

# *Studies in Burmese linguistics*

## Pacific Linguistics 570

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# **Studies in Burmese linguistics**

Edited by  
Justin Watkins



Pacific Linguistics  
Research School of Pacific and Asian Studies  
The Australian National University

Published by Pacific Linguistics  
Research School of Pacific and Asian Studies  
The Australian National University  
Canberra ACT 0200  
Australia

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First published 2005

National Library of Australia Cataloguing-in-Publication entry:

Justin Watkins, editor  
Studies in Burmese linguistics.

I. Burmese language. 2. Burma - Languages. I. Watkins,  
Justin. II. The Australian National University. Research School of Pacific and Asian Studies.  
Pacific Linguistics.

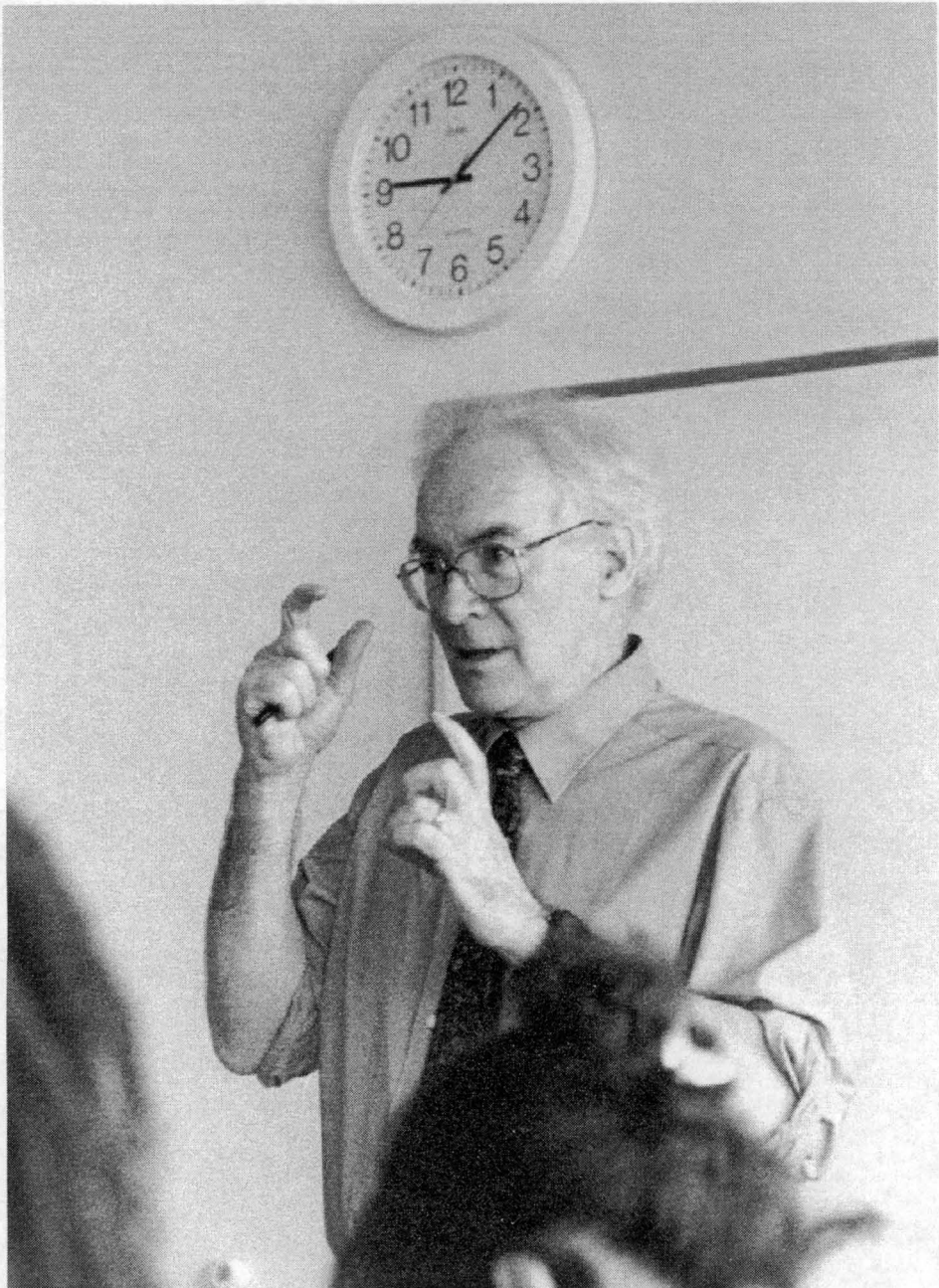
495.8

Bibliography.  
ISBN 0 85883 559 2

Front cover: Burmese Kammavaca manuscript, courtesy of the British Library  
Reference Or.12010/B f.1  
Inside cover: Gods honouring Buddha, courtesy of the British Library  
Reference Or.14297 f.18

Typeset by Justin Watkins and Paul Sidwell  
Cover design by Cirils Digital Printers  
Printed and bound by Cirils Digital Printers, Fyshwick, Canberra





**John Okell**

**Picture by Sophie Baker**



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## Acknowledgements

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There are many people who have offered help and encouragement throughout this project, and whose enthusiasm have helped to carry it through long periods of stagnation.

The first word of thanks goes to all the contributors (including Hsayama Than Than Win, Ed Garrett, Bert Vaux and others whose work did not, for one reason or another, make it into the book) without whom I would not have had the wonderful experience of editing this book. Your scholarship has taught me a great deal about the language I'm lucky enough spend my life working with.

Several anonymous reviewers undertook very careful readings of several draft manuscripts and offered extensive comments which have without doubt improved the quality of the final versions of those articles.

I'm grateful to Nance Cunningham, Aung Aung, Daw Mar Lay and Ma Mar who answered questions and helped me source obscure Burmese-language references while I was editing the manuscript in Yangon. Rachel Stein cut her copy-editing teeth on several of the articles and made a fine job of some very ragged early drafts.

Paul Sidwell, John Bowden and Malcolm Ross at Pacific Linguistics have been extremely kind to accept a second for publication a second highly technical manuscript to follow *The Phonetics of Wa*. I'm delighted that they have taken this book on, since Pacific Linguistics gives it the best chance of reaching its target audience at an affordable price. Many thanks to Julie Manley at PL for all her work too.

I asked Jim Matisoff to contribute his preface at the eleventh hour and was amazed that he agreed to write it — and made some valuable observations and corrections in the process. So many thanks to him too.

Despite all this help, it has still taken me over four years to pull my finger out and get the whole manuscript finished. For this, and for any the errors I've introduced into the articles where there were none before, I offer apologies and accept full responsibility.



# Abbreviations and conventions

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## 1 Transcription

Spoken Burmese is transcribed in this book according to the following conventions. The rationale behind the decisions taken in deciding upon this system is that the transcription should adhere to IPA conventions without being complicated by too much phonetic detail. See Watkins (2000 and 2001) for a more thorough treatment.

### Vowels

(1) and (2) show how vowels are transcribed in this volume, with an indication of the phonetic detail implied.

(1) Vowels in phonologically open syllables (all low tone).

<i>Burmese</i>	<i>transcription</i>	<i>IPA</i>	<i>gloss</i>
နီ	nì	[i]	‘red’
လေ	lè	[e]	‘wind’
ဝယ်	wè	[ɛ]	‘buy’
လာ	mà	[a]	‘come’
မော်	mò	[ɔ]	‘look up’
တို	tò	[o]	‘short’
ပူ	pù	[u]	‘hot’

(2) Vowels in syllables spelt with final stops (realised as glottal stops) or final nasals (realised as nasal vowels).

<i>Burmese</i>	<i>transcr</i>	<i>gloss</i>	<i>IPA</i>	<i>Burmese</i>	<i>transcr</i>	<i>gloss</i>	<i>IPA</i>
သစ်	θiʔ	‘new’	[iʔ]	သင်	θìn	‘new’	[ĩ]
လက်	lɛʔ	‘hand’	[ɛʔ]				
ဟပ်	haʔ	‘reflect’	[aʔ]	ဟန်	hàn	‘style’	[ã]
လွှတ်	ʔuʔ	‘release’	[ʊʔ]	လွန်	jùn	‘lacquer’	[õ]
အိပ်	ʔeiʔ	‘sleep’	[eiʔ]	အိမ်	ʔèin	‘house’	[ẽĩ]
ကိုက်	kaiʔ	‘bite’	[aiʔ]	ကိုင်	kàin	‘hold’	[ãĩ]
ရောက်	jauʔ	‘arrive’	[auʔ]	တောင်	tàun	‘mountain’	[ãũ]
လုပ်	louʔ	‘do’	[ouʔ]	ကုန်	kòun	‘run out’	[õũ]

Syllables written with an initial vowel symbol are transcribed with initial glottal stops, to make syllabification unambiguous, as in (3):



## (3) Initial glottal stop

<i>Burmese</i>	<i>transcription</i>	<i>gloss</i>	<i>IPA</i>
အောင်	ʔaun	‘succeed’	[ʔaũ]
အမာ	ʔəmà	‘scar’	ʔəmà
အအိပ်အနေ	ʔəʔeiʔʔənè	‘sleeping habits’	ʔəʔeiʔʔənè

*Tones*

Tones are transcribed as in (4). Note that the diacritics are different from those used in John Okell’s publications and teaching materials (also shown in (4), for comparison).

## (4) Transcription of Burmese tones

<i>tone</i>	<i>Burmese</i>	<i>transcription</i>	<i>gloss</i>	<i>Okell transcription</i>
low	ခါ	k <sup>h</sup> à	‘shake’	k <sup>h</sup> a
high	ခါး	k <sup>h</sup> á	‘be bitter’	k <sup>h</sup> à
creaky	ခ	k <sup>h</sup> ǎ	‘fee’	k <sup>h</sup> á
killed	ခတ်	k <sup>h</sup> aʔ	‘draw off’	k <sup>h</sup> aq

Reduced, ‘toneless’ vowels are transcribed as in (5):

## (5) Reduced, ‘toneless’ syllables

<i>tone</i>	<i>Burmese</i>	<i>transcription</i>	<i>gloss</i>	<i>Okell transcription</i>
reduced	စားပွဲ	zəbwé	‘table’	zǎ-bwèh

*Consonants*

(6) shows how consonants are transcribed in this volume, again with an indication of the phonetic detail implied by the transcription.

## (6) Transcription of consonants

<i>Bse</i>	<i>transcr</i>	<i>gloss</i>	<i>IPA</i>	<i>Bse</i>	<i>transcr</i>	<i>gloss</i>	<i>IPA</i>
ပါ	pà	‘include’	[p]	ရှာ	ʃà	‘look for’	[ʃ]
ဖ	p <sup>h</sup> à	‘patch’	[p <sup>h</sup> ]	လာ	là	‘come’	[l]
ဘ	bà	‘what?’	[b]	လှေ	ʔè	‘boat’	[ʔ]
မ	mà	‘hard’	[m]	အမရပူရ	ʔəmərəpùrə	(a town)	[ɹ]
မှ	m̥à	‘order’	[m̥]	ကာ	kà	‘block’	[k]
ဝါ	wà	‘cotton’	[w]	ခါ	k <sup>h</sup> à	‘partridge’	[k <sup>h</sup> ]
ဝှက်	wəʔ	‘hide’	[w]	ဂူ	gù	‘cave’	[g]
တာ	tà	‘measure’	[t]	ကြာ	ʔɛà	‘lotus’	[ʔɛ]
ထူ	t <sup>h</sup> ù	‘thick’	[t <sup>h</sup> ]	ခြေ	ʔɛ <sup>h</sup> i	‘foot’	[ʔɛ <sup>h</sup> ]
ဒါ	dà	‘that’	[d]	ဂျာနယ်	ʔɛà <sup>n</sup> è	‘journal’	[ʔɛ]
စာ	sà	‘writing’	[s]	ငို	ŋò	‘weep’	[ŋ]
ဆာ	s <sup>h</sup> à	‘hungry’	[s <sup>h</sup> ]	ငှက်	ŋèʔ	‘bird’	[ŋʔ]
ဇာ	zà	‘lace’	[z]	ညာ	ɲà	‘right-hand’	[ɲ]
နာ	nà	‘ill’	[n]	ညှစ်	ɲíʔ	‘squeeze’	[ɲʔ]
နှာ	ɲà	‘nose’	[ɲ]	အာ	ʔà	‘gape’	[ʔ]
ယာ	jà	‘farmland’	[j]	ဟာ	hà	‘thing’	[h]

## 2 Transliteration

This book uses the American Library Association and Library of Congress system of transliteration for Old Burmese (OB) and Pāli, and to transliterate the orthographic form of the modern language (Written Burmese; WB). This system, and others, are explained in detail in Okell's *A guide to the romanization of Burmese*. (London: Royal Asiatic Society, 1971). The main features of the system are set out in (7)-(10) below:

### (7) Transliteration of consonants

က	k	ခ	kh	ဂ	g	ဃ	gh	င	ñ
စ	c	ဆ	ch	ဇ	j	ဈ	jh	ည/ဉ	ññ/ñ
တ	t	ဋ	th	ဒ	d	ဌ	dh	ဏ	ṇ
တ	t	ထ	th	ဒ	d	ဓ	dh	န	n
ပ	p	ဖ	ph	ဗ	b	ဘ	bh	မ	m
ယ	y	ရ	r	လ	l	ဝ	v	သ	s
		ဟ	h	ဠ	!	အ	,		

### (8) Transliteration of vowels

—	a	အ	ā
—	i	ဇ	ī
—	u	ဉ	ū
—	e	ဧ	ai
—	o	ဧ	o'
—	ui		

### (9) Transliteration of medials

၂	-y-	၆	-r-	၁	-l-	၁	-v-	၂	-h-
---	-----	---	-----	---	-----	---	-----	---	-----

Combinations of medials are written in the order y, r, l, v, h.

၁	-yv-	၆	-rh-	၁	-vh-	၆	-rvh-
---	------	---	------	---	------	---	-------

### (10) Transliteration of other symbols

—	"	—	'	—	'	—	m
---	---	---	---	---	---	---	---

## 3 Abbreviations

The following forms of Burmese are referred to in various articles in this volume

OB	Old Burmese: the language of the 11th–13th century inscriptions
WB	written Burmese – the orthographical form of the modern language
CB	colloquial Burmese
MB	modern Burmese = colloquial Burmese
FB	formal Burmese

Grammatical forms are glossed consistently throughout all the articles in this volume. This editorial decision was taken so that the reader need not learn a fresh set of abbreviations in preparation for reading each article. The intention has been to reduce the potential for confusion and ambiguity, but I apologise if at times the drive for consistency has had the opposite effect. The following is a list of the abbreviations used, with an example of one Burmese morpheme which may be glossed using each abbreviation.

<i>gloss</i>	<i>expanded form</i>	<i>Burmese example</i>
APPEL	appellative	ရယ် jè
ADV	adverbial marker	စွာ swà
ADV <sup>REDUP</sup>	adverb formed by reduplication	ကောင်းကောင်း káungáun
REAL <sup>ATTR</sup>	attributive form of <i>realis</i> verb marker	တဲ့ tɛ
IRR <sup>ATTR</sup>	attributive clause form of <i>irrealis</i> verb marker	မဲ့ mɛ
OK?	tag particle seeking agreement	နော် nò
ATTR	attributive marker	သော thá
BEN	benefactive	ပေး pé
CAUS	causative	စေ sè
CLF	classifier	ခု k <sup>h</sup> u
COMP	compassion	ရှာ ʃa
CONT	continuative	နေ nè
.CRK	induced creaky tone	ကျွန်တော့် tɛaŋ
DISTR	distributive	စီ si
EMPH	emphatic	ပဲ p <sup>h</sup> é
EXCL	exclamation	တကား taká
EXP	experiential	ဖူး p <sup>h</sup> ú
EUPH	euphonic	လေ lè
HON	honorific	တော် tà
IMP	imperative	နဲ့ nɛ
INADV	inadvertently	မိ mǐ
IRR	<i>irrealis</i>	မယ် mè
NEG	negative	မ ma
NOM	nominaliser	ခြင်း tɛ <sup>h</sup> ín
REAL <sup>NOM</sup>	nominalised form of <i>realis</i> verb marker	တာ tà
NP	noun phrase	
OBJ	object marker	ကို kò
PL	NP plural marker	တွေ twè
POL	Polite	ပါ pà
Pro	pronoun	
PURP	purpose	ဖို့ pò
Q-?	yes/no-question sentence-final marker	လား lá
Q-WH	wh-question sentence-final marker	လဲ lé

QUOT	quotation marker	လို့ lɔ
REAL	<i>realis</i> modality	တယ် tɛ
RECIP	reciprocal	အချင်းချင်း ʔatɕʰɪndzʰɪn
REFL	reflexive	ကိုယ် kò
REM	remote; temporal or spatial remoteness	ခဲ kʰɛ
RESULT	resultative	ထား tʰá
SUBJ	Subject marker	က ka
SUBJUNC <sup>REDUP</sup>	subjunctive reduplication of verb	ဖြစ်ဖြစ် pʰjiʔpʰjiʔ
SUBORD	subordinate clause marker	၍ jwɛ

# Preface

---

The papers in this volume constitute an excellent introduction to the burgeoning field of Burmese linguistics, covering a wide range of topics in phonology, grammar, discourse analysis, lexicography, and stylistics.

A.D. Green's 'Word, foot and syllable structure in Burmese' treats Burmese segmental and prosodic phonology in the framework of constraint-based optimality theory. The notion of competing constraints is perhaps useful in describing such unpredictable phenomena as the epenthetic insertion of either a nasal or a glottal element in English loanwords in order to make them conform to the Burmese syllable canon; or the fact that some compounds, but not others, will 'reduce' their first element, often to the status of a stressless prefix. Or do the constraints compete with each other to such an extent that one must finally admit that the essence of natural language is to be incompletely formalisable?

The question of 'freedom of word order' is tackled from the viewpoint of prosodic phonology in 'Information structure, focus and prosody in Burmese' by

A. Simpson and J. Watkins. This paper takes an empirical, experimental approach, using questionnaires, acoustic analysis and perceptual tests to measure speakers' reactions to permutations in word order. They demonstrate that this 'freedom' is only relative, and that a host of syntactic, semantic, and pragmatic features govern the speaker's choice of a particular order in a certain context. (In this respect the analysis is reminiscent of the 'competing constraints' of O.T.) The authors show that the focused elements in a Burmese sentence appear typically in preverbal position; they are clearly stressed and do not tolerate repositioning within the sentence. Presupposed material, on the other hand, is destressed, especially when it occurs between the focus and the verb.

D. Bradley's 'Reflexives in literary and Spoken Burmese' provides an exhaustive analysis of the usage of reflexive constructions, both intra- and inter-dialectally, from both the synchronic and diachronic perspectives. The multiplicity of such constructions is ascribable to the 'instability and openness of the Burmese pronoun system', which is in turn related to the redundancy of pronouns in Burmese discourse. This paper is full of interesting titbits, including the observation that there is no evidence of ergativity even in the earliest inscriptions (although a number of modern Lolo-Burmese languages, e.g. Ache, are thoroughly ergative); the striking appearance of reflexives in proverbs (e.g. 'Only one oneself knows his own bellyaches'); and the complex reflexives that appear as four-syllable 'elaborate expressions'.

'Syntactic and morphological markers in Burmese: are they *really* optional?', by V.B. Kassevich, is a sophisticated meditation on the theoretical nature of optionality. It is connected to the old issue of whether East and Southeast Asian languages are really *supra grammaticam*, as the great lexicographer Giles felt Classical Chinese to be, because of its relative freedom of word order, the fluidity of its parts of speech, and its lack of obligatory

morphology. Southeast Asian languages dislike redundancy (as is evident, e.g., in Bradley's discussion of pronominal usage). In Kassevich's felicitous phrase, speakers of such languages 'are allowed to adjust the level of redundancy of the text.' Like the Simpson/Watkins paper, Kassevich's study is empirical, based on the results of clever experiments devised to test the acceptability of the addition or deletion of grammatical markers. It turns out that certain markers are indeed rather obligatory in many contexts, so much so that additions are more easily accepted by consultants than deletions; i.e. over-differentiation is more tolerated than under-differentiation, proving the Jakobsonian dictum that certain *meanings* (not necessarily certain *morphemes*) cannot be dispensed with from language.

K. Okano's 'The verb ပေး pé 'give' as a causativiser in colloquial Burmese' describes the multiple grammaticalisations of this lexeme, which can function

as either a pre-head or a post-head versatile verb in both literary and colloquial usage. As a post-head auxiliary it carries a benefactive/applicative, destinative, or transitive/causative meaning. As a pre-head auxiliary it carries an exclusively causative meaning. The relatively recent use of this verb in pre-head position is ascribed to indirect Mon influence, perhaps via the Moulmein dialect of Burmese.

Four papers are devoted to the intricacies of the categories of tense, aspect, and modality (TAM) in Burmese. Since the conclusions of the various authors are rather divergent, these papers provide a valuable airing of the terminological problems involved in this vital grammatical area. Tense, aspect, and modality are categories intimately interwoven in verbal semantics, although different languages emphasise them in different proportions. In 'Burmese as a modality-prominent language', A. Vittrant uses D.N.S. Bhat's criteria of degree of grammaticalisation, obligatoriness and pervasiveness to demonstrate that Burmese is a 'modality-prominent' language. All subtypes of modal concepts (clausal/objective, subjective, and speaker/utterance-oriented) are grammaticalised in the language. The pervasiveness of modal distinctions is evidenced by the fact that they play a role in complex as well as simple sentences, especially in nominalizations and in relative clauses. At first it seems as if U. Gärtner's paper 'Is the Myanmar language really tenseless?' challenges Vittrant's assertion that the dominant component in Burmese TAM categories is aspect or modality. In particular Gärtner wishes to reinterpret the contrast between တဲ tè and မဲ mè and their variants, which most authors now refer to marking a realis/irrealis distinction, as basically an opposition between non-future and future tenses. (This was apparently also the view of Kassevich in 1990.) Yet she admits that it is 'mainly a matter of approach or terminology whether an event is called potential or future, actual or past/present', and it 'seems pointless to contrast these complementary capacities which are inherent in the VP final markers'. After all it is a question of *relative* prominence! In his paper 'Tense in Burmese: a diachronic account', R. Yanson returns to the question of realis/irrealis vs. non-future /future, basically coming down on the side of the former, partly on historical grounds. He demonstrates that in Old Burmese inscriptions tense did not exist as a purely temporal category, so that temporal semantics in the pre-Pali period could not be expressed by grammatical means. Instead a marker *e* was used to express affirmative statements independent of tense (much like the Lahu final particle yò). Yanson also makes some interesting comments about the influence of Pali grammar on Old Burmese, e.g. that nominalised finite verbs were introduced into Burmese in order to represent Pali participles. Finally, the paper by F.K. Lehman (a.k.a. Chit Hlaing), 'Towards a formal cognitive theory of grammatical aspect and its treatment



in Burmese', is concerned with creating a formal theory to account for the aspectual distinctions made in Burmese. Whatever one's views on the fruitfulness of such endeavours, one can only admire Chit Hlaing's persistent attempts over the years to 'mainstream' the study of Tibeto-Burman languages by showing how very interesting they are, even from a formal/theoretical point of view.

