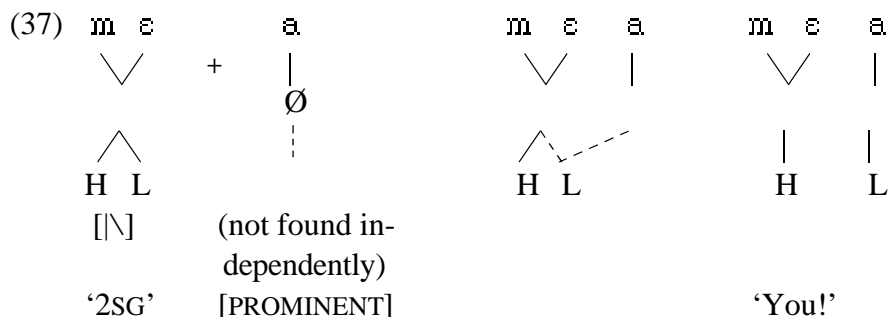
The examples seen in this section show that special behaviour is found with the low pitch in compounds when it is not associated with any syllable structure. The last example shows that even with segmental material, if that material is not linked to the syllabic tier the tone is still capable of overwriting the tone of the lexeme.

2.3.2 *Nasalisation*

Nasalisation is contrastive at the segmental level in Skou. In addition to being specified on a particular consonant or vowel, nasalisation also influences other segments in several ways:

1. it changes vowel quality;

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.

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 ɨ 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:

Table 60. Oral and nasalised vowel systems in Skou

Oral	Nasal
i	ĩ
e	ẽ
a	ã
ɔ	ɔ̃
u	ũ, ŋ
ɨ	—
o	õ

The vowels *ɨ and *o show an historical merger in nasal syllables, such that a proto-Skou *ɨ̃ has the rime õ as its reflex in modern Skou (Donohue 2002b). Synchronically, however, where we would expect ɨ̃ we in fact find ũ. The synchronic alternation is apparent in the case of predicates with the vowels e or o, which show inflection by vowel alternation for feminine. When not nasalised, these vowels show feminine with o, but when nasalised the resulting feminine form is ũ. This is discussed in context in 7.2.3, but the following examples illustrate the point. With lo we see that the regular feminine form simply involves raising the vowel to ɨ. '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 ɨ as its lexical vowel. The irregular vowel alternation for 'speak' follows from the more important constraint against the coda *[ɨ̃].

	plain	feminine	
(38)	lo	rɨ	'shave'
	lõ	rũ	'speak'
	lɨ	ru	'hear'

This illustration of different approaches to the elimination of ɨ̃ in synchronic and diachronic perspectives serves to illustrate the fact that historical processes are not necessarily the same as synchronic processes. Historically, when ɨ̃ 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 ʉ 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 ũ̈, also a syllabic velar nasal, ŋ (suggesting that the constraint against *[ʉ̃] is partially operative for #[ũ] as well). This is quite a perceptually striking allophone, with words such as 'she speaks', phonemically /rũ/, being produced as [rŋ]. The nasal stop allophone is most common following h or the nasals m and n: 'drink' [hŋ], 'deep' [mŋ ø], and 'kind of hand net' [nŋ], but [pŋ] ~ [pũ̈] '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 61 (not all the pairs here are minimal, due to tonal contrasts; note the syllabic nasal allophone of /ũ/).

Table 61. Nasalisation contrasts in syllables with different onsets

Onset	Oral			Nasal		
p	pa	'water'	[∟]	pã	'pus'	[∟]
t	ta	'hair'	[∟]	tã	'canoe'	[∟]
k	kø	'baked sago'	[⌐]	kø̃	'tooth'	[⌐]
b	ba	'who'	[⌐]	bã	'beach'	[⌐]
j	ji	'break'	[⌐]	jĩ	'fly'	[⌐]
f	fa	'inner wall'	[⌐]	fã	'wing'	[⌐]
h	ha	'bag'	[∟]	hã	'coconut'	[∟]
w	wa	'basket'	[⌐]	wã	'sail'	[⌐]
y	ya	'grass'	[⌐]	yã	'sick'	[⌐]
r	ra	'fire'	[∟]	rã	'ironwood'	[∟]
l	la	'outside wall'	[∟]	lã	'clay'	[∟]
m	mɔ	'season'	[⌐]	mɔ̃	'sit (feminine)'	[∟]
n	nu	'tree species'	[⌐]	nũ, nŋ	'kind of net'	[⌐]

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)   /tãberɔ/   'butterfly'   {*tangbéro*}
       [tãberɔ] ~
       [tãmberɔ]

Phonetic homoorganic prenasalisation is not found when the following segment is a fricative or the trill r:

(40)   /lẽfi/   'black'   {*léngfí*}
       [lẽfi]
       *[lẽŋfi]

When a semivowel follows a nasalised vowel, there is sometimes both prenasalisation and stopping. This is shown in the following examples:

(41)   /tãwatɔ/   'Cape Jar'   {*tangwáto*}
        [tãwatɔ] ~
        [tãŋwatɔ]

(42)   /jãyã/   'vomit repeatedly'   {*yangyang*}   (< *yang* 'vomit')
        [jãɲjã] ~
        [jãndʑjã]

When the following consonant is the lateral ɭ, 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' [tãndʑupa], neither of which will occur nasalised, regardless of whether stopping occurs or not: *[tã(ŋ)wãtɔ], *[tã(nd)ʑũpa].

(43)   /kɔ̃lɔ/   'below'   {*konglo*}
        [kɔ̃lɔ] ~
        [kɔ̃lɔ̃] ~ [kɔ̃lɔ̃]

The putative prenasalisation of a following stop is of course undetectable when the following stop is a nasal, so the degree to which the ɲ in *ɲɭɔ* 'banana' is affected by the preceding nasal vowel cannot be determined; it is certainly not perceptibly lengthened. It is worth noting, in this regard, that the lexicon contains relatively few examples of Ṽ[m/n] or [m/n]Ṽ, 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 ɦ) and the onsets m and ɲ (the first might arguably be ɓ with a nasal tier attaching to it, but the absence of either phonological or phonetic ɗ in Skou makes the analogy with ɲ 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)   ke   hʉ   fɛ̃   {*ke hue fèng*}
        3SG.NF   stomach   bad
        '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 changes. The phonological specification is as follows, with only the first stop and the last vowel nasalised.

(45)   ni   hʉ   fɛ̃   {*nì hue fèng*}
       1SG   stomach   bad
       CV   CV   CV
       N   N
       '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 ɲ (solid lines indicate strong nasalisation, and dashed lines show weak nasalisation).

(46)   [n i   h ʉ   f ɛ̃]
        | ˜ ˍ ˍ ˍ ˍ ˌ ˌ⁄ | |
        N   N   Ø N

After the fully specified nasal onset in *nì*, weak nasalisation spreads rightward until interrupted by an oral consonant, in this case the ɟ. 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 ɦ, 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.

(47)   napã̄   nȭpȭ
       five   four
       'five'   'four'

       [n a   p ã̄   n ȭ ᵐp ȭ]
        |⁄ | | |⁄‿⁄ | |
        N   Ø N   N N Ø N
       * [nã̄mpã̄]   [nȭmpȭ]
         [nã̄pã̄]   * [nopȭ]

Some other examples of the association of phonologically contrastive nasalisation, and its spread and blocking in adjacent syllables, is given in the following tables. the first shows the spread of phonetic nasalisation through a non-oral consonant.

(48)   *nì ha tà*
       'I run'
       Segments: n   i   h   a   t   a
       Phonological nasalisation: +   -   -   -   -   -
       Phonetic nasalisation: ++   +   +   +   Ø   Ø
       [nĩ̄h̃ã̄ta]

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) *hang e ang*
      'You all ate a coconut'
      Segments: h   ã   ɛ   ã
      Phonological nasalisation: -   ++   -   ++
      Phonetic nasalisation: Ø   ++   +   ++
      [h̃ãj̃ɛ̃ã]

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

(50) *táng nì ká*
      'I shot a bird'
      Segments: t   ã   n   i   k   a
      Phonological nasalisation: Ø   ++   ++   -   -   -
      Phonetic nasalisation: Ø   ++   ++   +   Ø   Ø
      [tãnĩka]

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) *táng ke ká*
      'He shot a bird'
      Segments: t   ã   k   ɛ   k   a
      Phonological nasalisation: Ø   ++   -   -   -   -
      Phonetic nasalisation: Ø   ++   +/-   Ø   Ø   Ø
      [tãŋkɛka]

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   ã   p   ɛ   w   a
      Phonological nasalisation: Ø   ++   -   -   -   -
      Phonetic nasalisation: Ø   ++   +/-   Ø   Ø   Ø
      [tãmpɛwa]

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'   ['i]   [⌐]

(54)   *e*   'board'   ['ɛ]   [└]

(55)   *kíngue*   'green tree frog'   ['kǐ̈ʉ]   [⌐_];   *[kǐ̈'ʉ]

(56)   *naké*   'dog'   ['nakɛ]   [└⌐];   *[na'kɛ]

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'   [pɜ'pɛ]   [└ _];   *['pɛ pɛ] / *['pɜ pɛ]

(58)   *pe=ueme*   'woman'   [pɛ'ʉmɛ]   [└ _ _];   *['pɛʉmɛ]

(59)   *ke=naké*   'male dog'   [kɛ'nakɛ]   [└ _ ⌐];   *['kɛnakɛ]

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

(60)   *ke=k-a*   'he walks'   [kɜ'ka]   [└ _];   *[kɛ'ka]

(60)' *ke=k-a-ka* 'he is walking'   [kɜ'kaka]   [└ _ _];   *[kɛka'ka]

Similarly, with a suffix such as the applicative *-na* (13.2) we similarly find not 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'   [kɜ'kakana]   [└ _ _ _];   *[kɛka'kana], etc.

(62)   *naké-nì=ne*   'my dog'   ['nakɛninɛ]   [└ ⌐ \ _];   *[nakɛ'ninɛ], 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 62. Consonantal contrasts

Vowel				
p	[⌐]	[pʷa]	*pá*	'house'
t	[⌐]	[ta]	*tá*	'elephant grass, mother in law'
k	[⌐]	[ka]	*ká*	'ceremonial armband'
b	[⌐]	[ba]	*bá*	'who'
j	[⌐]	[dʒa]	*já*	'wet'
f	[⌐]	[fa]	*fá*	'inner house wall'
h	[⌐]	[ha]	*há*	'nose'
w	[⌐]	[wa]	*wá*	'carrying basket'
y	[⌐]	[dzja]	*yá*	'tall grass'
r	[–]	[ra]	*ra*	'fire'
l	[⌐]	[la]	*lá*	'outer wall'
m	[⌐]	[ma]	*má*	'(other's) mother'
n	[⌐]	[na]	*ná*	'paddle'

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 63. Vocalic contrasts

Vowel			Orthography	
i	[pʷi]	[⌐]	*pí*	'half-ripe'
	[i]	[⌐]	*í*	'snake'
e	[pʷɛ]	[⌐]	*pé*	'you catch (feminine)'
	[e]	[⌐]	*é*	'bone'
a	[pʷa]	[⌐]	*pá*	'house'
	[a]	[–]	*a*	'cloud'
o	[pɔ]	[⌐]	*pó*	'vegetables'
	[o]	[⌐]	*ó*	'lime (for betelnut)'
u	[po]	[⌐]	*pú*	'you shoot'
	[ʊ]	[\]	*ù*	'smell rotten'
ue	[pʉ]	[⌐]	*púe*	'wallaby (sp.)'
	[ɤ]	[\]	*ùe (te)*	'sink'
oe	[pø]	[⌐]	*póe*	'heavy'
	[ø]	[⌐]	*óe*	'kind of yam'

We have already seen that there is no nasalised high central rounded vowel, *[ʉ̃], for historical reasons and with synchronic support (2.3.2.1). Contrasts involving the six nasalised vowels are shown in table 64.

Table 64. Vocalic contrasts

Vowel			Orthography	
ing	[pʷĩ]	[⌐]	*píng*	'bench, table'
	[ĩ]	[–]	*ing*	'(the)'
eng	[pʷɛ̃]	[–]	*peng*	'forget'
	[e]	[⌐]	*é*	'bone'
ang	[pʷã]	[–]	*pang*	'pus'
	[ã]	[–]	*ang*	'root used to make fish poison'
ong	[pɔ̃]	[–]	*pong*	'blow (at fire)'
	[ɔ̃]	[–]	*ong*	'deception'
ung	[põ]	[–]	*pung*	'liver'
	[ũ]	[–]	*ung*	'now'
ueng	*[pʉ̃], etc.			
	*[ʉ̃]			
oeng	[pø̃]	[⌐]	*póeng*	'tongue'
	[ø̃]	[–]	*oeng*	'remember'

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 [ɨ] 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 65 as well as table 68 below), but are rare.

Table 65. Contrasts in nasalisation

Vowel	Oral		Nasal	
i	*pì*	'mountain'	*pìng*	'bow'
e	*fé*	'tomorrow'	*féng*	'wind'
a	*ha*	'star'	*hang*	'coconut'
o	*mo*	'you paddle'	*mong*	'she sits'
u	*lú*	'Waromo'	*lúng*	'Ormu, fly'
ue		– no contrast –		
oe	*óe*	'black ant'	*óeng*	'memory'

With tone there are many restrictions on cooccurence 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 66. Contrasts in pitch

Vowel	High		Low		Fall	
i	*pí*	'speech'	*pi*	'swim'	*pì*	'mountain'
	lí	'boil'	*li*	'rotate'	*lì*	'ruin'
e			*te*	'they'	*tè*	'fence'
	fé	'tomorrow'	*fe*	'fork'		
a	*páng*	'husband'	*pang*	'she eats'	*pàng*	'flower'
	lá	'wall'	*la*	'cold'	*là*	'prawn'
o	*hó*	'strip, peel'	*ho*	'front'	*hò*	'whistle'
	nóng	'breast'	*nongpong*	'four'	*nò*	'hand'
u	*pú*	'you shoot'	*pu*	'nest'	*pù*	'conch shell'
	húng	'Sentani'	*hung*	'edge'	*hùng*	'vagina'
ue	*rúe*	'rudder'	*rue*	'handle'	*rùe*	'horn'
	húe	'stomach'	*hue*	'tread on'	*Húepa*	'Palora clan'
oe	*tóe*	'tree'	*toe*	'beads'	*tòe*	'she's angry'
	póeng	'tongue'	*poe*	'thick'	*Pòeng*	'Skofro'

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

2.5   Phonotactics revisited

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):

Position	Onsets		vowels		tone melodies		nasalisation		
Contrasts	14	x	7	x	5	x	2	=	980
Examples	p, t, k, b, j, f, h, w, y, l, r, m, n, Ø		i, ɛ, a, ɔ, u, ʉ, ø		H, L, HL, LH, LHL		Ø, N		

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 *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):

- ɦ 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:

$$14_{\text{onsets}} \times (7_{\text{oral}} \text{Vs} + 6_{\text{nasal}} \text{Vs}) \times 3_{\text{pitches}} = 546$$

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

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[27] Phonotactic constraints were determined by combing through the existing lexicon of Skou, by attempting to elicit syllables with all of the 980 'logically possible' syllables 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 [bɔ] to me, speakers invariably produced [bʷɐ], and claimed that this is what I had produced. 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).

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 the previous point, there are no words with 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 phonetically-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 onset) F_0 patterns found on phonologically low-pitched words (see figures 2 and three in appendix 1 for an example of how close the initial F_0 of high pitched and low pitched words can be). This has then led to a reinterpretation of syllables with this voicing preconditioning of the F_0 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 [ɰʷ] 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 *já* 'noose trap for a pig' is heard as [ʝa], but *jíngpa* 'fly (verb)' is [ɡɪ̈(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 [dʑ], [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] sounds, 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 F_0 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 F_0 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:

(63)   *pále*   [pa lɛ]   Possible pitch realisations: 44 22, 44 21, 43 22, 43 21
               | | (not exhaustive)
       'pig'   H L

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:

(64)   *ìno*   [i no] Possible pitch realisations: 42 21, 42 11
                    | | (not exhaustive)
       'banana'   H L

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.

(65)   *kòepi*   [kɯ pi]   Possible pitch realisations: 43 21, 43 11
                     | | (not exhaustive)
       'grass skirt H   L

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, [koɣa], with a [|‾_] pitch, to be compared to the Malay ['koja]). 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 F_0-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 66 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 67. Pitch contour frequencies by vowel quality (percentages)

| | Pitch contour | | |
	low	high	fall
Overall:	47	37	16
Vowels:			
i	37	**48**	14
ɛ	50	30	20
a	48	33	19
ɔ	**61**	31	8
ʊ	51	35	14
ɨ	57	30	13
ɵ	**20**	**56**	24

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 ɵ, and for low pitch to occur with ɔ. 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, /ɵ/ is pronounced [ɣ]). While explanatory of the deviant frequencies observed, it does not explain the highly normal values found for ʊ and ɨ. 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 68, and typifies the frequencies found both with these two segments and the voiceless consonants.

Table 68. Non-nasal sonorant and vowel frequencies

Vowels:	i	ɛ	a	ɔ	u	ʉ	ø	Total
l	3	11	16	6	6	5	12	59
r	1	4	5	3	4	2	2	21

The non-occurrence of *[ʉ̃] 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 ʉ 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 68.

Table 69. Nasal consonant and vowel frequencies

Vowels:	i	ɛ	a	ɔ	u	ʉ	ø	Total
m, n	3	5	23	7	4	–	5	47

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 ʉ or ø, the sole exception being the word for 'hat', woːwø. (This restriction is true of lexical roots, though some verbs with a ʉ or ø vowel allow these sequences to occur in the 3SG.F or 3PL inflections, such as 'they squash', yʉ, or 'she waits', wø̃; see 7.2.2 for details on prefixal agreement patterns.) Additionally, y may not occur with the other front vowels, i or ɛ. (Again, this is found in some verbal inflection: 'they ask', tɛ̃ or yɛ̃, 'they count', ya yĩ.) Both of the glides show strong preferences for the low vowel, just as has been seen with the nasals.

Table 70. Glides and vowel frequencies

Vowels:	i	ɛ	a	ɔ	u	ʉ	ø	Total
w	2	4	5	2	3	–	1	12
y	–	–	9	2	2	–	–	14

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 ø. This, and the other restrictions, are all shown in table 71.

Table 71. Consonant and vowel restrictions

Consonants:	i	ɛ	a	ɔ	u	ʉ	ø
p, t, k, f, h							
l, r							
m, n						–	
w						–	
y	–	–				–	–
b, j				–	–	–	

The layout 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 cooccuring with nasalised syllables is the absolute ban on the appearance of *[ɨ̃]. When called for by synchronic rules, [ũ] is heard instead. Historically, roots with *ɨ̃ show reflexes with ɔ̃. Clearly, there has been a reinterpretation of the rules governing the non-appearance of *[ɨ̃]; 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 other than a bilabial onset, k, or no onset at all. That is, [pĩ], [bĩ], [kĩ] and [ĩ] are heard, but none of the other nine onsets that can occur with [i] appear with this vowel when nasalised.

<div align="center">

Table 72. The vowel [ĩ]

Consonant:	p	t	k	b	j	f	h
[ĩ]		–			–	–	–
Consonant:	l	r	m	n	w	y	
[ĩ]	–	–	–	–	–	(–)	

</div>

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 [ĩ] 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 [ĩ] in their rime in Skou; the absence of a contemporary [tĩ] can be accounted for by noting that all modern occurrences of [t] reflect proto-Skou *ʒ, *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 involves consonantal and vocalic identity as well as the dimension of nasalisation. Although sequences of [t] and front non-hight vowels are allowed, with both [tɛ] and [tø] acceptable in oral syllables, there are no occurrences of *[tɛ̃] or *[tø̃]. 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 inflectional paradigm which involves the cluster *pl* for 3SG.F; both of these are shown in (66) and (67) below.

Regular paradigm

(66) ö̃   mä̃   kä̃   ṹ   ö̃   ö̃   ɛ̃
      1SG   2SG   3SG.NF 3SG.F   1PL   2PL   3PL

Alternative paradigm

(67) ö̃   mä̃   ö̃   plṹ   ö̃   ö̃   ɛ̃
      1SG   2SG   3SG.NF 3SG.F   1PL   2PL   3PL

The second recorded instance of a consonant cluster involves the lexical item *lópa* 'earlier on', which has occasionally be recorded as [blɔpa], in addition to the more frequent and universally accepted [lɔpa]. 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/s 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.

(68)   a. *Ke=ti.*   b. *Ke=ti-ti*   *li.*
          3SG.NF=3SG.NF.go   3SG.NF=3SG.NF.go-RED do
          'He went.'   'He wants to go.'

(69)   a. *Ke=jíngpa.*   b. *Ke=jíngpa-pa*   *li.*
          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*

Adjunct nominal constructions present no 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

Reduplication is not so 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 examples explains the fate of women whose husbands have died since the ecological destruction brought about by Indonesian colonisation has reduced the natural resources that used to be found in the Skou area. The second example describes the social situation in the Humboldt Bay region before the Dutch era.

Nouns

(75)   *… ne=bàro-ro,*
          1PL=widow-RED
          'and us widows, …'

(76)   *… pìng-pìng   nawò   te=ti.*
          war-RED   many   3PL=3PL.
          'they fought many wars.'

In the next two examples the use of reduplication has a distributed sense: not simply 'outside' or 'sago processing place', but a variety of possible locations which can 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.

(77)   *mè=bà*   *moeng*   *pe-pe*   *ung=pa,*
       2SG=person   sit   outside-RED   now=INSTR
       'you'll be sitting down somewhere outside, …'

(78)   *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

(79) *... te=r-e   mong   tí=ing a=ko   rong-rong=pa,...*
       3PL=3PL-get.PL   F.sit   salty.water=the=OBV   long-RED=INSTR
       'they leave it in the salty water for a long time,... '

(80) *Rá   è=ko   líhi=ing,   péng-péng=pa.*
       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.

(81) *ne=wi tàfi   te,   =ko,   ya-na   ùe-ùe=pa,*
       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.