A welcome new trend in the study of Burmese (as well as other Southeast Asian languages) is the recent emphasis on connected texts or discourse. In her article 'Topicalisation in Burmese expository discourse', P. Hopple investigates the nature of topicalisation in Burmese, focusing on the use of three topic-marking particles (သည့် *thi*, က *ka* and ကို *ko*) in one particular text. Exploring the nature of the figure/ground distinction in Burmese grammar, she concludes that သည့် *thi* marks a background theme, while က *ka* and ကို *ko* indicate the social status of participants in the discourse, dominant vs. subordinate, respectively. Among other functions, the latter two also signal role reversals within an embedded narrative discourse or the figure/ground Gestalt. While the selection of topic/theme particles might seem random from the point of view of sentence-based grammar, a discourse approach motivates the choice of one particle over another.

In a similar vein, San San Hnin Tun's 'Discourse particles in Burmese' analyzes a corpus of eight texts within the framework of discourse analysis, focussing on

two particles which are affective (interactional) rather than referential, denotative, or cognitive: လည်း *lé* and ပေါ့ *pə*. Such particles are a Southeast Asian areal feature, and are naturally polysemous and highly context-sensitive. (They are in fact readily borrowable into other languages; Lahu also uses *pə*? as an emphatic particle.) Sometimes one can give quite a precise meaning to such a particle in a given context, e.g. the interesting use of ကလည်း *kalé* with kinship terms and pronouns in the contexts of 'self-justification, self-defence, or reproach'. The author envisions the possibility that the choice of particular particles may have an idiosyncratic component (much as English speakers have individual preferences with respect to interjections like 'goodness me!' or 'damn it all!'). I have noticed the same phenomenon in Lahu texts. Certain speakers have favourite particles, and these are subject to a sort of intra-textual contagion. Once an emotive particle appears in the discourse, it tends to occur several times in quick succession, often by both interlocutors in a conversation.

By far the longest article in this volume is T. Ohno's 'The structure of Pagan period Burmese', a comprehensive survey of the main features of Pagan period phonology, morphology and syntax. Despite the highly variable spelling in the inscriptions, much can be figured out about Old Burmese phonology. Especially interesting are the discussions of the value of the vowel variously transcribed as 'iu' or 'ui' (or even [i]); and the frequent but not entirely consistent marking of tonal distinctions. The rare closed syllable rhymes with medial -e- are shown to have been variants of other combinations for the most part (although there are grounds for occasionally setting them up at the PLB level). As in Sino-Tibetan languages in general, the vast majority of noun- and verb-roots were monosyllabic, although semantically transparent compounds certainly occurred as well. Four-syllable elaborate expressions already existed, via the prefixation of *a-* to both parts of disyllabic verbs. Pronominal prefixes (*ni-* for 1<sup>st</sup> person, *a-* for 3<sup>rd</sup> person) were used to mark possession with kinship terms (as e.g. in modern Chin languages). Classifiers already abounded, as did simplex/causative verb phrases, marked by aspiration of the initial consonant of the causative member. A panoply of post-nominal and post-verbal particles were already in evidence. In short, the overall structure of Pagan-period Burmese was not

all that different from that of modern Burmese — a reassuring conclusion! The article is richly exemplified, with almost 300 illustrative sentences and an index of grammatical forms.

The agonies and the ecstasies of dictionary-making are vividly evoked in A. Esche's 'The experience of writing the first German-Myanmar dictionary'. Although she has tormented herself over the years with the question 'Is such a dictionary really necessary?', she fortunately seems finally to have come to the opinion that it was well worth the years of effort and expense to produce it. As a member of the tribe of 'harmless drudges' myself (as the redoubtable Dr Johnson referred to us lexicographers), I can well sympathize. But after all is there any enterprise more noble than compiling a dictionary? Dictionaries of a living language can never be complete or totally up-to-date, as languages change before our very eyes. Yet this doesn't mean that we should give up, especially now with the computer to help us.

Saw Tun's article, 'Modern Burmese writing: an examination of the status of colloquial Burmese', is basically a polemic against introducing lexical items and grammatical constructions characteristic of Formal Burmese (FB) into modern Burmese texts. He decries the 'muddled mixture of colloquial and literary Burmese', and the 'ambiguity and verbosity' of the FB style. There is definitely a political component to this distaste, given the present government's fondness for the pretentious weightiness of FB, so that FB is now gaining ground in the government-controlled media. This whole issue is highly reminiscent of the controversies surrounding the gradual and reluctant replacement of the Chinese literary style (文言 *wényán*) by the colloquial style (白話 *báihuà*) in the early 20th century, after Sun Yat-sen's revolution. There is a strikingly close analogy between the recent FB introduction of သူမ *thùmə* as a feminine third-person pronoun, and the creation of such a concept by the innovative addition of the 'woman-radical' to make the character 她 *tā* 'she' from the intrinsically genderless third-person pronoun 他 *tā* in Mandarin, in order to imitate the high-prestige Western languages with gender distinctions like *he/she*.

It is a special pleasure for me to conclude with a few words of tribute to my good friend John Okell. John and I got to know each other in the 1960's, and quickly found that we had much in common, especially a sort of obsessive-maniacal compulsion to immerse ourselves in a Southeast Asian language. The fascinating similarities and differences between Burmese and Lahu have been an endless source of pleasure for us to ponder over the years.

John Okell's mastery of Burmese language and culture is unparalleled among Western scholars of his generation. His *A Reference Grammar of Colloquial Burmese* (1969) remains the unchallenged standard work on the subject. He has educated generations of students in all aspects of the field, in the U.K., the U.S. and Thailand. The tapes and other teaching materials he has created during his forty years of pedagogy have exerted a worldwide influence.

On the personal level, to know John is to love him, for his intellectual generosity, his gentle wit, and his very British modesty. Also, one might add, for his musicianship! It has been a cherished feature of our all too infrequent meetings (once, memorably, at Eugénie Henderson's home in Hampstead) for John to whip out his flute for some flute and piano duets. The growing sophistication of Burmese linguistics evidenced in this volume is due in large part to the work of John Okell. His colleagues and students salute him!



## *Foreword*

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This book has been in preparation for a shamefully long time. The idea of inviting contributions for an edited book of articles on various aspects of the linguistics of Burma was conceived one quiet afternoon at SOAS in early 2001; little did I know then that the book would still be in preparation in 2005. During the intervening four years I have alternated between chivvying authors into submitting their work and apologising for my own inaction when, for months on end, other teaching and administration duties at SOAS completely eclipsed the Burmese Linguistics Book project.

One reason why this project took such a long time to finish was the decision, taken early on, to ensure consistency of transcription/transliteration and linguistic glossing in the Burmese language material across all the articles in the book, to enable the book to be read more as a coherent whole. This entailed retyping, retranscribing and reglossing the Burmese text of the whole book, because it seems there are as many ways of rendering Burmese script in electronic media, of transcribing it, and of describing the language's functional morphemes as there are linguists with an interest in Burmese. Processing the Burmese text has been unbelievably time-consuming, but worthwhile, I think.

For the Burmese text, I have used the IC Myanmar Bold font — an adaptation by Ian Carter of John Okell's original Avalaser font (which I had to use for one or two rare symbols found only in inscriptions). Phonetic transcription (or, for Old Burmese material, transliteration) and morpheme-by-morpheme glosses are given for all Burmese material, except for some of the longer passages in the contributions from Saw Tun and San San Hnin Tun. I feel strongly that presenting the Burmese language material without a romanised version of some kind would have made the book inaccessible for linguists who do not read Burmese script.

There exists no other collection of articles dedicated to the linguistics of Burmese, despite the fact that Burmese is a major language of South East Asia with perhaps forty million speakers and many more second-language speakers — more than any other language in the Tibeto-Burman language family. No doubt Burma's troubled history in recent decades has prevented more linguists from approaching the language analytically. Recent publications on Burmese have included a good number of descriptive grammars, dictionaries and language learning materials, while published linguistic research has been restricted to occasional articles and one or two oldish monographs. The contributors to this volume make up a significant proportion of the small and scattered community of linguists who specialise in Burmese, and I am happy to count among them my teachers, colleagues and friends

Now that the book has finally come together, I realise how enormously rewarding the editing process has been. Many of the contributors are not native speakers of English, and in some cases they were nervous about submitting work for publication in English and

invited me to rewrite their text as necessary. This, combined with the task of adding consistent transliteration, glossing and formatting, gave rein to a rather free editorial hand, though not without some trepidation with regard to interfering with other people's work. I have aimed to produce a book which adds weight to the individual articles it contains by presenting them as a readable collection. In some cases, I have collaborated with the authors on substantial rewriting or restructuring of the material they originally submitted; in others, I have done no more than necessary for the article to conform to the book's transcription, glossing and formatting conventions.

This book is divided into broadly themed sections which cover a range of sub-disciplines within linguistics. The contributors were invited to write on research topics of their own choosing, such that the volume is a snapshot of current research on Burmese, rather than a systematic linguistic survey of the language. While not all the articles are theory-neutral, I hope they remain accessible to a broad readership of people interested in Burmese with no formal training in linguistics. Conversely, many aspects of Burmese covered in the papers in this volume are of obvious interest to a wider constituency of linguists, not just those familiar with Burmese. I hope you enjoy it.

*Justin Watkins*

London, June 2005

### **Burmese or Myanmar?**

At present, the language described in the chapters of this book can be referred to in English as 'Burmese' and 'Myanmar'. I invite readers to regard both terms as equivalent and interchangeable.

# John Okell

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School of Oriental and African Studies 1959–1999.  
Assistant Lecturer in Linguistics 1959, Lecturer in Burmese 1965,  
Senior Lecturer in Burmese 1989, retired 1999.

Honouring John Okell does not require a book. However, he has had such a profound influence on my life that I am bound to acknowledge my gratitude to him in some formal way, and dedicating this book to him provides the ideal opportunity.

We write to each other a lot as it is: my email archives contain well over a thousand emails between us spanning eleven years. He first cast his spell on me when I joined the beginners' Burmese language class at SOAS, continued to keep tabs on me for several years after that as joint supervisor of my PhD, and finally sealed my fate when he retired, giving me the opportunity to apply for the Burmese job at SOAS which had last been vacant more than forty years earlier. Possibly more active in retirement than when employed, John is ever on hand to help, entertain, inform, support and guide. We meet regularly at SOAS or at Burma-related events in London, and most recently have made a point of having a leisurely pow-wow over lunch or dinner to exchange သတင်း (news) and အတင်း (gossip) after either of us returns from a visit to Burma. I'll spare him the embarrassment of writing at length. John, I hope you enjoy the articles in this volume, which is dedicated to you with fondness and thanks.

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# 1 *Word, foot, and syllable structure in Burmese\**

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## 1 Introduction

Prosodic phonology is the branch of linguistics concerned with the representation and behaviour of phonological constituents above the segment: syllable, foot, prosodic word, phonological phrase, intonational phrase, utterance. These elements, from the syllable to the utterance, are known as the Prosodic Hierarchy (Selkirk 1984; Nespor and Vogel 1986). Researchers frequently focus on the portion of the prosodic hierarchy between the segment and the prosodic word (also called pword, symbolised  $\omega$ ) e.g. Peperkamp (1997), Ewen and van der Hulst (2001), and the papers collected in Hall and Kleinhenz (1999). In this chapter I address theoretical issues in the prosodic phonology of Burmese, examining the structure of the syllable, foot, and prosodic word in Burmese within the constraint-based framework of Optimality Theory (Prince & Smolensky 1993).

In the rest of section 1, I give the inventory of Burmese surface phones — vowels, tones, and consonants, and provide a brief introduction to Optimality Theory. In section 2, I discuss major (= heavy) syllables and show that a violable constraint bans all singly linked place features (not just consonantal ones, as in many other languages) from the right edge of a syllable in Burmese. I argue that the properties that distinguish major syllables from minor (= light) syllables, including presence of tone and toleration of onset clusters, are most straightforwardly accounted for with the assumption that all major syllables are feet and that all feet consist of exactly one major syllable. In section 3, I examine minor syllables and show that their shape and distribution are attributable to the constraint against place features in syllable-final position, a markedness constraint against heavy syllables, and constraints requiring all feet and prosodic words to be right-aligned. In section 4, I first show that all prosodic categories are preferably nonbranching in Burmese and then discuss exceptions to the generalization that a pword contains exactly one foot in Burmese, arguing that both the pword and the foot are, in some cases, prespecified in the input. Section 5 concludes the chapter.

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\* This chapter is a revised version of a paper in *Working Papers of the Cornell Phonetics Laboratory* 10 (1995), 67–96. I should like to thank the following people for their help and advice: Fraser Bennett, F. K. L. Chit Hlaing, Abby Cohn, Laura Downing, Caroline Féry, Terri Griffith, Daniela Lentge, Máire Ní Chiosáin, David Parkinson, San San Hnin Tun, Hubert Truckenbrodt, Siri Tuttle, Ruben van de Vijver, Ratrete Wayland, Julian Wheatley, Moira Yip, Draga Zec, and an anonymous *WPCPL* reviewer.



**1.1 Vowels and tones**

The surface vowels and tones of Burmese are shown in (1):<sup>1</sup>

(1)    The surface vowels and tones of Burmese

<i>monophthongs</i>		<i>diphthongs</i>		<i>tones</i>	
i	u	ei	ou	Low	à
e	o	ai	au	High	á
	ə			Creaky	ǎ
ɛ	ɔ			Killed	a?
a					

The syllable structure of Burmese is C(G)V((V)C); the onset consists of a consonant optionally followed by a glide; the rhyme consists of either a monophthong alone, a monophthong with a consonant, or a diphthong with a consonant. Diphthongs cannot occur in open syllables, a fact which will be discussed in more detail in below. Some representative words are shown in (2):<sup>2</sup>

(2)    Basic syllables of Burmese

- a. CV       မေ       mè       (term of endearment for wife)
- b. CVC      မင်       mɛ?      ‘crave’
- c. CGV      မြေ       mjè      ‘earth’
- d. CGVC    မျက်      mjɛ?     ‘eye’
- e. CVVC    မောင်     màun    (term of address for young men)
- f. CGVVC   မြောင်း   mjáun   ‘ditch’

Modern Burmese is generally analyzed as having a four-way tone contrast in major syllables, as illustrated by the minimal quadruplet in (3):

(3)    The four tones of Burmese (Okell 1969:5)

- a. low       ခါ       k<sup>h</sup>à      ‘shake’
- b. high      ခါး      k<sup>h</sup>á      ‘be bitter’
- c. creaky    ခ       k<sup>h</sup>ǎ      ‘fee’
- d. killed    ခဝ်      k<sup>h</sup>a?     ‘draw off’

In principle, this four-way contrast should be describable with two binary distinctive features, but to develop such a theory would be beyond the scope of this chapter.

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<sup>1</sup> There is little agreement from one author to another on the designation of the tones. Some authors use terms such as low, high, creaky, checked, falling, heavy, glottalized, etc.; others number the tones 1–4. Among the authors who use numbers, there is even variation as to which tone is given which number. There is also wide variation as to the transcription of Burmese. The names of tones used in this chapter conform with the conventions followed elsewhere in this volume.

<sup>2</sup> All examples in this chapter are from Bernot (1963), Okell (1969), Esche (1976), or Wheatley (1987), unless otherwise noted.



The phonemic contrast traditionally known as 'tone' in Burmese involves not only pitch, but also phonation, intensity, duration, and vowel quality. For this reason Bradley (1982) prefers the term 'register' rather than 'tone', but I will continue to use the traditional term here, though with the understanding that 'tone' refers to all of these properties and not just pitch. Detailed phonetic studies of the Burmese tones include Mehnert and Richter (1972–77, part 3) and Thein Tun (1982).

In syllables with a nasal rhyme, only three tones are possible. The killed tone is excluded from such syllables:

(4) Three tones in nasal rhymes

- |    |        |    |       |           |
|----|--------|----|-------|-----------|
| a. | low    | ᵃ  | kʰàN  | 'undergo' |
| b. | high   | ᵃ̃ | kʰáN  | 'dry up'  |
| c. | creaky | ᵃ̣ | kʰạN | 'appoint' |

This fact can be explained by assuming that N and ʔ are both required to stand in coda position, but Burmese phonotactics do not allow complex codas. To avoid this conflict, one of the consonants must be deleted. Native Burmese vocabulary lacks phonological processes which would allow us to determine what the output of a hypothetical input like /θNʔ/ would be, but evidence from loanwords may be brought to bear. In general, final obstruents in other languages all become ʔ in Burmese, for example တူလီʔ *tjùliʔ* 'tulip'. Foreign words that end in nasal + obstruent clusters usually become nasal rhymes in creaky tone in Burmese, for example ပိုင် *pain* 'pint'. This suggests that in the presence of N, the glottalization normally associated with killed tone surfaces instead in creaky tone.

Burmese, like many South East Asian languages, has a distinction between major and minor syllables.<sup>3</sup> The exact definition of major and minor syllables varies from language to language, but in general the distinction seems to parallel the distinction between heavy and light syllables found in all languages. Following Moraic Theory (Hyman 1985; McCarthy and Prince 1986; Hayes 1989), we may assume that minor (light) syllables contain one unit of weight, called a mora (symbolised  $\mu$ ), while major (heavy) syllables contain two moras.<sup>4</sup>

In most languages that have the major/minor syllable distinction, including Burmese, a word must contain at least one major syllable and may not end with a minor syllable. In Burmese, the characteristics of a major syllable are:

- (i) it may contain any vowel except  $\text{ə}$ ;
- (ii) it may be an open or closed syllable;
- (iii) it bears tone;
- (iv) it may have a simple (C) or complex (CG) onset.

All the words in (2) above are examples of major syllables. The characteristics of a minor syllable in Burmese are:

<sup>3</sup> The terms 'major syllable' and 'minor syllable' seem to have been used first by Henderson (1952) for Cambodian and Shorto (1960) for Palaung.

<sup>4</sup> Duanmu (1990) argues that all syllables are heavy in Chinese, which does not have the major/minor syllable distinction.

- (i) it may only contain the vowel ə;
- (ii) it is an open syllable;
- (iii) it does not bear tone;
- (iv) it has only a simple (C) onset;
- (v) it is not the final syllable of the word.

This last restriction (v) entails that a word may not contain only minor syllables. In the examples in (5), all non-final syllables are minor and all final syllables are major.

(5) Words containing minor syllables

- a. ခလုတ်      k<sup>h</sup>ə.louʔ      'knob'
- b. ပလွေ      pə.lwè      'flute'
- c. သရော်      θə.jə      'mock'
- d. ကလက်      kə.lɛʔ      'be frivolous'
- e. ထမင်းရည်      t<sup>h</sup>ə.mə.jè      'rice-water'

It is also possible for a non-final syllable to be major, for example the first syllable of မိန်းမဝတ် méin.mə.wuʔ 'women's clothing'.

## 1.2 Consonants

The consonants of Burmese are shown in (6):

(6) The consonants of Burmese

stops/affricates	fricatives	nasals (N is placeless)	approximants
p   t   tɕ   k	θ   s   ʃ	m   n   ɲ   ŋ	l   j   w
p <sup>h</sup> t <sup>h</sup> tɕ <sup>h</sup> k <sup>h</sup> ʔ	(ð)   s <sup>h</sup> h	m̥   n̥   ɲ̥   ŋ̥   N	ɭ   (w̥)   (r)
b   d   dʒ   g	z	ṃ   ṇ   ɲ̣   ŋ̣	

The approximants r and w̥ are rare; ð is a voiced allophone of θ.

The feature distinguishing the voiced and voiceless sonorants is probably not [voice] but [spread glottis]. In other words, the voiceless sonorants are phonologically aspirated. Evidence for this comes from a set of about 50 pairs of verbs in which the intransitive or passive member of each pair begins with a nonaspirated sound, while the transitive, causative, or active member begins with the aspirated correlate (Okell 1969:42, 205ff.). Examples are shown in (7); in i-j, ʃ functions as the aspirated equivalent of j.

## (7) Unaspirated/aspirated verb pairs

[-s.g.] initial: passive/intransitive				[+s.g.] initial: active/transitive		
a.	ပြတ်	pjaʔ	‘be cut’	ဖြတ်	p <sup>h</sup> jaʔ	‘cut’
b.	ကျက်	cɛʔ	‘be cooked’	ချက်	c <sup>h</sup> ɛʔ	‘cook’
c.	ကွဲ	kwɛ	‘be split’	ခွဲ	k <sup>h</sup> wɛ	‘split’
d.	စုတ်	souʔ	‘be torn’	ဆုတ်	s <sup>h</sup> ouʔ	‘tear’
e.	မြတ်	mjouʔ	‘be buried’	မြှတ်	mjouʔ	‘bury’
f.	နွေး	nwɛ	‘be warm’	နွှေး	ṇwɛ	‘make warm’
g.	ညှိ	ɲi	‘be alight’	ညှိ	ɲi	‘set alight’
h.	လွတ်	luʔ	‘be set free’	လွှတ်	ḷuʔ	‘set free’
i.	လျော့	jɔ	‘be reduced’	လျှော့	ḷɔ	‘reduce’
j.	ရွှေ့	jwɛ	‘be moved’	ရွှေ့	ḷwɛ	‘move’

All consonants except the placeless nasal  $\mathcal{N}$  are allowed in onset position, and an onset consonant is obligatory in Burmese. Thus vowel-initial words of English and Pāli are borrowed into Burmese with initial  $\mathcal{?}$ , for example အင်ဂျင်  $\mathcal{?}in\mathcal{d}\mathcal{z}\mathcal{in}$  ‘engine’, အာကာသ  $\mathcal{?}ak\mathcal{a}\mathcal{θ}\mathcal{a}$  ‘space, universe’ (< Pāli ākāsa). Only placeless consonants are allowed in coda position, namely  $\mathcal{?}$  and the placeless nasal  $\mathcal{N}$  (which is realised as nasalization on the preceding vowel, with an approximate coronal articulation after monophthongs and an approximate velar articulation after diphthongs (Bennett & Lehman 1994)).<sup>5</sup> Although  $h$  is placeless, it does not appear in coda position, presumably reflecting the cross-linguistic tendency to disfavour coda  $h$ .

## 1.3 Optimality Theory

Optimality Theory or OT (Prince & Smolensky 1993; McCarthy & Prince 1993b; Archangeli & Langendoen 1997; Kager 1999; Boersma et al. 2000; McCarthy 2002) is a theory of generative grammar built around the concept of the violable constraint. According to OT, the grammar of a language consists of a ranked hierarchy of constraints: constraints may be violated if violation of one constraint spares a violation of a higher-ranking constraint. The constraints are held to be universal, i.e. present in the grammar of every human language, but their hierarchical ranking differs in every language. Constraints are in principle violable, however every language has some constraints that are undominated in that language’s hierarchy and hence never violated.

The lexicon of a language is held to consist of a list of inputs which the speaker compiles as a learner; each input corresponds to a set of candidate outputs generated by a function called Gen. These candidates compete with each other to determine the optimal output — the actual surface form pronounced by the speaker. An evaluator function (known in the OT literature as EVAL) judges competing candidates against the constraint hierarchy. This evaluation is represented graphically by means of a tableau, as shown in (8). In this tableau, A, B, and C stand for constraints; they are ranked from left to right,

<sup>5</sup> See Trigo (1988) for a full discussion of the behavior of placeless nasals (she calls them nasal glides) across languages.

showing that constraint A outranks B, and B outranks C (in shorthand,  $A \gg B \gg C$ ). The candidates are  $\phi$ ,  $\chi$ , and  $\psi$ ; violations of each constraint are marked \*. A is the highest ranking constraint, therefore  $\phi$ 's violation of A is fatal (fatal violations are marked with the exclamation point !).  $\chi$  and  $\psi$  do not violate A, however  $\chi$  violates constraint B and thus eliminated from consideration.  $\psi$  only violates the lowest ranked constraint C and is therefore selected as the optimal candidate, i.e. the actual surface form. The symbol  $\Psi$  points to the optimal candidate. Shaded cells indicate that the violation or fulfillment of a constraint is irrelevant to the evaluation process:

(8)

INPUT	A	B	C
$\phi$	*!		
$\chi$		*!	
$\Psi$ $\psi$			*

There are three major kinds of constraints: faithfulness constraints, markedness constraints, and alignment constraints. Faithfulness constraints govern the relationship between the input and the output by requiring identity between the two.<sup>6</sup> If any element of the input has no correspondent in the output, a constraint of the family MAX (maximization) is violated; in effect, MAX constraints prohibit deletion. If any element of the output has no correspondent in the input, a constraint of the family DEP (dependency) is violated; in effect, DEP constraints prohibit insertion. Finally, if any input-output correspondence pair differs in the value of any feature, a constraint of the family IDENT (identity) is violated; in effect, IDENT constraints prohibit alteration of segments.

Markedness constraints make general statements about phonological well-formedness; generally, any structure that is marked in comparison to another structure will violate a markedness constraint. The relative ranking of markedness constraints and faithfulness constraints determines which marked structures will be allowed in a language: a marked structure is allowed if the relevant faithfulness constraint outranks the markedness constraint prohibiting the structure.

The third type of constraint encountered in OT are alignment constraints (Prince & Smolensky 1991; McCarthy & Prince 1993a). These constraints require certain prosodic or morphological entities to share an edge with certain other prosodic or morphological entities. Alignment constraints generally have the form  $\text{Align}(\kappa, E; \lambda, E')$  where  $\kappa$  and  $\lambda$  are prosodic or morphological categories and  $E$  and  $E'$  are edges (left or right).  $\kappa$  is quantified universally while  $\lambda$  is quantified existentially: a prose statement of the constraint is: '*For every  $\kappa$  there is some  $\lambda$  such that the  $E$  edge of  $\kappa$  is aligned with the  $E'$  edge of  $\lambda$ .*'  $E$  and  $E'$  need not be the same (for example the left edge of a suffix may be aligned with the right edge of a root), but in practice they are very often the same. Hence the shorthand notation  $\text{Align-L}(\kappa, \lambda)$  ('*the left edge of every  $\kappa$  is aligned with the left edge of some  $\lambda$* ') and  $\text{Align-R}(\kappa, \lambda)$  ('*the right edge of every  $\kappa$  is aligned with the right edge of some  $\lambda$* ') are often used.

<sup>6</sup> Actually there are other pairs of forms that can stand in a correspondence relationship to each other, not just input and output. But in this chapter I consider only input-output correspondences, and use MAX and DEP as shorthand for MAX-IO and DEP-IO. See McCarthy and Prince (1995) for more discussion on constraints governing correspondence relationships.

More details about Optimality Theory will be introduced in the course of this chapter, as they become relevant to the discussion of Burmese prosodic phonology.

## 2 Major syllables

A major syllable in Burmese consists of an obligatory onset (any of the consonants in (6)) except N) followed by one of the fifty possible rhymes listed in (9):

(9) The fifty rhymes of major syllables (adapted from Thein Tun 1982)

	NON-NASAL RHYME				NASAL RHYME		
	Low	High	Creaky	Killed	Low	High	Creaky
/i/	ì	í	ĩ	i?	ìn	ín	ĩn
/u/	ù	ú	ũ	u?	ùn	ún	ũn
/a/	à	á	ǣ	a?	àn	án	ǣn
/ɛ/	è	é	ɛ̃	ɛ?			
/ai/				ai?	àin	áin	ǣin
/ei/	è	é	ɛ̃	ei?	èin	éin	ɛ̃in
/au/	ò	ó	ǫ	au?	àun	áun	ǣun
/ou/	ò	ó	ǫ	ou?	òun	óun	ǫun

In this section I explore the nature of major syllables in more detail, focusing in §2.1 on the hypothesis that all major syllables are bimoraic; in §2.2 on the constraint against place features at the right edge of the syllable; in §2.3 on the claim that major syllables are monosyllabic feet; and in §3.1.4 on the relationship between tone and the foot (i.e. the major syllable).

### 2.1 Bimoraicity

As alluded to above, a word in Burmese must contain at least one major syllable, which may be defined as a syllable whose nucleus is a full vowel — i.e. any monophthong or diphthong except ə. Examples are given in (10):

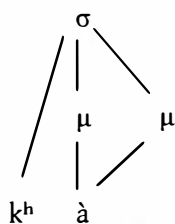
(10) Major syllables

- a. əl      k<sup>h</sup>à      ‘shake’
- b. ə̌      k<sup>h</sup>àn      ‘undergo’
- c. əoŋ      k<sup>h</sup>a?      ‘draw off’

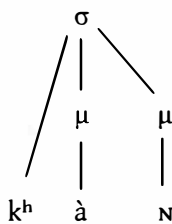
Vowel length is not contrastive in Burmese, but as previously mentioned, we may hypothesise that major syllables are all bimoraic, while minor syllables are monomoraic. In open major syllables like k<sup>h</sup>à the vowel is presumably bimoraic, while in closed syllables like k<sup>h</sup>àn and k<sup>h</sup>a? the vowel and the coda consonant support one mora each, as shown in (11). (The syllable is symbolised σ):

## (11) Structure of major syllables

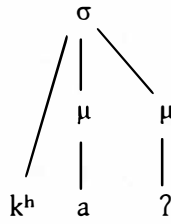
a.



b.



c.



Mehnert and Richter (1972–77: Part 3, 148–150) show that the duration of the rhyme of a minor syllable varies from 25 to 50 ms, while the duration of the rhyme of a major syllable varies from 150 to 600 ms. The difference in duration of major and minor syllables can be straightforwardly represented as a difference in syllable weight: minor syllables are light or monomoraic, and major syllables are heavy or bimoraic.<sup>7</sup> The wide variation in range of duration within major syllables (150–600 ms) is due to the fact that tone, rather than weight, is the primary determiner of duration in Burmese: Killed tone syllables are very short, Creaky tone syllables somewhat longer, Low tone syllables longer still, and High tone syllables longest of all (Thein Tun 1982).

## 2.2 Restrictions on place features

The phonotactic restrictions on the rhymes of major syllables are the following: the diphthongs *ei ai ou au* *must* be closed by one of the coda consonants ʔ or ɴ (12); the mid monophthongs *e o ɔ* *must* occur in open syllables (13); *ɛ* may occur in an open syllable or a syllable closed by ʔ, but no syllable may end in *ɛɴ* (14).

## (12) Diphthongs only in closed syllables

a.	အိပ်	ʔeiʔ	‘sleep’	အိမ်	ʔèiɴ	‘house’	*ʔèi
b.	ဆိုက်	shaiʔ	‘arrive’	ဆိုင်	tʰàiɴ	‘sit’	*tʰài
c.	ချုပ်	təuʔ	‘sew’	ချုပ်	təʰòuɴ	‘overspread’	*təʰòu
d.	ကျောက်	təuʔ	‘stone’	ကြောင်	təàuɴ	‘cat’	*təàu

(13) *e o ɔ* only in open syllables

a.	အေး	ʔé	‘be cold’	*ʔéi	*ʔéɴ
b.	ချို	təʰò	‘be sweet’	*təʰòu	*təʰòɴ
c.	ကြော်	təò	‘fry’	*təʰàu	*təʰòɴ

<sup>7</sup> Another possibility, suggested to me by both Abby Cohn and Laura Downing, is that minor syllables are nonmoraic. I do not have space in this chapter to compare that hypothesis with the view taken here, that minor syllables are monomoraic.

(14)  $\epsilon$  in open syllables and before ?

- |    |                        |                     |                          |
|----|------------------------|---------------------|--------------------------|
| a. | သွယ်                   | $\theta w\epsilon$  | 'connect by thread etc.' |
| b. | သွက်                   | $\theta w\epsilon?$ | 'be fluent'              |
| c. | * $\theta w\epsilon n$ |                     |                          |

Diphthongs in closed syllables are presumably monomoraic in Burmese, so that a syllable like  $\text{a}\text{u}\text{h}\text{ou}?$  'sew' (12)c has the structure shown in (15):

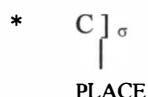
(15)



In this section I will show that the ban on diphthongs in open syllables can be linked to an independent fact of Burmese phonology, namely that coda consonants are obligatorily placeless.

The Coda Condition (Steriade 1982; Itô 1986, 1989; Yip 1991) was devised as a way of restricting the occurrence of features in the coda; for example, by prohibiting place features. A Coda Condition doing just this was formalised by Itô (1989) as in (16):

(16) Coda Condition



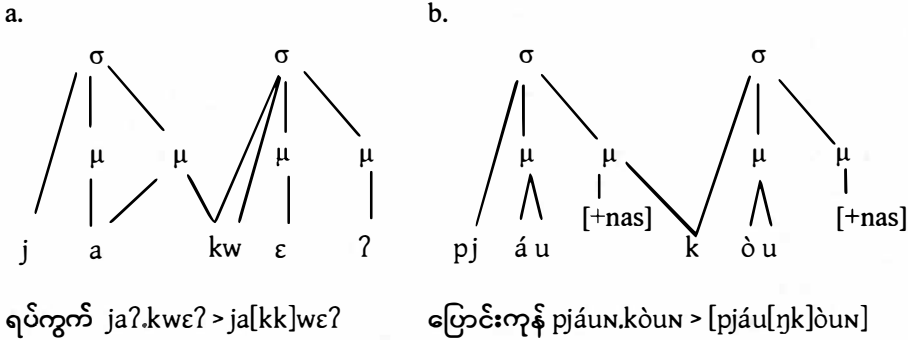
Burmese patently obeys this constraint, as the only permissible coda consonants,  $?$  and  $n$ , are both placeless. Application of the Coda Condition has traditionally been confined to consonantal place features, as in Itô's (1989) illustration with Japanese. In this language, the only licit coda consonants are the placeless nasal  $n$  (e.g.  $/h\text{on}/$  'book'), the first halves of geminates (e.g.  $/kitte/$  'stamp') and homorganic nasal-stop clusters (e.g.  $/tombo/$  'dragonfly'). Itô argues that the latter two cases are not violations of the Coda Condition, because the place features are licensed by the onset position, and the coda consonants merely share the onset consonants' place features. This situation also applies to Burmese; coda  $?$  and  $n$  tend to assimilate in place to a following consonant, as illustrated in (17):

## (17) Place assimilation

- a. ရပ်ကွက် ja[kk]wε? < jaʔ.kwε? ‘area, quarter’  
 စိတတင် sei[tt]in < seiʔ.tin ‘opinion’  
 လုပ်ဇာတ် lou[sz]aʔ < louʔ.zaʔ ‘fictitious story’
- b. ပြောင်းကုန် pjáu[ŋk]òun < pjáuN.kòun ‘alter completely’  
 အပြင်သွား ʔəpjì[nth]wε? < ʔəpjìN.tʰwε? ‘go outside’  
 သံချိတ် θà[ndz]eiʔ < θàN.Deiʔ ‘iron hook’

As in Japanese, coda place features in Burmese must be licensed by being linked with an onset consonant, as illustrated in (18):

## (18) Linked coda consonants



However, unlike Japanese, Burmese apparently prohibits not only consonant place features but also vowel place features from the right edge of a syllable. This extension of the Coda Condition to vowel place features can explain the complementary distribution of diphthongs and monophthongs seen above. Specifically, if all place specifications are barred from the right edge of the syllable, diphthongs can be excluded from open syllables, because to allow diphthongs in open syllables is to allow the place features of the second element of the diphthong to occur at the syllable's right edge. Thus a structure like \*tài is ill-formed for the same reason as \*tak, namely that each syllable contains at its right edge a segment with place features.

A question that immediately arises with this analysis is how a syllable like ခါ kʰà ‘shake’ (3)a can be well formed, since it too contains at its right edge a segment [a] that has place features. The answer is that major syllables are bimoraic, so that the place features under the second mora in (11)a are licensed by the first mora, just as the place features under the second mora in the first syllable of each of (18)a and b are licensed by the following onset. In OT terms, the constraint banning place features from the right edge of a syllable may be named \*PLACE]<sub>σ</sub> and stated as in (19):<sup>8</sup>

<sup>8</sup> Itô and Mester (1994, 1999) define the constraint CODA CONDITION positively as Align-L ([PLACE], σ). A similar statement of \*PLACE]<sub>σ</sub> is not possible as it would not be able to judge between well-formed [tɕʰouʔ] ‘sew’ and ill-formed \*[tɕʰou] with regard to the place features of *u*.



- (19) \*PLACE]<sub>σ</sub> The rightmost mora of a syllable does not dominate Place features.



According to the Linking Constraint of Hayes (1986), association lines are interpreted exhaustively; in this case, that means that \*PLACE]<sub>σ</sub> is violated only if the Place features are linked *exclusively* to the final mora of the syllable. The coda consonants of the first syllables of [jakkwɛʔ] and [pjáuŋkòuɴ] in (18) do not violate \*PLACE]<sub>σ</sub> because their Place features are associated with the following syllable as well. Likewise, the [à] in [k<sup>h</sup>à] does not violate it, because its Place features are associated not only with the final mora, but with the first mora as well.

In Burmese words that have been borrowed from English, a syllable-final obstruent in the English source word is generally replaced by ʔ, e.g. [kɛʔ] ‘cap’, [keiʔ] ‘cake’, [kouʔ] ‘coat’. If the place features of the coda consonant of each English source are present in the input, then the faithfulness constraint MAX(Place) (20) is violated in these forms, but \*PLACE]<sub>σ</sub> is fulfilled.<sup>9</sup> This allows us to deduce the ranking \*PLACE]<sub>σ</sub> » MAX(Place). The tableau in (21) illustrates this ranking for [keiʔ] ‘cake’.

- (20) Max(Place)

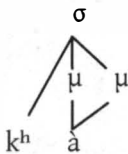
Place features in the input have correspondents in the output.

- (21)

/keik/	*PLACE] <sub>σ</sub>	MAX(PLACE)
keik	*!	
☞ keiʔ		*

Because of the Linking Constraint, the candidate əʔ k<sup>h</sup>à with a bimoraic vowel does not violate \*PLACE]<sub>σ</sub>: as can be seen in (22) the place features of the a are not linked exclusively to the final mora of the syllable, but to the first mora as well.

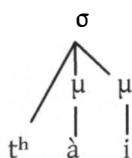
- (22) k<sup>h</sup>à ‘shake’ (10)a.



But a diphthong in an open syllable would violate \*PLACE]<sub>σ</sub>, as in (23).

<sup>9</sup> If a learner first hears the word [keiʔ] from another Burmese speaker, the input posited will be /keiʔ/, not /keik/, but the point is that in the cases where the English word does directly provide the input, the grammar of Burmese provides a constraint ranking that produces a grammatical output.

(23)



In this form, the place features of the [i] are uniquely linked to the second mora of the syllable, in violation of  $*\text{PARSE}]_{\sigma}$ . How is this problem solved? Loanwords from English that contain /ai/ or /au/ in an open syllable take an epenthetic coda consonant in Burmese, as in the examples in (24).

(24) Loanwords from English with epenthetic consonants after /ai, au/

- |    |              |                          |           |
|----|--------------|--------------------------|-----------|
| a. | ပေါင်ဒါ      | pàundà                   | 'powder'  |
| b. | ဆိုင်ကလုန်း  | s <sup>h</sup> àinkəlóun | 'cyclone' |
| c. | ဇူလိုင်      | zùlàiN                   | 'July'    |
| d. | အိုင်အိုဒင်း | ?àin?òdín                | 'iodine'  |
| e. | ဒရိုင်ဘာ     | dəràinbà                 | 'driver'  |
| f. | ဒိုင်ယာရီ    | dàinjàrì                 | 'diary'   |
| g. | နက်တိုင်း    | nɛ?tàiN                  | 'necktie' |
| h. | ဂလိုက်ဒါ     | gəlai?dà                 | 'glider'  |
| i. | တိုက်ဖွန်း   | tai?p <sup>h</sup> ún    | 'typhoon' |

It does not appear to be predictable whether the epenthetic coda consonant is N or ? — indeed sometimes either is possible — but either way these examples show that the faithfulness constraint DEP(SEG) ('a segment in the output has a correspondent in the input'), which prohibits epenthesis, is violated in order to avoid a violation of  $*\text{PLACE}]_{\sigma}$ , as shown in (25).<sup>10</sup>

(25)

/daijari/	$*\text{PLACE}]_{\sigma}$	DEP(SEG)
dài.jà.rì	*!	
☞ dàin.jà.rì		*

The diphthongs ei ou au are in complete complementary distribution with the monophthongs e o ɔ since the diphthongs occur only in closed syllables and the monophthongs only in open syllables. Because  $*\text{PLACE}]_{\sigma}$  outranks MAX(Place), as we determined in (21), an input providing a diphthong with no following consonant, e.g. /tɕ<sup>h</sup>òu/, has as its optimal output a form with a monophthong, e.g. ချို tɕ<sup>h</sup>ò 'be sweet' (13).<sup>11</sup>

<sup>10</sup> The most commonly found tone in open syllables in English loanwords is Low, which may be regarded as the least marked tone of Burmese and therefore the one that surfaces when the input provides no tone.

<sup>11</sup> The alternative hypothesis, that input monophthongs e o ɔ have diphthongal output allophones, would have grave difficulties motivating diphthongization in closed syllables.

(26)

/t <sup>h</sup> òu/	HEADEDPLACE	*PLACE] <sub>σ</sub>	MAX(PLACE)
t <sup>h</sup> ə	* !		
t <sup>h</sup> òu		* !	
☞ t <sup>h</sup> ò			*

On the other hand, when the diphthong is followed by a (placeless) coda consonant, as in ချံ့ t<sup>h</sup>ou? ‘sew’ (12)c, the diphthong is no longer in syllable-final position. In this case, \*PLACE]<sub>σ</sub> will not be violated, and the candidate \*[t<sup>h</sup>o?] fails because it violates MAX(Place).

(27)

/t <sup>h</sup> ou?/	*PLACE] <sub>σ</sub>	MAX(PLACE)
☞ t <sup>h</sup> ou?		
t <sup>h</sup> o?		* !

This explanation will hold for the other monophthong/diphthong pairs seen above in (12)–(13): /ɛ/ vs. /ɛin/ and /ɛi?/; /tə/ vs. /təu/ and /təu?/. Thus we may conclude that the monophthongs e o ɔ are output allophones of input ei ou au. Since ε and ai both occur before ʔ (e.g. ဆက် s<sup>h</sup>ɛʔ ‘continue’ vs. ဆိုက် s<sup>h</sup>aiʔ ‘arrive’ (12)b; တက် tɛʔ ‘go up’ vs. တိုက် taiʔ ‘attack’), they are separate phonemes /ɛ/ and /ai/. Elsewhere the two are in complementary distribution, as only ai but not ε appears before n and only ε but not ai appears in open syllables.

### 2.3 Monosyllabic feet

Following standard definitions of feet (Allen 1973; Hayes 1980; Selkirk 1980b), we may assume that heavy (μμ) syllables are in fact feet; because long vowels, falling diphthongs, and vowel + consonant sequences all have more prominence on the first mora than the second, these feet may be considered left-headed and therefore trochaic.<sup>12</sup> The fact that the first mora of a heavy syllable licenses Place features while the second mora does not is additional evidence for the left-headedness of heavy syllables. Any minor syllables preceding a major syllable remain unfooted, as shown in (28) where parentheses indicate foot boundaries.

(28) Monosyllabic feet in Burmese

a.	ဘဲ	(bɛ)	‘duck’
b.	ပန်း	(pán)	‘flower’
c.	နှစ်	(nɪʔ)	‘year’
d.	စားပွဲ	zə(bwɛ)	‘table’
e.	ထမင်းရည်	t <sup>h</sup> əmə(jɛ)	‘rice-water’

<sup>12</sup> See Kager (1993) on the internal prominence contour of heavy syllables.

According to Grouping Harmony (Prince 1990), (LL) is as harmonious a foot as (H); the two should be equivalent. But although a Burmese word may consist of a single heavy syllable, no Burmese word consists of two light (minor) syllables; \*[LL] is not a possible word shape, and therefore presumably not a possible foot. This fact may be attributed to two undominated constraints aligning each edge of a foot with the edge of the head syllable of the foot.

(29) ALIGN-L(*f*, *ó*)

The left edge of each foot is aligned with a foot-head.

(30) ALIGN-R(*f*, *ó*)

The right edge of each foot is aligned with a foot-head.

Since only one syllable can be the head of any foot, only monosyllabic feet can obey both of these constraints, as illustrated in the tableau in (31):

## (31)

	Align-L( <i>f</i> , <i>ó</i> )	Align-R( <i>f</i> , <i>ó</i> )
( <i>ó</i> <i>σ</i> )		*
( <i>σ</i> <i>ó</i> )	*	
( <i>ó</i> )		

Every pword in Burmese must end in a major syllable, i.e. a foot. This implies that not only ALIGN-L(*f*, *ó*) and ALIGN-R(*f*, *ó*) but also ALIGN-R(*ω*, *f*) (32) (McCarthy & Prince 1993b, 32) are undominated and inviolable in Burmese.