(82) *... te   ke=ing a   ráng-ráng te=ing a,*
       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, possibly, adjectives. Another clearly distributive use is found in the reduplication of *nè* 'where', which can be reduplicated to give a 'wherever' meaning.

Intensification: negator, aspect reduplicated

(83) *Táng=ing   te=ti=ko=ra,   ka-ka=pa.*
       k.o.net=the   3PL=3PL.do=OBV=also   NEG-RED=INSTR
       'They used to make the t<u>áng</u> nets, but no more.'

(84) *Ne=wá   loeng-loeng=pa,*
       1PL=plant finish-RED=INSTR
       'we plant them all, …'

Distributive: numeral, epistememe reduplicated[28]

(85) *ne=wí ta fi   í,   bàng   héngtong-tong=pa,*
       1PL=leave   stand   yesterday three-RED=INSTR
       'we leave it stand for, oh, three days, …'

---

28 The lack of any proclitic agreement on *í* 'stand' in this sentence can be explained by the fact that it has an inanimate subject.

(86)   *Ke=k-á*   *hangbang=ko ke=k-á*
        3SG.NF=3SG.NF-walk   far=OBV   3SG.NF=3SG.NF-walk

        nè-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 sketchy 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 a real phenomenon, 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 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. 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 fully.

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 73.

Table 73. Phoneme: grapheme correspondences

Phoneme	Grapheme	Phoneme	Grapheme
p	*p*	l	*l*
t	*t*	m	*m*
k	*k*	n	*n*
b	*b*	i	*i*
ɺ ~ ɡʲ	*j*	ɛ	*e*
f	*f*	a	*a*
h	*h*	ɔ	*o*
w	*w*	u	*u*
j ~ dʒ	*y*	ʉ	*ue*
r	*r*	ø	*oe*

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 ɔɛ or ɑɛ 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 [ɔɛ] and [taruɛ] respectively, not *[ø] and *[tarʉ]. 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: *âi*, not *á.ì* or *á-ì*.

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] ~ [pasaŋ]. Older speakers pronounce all final nasals in Indonesian as nasalisation on the vowel: Indonesian *malam* {malam} 'night', pronounced in Skou as [malã], Indonesian *dʒantan* {jantan} 'male (animal)', pronounced in Skou as [jãntã] (*/#[d(ʒ)jãntã]). 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 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, the diacritic for high or falling pitch appears on the first element of this digraph. For example, *óe* 'yam' with a single diacritic represents [ø] [|⎺], and not *oé* or *óé*, which, logically, would represent different disyllabic words, [ɔɛ] [|_⎺] and [ɔɛ] [|⎺], respectively; these are not attested words in Skou. 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 *patítí* 'freckle', which has a LH tone melody, simply indicating the first and final

syllables as displaying low pitch and high pitch would be sufficient to differentiate this LH tone melody from all others: #*patití*. This practise 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 74.

Table 74. Graphemes used for tone and nasalisation: a selection

	Segments	Pitch	Nasalisation	Orthography
'sleepy'	fa	[⁻]	Ø	*fá*
'bad'	fɛ̃	[\]	N	*fèng*
'far'	hãbã	[⁻ ⁻]	N, N	*hángbáng*
'valley'	hɒ̃	[⁻]	N	*hóeng*
'green tree frog'	kĩɐ	[⁻ _]	N Ø	*kíngue*
'heel	lãito	[⁻ ⁻ _] < F-HL	N Ø Ø	*làngíto*
'peanut'	lɛɐ	[\ _]	Ø Ø	*lèue*
'west'	lɔwɔ̃	[_ ⁻]	Ø N	*lowóng*
'I'	ni	[\]	Ø	*nì*
'straight'	tɐloɪo	[_ ⁻ ⁻]	Ø Ø Ø	*tuelóelóe*

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 *-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 [tɐ] [_] 'hair' from [tɐ] [⁻] 'arrow' by writing the first as *ta* and the second as (for example) *tac*, *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 [tɐtʃ], [tɐk] and [tɐkɜ]: 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 *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 [kɜ].

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 *oe* and *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 no problem to write the language, but that there was no point in doing so, since neither you nor anyone else could then read what you had written. This apparent paradox has its roots in the representation for the non-back rounded vowels, and suprasegmentals.

Allowing for the fact that ʉ̃ does not occur (2.3.2.1), the following syllable rimes are differentiated in Skou:

Table 75. Skou rimes

	High pitch			Low pitch			Falling pitch		
Oral	i	ʉ	ʊ	i	ʉ	ʊ	i	ʉ	ʊ
	ɛ	ø	ɔ	ɛ	ø	ɔ	ɛ	ø	ɔ
		a			a			a	
Nasal	ĩ		ũ	ĩ		ũ	ĩ	–	ũ
	ɛ̃	ø̃	ɔ̃	ɛ̃	ø̃	ɔ̃	ɛ̃	ø̃	ɔ̃
		ã			ã			ã	

The locally-developed orthography represents these different rimes in the following way:

Table 76. Local orthographic representation of Skou rimes

	High pitch			Low pitch			Falling pitch		
Oral	*i*	*ê*	*u*	*i*	*ê*	*u*	*ê*	*ê*	*ê*
	e	*ê*	*o*	*e*	*ê*	*o*	*ê*	*ê*	*ê*
		a			*a*			*ê*	
Nasal	*ing*		*ung*	*ing*		*ung*	*ê*		*ê*
	ê	*ê*	*ê*	*ê*	*ê*	*ê*	*ê*	*ê*	*ê*
		ang			*ang*			*ê*	

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:

(87)   Written: <Hê   pe   tê>   for   *Hòe   pe=tue.*
                                                             sago   3SG.F=3SG.F.do
                                                             'She cooked sago.'

Possible lexically instantiated interpretations for orthographic <hê>:

> *hang* 'coconut', *héng* 'ask', *héng* 'yawn', *hèng* 'fart', *hèng* 'accusation', *hì* 'blood', *híng* 'other, different', *hò* 'roofing', *hò* 'whistle', *hóe* 'go beachwards', *hòe* 'sago', *hóeng* 'valley', *hóeng* 'wait', *hù* 'hammer', *hung* 'edge', *hùng* 'vagina', *hue* 'squash, crush', *húe* 'stomach'.

Possible lexically instantiated interpretations for <pe>:

> *pe* '3SG.F', *pé* 'put down'.

Possible lexically instantiated interpretations for <tê>:

> *tà* 'arrow', *tàng* 'sickle', *tè* 'garden fence', *tue* 'she does'.

Possible plausible interpretations for <hê pe tê>:

(88)   a. *Héng   pe=tue.*   b. *Hèng   pe=tue.*
           yawn   3SG.F=3SG.F.do   accuse   3SG.F=3SG.F.do
           'She yawned.'   'She accused.'

        c. *Hì   pe=tue.*   d. *Hìng   pe=tue.*
           blood   3SG.F=3SG.F.do   other   3SG.F=3SG.F.do
           'She bled/menstruated.'   'She did something else.'

        e. *Hò   pe=tue.*   f. *Hò   pe=tue.*
           roofing   3SG.F=3SG.F.do   whistle   3SG.F=3SG.F.do
           'She make a roof.'   'She whistled.'

        g. *Hòe   pe=tue.*   h. *Hù   pe=tue.*
           sago   3SG.F=3SG.F.do   hammer   3SG.F=3SG.F.do
           'She cooked sago.'   'She hammered.'

        i. ? *Hùng pe=tue.*   j. *Hùe   pe=tue.*
           vagina 3SG.F=3SG.F.do   stomach   3SG.F=3SG.F.do
           'She had sex with a woman.'   'She considered.'

    (Example (88)i is clearly odd, but was deemed 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 76. 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 77. Current orthographic representation of Skou rimes
(aligned to match the previous two tables)

	High pitch			Low pitch			Falling pitch		
Oral	*í*	*úe*	*ú*	*i*	*ue*	*u*	*ì*	*ùe*	*ù*
	é	*óe*	*ó*	*e*	*oe*	*o*	*è*	*òe*	*ò*
		á			*a*			*à*	
Nasal	*íng*		*úng*	*ing*		*ung*	*ìng*		*ùng*
	éng	*óeng*	*óng*	*eng*	*oeng*	*ong*	*èng*	*òeng*	*òng*
		áng			*ang*			*àng*	

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 ꞵ to ꜰ in feminine verbs requires no change in the appearance of the written verb in terms of its rime: the written *ê* remains *ê*. 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 change 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).

Yet another issue in the orthography is the representation of the palatal consonants, here given as *j* for /ɟ/ 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 78, 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 78. Predictions for trisyllabic words based on a H-L distinction in monosyllables

	Monosyllables	Trisyllables
Syllable tone	H *vs* L	HHH HHL HLH HLL
		LHH LHL LLH LLL
Word tone	H *vs* L	HHH LLL
Pitch accent	H *vs* L	HLL LHL LLH LLL

Clearly the trisyllabic predictions are vastly different, and the true nature of the tone system is easy to spot, although it was totally masked when we examined just monosyllables.

The complicating factors, such as tone sandhi, minimal word constraints, and variable inflection points, 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 idiosyncracies. 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 /ʒ/, 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 *[ĩ] 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.[29] On the other hand, there are many areal traits of the New Guinea region that *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 2005 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).[30]

(1)   [A *Áì*]   [P *yá-né-nì=ne*]   *ke=yú-yú.*
        father   sister-1SG.DAT-1SG.GEN=1SG.DAT   3SG.NF=search-RED
        'Father is looking for my sister.'

(2)   * [P *yá ne nì ne*] [A *áì*] *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 father.'

---

[29]   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.

[30]   The high tone on the first dative morpheme marking *yá* 'sister' is present as a result of tone spreading from the high-toned root, *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).

(4)   * [P *âi*] [A *yá né nì ne*] *pe yúyú*

Oblique arguments 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)   [S *Re-ké=ke*]   *ke=ti*   [OBL *Jáwung*].
              father-3SG.NF.GEN=3SG.NF.DAT   3SG.NF=3SG.NF.go   Nyao
              'His father went to Nyao.'

(6)   [A *Pe*]   [P *hòe*]   *pe=tue*   [OBL *nè=ne*].
              3SG.F   sago   3SG.F=3SG.F.do   1PL.GEN=1PL.DAT
              'She made sago for us.'

(7)   *Bàng*   [P *hòe*]   *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)   *Pe   tangnófó=pa   móe   pe=r-ú*L.
              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 *ka* marks negation, and the auxiliary *li* 'do', in combination with reduplication on the verb, marks intention.

(9)   *Húhúfa   ke=moeng-moeng   ka   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 *=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)   [TOP [P *Yá-né-nì=ne=ra=ing a*]]*,*   [A *âi*] *ke=yú-yú.*
                    sister-1SG.DAT-1SG.GEN=1SG.DAT=also=the   father   3SG.NF=search-RED
                    '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 clause 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)   [TOP [A *Ánì-nì=ne=fa=wò*]],   *bàng*   [P *hòe*]   *pe=tue.*
           mother-1SG.GEN=1SG.DAT=only=EMPH yesterday   sago   3SG.F=3SG.F.do
           'It was my mum who made sago yesterday.'