(32) ALIGN-R(*ω*, *f*)

The right edge of every pword is aligned with the right edge of some foot.

As the tableau in (33) shows, only pwords of the form [(*ó*)], [*σ*(*ó*)], and [*σσ*(*ó*)] (the canonical word shapes of Burmese), meet all three constraints.

## (33)

	ALIGN-L( <i>f</i> , <i>ó</i> )	ALIGN-R( <i>f</i> , <i>ó</i> )	ALIGN-R( <i>ω</i> , <i>f</i> )
[( <i>ó</i> )] <sub>ω</sub>			
[ <i>σ</i> ( <i>ó</i> )] <sub>ω</sub>			
[ <i>σσ</i> ( <i>ó</i> )] <sub>ω</sub>			
[( <i>ó</i> ) <i>σ</i> ] <sub>ω</sub>			*
[( <i>ó</i> <i>σ</i> )] <sub>ω</sub>		*	
[( <i>ó</i> <i>ó</i> )] <sub>ω</sub>	*		
[( <i>ó</i> <i>σ</i> ) <i>σ</i> ] <sub>ω</sub>		*	*
[( <i>ó</i> <i>ó</i> ) <i>σ</i> ] <sub>ω</sub>	*		*

In the next section we see how these three alignment constraints interact with other constraints to determine the form and distribution of minor syllables.

### 3 Minor syllables

Minor syllables contain only the vowel ə in Burmese. They contain neither tone nor coda consonants, do not allow complex onsets, and may never appear in the final position of a word. As we have seen, major syllables are bimoraic; it is reasonable to suppose that minor syllables are monomoraic. This supposition is borne out by the phonetic evidence of Mehner and Richter (1972–77), who show that the duration of minor syllables has a range of 25–50 ms, while the duration of major syllables has a range of 150–600 ms.

Minor syllables often occur as the initial syllable of a bisyllabic monomorphemic word like [kʰəlouʔ] ‘knob’. In this case, the toneless schwa is probably already represented as such in the input since the learner is confronted with no alternations that would justify any other input.<sup>13</sup> But minor syllables arise also in a kind of compound word that I refer to as a ‘reducing compound.’ In a reducing compound, the last syllable of a non-final member of the compound is reduced from a major to a minor syllable. Some examples of reducing compounds are shown in (34). (The obstruent voicing seen on the final element of some of these compounds will not concern us here, as it does not affect prosodic structure.)

#### (34) Reducing compounds

a.	ကြမ်းပိုး	tsán + pʰó	>	tsəbʰó	‘floor’ + ‘insect’	>	‘bed-bug’
b.	ငါးဥ	ŋá + ʔu	>	ŋəʔu	‘fish’ + ‘egg’	>	‘fish-spawn’
c.	နှစ်လ	ɲíʔ + lə	>	ɲələ	‘two’ + ‘month’	>	‘two months’
d.	သွားရည်	θwá + jè	>	θəjè	‘tooth’ + ‘juice’	>	‘saliva’
e.	ထမင်းရည်	tʰəmín + jè	>	tʰəməjè	‘rice’ + ‘water’	>	‘rice-water’
f.	ကုလားပြည်	kəlá + pjè	>	kələbjè	‘Indian’ + ‘country’	>	‘India’

As can be seen from these examples, a number of phonological processes happen under reduction: tone is lost; all vowel place features are lost, leaving only placeless ə behind; a coda consonant is lost (cf. (34)); and an onset cluster is simplified (cf. (34)). All of these processes find a single explanation if we assume that minor syllables are unfooted, an assumption that can be attributed to the role of ALIGN-L(*f*, *σ*), ALIGN-R(*f*, *σ*), and ALL-FT-R(35). As discussed above, ALIGN-L(*f*, *σ*) and ALIGN-R(*f*, *σ*) are undominated in Burmese; both they and ALL-FT-R crucially outrank PARSE-*σ*(36). The domination of ALL-FT-R cannot be demonstrated with the tableau in (37), although we will see that it can be violated.

#### (35) ALL-FT-R

Align-R(*f*, *ω*): the right edge of every foot is aligned with the right edge of some pword.

<sup>13</sup> See Yip (1996) on the shape of the input in the absence of alternations.

(36) PARSE- $\sigma$ 

Syllables are parsed into feet.

## (37)

/ɲá·ʔu/	ALIGN-L(f, ó)	ALIGN-R(f, ó)	ALL-FT-R	PARSE- $\sigma$
[(ɲá)(ʔu)] <sub>ω</sub>			* !	
[(ɲá.ʔə)] <sub>ω</sub>		* !		
[(ɲə.ʔu)] <sub>ω</sub>	* !			
☞ [ɲə(ʔu)] <sub>ω</sub>				*

Each of the four phonological processes found in reducing compounding — loss of tone, loss of vowel place features, loss of the coda nasal, and onset simplification — are attributable to the loss of foot status under syllable reduction. In the following section I shall analyze each of these processes in turn, beginning with the loss of tone.

## 3.1 Loss of tone

The loss of tone under syllable reduction may be viewed as the interaction between the constraints *FOOTSALIENCE* (FTSAL) and *\*TONE*. FTSAL was defined by Zec (1999) for Neo-Štokavian as ‘*A foot is associated with High tone*,’ because in that language only High tone is present in the input, while Low tone is the default for syllables not marked with High. In Burmese on the other hand, all the tones are apparently present in the input,<sup>14</sup> so FTSAL must be stated more generally.

## (38) FTSAL (Zec 1999)

A foot is associated with tone.

*\*TONE* can be thought of as a member of the *\*STRUCTURE* family (Prince & Smolensky 1993, 25; McCarthy 2002, 47) that imposes general bans on marked structure.

(39) *\*TONE*

Tone is not present.

When FTSAL outranks *\*TONE*, which in turn outranks the faithfulness constraint *MAX(Tone)* (*‘Tonal features present in the input are present in the output’*), tone is realised on all and only footed syllables. Because minor syllables are unfooted, they are toneless. This is shown in the tableau in (40).

<sup>14</sup> At least in native words; as mentioned above, the Low tone that appears in English loanwords is perhaps not present in the input.

(40)

/ηά+?u/	FTSAL	*TONE	MAX(TONE)
[ηά(?u)] <sub>ω</sub>		** !	
☞ [ηə(?u)] <sub>ω</sub>		*	*
[ηə(?u)] <sub>ω</sub>	* !		**

### 3.2 Loss of vowel place features

Under the widespread assumption that ə is a placeless vowel, the fact of its occurrence to the exclusion of all other vowels in minor syllables in Burmese can be attributed to \*PLACE]<sub>σ</sub>. As defined in (19), this constraint bans place features not specifically from the coda position of the syllable but rather from the right edge of the syllable. In open, monomoraic syllables, the nucleus vowel is at the right edge of the syllable and therefore subject to \*PLACE]<sub>σ</sub>. When a syllable surfaces as a minor syllable, for example in reducing compounds, the vowel is reduced to ə in compliance with \*PLACE]<sub>σ</sub> and in violation of lower-ranking MAX(Place) (20). Major syllables, on the other hand, are bimoraic, so that the Place features associated with the last mora are also associated with the first mora, avoiding a violation of \*PLACE]<sub>σ</sub>. An example comes from the word ငါးဥ ηə?u 'fish-spawn' (34), as shown in the tableau in (41).

(41)

/ηά+?u/	*PLACE] <sub>σ</sub>	MAX(PLACE)
ηa(?u)	* !	
☞ ηə(?u)		*

Extending the ban on syllable-final place features so that it applies not only to coda consonants but to vowels as well thus accounts simultaneously for the prohibition on diphthongs in open syllables and the reduction of all vowels to ə in minor syllables.

### 3.3 Loss of coda consonants

It is generally accepted that heavy syllables are more marked than light syllables, so that a constraint banning heavy syllables is predicted. This constraint may be named NOHEAVY.

(42) NOHEAVY

A syllable contains only one mora.

In fact, of course, most syllables in Burmese are major syllables, and therefore bimoraic. But it is a well known fact of prosodic phonology that feet are preferably binary (bimoraic or bisyllabic), as expressed by the constraint FOOTBINARITY (FTBIN).

(43) FTBIN (Prince &amp; Smolensky 1993, 47)

Feet are binary at some level of analysis (μ, σ)

Provided FTBIN outranks NOHEAVY in Burmese, a syllable may be bimoraic only in order that FTBIN not be violated, as illustrated in (44).

(44)

/k <sup>h</sup> à/	FTBIN	NOHEAVY
[(k <sup>h</sup> à <sub>μ</sub> )] <sub>ω</sub>	*!	
☞ [(k <sup>h</sup> à <sub>μμ</sub> )] <sub>ω</sub>		*

NOHEAVY thus predicts that unfooted syllables must be monomoraic, since FTBIN is not an issue. This is the reason why the first syllable in a reducing compound such as  $\text{တဲးပိး}$   $\text{təán+pó}$  > [təábó] ‘bed-bug’ (34) or  $\text{နှစ်လ}$   $\text{nĩ?+lā}$  > [nəlā] ‘two months’ (34) loses its coda consonant; a bimoraic syllable would induce an extra violation of NOHEAVY, and footing the first syllable would violate ALL-FT-R (35). Undominated ALIGN-L(*f*, *ó*) and ALIGN-R(*f*, *ó*) prevent the two syllables from forming a (LL) foot. The ranking ALIGN-L(*f*, *ó*), ALIGN-R(*f*, *ó*), FTBIN » ALL-FT-R » PARSE-σ, NOHEAVY » MAX(seg) (45) is shown in the tableau in (46). The dashed lines in the tableau indicate that the ranking of two constraints with respect to each other cannot be determined. Crucially NOHEAVY dominates MAX(seg).

(45) MAX(seg)

A segment in the input has a correspondent in the output. (No deletion).

(46)

/təán+pó/	ALIGN-L ( <i>f</i> , <i>ó</i> )	ALIGN-R ( <i>f</i> , <i>ó</i> )	FTBIN	ALL-FT-R	PARSE-σ	NOHEAVY	MAX (seg)
[təə(bó <sub>μ</sub> )] <sub>ω</sub>			*!		*		*
☞ [təə(bó <sub>μμ</sub> )] <sub>ω</sub>					*	*	*
[(təə <sub>μ</sub> bó <sub>μ</sub> )] <sub>ω</sub>	*!						*
[(təá <sub>μ</sub> bə <sub>μ</sub> )] <sub>ω</sub>		*!					*
[təən(bó <sub>μμ</sub> )] <sub>ω</sub>					*	**!	
[(təán)(bó <sub>μμ</sub> )] <sub>ω</sub>				σ!			

ALIGN-L(*f*, *ó*), ALIGN-R(*f*, *ó*), and FTBIN are all unviolated in Burmese: there are no circumstances under which either a (LL) foot or a (L) foot is permissible.

### 3.4 Onset simplification

Major syllables allow onset clusters in Burmese while minor syllables do not. If a major syllable with a complex onset becomes minor in a reducing compound, the second consonant of the onset is lost, as shown in (47) (Okell 1969:15).



(47) Onset cluster simplification in reducing compounds

- a. နွားနို့      nwá + nɔ̃ > nənɔ̃    'cow' + 'udder' > 'milk'  
 b. သွားရည်    θwá + jè > θəjè    'tooth' + 'juice' > 'saliva'

To account for this fact I suggest that onset clusters are permitted only in foot-initial position in Burmese, and that the first consonant of such clusters is linked directly to the foot. Following arguments formalised in Green (2003), I propose that a universally ranked subhierarchy on onset clusters includes a string  $*_o[CC] \gg *_f[CC]$ , i.e. a cluster at the left edge of a syllable is universally more marked than a cluster at the left edge of a foot.<sup>15</sup> In Burmese, this ranking is interrupted by MAX(seg), i.e.  $*_o[CC] \gg \text{MAX(seg)} \gg *_f[CC]$ , allowing cluster simplification at the syllable level but not the foot level. Also low ranked is EXHAUSTIVITY<sub>f</sub> (Selkirk 1995, 443), which militates against domination by feet of anything other than syllables. The ranking is exemplified in the tableaux in (51) and (52).

(48)  $*_o[CC]$

A sequence of two consonants is forbidden in syllable-initial position.

(49)  $*_f[CC]$

A sequence of two consonants is forbidden in foot-initial position.

(50) EXH<sub>f</sub>

A foot immediately dominates only syllables.

(51)

/nwáɔ̃/	$*_o[CC]$	MAX(seg)	EXH <sub>f</sub>	$*_f[CC]$
.nwə.(nɔ̃.)	*!			
<i>ɔ̃</i> .nə.(nɔ̃.)		*		

In the tableau in (52), the consonant in *italics* is extrasyllabic, being linked directly to the foot.

(52)

/nwá/	$*_o[CC]$	MAX(seg)	EXH <sub>f</sub>	$*_f[CC]$
(.nwá.)	*!			*
(.ná.)		*!		
<i>ɔ̃</i> (n .wá.)			*	*

All of the phonological processes that major syllables undergo when they are transformed into minor syllables under reducing compounding are thus linked to the loss of foot status. Tone is lost, because only feet are required to be associated with tone. A coda consonant and all vowel place features are lost, because an unfooted syllable must be light, and place

<sup>15</sup> See Beckman (1998:238ff.) for a different analysis of complex syllable margins in prominent positions.

features are banned from the right edges of syllables. And complex onsets are simplified, because only feet tolerate complex onsets.

### 3.5 Distribution of minor syllables

Next, let us examine the constraint interactions that prohibit ə from occurring word-finally. The constraint HEADEDPLACE (53) is similar in effect to Cohn and McCarthy's (1998) constraint NON-HEAD(ə), which prohibits stressed ə. It requires the head mora of a foot to dominate place features, and ALIGN-R( $\omega$ , f) (32) requires every pword to be right-aligned with a foot. Both constraints are undominated and surface-true in Burmese. So what happens if an input ends in /ə/? Native words probably never have such inputs, as speakers would have no reason to posit them, but evidence from English loanwords shows us the strategy: word-final ə of English is realised as a in Burmese, as in ကောမာ kəmà 'comma'. The faithfulness constraint violated here, assuming the input /(kə)mə/<sup>16</sup>, is DEP(Place) (54).<sup>17</sup>

(53) HEADEDPLACE

The head mora of a foot dominates Place features.

(54) DEP(Place)

Place features in the output have correspondents in the input.

(55)

/ (kə)mə /	HEADEDPLACE	ALIGN-R( $\omega$ , f)	DEP(PLACE)
[(kə)(mə)] <sub>ω</sub>	*!		
[(kə)mə] <sub>ω</sub>		*!	
☞ [(kə)(mə)] <sub>ω</sub>			*

## 4 Polypodic words

One salient property of Burmese prosodic phonology is that there is a strong preference for nonbranching prosodic categories. We have seen that every prosodic category preferably contains exactly one of the next lower category. Syllables are monomoraic because of NOHEAVY, prohibiting bimoraic syllables, unless higher-ranking FTBIN forces a syllable to be bimoraic (cf. (46)). All feet are monosyllabic in Burmese, because ALIGN-L(f, ó) and ALIGN-R(f, ó) are undominated. And most pwords contain exactly one foot, because of high-ranking ALL-FT-R (cf. (46)). Such words are called 'monopodic', and examples of them are shown in (56):

<sup>16</sup> The reason for the foot structure in the input will become clear in §4.2.

<sup>17</sup> I do not have space here to explore the question why the features of *a* rather than some other vowel are the ones supplied.

## (56) Monopodic words in Burmese

a.	သူ့:	[(θwá)] <sub>ω</sub>	'go'
b.	လေး:	[(lé)] <sub>ω</sub>	'be heavy'
c.	စာ	[(sà)] <sub>ω</sub>	'writing'
d.	အိမ်	[(?èin)] <sub>ω</sub>	'house'
e.	သရော်	[θə(jə)] <sub>ω</sub>	'mock, satirise'
f.	ခလုတ်	[kʰə(louʔ)] <sub>ω</sub>	'knob'
g.	ထမင်းရည်	[tʰəmə(jè)] <sub>ω</sub>	'rice-water'

Nevertheless, there are some words in Burmese that contain more than one foot ('polypodic words'). These are chiefly compounds (57) or loanwords (57). A very few noncompound polypodic words do not appear to be loanwords (57). I shall refer to noncompound polypodic words, such as (57), as 'superlong' words.

## (57) Polypodic words in Burmese

a.	နေထိုင်	(nè)(tʰàin) = (nè) + (tʰàin)	'reside' = 'stay' + 'sit'
b.	ချောကလက်	(tʰəʔ)kə(lɛʔ)	'chocolate' (English)
c.	မုန်တိုင်း	(mòun)(dáin)	'storm'

In this section I shall argue that polypodic words are pre-specified for some prosodic structure: compounds like (57) contain pword structure in the input, and superlong words like (57) — contain foot structure in the input.

## 4.1 Nonreducing compounds

In section 3 above we saw a type of compounding called reducing compounding. Burmese also has nonreducing compounding, in which the elements of the compound undergo no phonological changes.<sup>18</sup> Nonreducing compounds are thus quite straightforward: two or more words are strung together to form a single word. The individual members of these compounds probably retain their original pwords, which are then parsed recursively into a single, larger pword, as shown in (58). (See Inkelas (1989) and McCarthy & Prince (1993b) on the recursiveness of the pword.) Examination of the glosses in the examples (especially (58)e, f) reveals that many 'compounds' in Burmese are not compounds in the traditional sense at all, but rather 'concatenation[s] of lexical words and grammatical formatives, presumably under a single X-bar category (X°)' (Bennett & Lehman 1994).

(58) Nonreducing compounds:  $\omega + \omega > [\omega \omega]_{\omega}$ 

a.	နေ + ထိုင် > နေထိုင်
	$[nè]_{\omega} + [tʰàin]_{\omega} > [[nè]_{\omega} [tʰàin]_{\omega}]_{\omega}$
	'stay' + 'sit' > 'reside'

<sup>18</sup> It is not unusual for a language to have more than one type of compound. Mohanan (1982, 1986), Aronoff and Sridhar (1983), Sproat (1986), and Inkelas (1989) discuss compounds in Kannada and Malayalam, where 'subcompounds' and 'co-compounds' have different phonological effects from each other. Unlike Kannada and Malayalam, Burmese does not seem to have an obvious semantic distinction between the two types of compounds.

- b. ရောင်း+ဝယ် > ရောင်းဝယ်  
 [jáun]<sub>ω</sub> + [wè]<sub>ω</sub> > [jáun]<sub>ω</sub> [wè]<sub>ω</sub>  
 ‘sell’ + ‘buy’ > ‘trade’
- c. ကြက်+ဆင် > ကြက်ဆင်  
 [tɛɛʔ]<sub>ω</sub> + [sʰìn]<sub>ω</sub> > [tɛɛʔ]<sub>ω</sub> [sʰìn]<sub>ω</sub>  
 ‘fowl’ + ‘elephant’ > ‘turkey’
- d. အရည်+အချင်း > အရည်အချင်း  
 [ʔəjè]<sub>ω</sub> + [ʔətɕʰín]<sub>ω</sub> > [[ʔəjè]<sub>ω</sub> [ʔətɕʰín]<sub>ω</sub>]<sub>ω</sub>  
 ‘characteristic’ + ‘quality’ > ‘qualification’
- e. ပို့+ပို့+ခိုင်း > ပို့ပို့ခိုင်း  
 [pɔ]<sub>ω</sub> + [pʰɔ]<sub>ω</sub> + [kʰáin]<sub>ω</sub> > [pɔ]<sub>ω</sub> [bɔ]<sub>ω</sub> [kʰáin]<sub>ω</sub>  
 ‘send’ + ‘to’ + ‘tell’ > ‘tell him to send it’
- f. ကြည့်+လို+ကောင်း > ကြည့်လိုကောင်း  
 [tɕi]<sub>ω</sub> + [lɔ]<sub>ω</sub> + [káun]<sub>ω</sub> > [tɕi]<sub>ω</sub> [lɔ]<sub>ω</sub> [káun]<sub>ω</sub>  
 ‘look’ + ‘-ing’ + ‘be good’ > ‘be good to look at’
- g. ကောက်+ပဲ+အသီး+အနှံ > ကောက်ပဲသီးနှံ  
 [kauʔ]<sub>ω</sub> + [pé]<sub>ω</sub> + [ʔəθí]<sub>ω</sub> + [ʔəṇàɴ]<sub>ω</sub> > [kauʔ]<sub>ω</sub> [pé]<sub>ω</sub> [θí]<sub>ω</sub> [ṇàɴ]<sub>ω</sub>  
 ‘paddy’ + ‘peas’ + ‘fruit’ + ‘grain’ > ‘crops’
- h. အိုး+အင်း+ခွက်+ယောက် > အိုးအင်းခွက်ယောက်  
 [ʔó]<sub>ω</sub> + [ʔín]<sub>ω</sub> + [kʰwɛʔ]<sub>ω</sub> + [jauʔ]<sub>ω</sub> > [ʔó]<sub>ω</sub> [ʔín]<sub>ω</sub> [kʰwɛʔ]<sub>ω</sub> [jauʔ]<sub>ω</sub>  
 ‘pot’ + ‘bowl’ + ‘cup’ + ‘ladle’ > ‘household goods’

I am not concerned here with certain effects of compounding, such as voicing, as seen in (58), or the loss of the prefix [ʔə-] in some forms like (58), but not in others like (58).

Compound words consisting of more than one pword are well attested: in Igbo (Zsiga 1992), Malayalam (Sproat 1986; Inkelas 1989), Sanskrit (Selkirk 1980a), and Turkish and Hungarian (Nespor & Vogel 1986), for example, certain compounds contain more than one pword. Also in the history of Welsh, as described by Jackson (1953:367, 436, 514, 579), external sandhi processes are found between the members of a compound, and are distinct from internal sandhi processes found within a simple pword. This implies that the members of the compound are separate pwords in that language as well.

Whether a Burmese compound will be of the reducing or nonreducing type cannot be determined phonologically. There is no phonological reason why နေထိုင် ‘reside’ (58) must be [nèthàin], not \*[nəthàin], nor why (34) ကြမ်းပိုး ‘bed-bug’ must be [tɕənbó], not \*[tɕánbó]. Indeed, there seems to be dialectal variation on this point. Okell (1969:15) reports ထန်းရည် ‘toddy juice’ to be pronounced as reduced [tʰəjè] in Upper Burma but as non-reduced [tʰánjè] in Lower Burma. Instead, the decision between reducing and non-reducing compounds must be made already in the lexicon, for example by prespecifying pwords in non-reducing compounds. Under this analysis, a non-reducing compound like နေထိုင် nèthàin is lexically specified as containing two pwords, thus /[nè]<sub>ω</sub>+ [tʰàin]<sub>ω</sub>/, while

reducing compounds like ကြမ်းစို: *krám̥sɔ̌* do not contain prosodic prespecification, thus /təán+pó/. And the word for ‘toddy juice’ is lexically represented as /tʰán+jè/ in Upper Burmese dialects and /tʰán]<sub>ω</sub>+jè]<sub>ω</sub>/ in Lower Burmese dialects.