Obliques in topic positions can be seen in the following:

(12)   [TOP [OBL *Te Jáwung=fue a=wò*]]   *ne=ne-ne*   *ti.*   *Te Jáwung=a*
           Nyao=that=EMPH   1PL=1PL.go-RED 1PL.do 3PL=Nyao=PROM
           te=bà   héfèng.
           3PL=person   good
           'Nyao, we want to go there. Nyaos are good people.'

(13)   [TOP [OBL *Ke=ing=ra=wò*]],   *e=moeng-moeng ka,   jéng   fèng.*
           3SG.NF=DEIC=also=EMPH   2PL=sit-RED   NEG   place   bad
           '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)   [TOP [PRED *Pe=w-á=ing a*]],   *rángleng=pa   hòe*
           3SG.F=3SG.F-pound=the afternoon=INSTR   sago

           pe=tue   e.
           3SG.F=3SG.F.do   3SG.F.be
           'She pounds it, until afternoon she works the sago.'
           (Literally, 'The she-pounds-(it)ᵢ, having become afternoon she
            does itᵢ 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). 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*] *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.'

(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, and in this use *ang* has all but lost 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')

Another relative clause type, in which the head of the relative clause occurs internal to 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) !* *te=bà=fue a te=y-á háháfa e ti*
3PL=person=that 3PL=3PL-walk slowly 3PL.be 3PL.do
'Those people are walking along slowly.'

(21) !* *te bà fue a te yá e háháfa ti*

(22) !* *te bà fue a te yá e ti 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) !* *te=bà=fue a te=y-á háháfa bàme*
3PL=person=that 3PL=3PL-walk slowly village
'Those people walked slowly in the village.'

(24) !* *te bà fue a te yá bàme 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 *háháfa* in (25) and (26).

(25) *Te bà fue a háháfa te yá e ti.*
'Those people are walking along slowly.'

(26) *Te bà fue a háháfa te yá bàme.*
'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) [$_A$ *Yá-né-nì=ne pe*] *âi pe=yúyú.*
sister-1SG.DAT-1SG.GEN=1SG.DAT 3SG.F.ERG father She:searching.for
'My sister is looking for father.'

(28) * *yá-né-nì=ne*   [P *âì*   *ke*]   *pe=yúyú.*
      sister-1SG.DAT-1SG.GEN=1SG.DAT   father   3SG.NF.ERG   She:searching.for
      'My sister is looking for father.'

(29) * [S *âì*   *ke*]   *ke=ti*   [GOAL *Jáwung*].
      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 *âì* cannot be interpreted as marking the subject as the possessor of *âì*, 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 of cases in which the possessively marked beneficiary is additionally marked as being possessed.

(30) *Pe*   [INSTR *ní=pa*]   *hòe*   *pe=tue*
      3SG.F   stirring.spoon=INSTR sago   she:does
        [BEN *áì-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 áì ké ke.*

(32) *Pehòe pe tue áì 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 oblique arguments to appear, as can be seen in the following example using a location:

(33) *Pe*   *hòe*   *pe=tue*   [LOC *pá*].
      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 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 pá*

In addition to the proclitic agreement that is obligatory on all verbs,[31] 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 *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)   *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)   *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)   * *yá ne nì ne ya pe ang*

(38)   * *yá ne nì ne ya pang*

(39)   * *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).

(40)   * *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 *yú* 'search for' and *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:

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[31]   The one major exception to this requirement involves inanimate and indefinite subjects, such as 'it rained', expressed in Skou as *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)   *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.

we have seen that the markers for ergative, genitive, and dative are all derived, with little 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 79. The elaboration of pronominal forms

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

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 smaller 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'.[32]

(41)   a.   *te=r-í-rí=pa*   *te=r-oe*   *tu*   *me*   *toe,*
                3PL=3PL-get.PL-RED=INSTR   3PL=3PL-get   carry.PL   3PL.return   3.come
                'they get them and they take them home, …'

        b.   *te=r-í*   *hí-hí*   *tí,*
                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).

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[32]   The following example also shows an interesting case of disagreement, in that the vowel of the verb *lóe* 'get' does not appear in the plural form (*roe* instead of the expected *rí*). See 12.3.2.

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

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 pìng te=ti   e,   hùng te=ti   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, postverbal yet pre-auxiliary and postverbal and 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 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 object to appear in a simply-headed clause (and hence there are no root-trivalent verbs); 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 restriction 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 tà*
      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'. Synchronically they have different 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.

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 following ungrammatical sentences show various (unsuccessful) attempts at encoding a source in different ways without using *há* 'from'.

(50)   a. * *pe moe watà te pá pè pe wò we **pá ké ke***

        b. * *pe moe watà te **pá ké ke** pá pè pe wò we*

        c. * *pe moe watà **pá ké ke** te pá pè pe wò we*

        d. * *pe moe **pá ké ke** watà te pá pè pe wò we*

        e. * ***pá ké ke** pe moe watà te pá pè pe wò we.*

The lack of trivalent verbs is similarly handled effectively by the grammar by serialising with *ké* 'get' (or *wé* 'get (feminine object), *lóe* 'get (plural object)', as appropriate). shown in (51) and (52).

(51) *Tà   ke=wé   leng   wówo.*
     arrow   3SG.NF=get.F give   uncle
     'He gave an arrow to his uncle.'

(52) *móe   ne=r-oe-roe=pa   ne=n-a   me   toe-toe*
     fish   1PL=1PL-get.PL-RED=INSTR 1PL=1PL-walk   return.PL   3.come-RED
     bàme.
     village
     '…we take the fish and bring them back to the village.'

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. Interestingly, 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 *pìng* 'bow' is used with *lú* 'release' to specify the meaning 'shoot'.

(53) *Ke   pále   [*ADJ.NOM *pìng*] *ke=lú   hápèng.*
     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 *pìng* '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 this assumption will be presented in 3.13).

(54)   VP   NP_{OBJ}   ADJ.NOM   proclitic_{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.

(55)   *Pe   pílang   pe=*[_{ADJ.NOM} *na*] *r-ùng.*
         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.

(1)'   * *áì ke yá-ne-nì=ne yúyú*

(33)'   * *pe hòe tue pá*

(53)'   * *ke pále pìng lú hápèng*

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).

(56)   *Yá-né-nì=ne   pa   pe=hí-hí.*
         sister-1SG.DAT-1SG.GEN=1SG.DAT   water   3SG.F=wash-RED
         'My sister is washing.'

(57)   * [_S *yá ne nì ne pe*] *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 and their syntax 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 (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:

(58)   *Ke=toe=pa*   *ke=ta k-ùng.*
       3SG.NF=3.come=INSTR   3SG.NF=sitting 3SG.NF-sit
       'He_i came and then he_i sat down.'

(59)   *Ke=toe=ko*   *ke=ta k-ùng.*
       3SG.NF=3.come=OBV   3SG.NF=sitting 3SG.NF-sit
       'He_i came and then he_j 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 'He_i came and then he_i 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 arguments 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 complementation constructions (see chapter 15);
- S and P may be the restriction of a postverbal floating quantifier *fátà*, 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 criteria:

- 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   kúhe 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 in Skou, discussed in 13.2, but the only means of causativising 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 (semi-)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 a 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 80xxx 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 80. Coding characteristics of different participants

	Pre-/postverbal	NP marking	verbal agreement		
A	**A** P V	(=PRO.ERG)	**PRO=**	**PRE-**	<V[**VOWEL**]>
S	**S** V		**PRO=**	**PRE-**	<V[**VOWEL**]>
P	A **P** V				<V[**VOWEL**]>
ADJ.NOM	**A**N V / V **A**N				
instrument	(**INSTR** V)	*=pa*			
beneficiary	V **BEN** AUX	-POSS			
goal	V **GOAL** AUX				
location	V AUX **LOC**				
time	**TIME** S/A P V				

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   rangwaue=pa rí   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   rí   rangwaue=pa 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 arguments and time adverbs are positioned at the periphery of this nuclear clause, with instruments appearing internally and marked by the case marker *=pa*. This can all be summarised in the following templatic model of the clause in Skou.

        Positions for oblique arguments in the clause

(68)   Time

S   * [A/S] ( ) [P] ( )   ADJ.N V ADV   *   ASP   *

            [INSTR]*=pa*   ALL, ABL, INSTR, BEN   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 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)

$$
\begin{array}{c}
\text{CP} \\
\diagup \quad \diagdown \\
\text{NP}_{\text{TOP}} \qquad \text{IP} \\
\diagup \quad | \quad \diagdown \\
\text{NP}_{\text{SUBJ}} \quad \text{VP} \quad \text{NP}_{\text{LOC}} \\
\diagup \quad \diagdown \\
\text{NP}_{\text{OBJ}} \quad \text{V'} \quad \text{NP}_{\text{GOAL}} \\
\diagup \quad \diagdown \\
\text{(N)} \quad \text{V}
\end{array}
$$
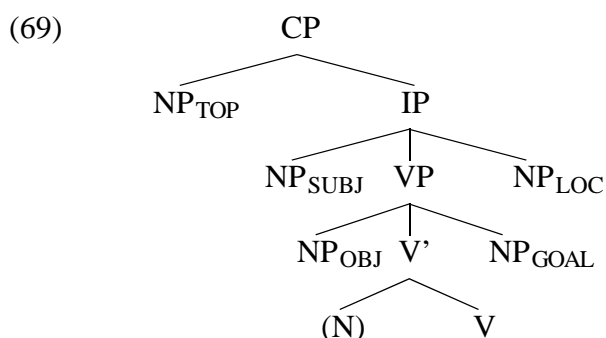
Justification for these different phrase-structural levels can be found in the following facts:

- 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 80. In table 81 we can see the syntactic differences between the main grammatical functions.

Table 81. Syntactic tests for grammatical function status

	Interclausal	Intraclausal
Subject	coreference monitored by choice of *=pa* or *=ko* shows raising in jussive complements	
Object	shows raising in jussive complements	alternates with subject in a passive construction
Oblique	raises to object in perception complements	unmarked position is postverbal

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 arguments 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 pre-sentential topic position, which may be filled by any of the nominals of the clause. There is no resumption of the topicalised phrase in the clause unless it must appear on the verb as an agreement marker.

(1)   CP
                         /\
              XP$_{i\ (\text{TOP})}$ S/XP$_i$
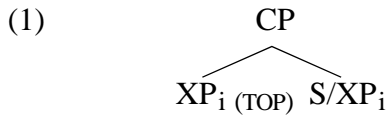
The reasons for labelling the topic element as an XP, and not simply an NP, will be apparent at the end of this section.

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)   *Ke=húng   ke   tángrùe=ing a pìng   ke=lú.*
      3SG.NF-Sentani   3SG.NF.ERG   cassowary=the   bow   3SG.NF=release
      'The Sentani man shot that cassowary.'

> Topicalised P:

(3)   *Tángrùe=ing a,   ke=húng   ke   pìng   ke=lú.*
      cassowary=the   3SG.NF-Sentani   3SG.NF.ERG   bow   3SG.NF=release
      'The cassowary, the Sentani man shot (it).'

> Focussed P:

(4)   *Ke=húng   ke   tángrùe=ing a=ka   pìng   ke=lú.*
      3SG.NF-Sentani   3SG.NF.ERG   cassowary=the =FOC   bow   3SG.NF=release
      'The Sentani man shot <u>the cassowary</u>.'

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)   *Jéng, yano   nì=lóe=ko   péng.*
      place work 1SG=get.PL=OBV tidy
      'That place, I cleaned it up and now it's tidy.'

(6)   *Jéng=fue a,   rí   nì=lóe   ka.*
      place=that   wood 1SG=get.PL   NEG
      'That place, I took all the (fire)wood away.'

In (5) the topic is related to the subject of the clause headed by *péng*; it cannot be construed as either the subject (*nì* 'I') or the object (arguably *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 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 <u>him</u>.'

(10) *Ke=a=ra   pále   nawò   ke=jí.*
      3SG.NF=PROM=also pig   many   3SG.NF=hit.PL
      '<u>He</u>, 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 <u>you</u> 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, but then the speaker decides to re-establish herself as a topic. In this topic re-establishment there is clearly contrastive weight given to this new topic, and it is marked with a whole string of markers of pragmatic salience.

(15) *Taíngbe   ke=baléng-nì=ne   ke=wáng=ing a,*
      money   3SG.NF=male-1SG.GEN=1SG.DAT   3SG.NF=die=the

      a   nì=ra=wò=fa=ing a,   nì=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.

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 the
second sentence following), 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=the   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, the inflected form of the verb 'do'. 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*[33]

It is quite possible for more elements to be 'left behind' in the non-topicalised part of the clause, but the presence of 'do' is still obligatory.

(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*

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 full VP be topicalised as a unit when the V is topicalised 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.

(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.'

(24) [TOPIC *Te ya tà to te **bàng** ing a*]*, fetànghapa te angku nawò te ti.*
      'Running to the beach, a lot of children did this morning.'

(25) * *te ya tà to te ing a, fetànghapa te angku nawò te ti **bàng***

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).

(26) *È-ke-ké=ke   hòe   pe=tue   pá.*
      wife-3SG.NF.DAT-3SG.NF.GEN=3SG.NF.DAT   sago   3SG.F=3SG.F.do   house
      'His wife is making sago jelly at home.'

(27) [TOPIC *Hòe pe tue ing a*]*, èke ké ke pe tue **pá***.
      'Making sago jelly, his wife is doing (it) at home.'

---

[33] 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).

(28)   * [TOPIC *hòe pe tue **pá** ing a*]*, èke ké ke pe tue*
         'Making sago jelly at home, his wife is doing.'[34]

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 for topicalisation, 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)   *Naké   makí=ing a,   ung a ke=angku   boeboe   ke=lá.*
        dog   big=the   now   3SG.NF=child growl   3SG.NF=utter
        'The big dog, now it's growling at the boy.'

Ungrammatical: Subject N topicalised, Adjective in clause-internal position

(30)   * *naké=ing a,   ung a makí   ke=angku   boeboe   ke=lá*
         dog=the   now   big   3SG.NF=child growl   3SG.NF=utter

Ungrammatical: adjective topicalised, Subject N in clause-internal position

(31)   * *makí=ing a,   ung a naké   ke=angku   boeboe   ke=lá*
         big=the   now   dog   3SG.NF=child growl   3SG.NF=utter

Grammatical: object topicalised

(32)   *Pulé   hápa=ing a,   ke=a   pìng   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   pìng   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   pìng   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 argument. In addition to its

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[34] It is, of course, possible to topicalise the location without the verb, as in [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, *hóe pe tue* and *pá*: [TOPIC *hòe pe tue*] [TOPIC *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: [TOPIC *hòe pe tue ing a*] [TOPIC *pá fue a*]*, èke ké ke pe tue*.

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) *Ung a mè   **ya**   mè=pi.   me   pi?*
      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 *=ka* or *=a*; they do not show any difference in syntactic restrictions.

Focussed A

(38) *Ung a pe=ing=a   hòe   pe=tue   e   tue!*
      now   3SG.F=DEIC=PROM   sago   3SG.F=3SG.F.do   3SG.F.be   3SG.F.do
      'Now <u>she's</u> cooking the sago!'

The analysis of the sequence [ĩa] following *pe* as two clitics, not one, comes from the inability of this sequence in this clause to occur with the 'also' clitic *=ra*; *=ra* is incompatible with *=a*, but is compatible with *=ing a* 'the' (see 4.9).

Focussed S

(39) *Ung a   te=angku=ka   te=meng   e   ti   nè?*
      now   3PL=child=FOC   3PL=sit.PL   3PL.be   3PL.do   Q
      'And where are <u>those kids</u> now?'

(this example shows that when a location is pragmatically focussed it must appear
in its normal postverbal position)

Focussed P

(40) *Ke=Téme=ing a   pe=ueme=ka=fue a   ke=láng.*
      3SG.NF=Nafri=that   3SG.F=woman=FOC=that   3SG.NF=hit.F
      'The Nafri guy hit <u>that woman</u>.'

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 *ung a* appears preceding *te angku ka*, in (41) we can see *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) *Te=angku=fa=ing a,   unga a nà   te=oe   e   ti   fue a.*
      3PL=child=only=the   now   play   3PL=play   3PL.be   3PL.do   there
      'Those kids, they're playing over there.'

(42) * *te angku ka ung a te meng e ti nè?*

(43) */# *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.

       TOPIC   PREDICATE   PROMINENT
(44) *Te=bà   húefa   te=te   ung a=we.*
      3PL=person   old   3PL=3PL.do   now=this
      'The old people do it now, … (but before younger people did it in their
       stead).'

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?'

In this way 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 not so 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, and the only nominals that can appear in a postverbal position are goals and locations.

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 *héng* '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 pronominal system, reference to a specific set of locations is accomplished in Skou by three systems:

- the non-pronominal demonstratives (which appear cliticised, usually to the NP head);
- 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 82xxx, 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.

Table 82. Deictics

	Skou	Meaning	Gloss	Common variants
locative	*wi a*	this, proximal	this	[wiya], [we]
	fue a	that, distal	that	[fʉa], [fuwa]
referential	*ing a*	definite	the	[ĩa], [ĩja], [ɲã]
	ing	deictic reference	DEIC	[ĩ]
pragmatic	*a*	prominence marker	PROM	[a]
	ka	(focus)	FOC	[ka], [ɣa]
	ra	also	also	[ra]
	fa	only, just	only	[fa], [va]
	pí	even	even	[pi]
	wò	emphatic	EMPH	[wɔ]
	ke ing (a)	that one, (assumed knowledge)	3SG.NF =the	[kḭ], [kə̃j], [kḭɲa]

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,*   *rángueke=pa,*
       taro-shoots=INSTR   vegetable-gedi-shoots=also   sweet.potato=INSTR
       'taro shoots, even <u>gedi</u> 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-nì=ne=we=pí=ra*   *báng*   *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-nì=ne=we(=ra)*   *fèng,*   *wì 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*   *héfèng=ra*   *te=ti*   *ka,*
       thing   good=also   3PL=3PL.do   NEG
       'they don't do anything worthwhile, …'

Verb:

(53)   *Ne=r-oe=ra*   *ne,*
       1PL=1PL-get.PL=also   1PL.go
       'we get them, and then go, …'

Medial verb:

(54)   *… hòe*   *te=t-ang=ko=ra*   *ka.*
       sago   3PL=3PL-eat=OBV=also   NEG
       'they all eat the sago, eat it till it's all gone.'

Pronominal clitic:

(55) *Nì=**ra**=lue   ka.*
      1SG=also=hear   NEG
      'I don't know either.'

Free pronoun:

(56) *ne=Máwo   ne=**ra**   Te Óeti   pí-tè   ne=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) *Fe=**ra**   te=te   báng=fue,*
      tomorrow=also   3PL=3PL.go   beach=that
      'The next day they went to the beach as well, …'

Numeral:

(58) *Te=ueme   hìngtung=**ing**   te=a,*
      3PL=woman   two=DEIC   3PL=PROM
      'And those two women, …'

Negator:

(59) *ya-lilipa=**ka**=**ra**   ka,*
      thing-all.things=NEG=also   NEG
      'there wasn't a shortage of things, …'
      (literally 'a lack of all things, too, was not (present)')

Quantifier:

(60) *bépú   fátà=**we**   pe=r-úe   pú   mong-mong   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 *ka* is used in exactly those circumstances that preclude the use of *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).

(61) *Ha   nì=loe   i.*
      bag   1SG=put.down   be.at
      'I put down the bag.'

(62) * *ha   nì=loe   fítong   i.*
      bag   1SG=put.down   ground   be.at
      'I put the bag down on the ground.'

(63) *Ha   nì=loe   fítong.*
      bag   1SG=put.down   ground
      'I put the bag on the ground.'

(64) *Hìoe   nì=a=loe   loe.*
      pandanus 1SG=PROM=get.PL   come
      'I'll get the pandanus.'
      (In Papuan Malay: 'Buah merah saya yang angkat.')

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=pí=ra   àng   mè=m-e-me   lóe   m-á   p-oe.*
      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*

(70) *Ke=bà=ing a   ke=pí=ra   ke=ká.*
      3SG.NF=person=the   3SG.NF=even=also   3SG.NF=hit
      'That guy hit him too.'

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 [mɛpipa], shows three tonal melodies, HL, H and HL, respectively, yielding a pitch contour of [\ ¯ \] on the single syntactic word (as judged by tests for word status within the clause – see 5.1) /mɛpipa/.

(74) *Ke   mè=pí=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. 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 xx82 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*   (*fèng*).
       house=also=1SG.GEN=1SG.DAT   bad
       '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*
       house=1SG.GEN=1SG.DAT=that
       '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.*
       house=DEIC=1SG.GEN=1SG.DAT
       'My house.'

(80) *Pá-nì=ne=ing.*
       house-1SG.GEN=1SG.DAT=DEIC
       '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.[35]

(81) *Pá=ra=nì=ne=ing.*
       house=also=1SG.GEN=1SG.DAT=DEIC
       'My house too.'

(82) ?/# *Pá=ra=ing-nì=ne.*
       house=also=DEIC=1SG.GEN=1SG.DAT
       'My house too.'

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.

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[35] 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, loosely attributed to Sandy Chung.

(83)   *Pá=ing-nì=ne=fue a.*
       house=DEIC=1SG.GEN=1SG.DAT=that
       'That house of mine.'

(84)   # *Pá-nì=ne=ing=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*   *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*   *máki=**fue a**.*
       house=1SG.GEN=1SG.DAT   big=that
       'That big house of mine.'

(89)   * *pá-nì=ne=**fue a** máki*[36]

       Noun, possession, adjective and referential clitic

(90)   *Pá-nì=ne*   *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*   *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*

(96)   * *pá=**ra**=nì=ne=**fue a** máki*

(97)   * *pá=**ra**=nì=ne máki=**fue a***

From these examples we can see that the clitics 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

---

36   This string of morphemes is grammatical with a clausal, not phrasal, interpretation (and appropriate intonation), as 'That big house of mine, (it's) big.'

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.