Two constraints relevant for this analysis are MAX( $\omega$ ) (59) and NONREC $\omega$  (60).

(59) MAX( $\omega$ )

A pword in the input has a correspondent in the output.

(60) NONREC $\omega$  (Selkirk 1995:443)

No pword dominates a pword.

In Burmese, MAX( $\omega$ ) dominates NONREC $\omega$ , which means that a pword may be recursive only in order to avoid deleting a prespecified pword. The result is that reducing compounds have no recursivity in the output, while nonreducing compounds do have recursivity, as shown in the tableaux in (61)–(62).

(61)

/təán+pó/	MAX( $\omega$ )	NONREC $\omega$
[[təán] <sub>ω</sub> [bó] <sub>ω</sub> ] <sub>ω</sub>		* !
☞ [təábó] <sub>ω</sub>		

(62)

/[nè] <sub>ω</sub> + [tʰàin] <sub>ω</sub> /	MAX( $\omega$ )	NONREC $\omega$
☞ [nè] <sub>ω</sub> [tʰàin] <sub>ω</sub> ] <sub>ω</sub>		*
[nəthàin] <sub>ω</sub>	* !	

As for dialectal variation between Upper Burmese and Lower Burmese dialects, this is probably due to different lexical specifications in the different dialects rather than to different constraint ranking. Okell (1969:15) says that ‘weakening [i.e. reduction in compounding] is said to be more common in Upper than in Lower Burma’ and gives the example of ကြမ်းစို *tʰəjè* ~ tʰánjè ‘toddy juice’ as an illustration; but to argue that Upper Burmese has the ranking NONREC $\omega$  » MAX( $\omega$ ) would be to predict that Upper Burmese *never* has nonreduced compounds, which is not the case (F.K.L. Chit Hlaing, pers. comm.).

Burmese freely tolerates compounds with both reducing and nonreducing elements, as shown in (63).

(63) Compounds with both reducing and nonreducing elements

a.	လွတ်ငြိလာ: lu? + pì + lá	>	lu?pəlá ‘free’ + PERF + Q-?	‘is (one) free?’
b.	နေမယ်လာ: nè + mɛ̌ + lá	>	nèməlá ‘stay’ + IRR + Q-?	‘will (one) stay?’
c.	မိန်းမဝတ် méinmə + wu?	>	méinməwu? ‘woman’ + ‘clothing’	‘women’s clothing’
d.	လမ်းမတော် lán + mə̌ + tò	>	lánmədɔ̌ ‘road’ + ‘main’ + HON	‘main road’

In these cases, the inputs presumably contain prespecified pword structure only where there is no reduction, thus  $/[lu?]_{\omega} + pi + [lá]_{\omega}/$ ,  $/pjə + [tín]_{\omega} + [pau?]_{\omega}/$ , etc.

## 4.2 Noncompound polypodic words

In addition to compounds, Burmese has a few superlong words, by which I mean morphologically simplex (i.e. not compound) polypodic words. Most but not all of them are loanwords. Some examples are shown in (64).

### (64) Superlong words in Burmese

a.	ကြောင့်ကြ	(təaun)(təa)	‘be anxious’		
b.	မုန်တိုင်း	(mòun)(dáin)	‘storm’		
c.	ထားနာ	(tʰà)pə(nà)	‘enshrine’	< Pāli	ṭhapanā
d.	ဗုဒ္ဓ	(bou?)(dā)	‘Buddha’	< Pāli	Buddha
e.	အာကာသ	(ʔà)(kà)(θā)	‘space, universe’	< Pāli	ākāsa
f.	အပ်ရိယိတ်	ʔəpə(rɪ)jə(jei?)	‘appreciate’	< English	
g.	ချောကလက်	(tʰə)kə(lə?)	‘chocolate’	< English	
h.	အင်ဂျင်	(ʔin)(jìn)	‘engine’	< English	

Just as nonreducing compounds are analyzed as having prespecified pwords, these superlong words can be analyzed as having prespecified feet: the input of  $[tʰəpənà]$ , for example, is  $/tʰəpənà/$ . In order to prevent syllable reduction from applying, we need to assume that a faithfulness constraint  $MAX(f)$  (65) outranks  $ALL-FT-R$ , as illustrated in (66).

### (65) $MAX(f)$

A foot in the input has a correspondent in the output.

### (66)

$/tʰəpənà/$	$MAX(f)$	$ALL-FT-R$	$MAX(PLACE)$
$[tʰəpə(nà)]_{\omega}$	*!		*
$\sigma [(tʰə)pə(nà)]_{\omega}$		$\sigma\sigma$	

Polypodic words are exceptional in Burmese, and arise only when some prosodic structure (pword, foot) is prespecified in the input. Where no prosodic structure is prespecified, Burmese constraint ranking ensures that pwords are monopedic, in accordance with the more general tendency toward nonbranching prosodic categories in this language.

## 5 Conclusions

In this chapter I have discussed several aspects of the prosodic structure of Burmese and have addressed several problems. Both the ban on diphthongs in open syllables and the fact that placeless ə is the only vowel allowed in light open syllables are explained by analyzing Burmese as prohibiting both vocalic and consonantal place features from the

right edge of a syllable. The various effects seen in syllable reduction (loss of tone, reduction of all vowels to ə, loss of coda consonants, and onset simplification) are all attributable to the fact that a major syllable is a foot while a minor syllable is unfooted. Finally, both pwords and feet can be prespecified in the input, accounting for the contrast between monopodic words (including reducing compounds) and polypodic words (including nonreducing compounds).





# 2

## *Focus in Burmese: an investigation and experimental study of information structure and prosody*

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### 1 Introduction

This chapter considers the interaction of information structure, focus and prosody in Burmese. For many years research has been carried out on the potential impact of focus structures on word order, and recently an increasing number of works has begun to investigate the possible linking of focus with prosody and intonation. Primarily initiated in studies of Romance and Germanic languages (e.g. Cinque 1993, Ladd 1996, Zubizarreta 1998 among many others), this latter work is now growing in its coverage of other, non-European languages, and in the area of eastern Asia there have been recent, interesting investigations of prosodic effects on word order in Japanese and also Korean, in Ishihara (2002), Deguchi and Kitagawa (2002) and Jun (1996). Such work has complemented a growing body of research into the effects of focus in so-called ‘free-word order’ languages, where it is observed that a wide range of word order possibilities seem to be available within a single language. For example, in descriptions of languages having a neutral SOV-type word order such as Japanese, Korean, Turkish and Hindi, it is common to find it noted that a di-transitive clause may actually allow for a whole range of word order permutations as schematised in (1). Where the verb-final property of such languages may be less strictly imposed, as, for example, in Hindi, it may also be possible for other combinations to occur, and for arguments of the verb to be optionally positioned following the verb.

(1) Common word order permutations in ‘SOV’ ‘free word order’ languages

‘John gave a book to Mary’

Sub = subject, DO = direct object, IO = indirect object

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<sup>1</sup> We are grateful to all the Burmese consultants who have provided the syntactic and perceptual judgements, translations and recordings on which this study is based, in particular Pyu Cyn, Khin Mar Mar Kyi and MT. Many thanks are also due to John Okell for many hours commenting on the data presented to informants and for valuable intuitions about the results obtained from native speakers. Thanks also to Bernard Howard for invaluable assistance in making the recordings.

- a. Sub IO DO V
- b. Sub DO IO V
- c. DO Sub IO V
- d. DO IO Sub V
- e. IO Sub DO V
- f. IO DO Sub V

The primary goal of most investigations of this kind of free word order has generally been to attempt to discover whether such word order really is free and random, or whether it is actually governed and even predicted by the interaction of syntactic, semantic and pragmatic factors, and possibly also prosody. In order to account for the complex patterns attested, a wide range of different theoretical approaches have been proposed in both formal and functionalist frameworks, with particularly significant work carried out by Lambrecht (1994), Vallduvi (1992), Givón (1990), Choi (1999), and Neeleman and Reinhart (1998) to name just a few. However, in spite of the increased and large amount of work carried out on the information-structure and prosodic factors potentially governing word order, there are still many central issues that are not well-resolved, and there are clear disagreements as to how to best capture the patterns observed. In addition to this, it is also not uncommon to find important disagreements about the basic 'facts' which obtain in certain of the languages studied, e.g. German, Korean, Japanese. There is consequently a pressing need for more careful studies on such matters to be carried out, and for information from a wider array of languages to be brought to bear on the general issues of word order variation and its relation to information structure and prosody. The aim of the current chapter is therefore to see how a study of Burmese may be able to contribute to this ongoing debate, and to examine what factors may seem to be responsible for the appearance/occurrence of 'free word order' patterns within the language. Burmese being typologically similar to Japanese, Korean, Hindi and Turkish in many relevant ways, it is hoped that a careful examination of word order permutation in Burmese will not only serve towards a better understanding of Burmese itself, but also be of value in more general cross-linguistic comparative research into word order variation within SOV languages.

The structure of the chapter is now as follows. Section 2 first provides a general background introduction to the notion of focus and various other factors often taken to have effects on word order in different languages. Section 3 then turns to Burmese and discusses at some length a wide range of word order patterns investigated in the language, together with information on how and why such patterns were investigated and the conclusions which seem to be indicated by the data. Following this examination of the influence of primarily discourse-related, pragmatic factors on word order patterns, section 4 presents the second major part of the present study, which was an investigation of the prosodic properties of word order variation and the occurrence of stress patterns in focus-related sentences. Section 5 then concludes the study with a summary of observations on the interaction of prosody with information structure and the limits of variation which seem to be attested in word order variation in Burmese.

## **2 Factors governing word order variation: a brief overview**

Before proceeding into the investigation of Burmese proper, it will be useful to note and clarify certain commonly assumed notions and ideas relating to the study of focus and word order variation.

One common approach to modeling patterns such as those abstractly schematised in (1) is to argue that the different possible word orders which occur in a language result from the interaction of various different constraints relating to syntax and pragmatics (and sometimes also prosodic weight). Such an approach is highly formalised in work carried out within Optimality Theory, as e.g. in Choi (1999), and is also present in spirit in a range of earlier works such as Bresnan and Kanerva (1989), Givón (1990), Herring (1990). The central idea in many of these works is that (a) all discourse referents/Noun Phrases/NPs are associated with a number of properties (case, grammatical function, semantic role, degree of animacy etc), (b) each individual property system dictates its own optimal ordering of the elements which are specified with properties of that system, and (c) sometimes the particular clustering of properties within NPs in a sentence may give rise to competition and conflict between the different property systems, with different languages potentially resolving these conflicts in different ways.

A number of these property systems and their assumed effects on word order can be noted here as relevant illustration. First of all, it is widely assumed that information which is referentially old or 'given', such as the topic of a sentence, is commonly positioned before information that is new, resulting in the linear ordering of elements with old/new referential properties as in (2):

- (2) Old/new information status  
given/old > new

Secondly, there is evidence to indicate that the ordering of NPs in a sentence may be regulated by the different grammatical roles they bear, hence cross-linguistically it has been observed to be very common for subjects to precede objects in neutral word order patterns, and elements with other grammatical roles are quite possibly also positioned according to a canonical type of order, as in (3):

- (3) Grammatical relations  
subject > object > oblique > adjunct

Other hierarchical orderings that have been assumed to cause a linear ordering of elements relate to the semantic roles, case relations and degree of animacy borne by NPs in a sentence, as represented in (4)–(6). In each case, an element on the higher end of the scale is assumed to 'win out' over elements lower in the scale, and in many cases cause a parallel linear left-to-right ordering if other factors do not conflict with this:

- (4) Thematic hierarchy of NPs  
agent > patient > goal...
- (5) Case hierarchy  
nominative > accusative > dative...

(6) Animacy hierarchy

human 1st/2nd person > human 3rd person > animate non-human > inanimate

In an ideal kind of case, an element which is higher than some other element on one hierarchical scale will also be higher than the second element on all other scales, hence be uniformly more prominent than the second element with regard to all relevant properties. For example, it may be found that a subject NP occurs in nominative case, is human and an agent and is also old information, and that an object NP has accusative case, is inanimate, new information and semantically a patient, as in (7). This is assumed to lead to an automatic positioning of the subject NP before the object NP.

## (7) 'John read a book.'

subject	>	object
nominative	>	accusative
agent	>	patient
old	>	new
human	>	inanimate

However, there may also be many cases where a conflict arises and the case, animacy and other values for two referents may not follow the same hierarchical ordering in all instances. Such cases are suggested to potentially result in different kinds of word order outputs in different languages, depending on the relative importance a language may give to the hierarchies in (2-6). The present investigation pays particular attention to the status of referents with regard to the new-old distinction in (2) and observes how this plays a clearly important role in the ordering of elements within a sentence in Burmese.

As in many other investigations into word order variation, we also consider the effects that *focus* has on different types of word order. The term 'focus' is commonly used in two significantly different senses. The first of these is to refer to *new* information introduced into a sentence against a background of presupposed, old information. This kind of focus is often referred to as *information focus* or *completive focus*, and can be naturally identified by the use of *wh* question-answer pairs, the element which supplies a value for a *wh*-constituent in a question always functioning as a new information focus in the answer, as e.g. in (8):

(8) Q: What did John buy?

A: I think he bought a book.

When a new information focus is instantiated by a single constituent such as an object or a subject (or a verb), this is furthermore referred to as an instance of '*narrow focus*', as in (8) above. If, however, a new information focus is instantiated by a larger constituent such as a VP or even a full sentence as in (9) and (10), the term '*broad focus*' is used to indicate that the extent of the focus is larger than cases of simple narrow focus:

## (9) Q: What did John do?

A: I think he bought a book.

- (10) Q: What happened?  
A: John bought a book.

A second type of focus which is often distinguished, on the grounds that it may have different effects on word order, is *contrastive focus*, and involves the focal contrast of one element with another in the discourse context, as e.g. in (11):

- (11) It was John who bought a book, not Mary.

In certain languages (for example Hungarian; Kiss 2002), an NP which has the interpretation of being in contrastive focus is forced to occur in a special position in the sentence (pre-verbally in Hungarian), whereas NPs that instantiate new information focus occur in other kinds of position (post-verbally in Hungarian). In the present study of Burmese, we consider both how new information focus patterns (narrow and broad) and the effects of contrastive focus.

Turning now briefly to certain ideas concerning prosody, and how prosodic factors may relate to focus and information structure, in many languages it has been observed that a clear sentence-final stress intonation coincides with new information focus occurring in such a position. This default intonation pattern is referred to as *nuclear stress* and the suggestion is made that nuclear stress highlights as new information focus whatever element occurs finally in a sentence, as for example in (8) where 'a book' receives the nuclear stress intonation. In certain languages such as Italian, it has also been noted that a new information focus *must* occur in the sentence-final position where nuclear stress falls, and that if the use of a neutral word order pattern would cause the new information focus to occur elsewhere in the sentence, such a neutral word order must be converted into a non-neutral pattern so that the element instantiating completive focus does occur finally in the sentence. This is illustrated in (12) below. Although Italian has a neutral SVO word order like English, if the subject NP is the answer to a *wh*-question (12)a and instantiates new information focus, it must be positioned following the verb as in (12)b and a pre-verbal positioning of the subject as in (12)c is quite inappropriate:

- |         |                    |    |                       |    |                     |
|---------|--------------------|----|-----------------------|----|---------------------|
| (12) a. | Chi è arrivato?    | b. | È arrivato Gianni.    | c. | #Gianni è arrivato. |
|         | who has arrived    |    | has arrived Gianni    |    | Gianni has arrived  |
|         | 'Who has arrived?' |    | 'Gianni has arrived.' |    |                     |

Generally, it is important to note here that the occurrence of focus in a sentence-final position is frequently attributed to the prosodic reason that nuclear stress naturally falls in such a position, and so syntactic structures may need to be built in which a focused element occurs in the sentence-final stress position.

Note that in verb-final languages such as German, it has been argued that the relevant sentence-final position where nuclear stress highlights a new information focus is actually the immediately pre-verbal position, and that the notion 'sentence-final' may actually be thought of as 'most deeply embedded' in a syntactic structure (Cinque 1993).

It can also be added that certain languages permit exceptions to the automatic application of nuclear stress in sentence-final position. In languages such as English, sentence-final elements which constitute old-given information may be invisible to the application of nuclear stress to a sentence-final element, allowing this nuclear stress to fall on a preceding element such as the verb in example (13). This is commonly referred to as

the possibility of de-accenting presupposed material in a sentence, and is a prosodic operation which is available in some but certainly not all languages (Ladd 1996; Cruttenden 2003).

- (13) a. I was thinking of giving John a bottle of whisky.  
       b. But John doesn't like whisky.  
       c.? But John doesn't like whisky.

Having outlined in brief a few of the relevant concepts and terms that will be referred to regularly in the rest of the chapter, we are now in a position to describe the full investigation of focus and prosody in Burmese which was carried out.

### 3 Focus-related word order variation

In order to gather information on information structure and prosody in Burmese, it was decided to divide the investigation into two main parts. The first major part of the investigation, described here in section 3, consisted in a comprehensive examination of different types of word order and the interpretations which are possible and natural in such orderings. The second part of the investigation, which built on the findings of the first part, was a controlled production and perception test which set out to examine the use of intonation and stress in focus-related sentences.

As a starting point for the study, certain fairly uncontroversial and commonly-made assumptions about basic word order patterns in Burmese were adopted as background hypotheses, and these subsequently appeared to be borne out by the general patterning of the data. First of all it was assumed that Burmese has an underlying neutral word order which is SOV in transitive sentences, and S-IO-DO-V in di-transitive sentences involving verbs of giving. Apart from being the most frequently occurring neutral pattern, there is evidence from case-marking that SOV order is basic in Burmese. If the object occurs adjacent to the verb, there is no particular pressure for it to be marked with accusative-like objective-case, whereas if it precedes the subject in an OSV order, it is commonly marked with the case-particle *-kou*. This provides an explicit indication to a hearer that the sentence-initial NP should not be given a default interpretation as a subject and is instead an 'out of place' object.

Secondly, given the observation in a number of works that *wh*-question words occur commonly before the verb in Burmese, we anticipated finding that focused elements in general might regularly appear in pre-verbal position. If this were to be so, it would group Burmese with the considerable number of SOV languages described as having a special pre-verbal focus position, e.g. Turkish, Hindi, Bengali, German. In certain of these languages, such as Hindi and Turkish, there are furthermore claims that a focused element *must* always come immediately before the verb. One of the goals of the investigation of Burmese was therefore identified as establishing the extent to which Burmese might require its focused elements to occur in immediately pre-verbal position, and also how any pre-verbal focus patterning is syntactically derived.

Because the study was interested in collecting information on both information focus and contrastive focus, the kinds of data examined included both *wh*-questions and correction sentences. *Wh*-questions were used as in other studies of focus to determine where the new information corresponding to a *wh*-question word is normally placed in a long answer form, as e.g. in (8).

While the most frequent type of answer to a *wh*-question is certainly a short answer form providing simply a value for the questioned element, long answer forms repeating more of the material in an input question are nevertheless quite grammatical and occur frequently in certain registers of speech/certain situations. As they are particularly revealing with regard to the effect of information status on sentence structuring, they are the type of answer-form that was predominantly examined here, as indeed in other studies of focus and information structure.

As Burmese is a language which does not automatically position its *wh*-question words sentence-/clause-initially in questions, unlike languages such as English and German (i.e. Burmese seems descriptively be a *wh* in situ language), the study also examined the positioning of *wh*-question words (as foci) relative to other elements in the sentence. Correction sentences such as the second part of speaker B's reply in (14) were used to examine where an element most naturally occurs if it is understood to be a focal centre in strong contrast with some other element, i.e. the patterning of contrastive focus:

(14) A: John likes Sue, I hear.

B: No, you're wrong. Bill likes Sue, (not John).

contrastive focus: Bill

(15) Sentence types/data considered in the study

(a) *wh*-questions and their answers

- used to examine new information focus by:
  - (i) the positioning of the answers to *wh*-questions
  - (ii) the positioning of *wh*-question words themselves

(b) corrections

- used to examine the positioning of contrastive focus

In terms of actual sentence structures, the study examined simple transitive sentences composed of a subject, object and verb in both SOV and OSV patterns, di-transitive double object constructions with an indirect object present in various combinations with the subject and the direct object, and also sentences with 'circumstantial' adverbs expressing the time and/or place of an event (e.g. 'yesterday', 'in the market' etc), which tend to occur most neutrally either before or after the subject of the sentence, as summarised in (16):

(16) Basic sentence patterns used

(a) simple transitive sentences: (i) S O V

(ii) O S V

(b) di-transitive 'double object constructions':

(i) Sub IO DO V

(ii) Sub DO IO V etc

(c) sentences with 'circumstantial' adverbs:

(i) Sub Adv Ob V

(ii) Sub Ob Adv V etc

Concerning the various language informants consulted in the study, during the first part of the investigation where informants were quizzed about their intuitions on the grammaticality and naturalness of different focus-related sentences (as well as being asked to translate various focus sentences), the informants were all native speakers of Burmese with a particular sensitivity to language — either teachers of Burmese, or journalists who regularly wrote news reports and carried out radio broadcasts in Burmese. These informants also had a high level of proficiency in English. In the second part of the investigation which focused on the acoustic production and perception experiments, native speakers were consulted who did not necessarily have any ability in English or a profession related to the production/teaching of Burmese language. With regard to the actual collection of information and testing of data for the first part of the study, this was carried out in two main ways. Most commonly, informants were presented with a variety of constructed data and asked to indicate which forms were grammatical, appropriate in the specified context, and most preferred in the specified context. Certain informants were also asked to translate sentences from English into Burmese, as a means to further establish preferred, natural equivalents to focus structures in English. In the investigation of the positioning of new information focus in Burmese, informants were also often given an initial input in the form of a *wh*-question in English, and asked to respond with a long-answer form in Burmese. Here the use of English had a clear potential advantage over using questions in Burmese to elicit new information focus, as it disallowed the possibility of informants directly (and blindly) copying the physical shape of an input question in Burmese directly into their response form. The use of English in eliciting data and judgements in certain contexts and tests however also required careful attention. Given the fact that Burmese does not have definite and indefinite articles, particular care was necessary to ensure that informants interpreted NPs in English input data in the intended way as being either given/old information when preceded by the definite determiner, or new information when preceded by the indefinite article.

(17) Information collection procedures

- (a) Judgements on constructed data: informants were presented with a range of possible Forms for focus/*wh*-question sentences and asked to indicate which were considered (i) grammatical, (ii) appropriate in the particular context, (iii) most preferred
- (b) Judgements on available interpretations: informants were quizzed about the interpretations they felt were available in various different word orders.
- (c) Translation: informants were asked to translate English sentences into their most natural Burmese equivalents, establishing informants' first natural preference.