(98)
```
           * CP
          /    \
       FOC      S
```

(99)
```
        *    IP
            /   \
         NP      VP
                /   \
             NP      V'
                    /   \
                 FOC     V
```
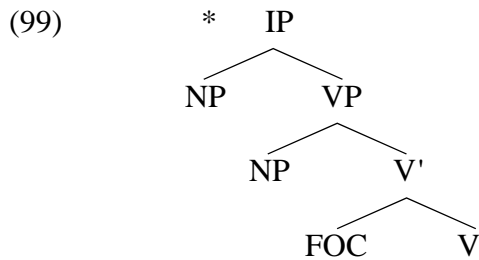
(100) *Tang-nì=ne=ka*   *mè=fu*   *ná?*
       canoe-1SG.GEN=1SG.DAT=FOC   2SG=see.F   Y/N
       'Have you seen my canoe.'

(101) *Palé=fue a*   *ku=ka*   *ke=k-ang.*
       pig=that   egg=FOC   3SG.NF=3SG.NF-eat
       'That pig ate <u>an egg</u>.'

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.

(102) *Bàng*   *páng-pe-pè=pe=ka*
       yesterday   husband-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT=FOC

       púru   *ke=ká.*
       white.tree.kangaroo   3SG.NF=hit
       'Yesterday her husband was the one who shot a tree kangaroo.'

Further discussion on the phrase-structural implications of focussing 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 interesting function of the emphatic marker is to shift the scope of an oblique argument 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_i told my child_j to buy some rice for him_{i /*j /?*k}.'

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_i told my child_j to buy some rice for him_{i /*j /?*k}.'

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=wò.
       transact 3SG.NF=do=OBV 3SG.NF=3SG.NF.DAT=EMPH
       'Theo_i told my child_j to buy some rice for himself_{*i /j /*k}.'

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=wò   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) *Nì   nalé lang=ing   nì=li=ko,   nì=wò   k-ang-kang   li.*
       1SG   taro lang=DEIC   1SG=do=OBV 1SG=EMPH   1SG-eat-RED   do
       'I made this taro <u>lang</u>, and I will eat it.'

This is the same *=wò* 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 83. Directional verbs

Orientation	
'westwards'	*hí*
'eastwards'	*e*
'northwards, seawards'	*o*
'southwards, landwards'	*hoe*

While direction is salient, orientation or location is not so important. The motion verbs listed in table 83xx 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' in table 83xx 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 *e* 'ascend, go up, board', but these verbs are in fact not identical. Their roots are homophonous, but 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' of spatial and elevational deixis, they are synchronically quite distinct verbs. This is a recurrent theme in the verbal lexicon of Skou, the minimal differentiation of two or more semantically related verbs.

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 84xx.

Table 84. Attested sequences of pragmatic markers

=we	=ra					
=we						=ing a
=we				=pí	=a	
=ing					=a	
=ing				=pí		
=ing a				=pí	=ra	
=fue						=ing a
	=ra	=wò				
	=ra	=wò	=fa			
	=ra		=fa			
	=ra					=ing a
	=ra	=wò	=fa			=ing a
		=wò			=ra	
			=fa	=pí		
			=fa		=ra	
			=fa			=ing
			=fa			=wi a
				=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 85. Generalised template for the pragmatic markers

NP	=DEM	=also	=EMPH	=only	=even	=also, =PROM	=DEM
	=we, =ing a, =fue	=ra	=wò	=fa	=pí	=ra	=ing a, =wi a

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.

(110)
```
                    DP
                   /  \
                 NP    D'
                /     /  \
            (DEM)  rest'  (DEM)
                   /  \
              (also)  rest  (also)
                      /  \
                 =EMPH  =only  =even
```
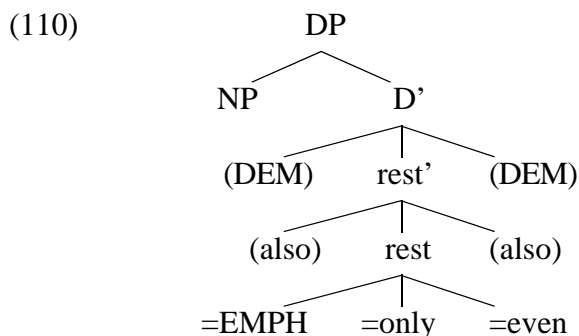
If the nodes in this tree (or, alternatively, the template seen in table 85xxx) was fully productive, then we should expect more forms than are actually attested. Ignoring the spurious (such as *=ra=ra* 'also also'), the combinations shown in table 86xxx are those that we would also predict, but which are not found.

Table 86. Predicted, but non-attested sequences of pragmatic markers

NP	DEM:					
►	*=we*		*=wò*			
(P)	*=we*			*=fa*		
(P)		*=ra*		*=fa*		
(P)		*=ra*			*=pí*	
(P)			*=wò*		*=pí*	
►			*=wò*			*=wi a*
(P)					*=pí*	*=ing a*
(P)					*=pí*	*=wi a*
	'this'	'also'	(EMPH)	'only'	'even'	'this, the'

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 xx86xx 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

(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=ueme   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=ti   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-í=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 …'

> *=wò=ra* 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…'

> *te=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 topic plays a salient part in Skou sentence and text structure. We have already seen data on basic 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:

	Topic$_1$: protagonist	Topic$_2$: setting			
(115)	*Ne=Máwo,*	*Te Tángpe,*	*ne=ne*	*ne*	*ti …*
	1PL=Skou Mabo	Skou Yambe	1PL=1PL.go	1PL.be	1PL.do

'We Mabos, (to) Skou Yambe, we'd go there …'

In this example the goal *Te Tángpe* would normally appear postverbally, as in (115)', the normal position for oblique arguments.

(115)' *Ne Máwo ne ne Te Tángpe 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 Tángpe*]*, ne Máwo 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

$$
\begin{array}{c}
\text{CP} \\
\diagup\diagdown \\
\text{NP}_{\text{TOP}a} \quad \text{IP} \\
\diagup\diagdown \\
[_{\text{IP}} \ldots \text{NP}_{\text{TOP}a}\, \text{V}\, [_{\text{GOAL}} \varnothing_a]\,]
\end{array}
$$
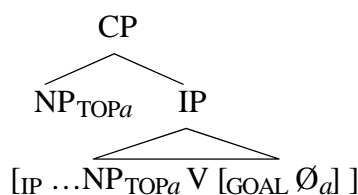
In the second analysis there are two topicalised constituents, the goal NP, and additionally the subject NP as well.

(117)   Putative analysis of (115): II

$$
\begin{array}{c}
\text{CP} \\
\diagup\diagdown \\
\text{NP}_{\text{TOP}b} \quad \text{CP} \\
\diagup\diagdown \\
\text{NP}_{\text{TOP}a} \quad \text{IP} \\
\diagup\diagdown \\
[_{\text{IP}} [_{\text{SUBJ}} \varnothing_b]\, \text{V}\, [_{\text{GOAL}} \varnothing_a]\,]
\end{array}
$$
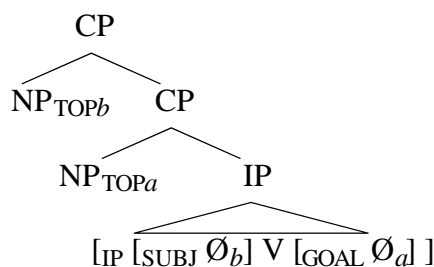
Since there is no evidence from other constructions that would lead us to posit a topical preverbal, but yet clause-internal position as seen in (116), and since there are clear topic-like intonation cues for the separateness of both the subject *ne Máwo* and the goal *Te Tángpe* in (115) from the verbal 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 fítong hápa.*
       sago   1PL=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. 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=ueme   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. *tilong   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)'
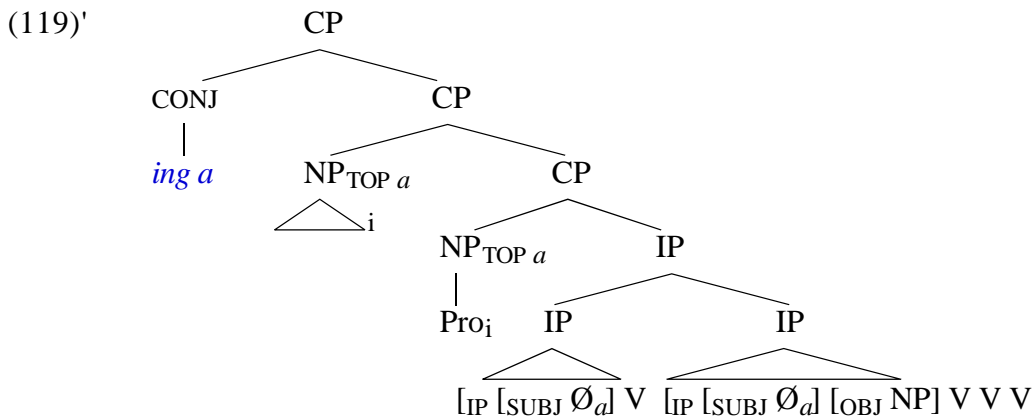
This sort of structure, with multiple topical reference to the same participant, would also account for sentences such as (120), which shows the opposite trend in terms of NP complexity

to that shown in (119). In (119) the first topical NP (*te=ueme 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: *nì* > *ne=bà* > *ku* [Patipeme] *ne*.

(120)　a.　*Ya　　nì,*
　　　　　thing　1SG
　　　　　'So, whatsit, I, …'

　　　b.　*ne=bà,*
　　　　　1PL=person
　　　　　'all of us, …'

　　　c.　*ku* [Patipeme]　　*ne,*
　　　　　child [Patipeme]　1PL
　　　　　'us Patipeme clan descendants, …'

　　　d.　*ápólè-ha　　ne=n-ang　　ka.*
　　　　　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 *=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 *tóe* and an instrumental marker. It appears that we have strong grounds for considering *tóe* to be a separate clause entirely; a possible alternative translation is given in (121)'. This takes *tóe=pa* to be a presentative, or topic introducing, clause of its own, linked to the main clause by the 'same reference' marker *=pa*, not the obviative *=ko.*.

(121)　a.　*Tóe=pa　　　ya-lilipa　　　　ka　　me,*
　　　　　beads=INSTR　thing-all.things　NEG　return.PL
　　　　　'The beads, those things aren't (here) any more, they've gone back, …'

　　　b.　*tóe=pa　　　héfèng　　ke=loe　　　　ka　　moe.*
　　　　　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 *=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.

5   *Word classes and clause types*

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 on 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. 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 ⱨ, 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 is described in 2.3.1.9.

Syntactically we find that the usual 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 in 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*

Two tone contours are not found in complex words consisting of two independently attested morphemes (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 *tánglé* '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 [nīnɛ̄] [|_] 'mine' has the same form as would be expected from the two bound morphemes *-nì* '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) *Móe-nì=ne*
fish-1SG.GEN=1SG.DAT
'my fish'

(8) *Pá=fue a   nì=ne.*
house=that   1SG=1SG.DAT
'That house is mine.'