In the construction of data to be tested with informants, a number of further variables were manipulated. The first of these was the in/definiteness of the NP referents and given/new distinctions. This was done in various ways: (i) by presenting the NP in the test-target sentence also in a preceding sentence to ensure that it was interpreted as definite/familiar/old information, (ii) by explicit instruction to informants that certain determinerless NPs in Burmese data should be interpreted as new in the discourse and indefinite/previously unidentified, and (iii) in instances where explicit disambiguation of



information was deliberately not provided, informants were asked about their interpretations of NPs and whether these could be naturally construed as familiar/old information, or whether they were interpreted as new, indefinite/previously unidentified information. As anticipated, the in/definiteness value of NPs turned out to be an important factor influencing their placement in the sentence. However it also became necessary to distinguish between different kinds of interpretation with indefinite NPs, namely the specific vs. non-specific interpretation open to indefinite NPs, and generic/type vs. token interpretations.

A second variable controlled for was the relative animacy of NP referents, specified by the values of two parameters:  $\pm$  human and  $\pm$  animate. Such animacy values also seemed to have a potential influence on the placement of NPs in a sentence, but one which is considerably less important than other factors relating to information structure. Finally, a third potentially influential factor that was paid attention to in constructing data to be tested was the prosodic weight/length of NP referents. In experimental data it was found that the prosodic weight of NPs did not seem to have obvious strong effects on the placement of NPs, despite the fact that other languages may show regular repositioning of lengthy NPs in certain configurations (e.g. Heavy NP Shift in English). This is not to claim that prosodic weight effects are fully absent from Burmese. In newspaper-style reporting it is common for long clausal objects to be positioned before a short NP subject, resulting in a non-canonical OSV word order. However, in the regular spoken style of Burmese investigated here, the length of NPs did not seem to have much effect on their positioning, and other factors relating to in/definiteness and specificity seemed to be significantly more important.

During the course of the investigation, for each sentence type and pattern in (15) and (16), and for each information collection procedure type in (17), the variables noted immediately above were manipulated for each grammatical role. Results from investigation of the different sentence types in (15) and (16) and manipulation of the variables were then cross-checked and compared to ensure consistency of judgements across construction types and informants. Where any discrepancies were discovered, relevant data and patterns were checked again. Careful comparison and consideration of the body of data which had been generated then led to the generalisations reported in sections 3.1–3.5 below.

### 3.1 Object focus in transitive sentences

The study began by looking at sequences in which the object of the sentence was in focus. What was consistently found here was that focused objects and objects which were *wh*-question words were placed in the pre-verbal position (which also corresponds to the assumed base position of an object in neutral SOV word order in Burmese). Sentences (18)–(25) show a range of typical patterns and data, subdivided according to whether the object was the reply to a *wh*-question (new information focus), a contrastive focus in a correction sentence, or a *wh*-question word itself.

- Objects as new information focus: replies to *wh*-questions
- Generalisation: the object occurs in the pre-verbal position/its base-position, whether the object is indefinite or definite: S Q V

(18) Input question: ‘What did John buy?’

Response: ဂျန် DVDကို ဝယ်တာ။  
 ၊ ၊ ၊  
 ၊ ၊ ၊  
 John DVD.OBJ buy.REAL<sup>NOM</sup>  
 ‘John bought a DVD.’

(19) Input question: Who does Mary like?

Response: မယ်ရီ ဂျန်ကို ချစ်တယ်။  
 ၊ ၊ ၊  
 ၊ ၊ ၊  
 Mary John.OBJ love.REAL  
 ‘Mary loves John.’

- Objects as contrastive foci in correction sentences.
- Generalisation: the object again occurs in the pre-verbal position, whether the object is indefinite or definite: S Q V

(20) ဂျန်က DVD ဝယ်တာ၊ VCR မဟုတ်ဘူး။  
 ၊ ၊ ၊ ၊ ၊  
 ၊ ၊ ၊ ၊ ၊  
 John.SUBJ DVD buy.REAL<sup>NOM</sup>, VCR NEG.be.NEG  
 ‘John bought a DVD, not a VCR.’

(21) မယ်ရီက ဘစ်(လ်)ကို ချစ်တာ၊ ဂျန် မဟုတ်ဘူး။  
 ၊ ၊ ၊ ၊ ၊  
 ၊ ၊ ၊ ၊ ၊  
 Mary.SUBJ Bill.OBJ love.REAL<sup>NOM</sup>, John NEG.be.NEG  
 ‘Mary loves Bill, not John.’

- Objects as *wh*-question words
- Generalisation: the object occurs in the pre-verbal position: S Q V

(22) မယ်ရီ ဘာ ဝယ်သလဲ။  
 ၊ ၊ ၊  
 ၊ ၊ ၊  
 Mary what buy.REAL.Q-WH  
 ‘What did Mary buy?’

These patterns were confirmed by asking informants whether it would be possible to position the object in sentences such as the above *before* the subject. Informants consistently indicated that this was *not* possible, whether the object was definite or indefinite:

(23) cf (20) ?? DVDက ဂျန်က ဝယ်တာ၊ VCR မဟုတ်ဘူး။  
 ၊ ၊ ၊ ၊ ၊  
 ၊ ၊ ၊ ၊ ၊  
 DVD.OBJ John.SUBJ buy.REAL<sup>NOM</sup> VCR NEG.be.NEG

(24) cf (21) ?? ဘစ်(လ်)ကို မယ်ရီက ချစ်တယ်။ ဂျန် မဟုတ်ဘူး။  
 ၊ ၊ ၊ ၊ ၊  
 ၊ ၊ ၊ ၊ ၊  
 Bill.OBJ Mary.SUBJ love.REAL John NEG.be.NEG

- (25) cf(22) \* ဘာ မယ်ရီ ဝယ်သလဲ။  
 bà mèrì wè.ðə.lé  
 what Mary buy.REAL.Q-WH

### 3.2 Subject focus in transitive sentences

Having examined the positioning of focused objects in transitive sentences involving simply a subject, object and a verb, the study then considered where the subject is positioned in similar transitive sentences when it is in focus as a new information focus, a contrastive focus, and as a *wh*-phrase. The common finding was that focused subjects are, like focused objects, regularly and most naturally positioned before the verb, resulting in an OSV order. Note that the data in this section observes the patterning when the object NP is definite. The combination of subject focus with an object that is indefinite is described in section 3.3.

- Subjects as new information focus: replies to WH-questions (26)
- Generalisation: the subject-focus commonly occurs in the pre-verbal position, following the object, when the object is definite: O S V:

- (26) Input question: Who helped you?

Response: ကျွန်တော့်ကို ဂျန်က ကူညီတာပါ။  
 tɕənɔ̌.gò dʒùn kùjì.dà.bà  
 I.OBJ John.SUBJ help.REAL<sup>NOM</sup>.POL  
 ‘John helped me.’

- Subjects as contrastive foci: in correction sentences (27)
- Generalisation: the subject again occurs in the pre-verbal position, following a definite object: O S V:

- (27) ဒီစာအုပ်ကို ဂျန်က ယူလာတာ၊ မယ်ရီက မဟုတ်ဘူး။  
 dì.sà?ou?kò dʒùn.gà jù.là.dà, mèrì.gà mə.hou?pʰú  
 this.book.OBJ John.SUBJ bring.come.REAL<sup>NOM</sup>, Mary.SUBJ NEG.be.NEG.  
 ‘John brought this book, not Mary.’

- Subjects as *wh*-question words (28)
- Generalisation: the subject occurs in the pre-verbal position, following a definite object: O S V

- (28) ဒီစာအုပ်ကို ဘယ်သူက ယူလာသလဲ။  
 dì.sà?ou?kò bɛ̀ðù.gà jù.là.ðə.lé  
 this.book.OBJ who.SUBJ bring.come.REAL.Q-WH  
 ‘Who brought this book?’

The data in (18)–(28) therefore all indicate that the focus of a sentence is commonly placed in pre-verbal position. Such a generalisation applies to both new information focus and contrastive focus.

### 3.3 Indefinite objects in subject focus sentences

The study also investigated the distribution of indefinite objects in subject focus sentences. Although it is more common for objects to be definite/old information in subject-focus sentences, comprising part of the background, presupposed information, there are certain contexts in which a subject focus sentence can naturally contain an object which is indefinite. The testing of a variety of such sentences/contexts led to results which were partly different from those where the object is definite. What was observed was that certain indefinite objects were placed in a position preceding the subject (as in subject focus sentences where the object is definite), but others were positioned in a position following the subject, resulting in an SOV order which reflects the neutral/assumed underlying order of elements in Burmese. Concerning the first, OSV ordering, this was found to occur in two sets of conditions. The first of these was where an NP functioning as an indefinite object in a subject focus sentence had been explicitly referred to in some way as a type, or generic member of a group. For example, (30) below was a translation task, and informants were asked to translate the English sentence: ‘Who picked a history book?’. As a background to the target sentence, informants were given a particular context which involved schoolchildren picking prizes after answering questions in a classroom quiz, and the prizes available were history books, novels, and writing pads. This pre-mention of ‘history books’ as a type then resulted in informants commonly producing an OSV order, as indicated in (29) below:

- Subject (*wh*) focus sentence, indefinite (but pre-mentioned) generic/type object
- Generalisation: OSV order

(29) Context given: children in a school are picking prizes from three types of objects: history books, novels, writing pads.

သမိုင်းစာအုပ်ကို	ဘယ်သူ	ရွေးသလဲ။
θəmáin.sàʔouʔ.kò	bèðù	jwé.ðə.lé.
history.book.OBJ	who	choose.REAL.Q-WH

‘Who picked a history book?’ → O S V

The second condition which resulted in the production of an OSV order was where the context given to informants led them to interpret the object as a *specific* indefinite NP (i.e. as an NP whose identity is known to either the speaker or some other discourse referent, but not the hearer). For example, informants were asked to imagine that they were watching a film of a crime scene investigation in which police agents were searching an apartment for a letter they believed must have been written and also must have been hidden in the apartment. With such a background context, informants were asked to translate the target sentence: ‘Which policeman is looking for a letter to the general?’, and this regularly resulted in an OSV order with the specific indefinite NP object positioned before the questioned/focal subject, as in (30).

- Subject (*wh*) focus sentence, specific indefinite object
- Generalisation: OSV order
- Context given: the investigation of a murder scene at which several policemen are carrying out various tasks.

(30)

ပိုလ်ချုပ်ဆီရေးတဲ့စာကို      ဘယ်ရဲသားက      ရှာနေတာလဲ။  
 bòdzouʔ.sʰi.jé.dɛ.sà.gò      bɛ̃jéðá.ga      ʃa.nè.dà.lé.  
 general.to.write.ATTR.letter.OBJ    which.policeman.SUBJ    search.CONT.REAL<sup>NOM</sup>.Q-WH  
 ‘Which policeman is searching for a letter to the general?’ → O S V

When the above two conditions did not hold and indefinite objects were *not* pre-mentioned or inferable as specific, however, it was found that an SOV order resulted, and non-specific indefinite objects were positioned following the focused/*wh* subject, as in (31).

- Subject (*wh*) focus sentence, non-specific indefinite object
- Generalisation: SOV order
- Context: a picture presented to informants with various people engaged in different activities. Task: translate the sentence: ‘Who is reading a book?’

(31) ဘယ်သူ စာအုပ် ဖတ်နေသလဲ။  
 bɛ̃ðù      sàʔou?      pʰaʔ.nè.ðə.lé.  
 who      book      read.CONT.REAL.Q-WH  
 ‘Who is reading a book?’

Data such as (31) therefore indicate that a *wh*-question word does not have to occur immediately before the verb, but can be separated from the verb by a non-specific indefinite object NP. Such examples may however also allow for the analysis that the object is *incorporated* into the verb and so forms a complex verbal predicate. If such an analysis could be maintained, one might not need to conclude that *wh* elements may be separated from the verb by other syntactic arguments.

Note that in addition to sentences with *wh* subjects, similar patterns were found to occur in sentences where the subject occurred as a new information focus and as a contrastive focus, i.e. an SOV order was found with non-specific indefinite objects, and an OSV order with specific or pre-mentioned generic object NPs.

### 3.4 Focus patterns in double object/di-transitive constructions

The positioning of focused elements was also investigated in sentences with both a direct object NP and an indirect object NP introduced by a di-transitive verb such as *pé* ‘give’. When the focused element was the direct object of the verb, it was found that this occurs immediately preceding the verb, as shown in (32)(33) and (35), where the object is respectively a *wh*-phrase, a new information focus, and a contrastive focus. Examples (34) and (36) illustrate that it is not possible/is highly unnatural to place the direct object in a position preceding the indirect object when the direct object is interpreted as being in focus.

- Direct objects as foci in double object/di-transitive sentences
- Generalisation: S IO DO V order, and not: \*/?? S DO IO V

- (32) ခင်ဗျား ညွှန်မှူးကို ဘာ ပေးလိုက်သလဲ။  
 kʰəmja̰ ɲùnɴṵ.ɡò bà pé.laiʔ.θə.lé.  
 you director.to what give.just.REAL.Q-WH  
 ‘What did you give to the director?’ → S IO DO V.
- (33) ကျွန်တော် ညွှန်မှူးကို မှတ်တမ်း ပေးလိုက်တယ်။  
 tɕənò ɲùnɴṵ.ɡò ṁaʔtán pé.laiʔ.tè.  
 I director.to report give.just.REAL.  
 ‘I gave the director the report.’ → S IO DO V
- (34) ?? ကျွန်တော် မှတ်တမ်း ညွှန်မှူးကို ပေးလိုက်တယ်။  
 tɕənò ṁaʔtán ɲùnɴṵ.ɡò pé.laiʔ.tè.  
 I report director.to give.just.REAL.
- (35) ဂျန် ကျောင်းသားကို ဗွီဒီယိုတိပ် ပေးတာ၊ စာအုပ် မဟုတ်ဘူး။  
 tɕún tɕáunθá.ɡò vɨdijò.teiʔ pé.dà, sàʔouʔ mə.houʔ.pʰú  
 John student.to video.tape give.REAL<sup>NOM</sup>, book NEG.be.NEG  
 ‘John gave the student a video tape, not a book.’ → S IO DO V
- (36) ?? ဂျန် ဗွီဒီယိုတိပ် ကျောင်းသားကို ပေးတာ၊ စာအုပ် မဟုတ်ဘူး။  
 tɕún vɨdijò.teiʔ tɕáunθá.ɡò pé.dà, sàʔouʔ mə.houʔ.pʰú  
 John video.tape student.to give.REAL<sup>NOM</sup>, book NEG.be.NEG
- Data where the indirect object is in focus was then tested. Interestingly, it was found here that two different orders were commonly indicated as being available. First of all, if the direct object is definite/old information, it is possible for an S DO IO V order to occur, as shown in (37)–(39) where the indirect object occurs as a *wh*-phrase, a new information focus, and as a contrastive focus.
- Indirect objects as foci in double object/di-transitive sentences
  - Possibility I, if the direct object is definite: S DO IO V
- (37) ဂျန် မှတ်တမ်းကို ဘယ်သူ့ကို ပေးလိုက်သလဲ။  
 tɕún ṁaʔtán.ɡò bèθy.ɡò pé.laiʔ.θə.lé.  
 John report.OBJ who.to give.just.REAL.Q-WH  
 ‘Who did John give the report to?’ → Sub DO IO V
- (38) ကျွန်တော်သိသလောက် ဂျန် မှတ်တမ်းကို ညွှန်မှူးကို ပေးလိုက်တယ်။  
 tɕənò.θi.ðə.lauʔ tɕún ṁaʔtán.ɡò ɲùnɴṵ.ɡò pé.laiʔ.tè.  
 I know.REAL.extent John report.OBJ director.to give.just.REAL.  
 ‘As far as I know, John gave the report to the director.’ → Sub DO IO V

- (39) မဟုတ်ပါဘူး။ ဂျန် မှတ်တမ်းကို အတွင်းရေးမှူးကို ပေးတာ။  
 mə.hou?pà.pʰú ၵဲနဲၵ် ၵာ?tán.gò ʔətwinjémú.gò pé.dè.  
 NEG.be.POL.NEG John report.OBJ secretary.to give.just.REAL<sup>NOM</sup>  
 'No, that's not right. John gave the report to *the secretary* [not to the director].'  
 → Sub DO IO V

Elsewhere, however, it was found that the focused indirect object could occur preceding the direct object resulting in a S IO DO V order. Significantly, this possibility also seems to be available whether the direct object is indefinite or definite and so is not linked to the information status of the direct object, as in (40), (41) and (42).

- Indirect objects as foci in double object/di-transitive sentences
- Possibility II: S IO DO V available whether the direct object is definite or indefinite

- (40) ဂျန် ဘယ်ကလေးကို နာရီ ပေးသလဲ။  
 ၵဲနဲၵ် bè.kʰalé.gò nàjì pé.ðə.lé.  
 John which.child.to watch give.REAL.Q-WH.  
 'Which of his children did John give a watch to?'  
 → Sub IO DO V

- (41) ဂျန် မယ်ရီကို နာရီ ပေးတယ်။  
 ၵဲနဲၵ် mèrì.gò nàjì pé.dè.  
 John Mary.to watch give.REAL.  
 'John gave *Mary* a watch.' → Sub IO DO V

- (42) မဟုတ်ပါဘူး။ ဂျန် အတွင်းရေးမှူးကို မှတ်တမ်း ပေးတာ။  
 mə.hou?pà.pʰú ၵဲနဲၵ် ʔətwinjémú.gò ၵာ?tán pé.dà.  
 NEG.be.POL.NEG John secretary.to report give.REAL<sup>NOM</sup>  
 'No, that's not right. John gave the report to *the secretary* [not to the director].'  
 → Sub IO DO V

The possibility that a focused indirect object can be separated from the verb by a direct object which is interpreted as *definite* and referential as in (42) suggests that the DO+V sequence here is *not* a case of simple morphological incorporation of the object with the verb, as incorporation is normally restricted to applying only to indefinite nouns. Consequently, examples of S IO DO V orders with definite direct objects are cases where the focused NP in a sentence actually does *not* immediately precede the verb and is separated from it by another referential argument NP.

### 3.5 Focused adverbs/PPs

A similar optional ability for an object to occur separating a focused element from the verb was found where the focused element was an *adverb* or a PP (postpositional phrase) indicating place, time or reason. Here as in the case of double object constructions with a focused indirect object two patterns were actually indicated to be naturally available.

Frequently the object of the verb (and all other arguments) precede the focused Adv/PP, so that the focused Adv/PP is in fact immediately pre-verbal, as shown in (43):

- Adverbs/PPs as foci in transitive sentences
- Possibility I: Sub Ob Adv/PP V

(43) မဟုတ်ဘူး။ ဦးလှသိန်း ကွန်ပျူတာ မနေ့က ဝယ်တာ၊  
 mə.houʔ.pʰú ʔú.ʔaθéin kùnpjùtə mənɛɡə wè.dà,  
 NEG.be.NEG. UHlaThein computer yesterday buy.REAL<sup>NOM</sup>,

ဒီနေ့ မဟုတ်ဘူး။  
 dìŋɛ mə.houʔ.pʰú  
 today NEG.be.NEG

‘No. U Hla Thein bought a computer *yesterday*, not today.’

However, it was also found to be possible for either an indefinite *or* a definite object to follow a focused Adv/PP, as in (44).

- Adverbs/PPs as foci in transitive sentences
- Possibility II: Sub Ob Adv/PP V

(44) Question prompt to answer: When did you read the report?

ကျွန်တော် မနေ့က မှတတမ်း ဖတ်တယ်။  
 tɕəŋə mənɛɡə ɲaʔtán pʰaʔ.tè.  
 I yesterday report read.REAL.  
 ‘I read the report *yesterday*.’

### 3.6 Summary of observed patterns

Certain global generalisations about the positioning of focus in Burmese can be extracted from a comparison of the patterns in 3.1–3.5, and these can be usefully described as deviations from the most neutral ordering of elements in a sentence. (45) below represents what can be taken to be the neutral, basic word of arguments and circumstantial adverbs in Burmese, and is a sequencing which does not automatically result in any special kind of topic or focus interpretation of any of the elements present, unlike other kinds of ordering. See also Wheatley (1982) and Okell (1969) for reference to canonical word-order patterns in Burmese.

#### (45) Neutral surface word order in Burmese

Sub Adv/PP<sub>(time/place)</sub> IO DO V

When any of the elements Sub, Adv/PP, IO or DO are the focus of the sentence, the data observed in sections 3.1–3.5 indicate that two patterns generally appear to be possible. In one common pattern it can be suggested that the focused element remains/occurs in the position it would regularly occur in in the neutral template in (45) and any other element which would otherwise normally occur between this focused element and the verb (in a



neutral ordering of elements) is (re-)positioned to the left of the focus. This results in the 'pre-verbal' focus effect, as schematised in (46) (focus underlined), and non-focal material which might intervene between the focus and the verb is evacuated from this position so that the focus occurs immediately preceding the verb. Described via the metaphor of 'movement' within a transformational approach, it can be suggested that the neutral underlying order of elements in (45) is converted into a different sequencing via the leftwards movement of non-focal elements which would otherwise intervene between the focus and the verb.

(46) Leftward repositioning of non-focal material

	<i>Neutral order</i>	<i>Order with focus</i>	<i>Analysed as movement</i>
a.	Sub IO DO V	Sub DO <u>IO</u> V	Sub DO <u>IO</u> <del>DO</del> V
b.	Sub DO V	DO <u>Sub</u> V	DO <u>Sub</u> <del>DO</del> V
c.	Sub Adv/PP DO V	Sub DO <u>Adv/PP</u> V	Sub DO <u>Adv/PP</u> <del>DO</del> V

Investigation indicates that this re-positioning of non-focal material is generally possible only when the repositioned material is informationally old in some sense: preferentially definite, and specific if indefinite (as in (30)), or pre-mentioned if a non-specific generic/type NP (as in (29)). Further data not presented here also indicate that the more 'affected' the non-focal material is by the action of the verb, and the more it is possible for the non-focal material to be a potentially emotive centre/centre of interest, the more natural this repositioning becomes. The leftwards repositioning described here can therefore be seen as a sub-type of clause-internal topicalisation—although the repositioning does not *necessarily* promote the NP to become a topic, like the leftwards positioning of elements to sentence-initial topic position, it is restricted to occurring with elements that are referentially given (in a certain sense).

It should also be noted that the NPs which undergo clause-internal repositioning in (46)a–c could alternatively be positioned in sentence/clause-initial position preceding the subject, which would result in an increase in prominence of the NP and more of a necessary topic-like interpretation.

A potentially different analysis of the relation of neutral base forms to derived surface focus structures might be to suggest that it is the focused element itself which moves/undergoes repositioning from its underlying base position to a position to the immediate left of the verb, as e.g. in (47), and that all other non-focal elements remain in their underlying base positions:

(47) Sub DO V → ~~Sub~~ DO Sub V

However, if such an analysis were to be maintained, there would be no explanation of why this movement should be restricted to occur only when the non-focal material intervening between the focus and the verb is informationally old. If non-focal material is assumed to simply remain in its underlying, regular base position, it should clearly be possible for non-specific indefinite NPs that are informationally new to be 'moved over' by the focus. However, the output sequencing in (47) is not possible if the DO is informationally new. This restriction is much easier to capture in an analysis which assumes that it is informationally old material that moves away from the pre-verbal focus position allowing the focused element to occur linearly before the verb. Furthermore, if the DO is assumed

to be in its base position in (47) and occur as the complement of the verb forming a constituent with the verb, there should be no syntactic position available for the focused subject to move to, so such rightwards focus movement can be ruled out on purely theoretical grounds as well.

The second pattern observed in 3.1–3.5 is for non-focal elements to the right of a focused NP/Adv/PP to remain in their base positions (i.e. to remain in the position that they would otherwise occur in in the template in (45)). This is most common with direct objects when some other element further to the left in the underlying/base order such as the subject or an Adv/PP is focused. Such a strategy results in the focused subject/Adv/PP *not* being immediately adjacent to the verb. This second patterning is again consistent with the assumption that the focused element itself is not moved/repositioned away from its base position. What (arguably) occurs in the second patterning is that the direct object simply fails to move away from its underlying, normal pre-verbal position:

(48) Non-repositioning of non-focal elements which occur to the right of the focus in underlying/base word order

	Neutral order	Order with focus
(a)	Sub DO V	<u>Sub</u> DO V
(b)	Sub Adv/PP DO V	Sub <u>Adv/PP</u> DO V

What does *not* seem to be found, apparently, therefore, is any obvious, regularised repositioning of focal elements themselves (unlike in languages such as Hungarian, where contrastively focused and *wh* elements are clearly always moved to a special pre-verbal position from their post-verbal base positions). During the course of the investigation, informants were in fact also presented with data in which a focused element was deliberately removed from its regular base/underlying position and relocated further to the left as schematised in (49). Such data, in which a focused element occurs to the *left* of elements which would normally occur to its right in neutral word order, were regularly rejected as unnatural and inappropriate. Examples of such orders are given in (49). The symbol # indicates that sequences of this type are ill-formed in the context of the underlined element being the focus of the sentence (the answer to a *wh*-question, or contrastive focus in a correction sentence):

(49) Orders not attested (inappropriate in context/unnatural)

- (a) #Ob Sub V
- (b) #Sub DO IO V
- (c) #Adv/PP Sub DO V
- (d) #Sub Ob Adv/PP IO V

The occurrence of the orders in (46) and (48) but non-occurrence of those in (49) can be accounted for most naturally, it would seem, if it is assumed that focused elements do not tolerate repositioning within a sentence and simply remain in their underlying/base position, whereas other, informationally old elements may be optionally repositioned further to the left of the element in focus. The data examined furthermore indicates that this generalisation holds equally of both new information focus *and* contrastive focus. Studies of other languages with neutral SOV word order such as Korean and German have

indicated that contrastively focused NPs can be repositioned further to the left in the clause than their regular base position, hence that orders such as those in (49) are in fact possible with contrastive (but not completive) focus. It was therefore partly anticipated that this might be possible in Burmese too. However, informants regularly resisted the leftwards shifting of contrastively focused NPs, suggesting that Burmese is rather different from Korean and German in this respect.

Finally, it can be noted that the general observation of apparently optional word order variation in certain focus sentences (schematised in (46) and (48)) requires some further qualification. First of all, concerning frequency and naturalness of occurrence, informants tended to make much more spontaneous use of the first 're-positioning' strategy (i.e. the forms in (46)) in interview sessions, and the second strategy (schematised in (48)) where non-focal elements occurring to the right of the focus are not repositioned to the left was often noted to be possible only when informants were specifically quizzed further about different potential word orders in focus sentences. This was particularly the case when the intervening non-focal material was a definite or specific indefinite object rather than a non-specific indefinite object. Secondly, there appear to be limits on the way that the second strategy can be naturally used. Essentially it was found that a focused element such as a subject, adverbial/PP or indirect object can be naturally separated from the verb by one element (normally an object), as schematised in (50), but if more material occurs separating the focus from the verb, as schematised in (51), this results in the focus sequence being considerably less natural. Note also that the generalisation that one constituent can naturally/tolerably intervene between the focus and the verb does not allow for sequences such as those in (49) to occur, however, where the focus constituent is repositioned leftwards from its neutral base position. The separation of a focused constituent from the verb appears to be possible only when this results from the non-removal of an intervening (non-focal) constituent from its neutral/base position in the template sequence in (45).

(50) Acceptable occurrence of a single element between the focus and the verb

- (a) Sub DO V
- (b) Sub Adv/PP DO V
- (c) Sub IO DO V

(51) Unnatural occurrence of more than one element between the focus and the verb

- (a) ?? Sub Adv/PP DO V
- (b) ?? Sub IO DO V
- (c) ??? Sub Adv/PP IO DO V

There consequently appears to be a 'tolerance level' regulating how far a focused element can be naturally distanced/separated from the pre-verbal position, and when more than one element intervenes between the focus and the verb, such forms clearly deteriorate in their acceptability. What regularly occurred when the attempt was made to elicit subject focus sentences where more than one other element occurred in addition to the verb was that informants would either make use of the repositioning strategy so that the subject came to be adjacent to the verb, as for example in (52), or they would switch to a rather different syntactic construction, a cleft structure, as in (53):

(52) Sub IO DO V → IO Sub ~~IO~~ DO V

မဟုတ်ပါဘူး။ မယ်ရီကို ဂျန်က စာအုပ် ပေးတယ်။  
 mə.houʔ.pà.bú mèrì.gò ʔún.ga sàʔouʔ pé.dɛ̃  
 NEG.be.POL.NEG Mary.OBJ John.SUBJ book give.REAL  
 'No, that's not right, *John* gave Mary a/the book.' [i.e. not Bill]

(53) မဟုတ်ပါဘူး။ မယ်ရီကို စာအုပ်ကို ပေးတာက ဂျန်ပါ။  
 mə.houʔ.pà.bú mèrì.gò sàʔouʔ pé.dà.ga ʔún.bà  
 NEG.be.POL.NEG Mary.OBJ book give.REAL<sup>NOM</sup>.SUBJ John.POL  
 'No, that's not right, *John* gave Mary a/the book.' [i.e. not Bill]

Due to such qualifications, and in order to test how the alternations between the two strategies might perhaps relate to prosodic factors, a second part of the investigation was initiated focusing on intonation and the potential use of stress in focus sentences. This is now described in section 4.

#### 4 Prosody and intonation in focus sentences

The general aim of the second part of the investigation was to test whether there is any prosodic signaling of focus in Burmese, perhaps via the use of stress. Having established that there is a strong *positional* encoding of focus and that focused elements occur either in the immediately preverbal position or sometimes separated from the verb by a single constituent, we hoped to determine whether this positioning is accompanied by any additional prosodic indication of focus. We also wanted to try to establish whether there might be sufficient intonational information present with focused elements to even disambiguate potentially ambiguous sentences presented out of context. A potential complicating factor here is the fact that Burmese is a tone language. It has often been assumed that the existence of tone may interfere with, constrain or even block the use of stress to highlight elements within a language. In the experimental work reported here, lexical items were deliberately selected so that all syllables used in the data have low tone. This was done so as to keep such a preliminary investigation to a manageable scale by excluding comparisons across tonal categories from the experimental design. Further study will therefore be required to investigate the effects of focus on stress patterns across all four lexical tones in Burmese. Finally, a related question we hoped to probe in the study was whether the pre-verbal positioning of foci in Burmese might possibly be attributed to the default location of *nuclear stress* in such a position, as argued by certain authors for verb-final focus structures in other languages such as German and Hindi.

##### 4.1 Design of the phonetic experiment

The experiment consisted of two major parts – a production experiment designed to gather information on intonational patterns in sentences with focus occurring on different constituents, and a perception test, structured so as to establish how well the identity of the focus in a sentence can (or cannot) be perceived from intonational patterns alone. The two parts of the investigation fed into each other, and recordings made in the production experiment were played to those participating in the perception experiment (a different

group of native speakers). As the goal of the perception test was to establish how well focus could be perceived from the phonetic signal alone, an important aspect of the experiment was to make use of sentences which structurally would allow for the possibility of different constituents being interpreted as the focus of the sentence (i.e. be potentially ambiguous as to what part of the sentence corresponds to). In order to allow for this and to gather a range of different information, the two sentences in (54) and (55) were used extensively in the experiments.

- (54) မာမာ            နာရီ            ဝယ်ပါတယ်။  
           mà mà        nà jì        wè.bà.dè  
           MarMar    watch    buy.POL.REAL  
           ‘Mar Mar bought a/the watch/watches.’

- (55) မာမာ            ရန်ကုန်မှာ        နာရီ            ဝယ်ပါတယ်။  
           mà mà        jàngòun.mà    nà jì        wè.bà.dè  
           MarMar    Yangon.in    watch    buy.POL.REAL  
           ‘Mar Mar bought a/the watch/watches in Yangon.’

Given the observation from section 3 that a focused element need not always be immediately pre-verbal, the sentences (54) and (55) can theoretically serve as the reply to a number of questions, in which case the part of the sentence which provides an answer value to the question will constitute new information focus. For example, sentence (54) can naturally serve as the reply to any of the following questions:

- (56)
- What did MarMar buy?    narrow object focus
  - Who bought a watch?    narrow subject focus
  - What did MarMar do?    VP focus
  - What happened?        broad S focus

(54) used to reply to questions of the type in (56) will produce narrow focus on the object နာရီ nà jì ‘watch’ when responding to an (a)-type question, and narrow focus on the subject မာမာ mà mà ‘MarMar’ when responding to the (b). When (c) and (d) type questions are asked, (54) will produce new information focus on နာရီဝယ် nà jì.wè ‘watch.buy’ (VP focus) for a (c)-type question, and broad sentential focus (consisting in the whole of (54)) for a (d)-type input.

In a similar way, sentence (55) can naturally serve as the answer form to the questions in (57):

- (57)
- What did MarMar buy?                    narrow object focus
  - Where did MarMar buy a watch?    narrow adverb focus
  - What did MarMar do?                    VP focus
  - What happened?                        broad S focus

Note that because it is felt to be quite unnatural for a focus to be separated from the verb by more than one constituent, sentence (55) could not be used as a natural reply to a fifth

possible question 'Who bought a watch in Rangoon?'. As the experiment hoped to gather information on narrow focus on an Adverb/PP preceding a direct object, and also wanted to test narrow focus on a subject preceding some other constituent, this resulted in the need for two sentences to be used rather than one. (54) critically allows for testing of narrow focus on the subject, and (55) for narrow focus on an Adv/PP. Finally, note that both sentences (54) and (55) follow the neutral ordering of elements in a sentence (i.e. (45)), hence there is no biasing towards any particular order due to the positions that the elements occur in.

In the production/elicitation experiments, four native speakers were recorded pronouncing sentences (54) and (55) as if they were the replies to the range of different questions in (56) and (57), varying the prosody of (54) and (55) as appropriate and necessary. Four speakers were chosen to produce the spoken material, all from Yangon and in their twenties or thirties. None reported abnormal speech or hearing, and one of the four was an experienced radio broadcaster and newsreader. The varied questions in (56)a–d and (57)a–d triggering the pronunciation of (54) and (55) as reply forms were asked by an interviewer in Burmese in quasi-random order, and the question and answer-pairs were recorded in the sound-proofed recording studio at the School of Oriental and African Studies in London on digital audio tape (DAT) using an electret condenser microphone with a Bruel-Kjær 2069 preamplifier. Each of the four consultants responded a total of three times to each question, yielding ( $4 \times 3 \times 4 =$ ) 48 tokens for each experiment. Finally, it can be noted that the sentences (54) and (55) used as reply forms were designed so that the consonants which occur at constituent boundaries are either sonorants or resonants, to keep pitch perturbation effects to a minimum.

Recordings of the same sentences pronounced with different interpretations in mind allowed for a careful acoustic analysis of the potential prosodic manifestation of focus in each case, and extensive phonetic information about both narrow and broad focus. In the follow-up perception test, the various recordings of the sentences in (54) and (55) were presented to native-speaker subjects as described in section 4.3 below. The subjects were asked to indicate which of the various interpretations in (56) and (57) the sentences were responding to. This test was intended to formally establish whether there was sufficient prosodic information in the pronunciation of focus sentences to disambiguate different focus structures within a single sequence of words.

## 4.2 Results I: the production experiments

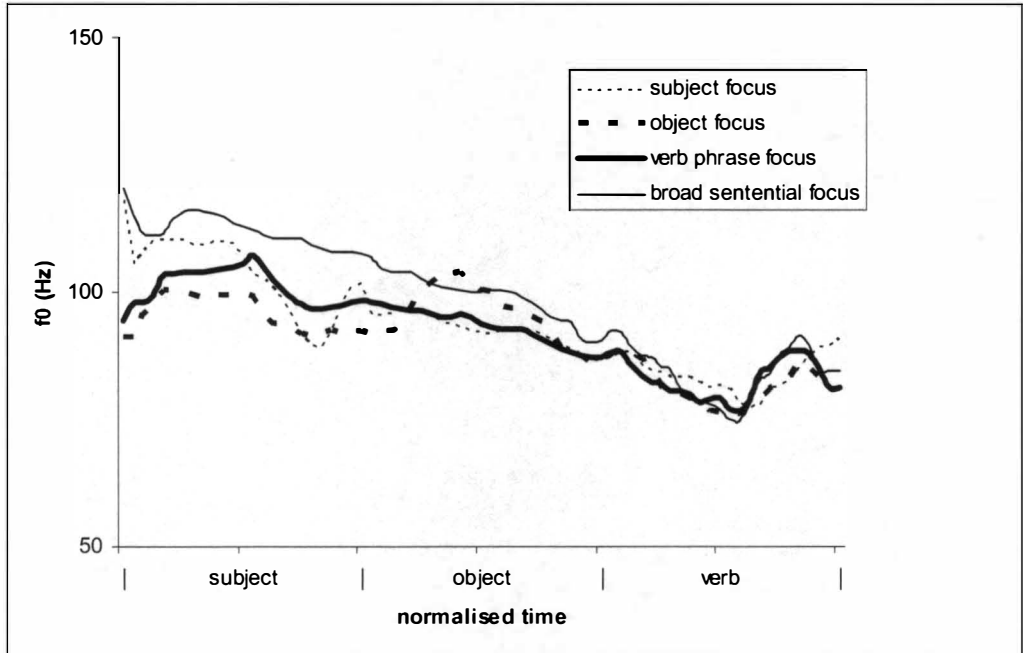
The recordings of the production experiments detailed below were analysed using Praat (version 4.3.12) speech analysis software, also making use of a time-normalising script by Yi Xu (Xu 2005).

### Production experiment 1

(58) and (59) illustrate pitch traces (measured as fundamental frequency in Hz) of four versions of sentence (54) spoken by two of the consultants — one male and one female — in response to the four prompt questions. The duration of the subject, object and verb phrase have been normalised for ease of comparison, so the duration of each appears equal on the horizontal axis.

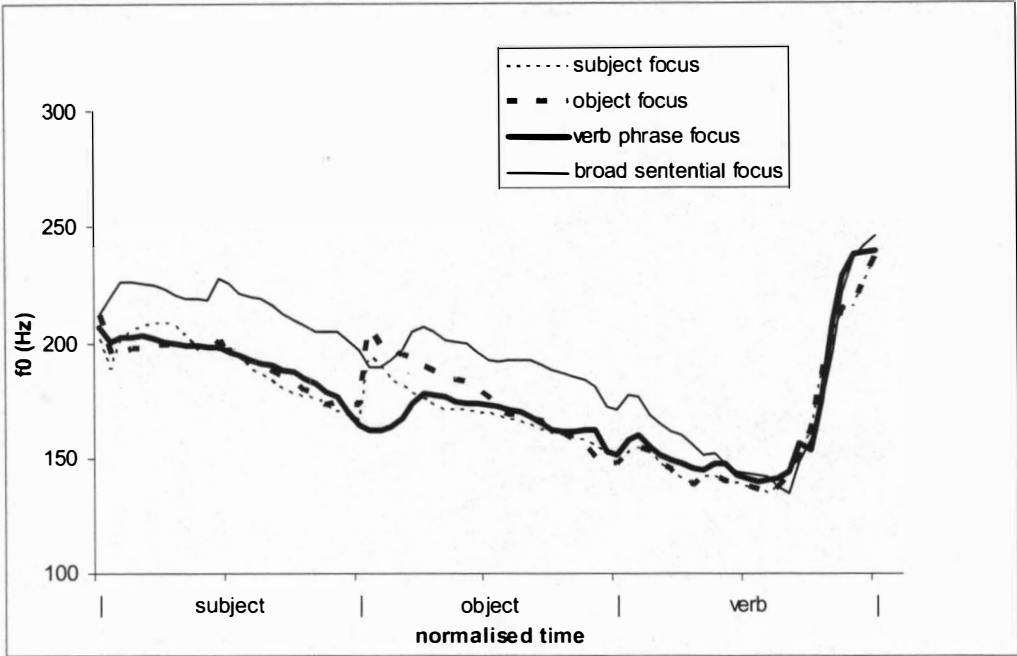
The representations of pitch change in (58), (59), (63) and (64) show a final rise in pitch on the sentence-final verb marker တယ် *tè*. This rise is associated with a formal reading speech-style, and is not relevant to the focus-related pitch changes under investigation.

- (58) Sample, typical fundamental frequency traces (male speaker) of sentence (54) ‘Mar Mar bought a watch’.



မာမာ နာရီ ဝယ်ပါတယ်။  
 màmà nàjì wè.bà.dè  
 MarMar watch buy.POL.REAL

(59) Sample, typical f0 traces (female speaker) of sentence (53) ‘Mar Mar bought a watch’

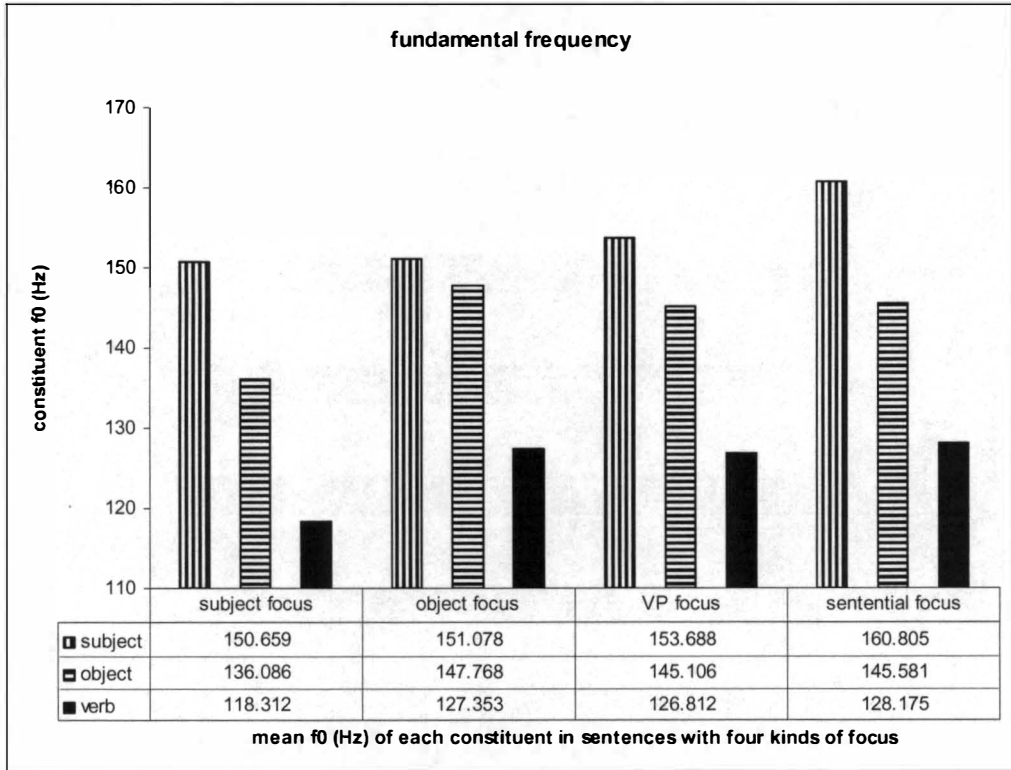


မာမာ နာရီ ဝယ်ပါတယ်။  
 màmà nàjì wè.bà.dè  
 MarMar watch buy.POL.REAL

Patterns in the data were sought by listening to and scrutinising the sentences, and by using the Praat software to reduce the f0 traces from all 64 sentences to a mean f0 measurement for each constituent in each sentence. The mean f0 data are displayed in (60) below. Each set of three columns represents the mean f0 (pitch height) of the three constituents (မာမာ màmà ‘MarMar’, နာရီ nàjì ‘watch’ and the final verbal cluster) in the twelve sentences spoken with each focus type. The bars thus represent the pooled data of all four speakers, two male and two female. It is assumed in calculating these means that between-speaker variation in the pitch, duration and loudness of the habitual speaking voices of the four speakers is constant.