(9) *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 *pá fue a* the *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 *Móe pe wá nì ne* in (9)'

Putative word boundaries for (9)

(9)' Prosodic: W   W

[mɔ   pewa nine]

Syntactic: W   W W
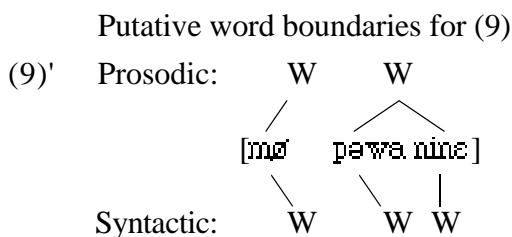
This data would ignore examples such as (10), in which a plural or third person beneficiary (or possessor) shows us that rather than being a genitive+dative combination, what we have is a free pronoun+dative. The genitive pronouns are all associated with a HL melody (except for the 3SG.NF) – see 6.3 – 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 *te* is ungrammatical, as shown in (10)'.

(10) *Móe   pe=w-á   te=te.*
fish   3SG.F=3SG.F-fry 3PL=3PL.DAT
'She fried some fish for them.'

(10)' * *móe   pe=w-á   tè=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)'   *Pá=fue a   te=te.*
         house=that   3PL=3PL.DAT
         'That house is theirs.'

(8)" * *pá=fue a   tè=te*
         house=that   3PL.GEN=3PL.DAT

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 *fátà* '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 predicating a clause. Importantly, there is a non-random assignment of morphologically unmarked functions to semantic types. Croft presumes that the pattern seen in table xx87 will emerge.

Table 87. Matching semantic types to discourse functions in English

	Reference	Modification	Predication
Objects	UNMARKED NOUNS	genitive, adjectivalizations, PP's on nouns	predicate nominals
Properties	deadjectival nouns	UNMARKED ADJECTIVES	predicate adjectives
Actions	action nominals, complements, infinitives, gerunds	participles, relative clauses	UNMARKED VERBS

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 88xx. Here both the type and either the paradigm name, or the individual morpheme form is shown.

Table 88. Morphological marking in Skou

	Reference	Modification	Predication
Nouns	unmarked	possessive: GEN + DAT	unmarked
Adjective	dummy: *YA*	unmarked	unmarked,[37] (or CLITIC=)
Verbs	dummy: *YA*	relative clauses: CLAUSE + *ING A*	agreement: CLITIC=

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-nì=ne***]   *pe=bà*   *héfèng.*
            3SG.F=woman-1SG.GEN=1SG.DAT   3SG.F=person   good
        'My wife is a good person.'

---

[37] 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-nì=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-nì=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*] *pá-nì=ne.*
            thing   old=that   house-1SG.GEN=1SG.DAT
        'The old one is my house.'

        Adjective: modificational

(15)   [_{NP} *Pá **rong**=fue a*] *pá-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.)

Verb, referential

(18)   [NP ***Ya   nì   ke=ká=ing a***]   *fu.*
        thing   1SG   3SG.NF=hit=the   rain
        'The thing that struck me was the rain.'

Verb, modificational:

(19)   [NP *Fu*   ***nì   ke=ká=ing a***]   *fu   bápàlí.*
        rain   1SG   3SG.NF=hit=the   rain   big
        'The rain that struck me was a heavy rain.'

Verb, predicative

(20)   *Fu*   [VP *nì*   ***ke=ká***].
        rain   1SG   3SG.NF=hit
        'The rain struck me.'

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)   *pe=angku*
        3SG.F=child
        'girl'

(22)   *ke=angku*
       3SG.NF=child
       '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 *balèng* 'man', which is classificatorily non-feminine, and *púwa* 'sugar glider (sp.)', which is feminine. These are not identical, however. While *balèng* 'man' may appear with the non-feminine clitic, *ke=balèng* '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.

Examples of this optional prefixation can be seen in the following.

       Animate noun: *bà=* optionally (but preferably) prefixed

(25)   *Ke=bà=we=ra=wò=fa=ing a   (bà=)máki=wò.*
       3SG.NF=person=this=also=EMPH=only=the ANIM=big=EMPH
       '<u>He</u> 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)   *Wùng=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)' * *wùng=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', *fí* '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: there is no 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 following two sentences.

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 an interesting case of 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 argument.

(32) *Ke=ti*   *pá.*
      3SG.NF=3SG.NF.go   house
      'He went 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', *hóe* '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   hóe   [landeng] te=toe   te=ti*
      America=the   come.landward [landing] 3PL=3.come   3PL=3PL.do

      pìng 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 When two (non-oblique) nominals make for a monovalent predicate: NV 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 identifiy two preverbal nominals, but which we classify as monovalent. One such example is shown in (37) and (38).

```
            [nominal]          [nominal]        [verb]
```
(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 arguments), 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 argument (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 subjects and objects, there are other core 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 apparent roles. 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 arguments, 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 89. Ambi-valent verbs

	monovalent reading	bivalent reading
fé	'perch on, be at (a surface)'	'put down, place'
jí	'break, snap'	'hit, break, (plural object)'
wépu	'be covered'	'cover something'

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.*
canoe=INSTR 1PL=place 1PL.be-RED sea
'We anchored out at sea in (our) canoe.'

(40) *Lang-nì=ne jí.*
pot-1SG.GEN=1SG.DAT break
'My pots're broken.'

Bivalent

(41) *Ne=r-oe ne=moe ne bàme ne=fé.*
1PL=1PL-get.1PL 1PL=return 1PL.go village 1PL=place
'We took them and went back to the village, and put them (up on platforms).'

(42) *Lang-nì=ne ke=jí.*
pot-1SG.GEN=1SG.DAT 3SG.NF=break.PL
'He broke my pots.'

(43) *Lúe nì=wépu fátà ko tue.*
basket 1SG=cover all be.at 3SG.F.do
'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) *Tílong=fue a fáfà.*
doorway=that open
'That doorway is open.'

(45) *Fu   bápáli ma   e   tue,   kúfong   nì=wé=ko,*
      rain   big   fall   3SG.F.be 3SG.F.do umbrella 1SG=get.F=OBV

      nì=jíng   e   te   ho,   nì=wépu=pa,   nì=moe.
      1SG=open   3SG.F.be 3SG.F.go above   1SG=cover=INSTR   1SG=return
      '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.

            SUBJ:agent   OBJ:patient

(46) *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, *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 argument.

            SUBJ:patient   OBL:agent

(47) *Ke=balèng=fue a   mòng   ke=wí   pe.*
      3SG.NF=man=that   wound   3SG.NF=get 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 *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:

            SUBJ:agent   OBJ:patient

(48) *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, *kóeng* 'tooth', the clause is still best regarded as
being bivalent, and not trivalent. This is because *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) *Anábí   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 *anábí* 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 langauges, 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) *Otoko=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) *Kong   ku   nì.*
      thorn   stab   1SG
      'I got poked by a thorn.'

(57) *Pe=angku=ing a   nì   pe=w-u.*
      3SG.F=child=the   1SG   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

Some 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 what object may appear overtly. One such verb is *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) *Mè   pí   mè=pi   nì=lúe.*
      2SG   speech   2SG=2SG.do   1SG=hear
      'I can hear you talking.'

(59) * *mè   nì=lúe*
        2SG   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 *lúe*, and a nominal one is ungrammatical.

(60) *Nì   naké=ing a   bóeboe   ke=lá   nì=lúe.*
      1SG   dog=the   bark   3SG.NF=make.noise 1SG=hear
      'I heard the dog barking.'

(61) *Nì nì lúe naké ing a bóeboe ke lá.*
      'I heard the dog barking.'

(62) * *nì   naké=ing a   nì=lúe*
        1SG   dog=the   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)'   *Nì   naké=ing a   nì=lúe   hòe   ke=k-ang*
       1SG   dog=the   1SG=hear sago   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)".

(63)'   *Ke=ing a   ne   ke=k-éng.*
     3SG.NF=the   1PL   3SG.NF=3SG.NF-ask
     'He asked us.'

(63)"   * *ke ing a   nè   ke kéng nì.*
             1PL.GEN

(64)'   *Ke ing a ke kéng   nè.*
                  1PL.GEN

(64)"   *Ke ing a ke kéng   ne.*
                  1PL

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   i   li   pe=te*   *nè.*
      child-1SG.GEN=1SG.DAT 1SG=ask   be do 3SG.F=3SG.F.go   Q
      'I'm asking my daughter_i where she_{i,j}'s going.'

(67)' * *nì=héng   i   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_i where she_{i,j}'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_i) where she_{i,∗j} was going.'

The same morphosyntactic pattern is found with the semantically more generic verb *lóeng* 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 lexcially separate albeit phonologically undifferentiable verbs). The question described in (68) could be replied to with *lóeng* 'answer' as seen in (68)', which has only one possible reading, but (69) shows that a use of *lóeng* 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_i answered (to) me that she_{i,∗j} 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_i told me that she_{i,j} wanted to go to the beach.'

When *lóeng* 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*   *i*   *li.*
      child-1SG.GEN=1SG.DAT speech   1SG=do   be do
      'I spoke to my child.'

(71) *Pí-ha   mè=pi   me   pi   ku-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 *héng* '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*, the obviative marker for clauses with different subjects, 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   âi-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*
     3PL=Skou Sai   speech-curse 3PL=3PL.do   be.at   3SG.F.do
     âi-nì=ne.
     father-1SG.GEN=1SG.DAT
     'The Skou Sais cursed my father.'

An example of a postverbal P with interesting behaviour is found in the predicate 'bump into, collide with', which is expressed with the verb *fí*, the same phonological form as that of the verb that is used to code 'meet', also *fí*. (Certainly it is the same phonological form, and I would argue that it is in fact the same lexical entry as well.) Compare the following two sentences, neither of which can show the word order of the other without the interpretation changing.

     OBJ   V

(74) *Mè   nì=fí.*
     2SG   1SG=meet
      'I met you.'
     * 'I bumped into you.'

     V   OBL

(75) *Nì=fí   mè.*
     1SG=meet 2SG
      'I bumped into you.'
     * 'I met you.'

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*.[38]

(76) *Oe   pe   ke=láng.*
      burp   3SG.F   3SG.NF=burp
      'She burped.'
      (Literally, '(A) burp burped her.')

(77) * *oe pe pe=láng*, * *pe oe* (*pe=*/*ke=*)*láng*

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 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) *Warme chocolade melk   beval-t   mij   best.*
      hot.chocolate   please-2/3SG   1SG   best
      'I like hot chocolates.'

---

[38] 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=láng*. Furthermore, the switch reference mechanism does not track the burp, but the burper (19.5).

(79)   * *chocolade melk beval mij best*, * (*mij/ik*) *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.'

Further discussion of the morphosyntactic behaviour of these predicates can be found in chapter 14. A similar, but not identical, construction can be seen in (81). Here the 'experiencer', the one suffering from snot, is coded as a topic, external to the clause, and the afflicting entity is the subject of the monovalent clause. Marking the verbal part of the clause with forms appropriate for the pronominal features of the topic is not a grammatical possibility.

(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 i 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 unlikely 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:

(84)   *Ke   nì=ká.*
       3SG.NF   1SG=hit
       'I hit him.'

More discussion of the *mòng wí* predicate, and the arguments for and against analysing it as a lexicalised passive counterpart to the verb *ká* 'hit, kill', can be found in 13.3.

5.4.3.6 Possibilities for subcategorisation

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 argument, 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.,	*fí* '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 lexial 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 argument.

(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 pariticpant 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 interesting 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 argument, 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-nì=ne   yata   nì=li   te=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 *te 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) * *te=bà pe=r-ú   nì   rópu-nì=ne   yata
        nì=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 *rópu nì ne* or *nì* is also perfectly grammatical: *Rópu nì ne pe rú nì yata nì li te bà*, or *Nì pe rú nì rópu nì ne yata nì li te bà*)

Similarly, a construction analogous to (97) with *na lùng* as the predicate in the subordinate clause is not eligible for raising of the goal:

(98) * *ku-nì=ne   pe=r-ú   nì*
        child-1SG.GEN=1SG.DAT 3SG.F=3SG.F-F.know   1SG

        te=Óeti   pí-tè   nì=na lùng
        3PL=Wutung   language-3PL.GEN   1SG=teach
        'She knew that I taught the Wutung language to my child.'

        (again, raising the agent or theme of the subordinate clause is acceptable: *Nì pe rú te Óeti pí tè nì na lùng ku nì ne*, and *Te Óeti pí tè pe rú nì na lùng ku nì ne*)

When *wé leng* is used in serial construction with *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 *wé leng*.

(99) *Rópu nì=wé leng   te-te   ke=angku-nì=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 *á re lolo li* 'exchange', which takes an oblique recipient.

(100) *Nì   táng   nì=á   re   lolo   nì=li   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 *lú* 'release, throw' takes only two arguments, the agent and the thing thrown. In order to express the goal, a complex serialising construction is used, seen in (101), inwhich the oblique goal is marked with the serialisation *lú hí* 'release hit'.

(101) *Wúng nì=lú=ko   nì=lú   hí naké.*
         stone   1SG=release=OBV 1SG=release   hit dog
         'I threw a stone at the dog.'

It is also possible to express this without a serial verb construction, but not with the verb *lú* alone.

(102) *Wúng nì lú hí naké.*

(103) * *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 specifiedrequire an instrument or 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.

(104) | *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:

(105) | *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.'

(106) * *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 (105) above can be seen in (107), where *anábí* appears with the same *=pa*.

(107) | *Rí=ing a* | *ke* | *anábí=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 syntax of instruments in clause 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 they may appear inside an NP to modify nouns without needing to be in a relative clause, and they may be predicative without requiring 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

(108) *ke=balèng   máki=ing a*
   3SG.NF=man big=the
   'the big man'

>Adjectival modifier, no deictic

(109) *ke=balèng   máki*
   3SG.NF=man big
   'a big man'

>Relative clause modifier, morphological deictic

(110) *ke=balèng   yáng=ing a*
   3SG.NF=man sick=the
   'a/the sick man'

>Relative clause modifier, no deictic

(111) #/? *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 (114), is ungrammatical regardless of the placement of *=ing a*.

>Noun-Adjectival-Numeral

(112) *te=balèng máki   héngtong=ing a*
   3PL=man big   three=the
   'the three big men'

>Noun-Numeral-Relative clause

(113) *te=balèng héngtong   yáng=ing a*
   3PL=man three   sick=the
   'three sick men'

>Noun-Relative clause-Numeral

(114) * *te balèng yáng (ing a) héngtong (ing a)*

These restrictions indicate that there are in fact two different structures involved; we may simply represent them templatically as shown in (108)'/(112)' and (110)'/(113)'.

NP:	Noun	Adjective	Numeral	Relative clause	Demonstrative
(108)' / (112)'	*te=balèng*	*máki*	(*héngtong*)		*=ing a*
(110)' / (113)'	*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.

	Plain	Animate	Inanimate	
(115)	*rong*	*bà=rong*	*ya=rong*	'old'
	náfeng	*bà=nafeng*	*yá=náfeng*	'strong, hard'
	bí	*bà=bi*	*yá=bí*	'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). 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, *bà=* 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 *bà* 'human, person' and *ya* 'thing, what', though in their classificatory function we can see that the scope of the morphemes is somewhat different. While *bà* the free nominal can only refer to humans, it is clear that *bà=* the classificatory proclitic can refer to any animate referent, as is made clear by the following example:

      bà= used with human reference

(116)   *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

(117)   *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= used with inanimate reference

(118)   *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 (116) - (118), 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.

(119) * *ke ing a ya ikáféng*

(120) * *í ing a ya ikáféng*

(121) * *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.

(122)   *Móe   nì=láng=ko   atáléle(-fa).*
        fish   1SG=chop.F=OBV   small-'ADJ'
        'I chopped the fish up into small pieces.'

(123)   *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', *èfa* '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 (124) - (126).

(124) *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.'

(125) *Pe=angku   naké   náfeng   pe=w-é.*
3SG.F=child   dog   strong(ly) 3SG.F=3SG.F-get
'The girl held the dog firmly.'

(126) *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 (128) (which is also grammatical, but less frequently heard where a small clause result coding option is available).

(127) *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.')

(128) *Atáléle   nì=k-ang.*
small   1SG=1SG-eat
'I only eat a little.'

Note that the small-clause construction in (127) 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 (131).

(129) *Ke=k-a tà=ko*   *tánge   ná   ke=pi.*
       3SG.NF=3SG.NF-walk running=OBV leg   tired   3SG.NF=tire
       'He ran until his legs were tired.'

(130) *Ke=k-a tà=ko*   *ke=kúkúfa.*
       3SG.NF=3SG.NF-walk running=OBV 3SG.NF=fast
       'He ran such that he was fast.'

(131) * *ke=kúkúfa   ke=k-a tà*
       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 or to show same-subject switch reference between clauses (approximately; see 19.5) is historically related to the same morpheme.

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 *nápang* 'five', which is used to form the numbers up to *náhìpa* 'eight', but not beyond. Numbers from nine to eleven are formed on the basis of *náhìpa* plus additions, but then *hangpà* '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 xx90 shows the cumbersomeness of the Skou forms, compared to the Indonesian numerals. The limit of the Skou counting system is *mabírí* 'twenty-four': attempts to elicit 'twenty-five' (and other higher numbers), with forms such as **mabírí pa áling* 'twenty-four and one' or **mabírí hì* '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 náhìpa pa nápang* 'twelve and eight and five', were all solidly rejected. Attempts to multiply *mabírí* 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, were quite clear on the meanings of the individual parts of the

compound, but also clear that the compound refers to seven, and not eight. A possible explanation for this mathematical oddity is given below.

Table 90. The Skou numerals (exhaustive)

	Skou		English	Papuan Malay
1	*áling*	1	one	satu
2	*hìngtung*	2	two	dua
3	*héngtong*	3	three	tiga
4	*nongpong*	4	four	ampa(t)
5	*nápang*	5	five	lima
6	*nápánghì*	5+n	six	anam
7	*nápang héngtong*	5+3	seven	tuju(h)
8	*náhìpa*	8	eight	delapan
9	*náhìpa pa áling*	8+1	nine	sambilan
10	*náhìpa pa hìngtung*	8+2	ten	sepulu(h)
11	*náhìpa pa héngtong*	8+3	eleven	seb(e)las
12	*hangpà*	12	twelve	duab(e)las
13	*hangpà pa áling*	12+1	thirteen	tigab(e)las
14	*hangpà pa hìngtung*	12+2	fourteen	ampab(e)las
15	*hangpà pa héngtong*	12+3	fifteen	limab(e)las
16	*hangpà pa nongpong*	12+4	sixteen	anamb(e)las
17	*hangpà pa nápang*	12+5	seventeen	tujub(e)las
18	*hangpà pa nápang pa áling*	12+5+1	eighteen	d(e)lapamb(e)las
19	*hangpà pa nápang pa héngtong*	12+5+3	nineteen	sambilamb(e)las
20	*hangpà pa náhìpa*	12+8	twenty	duapulu(h)
21	*hangpà pa náhìpa pa áling*	12+8+1	twenty one	duapulu(h) satu
22	*hangpà pa náhìpa pa hìngtung*	12+8+2	twenty two	duapulu(h) dua
23	*hangpà pa náhìpa pa héngtong*	12+8+3	twenty three	duapulu(h) tiga
24	*mabírí*	24	twenty four	duapulu(h) ampa(t)
25+	–	–	twenty five	duapulu(h) lima (etc.)

    We can represent the system behind the Skou numeral system as shown in table xx91. The change in counting at each step up is shown in bold, and the start of a new column.

Table 91. Skou bases

Increment	Base-5	Base-8	Base-12
1	5+1	8+1	12+1
2	'5+3'	8+2	12+2
3	**=8**	8+3	12+3
4		**=12**	12+4
=5			12+5
			12+5+1
			12+5+'3'
			12+8
			12+8+1
			12+8+2
			12+8+3
			=24

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 inteference 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 Skou family innovation; the motivation for this is not known, since there are no other languages with base-4 languages in the area.)

Table 92. Numerals in closely related languages

	Dusur	Dumo	Leitre	Wutung
1	opa	oɸa	ɔpa	ɔfa
2	yumono	yumɔnɔ	yumɔnu	hnyɔmɔ
3	ẽdu	ɛnu	ino	hɛnɔ
4	noɔ	nuɔ	noɔ	nɔu
5	no mlɛ o	nuɔ mlɛ oɸa	noɔ kã be	nɔi
6	no mlɛ yumono	nuɔ mlɛ yumono	noɔ kã u	nɔtʃɔ
7	no mlɛ ẽdu	nuɔ mlɛ ɛnu	noɔ kã yumɔnu	nɔtʃi nyũ
8	buyɛ	nuyu	noɔ kã ino	nɔtʃi hɛnɔ
24	buβi	muti oɸa	–	–

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 madeup 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 héngtong* '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 byvirtue of their phrase structural possibilities. Some time expressions are themselves composed of several words, and so represent phrasal categories.

Some of the most commonly encountered time expressions are shown in table xx93.

Table 93. Time expressions

	translation	literal gloss
ráng	'day, today'	sun
rángpang	'night'	sun+night
tang	'last night'	
rángleng	'afternoon'	sun+afternoon
fetànghapa	'morning'	
ung, ung a	'now'	
lópa	'earlier, in the past (any length of time)'	
ké	'month'	moon

féng langro	'season with eastern winds, roughly March to October'	
fu wa ro	'season with western winds, heavy waves at sea, approximately November to February'	
félangro	'year'	tomorrow+?
fétangpiung	'in three days' time'	
fétanpi	'the day after tomorrow'	
fé, fé=ung	'tomorrow'	
bàng	'yesterday'	
bàngto	'the day before yesterday'	
bàngtoung	'three days ago, or longer'	
ké topu wi a	'next month'	month+this
ké ti fue a	'last month'	month+go+that
félangro a toe	'next year'	year+come
félangro wi a	'this year'	year+this
félangro te	'last year'	year+go
bang áling	'Monday'	yesterday+one
bang hìngtung	'Tuesday'	yesterday+two
bang héngtong	'Wednesday'	yesterday+three
bang nongpong	'Thursday'	yesterday+four
bang nápang	'Friday'	yesterday+five
bang nápánghì	'Saturday'	yesterday+six
bang nápang héngtong	'Sunday'	yesterday+seven

The time expressions are normally found unmarked, as the first element of an NP, as in (132). 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 (133).

(132) 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.'

(133) *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 morphsyntactic 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   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 *fátà* '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-lingusitically 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), 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 aided this need.