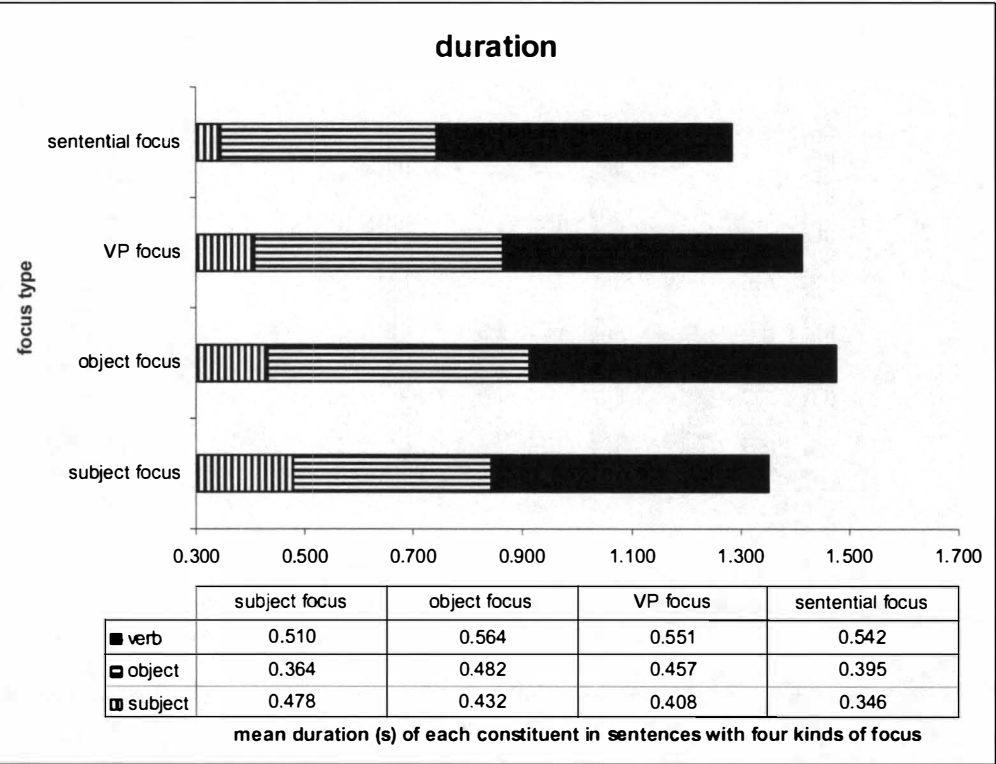
(60) mean (n=12) fundamental frequency of each constituent in sentence (54) spoken with each of four kinds of focus (i.e. as answers to Burmese equivalents of (56)a–d).



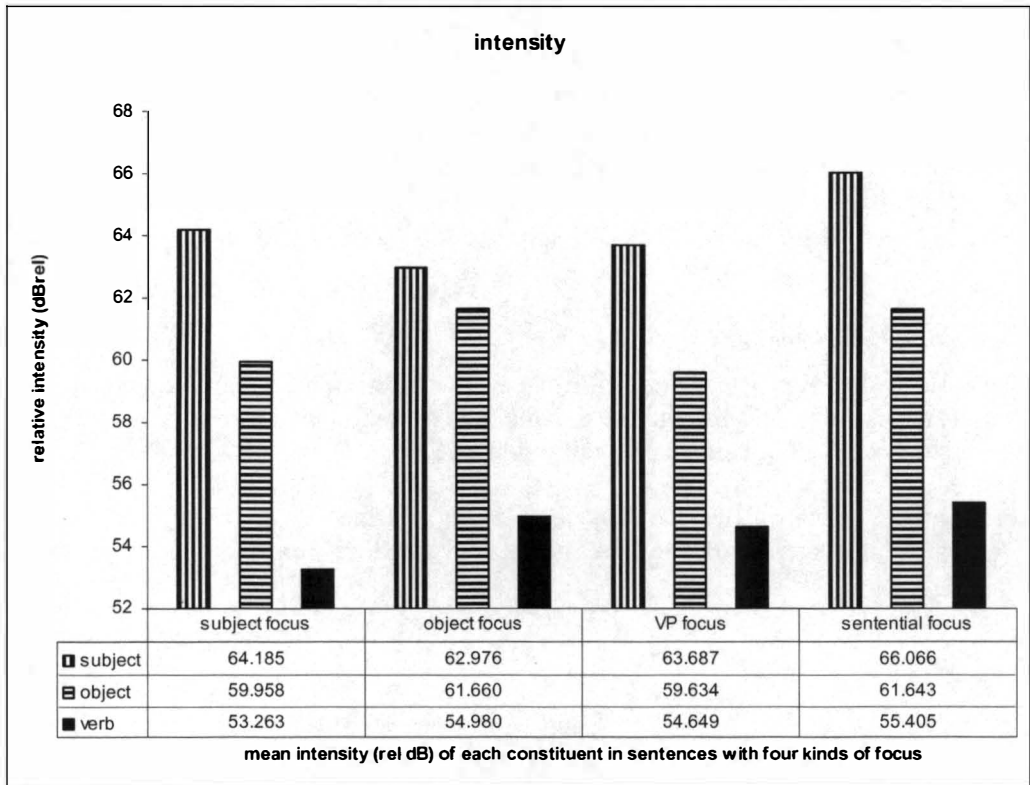
The intensity and duration measurements of each constituent in each sentence were pooled in a similar fashion. The results are displayed in (61) and (62) below. To allow visual comparison of the total utterance length, mean duration is displayed using horizontal bars.

(61) mean (n=12) duration of each constituent in sentence (54) spoken with each of four kinds of focus.

SUBJECT    OBJECT    VERB  
မာမာ        နာရီ        ဝယ်ပါတယ်။  
mà mà    nà jì        wè.bà.dè  
MarMar    watch      buy.POL.REAL



(62) mean (n=12) relative intensity of each constituent in sentence (54) spoken with each of four kinds of focus.



### Observations

Note that the declination of fundamental frequency and intensity through all of the sentences is a universal prosodic template and is not attributable to any focus effects (i.e. it is natural for speakers to gradually lower their pitch levels and reduce the loudness of their speech during the course of a sentence, whether producing a sentence with focus in it or not). However, scrutiny of the pooled data and the individual traces like those in (58) suggests that focus affects sentence prosody according to the following general patterns of deviation from this template:

#### *fundamental frequency*

- VP vs broad sentential focus:  $f_0$  generally starts higher and declines more rapidly for broad sentential focus than for verb phrase focus
- object focus: object  $f_0$  is higher
- subject focus: object and V  $f_0$  is lower (deaccented), but subject  $f_0$  is no higher.

#### *duration*

- VP vs broad focus: the sentence is shorter with broad sentential focus than with VP focus; the subject is very short with broad sentential focus
- object focus: the subject is shorter, the object is longer

- subject focus: the subject is longer, the object and the verb are shorter (deaccented)

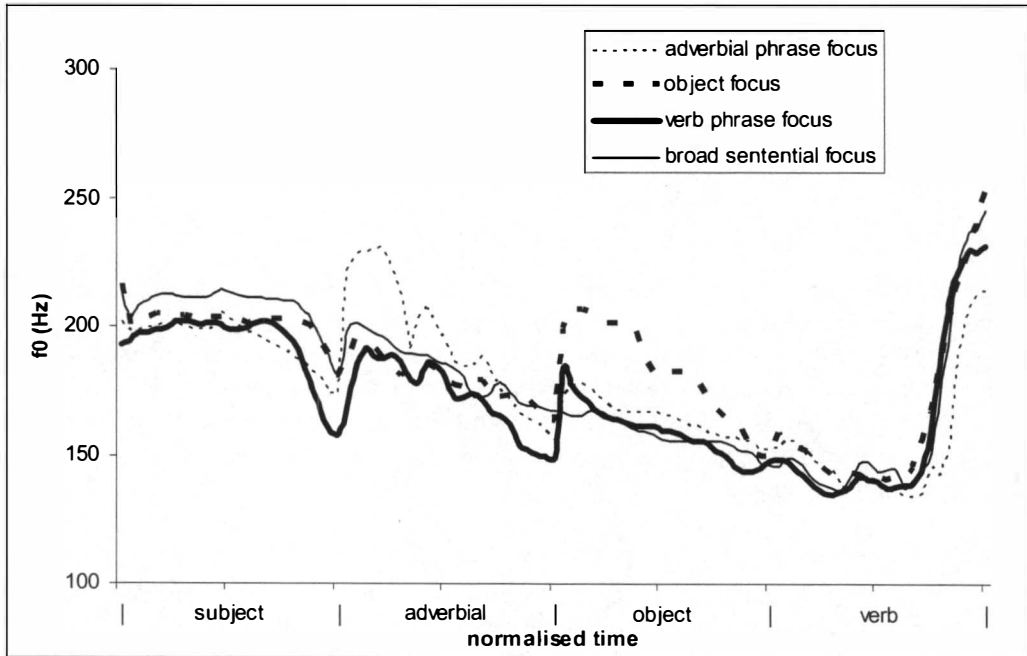
*intensity*

- VP vs broad sentential focus: all constituents are relatively more amplified (i.e. sound 'louder') with broad sentential focus than with VP focus
- object focus: the subject is slightly attenuated (de-accented), the object is more amplified
- subject focus: the subject is amplified, the object and the verb are attenuated (de-accented)

**Production experiment 2**

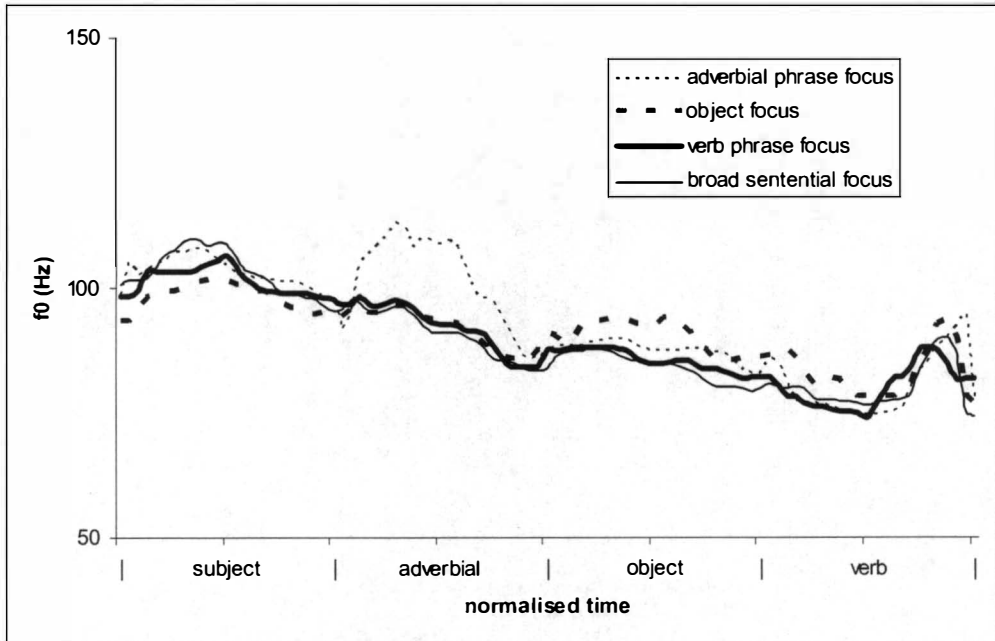
The results of *Experiment 2* are presented below in the same order and format as for *Experiment 1* above. Here, figures (63) and (64) relate to the longer sentence (55). The observations derived from the data follow table (67).

(63) Sample, typical pitch trace (female speaker) of sentence (55) 'Mar Mar bought a watch in Yangon.' NB The final rise is associated with formal reading style, and is not related to focus.



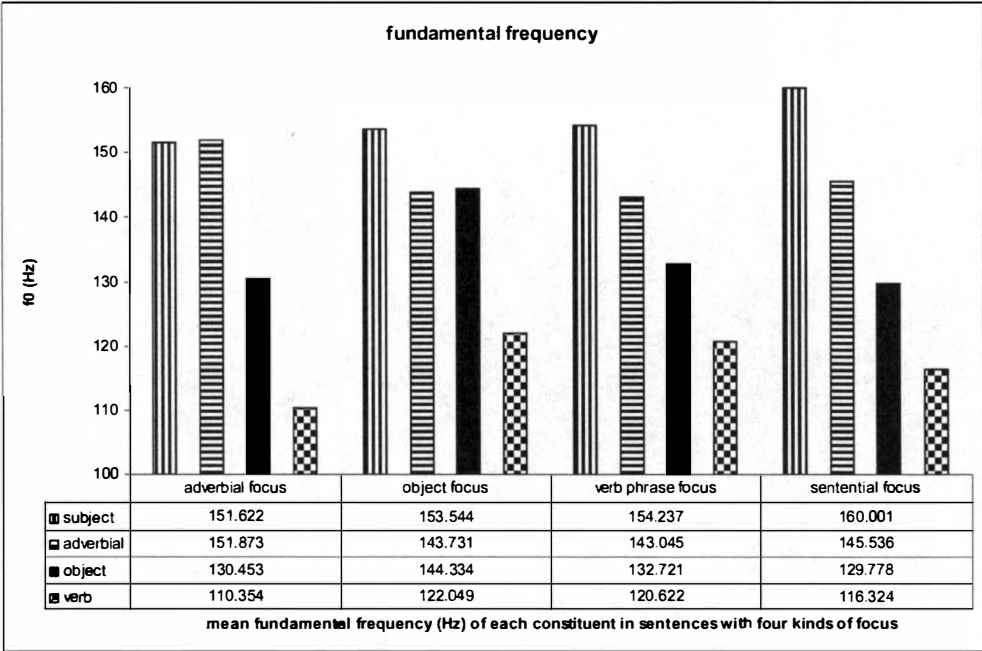
မာမာ ရန်ကုန်မှာ နာရီ ဝယ်ပါတယ်။  
 mà mà jàngòun.mà nàjì wè.bà.dè  
 MarMar Yangon.in watch buy.POL.REAL

- (64) Sample, typical pitch trace (male speaker) of sentence (55) 'Mar Mar bought a watch in Yangon.' NB The final rise is associated with formal reading style, and is not related to focus.

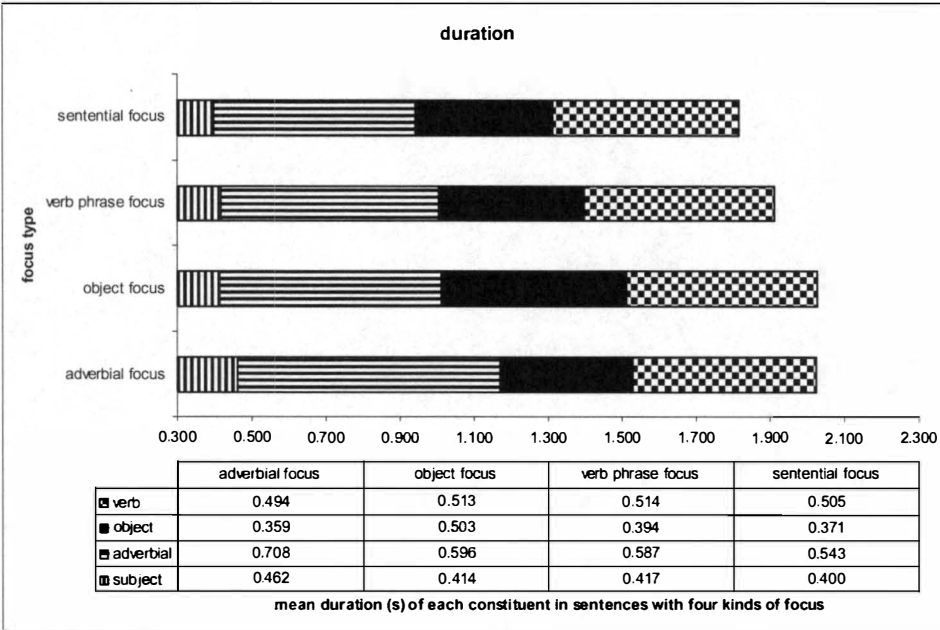


မာမာ ရန်ကုန်မှာ နာရီ ဝယ်ပါတယ်။  
 mà mà jànggòun.mà nàjì wè.bà.dè  
 MarMar Yangon.in watch buy.POL.REAL

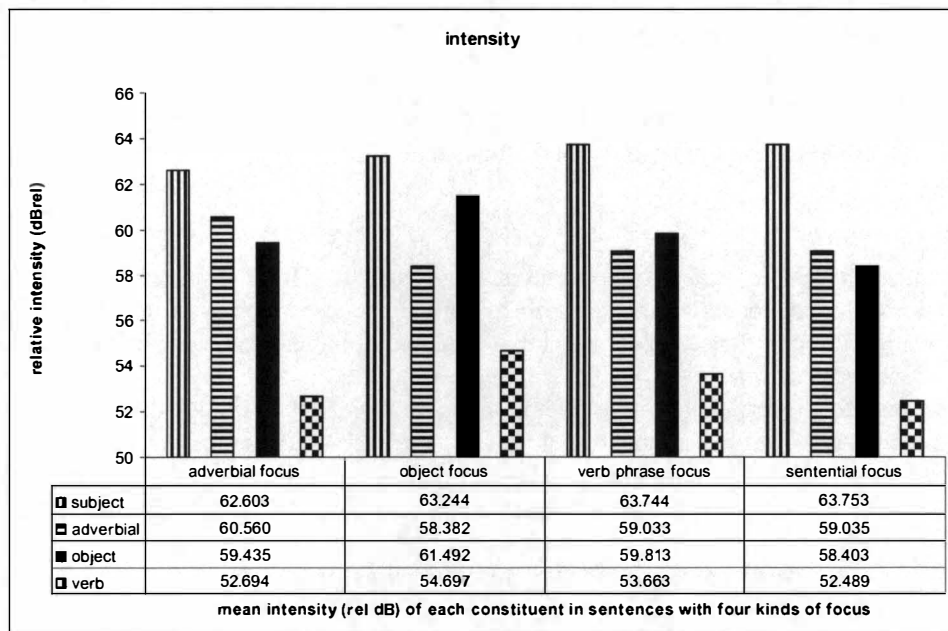
(65) mean (n=12) fundamental frequency of each constituent in sentence (55) spoken with each of four kinds of focus.



(66) mean (n=12) duration of each constituent in sentence (55) spoken with each of four kinds of focus.



(67) mean (n=12) relative intensity of each constituent in sentence (55) spoken with each of four kinds of focus.



### Observations

For the reasons noted earlier, the sentence used in *Production experiment 2* cannot be used to elicit an acceptable/natural subject focus. We can, however, observe the effects of the four types of focus compared in *Production experiment 2* on all four constituents in the sentence, including the subject.

Not surprisingly, with four constituents in the sentence instead of three, the patterns appear more complex. The universal template of declining fundamental frequency and intensity applies here also, but with four constituents to fit into the sentence's intonation pitch range instead of three, the relative 'pitch space' of each is smaller and the perturbations attributable to focus are thrown into sharper relief.

### fundamental frequency

- VP vs sentential focus: no discernible difference in relative pitch of individual constituents, but sentential focus starts higher and declines more sharply
- object focus: the object is raised in pitch, on average slightly higher than the preceding adverbial phrase
- adverbial phrase focus: the adverbial phrase is raised in pitch, on average slightly higher than preceding subject; the pitch of the object is slightly lowered

### duration

- VP vs sentential focus: sentential focus is globally shorter than VP focus.
- object focus: the object has a longer duration
- adverbial phrase focus: the adverbial phrase is longer, the object shorter

*intensity*

Often, intensity and fundamental frequency are correlated in speech, i.e. higher pitch sounds are generally also louder, but such a correlation is not observed in *Experiment 2*.

- VP vs sentential focus: no clear effect
- object focus: object (and V) amplified, preceding adverbial phrase attenuated
- adverbial phrase focus: adverbial phrase amplified

*Generalisations*

VP and sentential focus are not differentiated by prosodic effects on particular constituents. Rather, sentential focus is characterised by globally raised pitch with more rapid rate of declination through the sentence, by globally increased intensity and by reduced duration – i.e. a faster speech rate.

When the object, adjacent to the verb, is in focus, this is signaled by the object constituent being higher, longer and louder, and these are taken to be the phonetic correlates of stress in this position. There is some evidence from the pooled data that stressing the object in this way also results in stressing the verb to some degree as well. Alternatively, the same statistical effect could indicate that some speakers are conflating the object and verb phrase into one prosodic phrase and jointly stressing this single prosodic unit.

When a constituent in focus is not adjacent to the verb, as is the case with subject focus in *Experiment 1* and adverbial phrase focus in *Experiment 2*, then the constituent between the focus and the verb, and indeed the verb itself, are de-accented. The phonetic correlates of de-accenting are lower pitch, shorter duration and lower intensity.

Here, constituents positioned to the left of the focus appear to undergo de-accenting to a lesser degree than those positioned between the element in focus and the verb phrase.

**4.3 Results II: the perception of focus**

Two perceptual experiments were devised to test the extent to which listeners were able to recover the intended focus in the speech material elicited for Production Experiments 1 and 2 above. In essence, subjects were asked to listen to the various recordings of the sentences (54) and (55), and to judge which of the questions in (56)a–d and (57)a–d the sentences were responding to. These tests were intended to establish whether there is sufficient prosodic information in the pronunciation of focus sentences to disambiguate different focus structures within a single sequence of words.

**Experimental design**

The experiments were conducted as follows. The subjects selected were nineteen native speakers of Burmese, all current or former residents of Yangon, none of whom had formal training in linguistics or reported speech or hearing abnormalities. For both experiments, a set of sixty-four stimuli was assembled:

- four speakers;
- four types of focus (stimuli responding to one of four prompt questions) ;
- two repetitions produced by each speaker



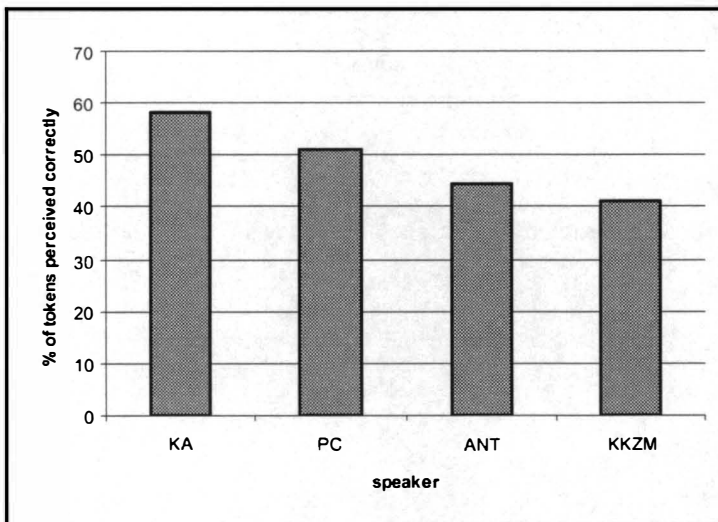
- each sentence presented twice in the experiment  
→  $4 \times 4 \times 2 \times 2 = 64$  sentences in each set.

The experiments were conducted using the Praat speech analysis software's 'multiple forced choice' facility, which presented the set of stimuli to each subject in quasi-randomised order, avoiding repetitions of the same stimulus. On hearing each sentence, subjects were required to select which of the four questions it was responding to by clicking with a mouse on the appropriate place on a computer screen. The judgements were made without time pressure, but subjects did not have the option of changing their mind.

### Results of the perception tests

The first thing to note in the results is a relatively high degree of variation between the speakers who produced the stimuli used in the perceptual experiment. Chart (68) shows the percentage of all sentences which were judged correctly for each of the four speakers whose recordings were used in the perceptual experiments. The speakers can be ranked for their 'general intelligibility of focus'. In other words, it was apparently globally easier for subjects to perceive intended focus in the speech of certain speakers than for others. This suggests that there may be a between-speaker difference in the extent to which Burmese uses prosody rather than syntax to convey focus. This variation falls outside any significant effect within the experimental design.

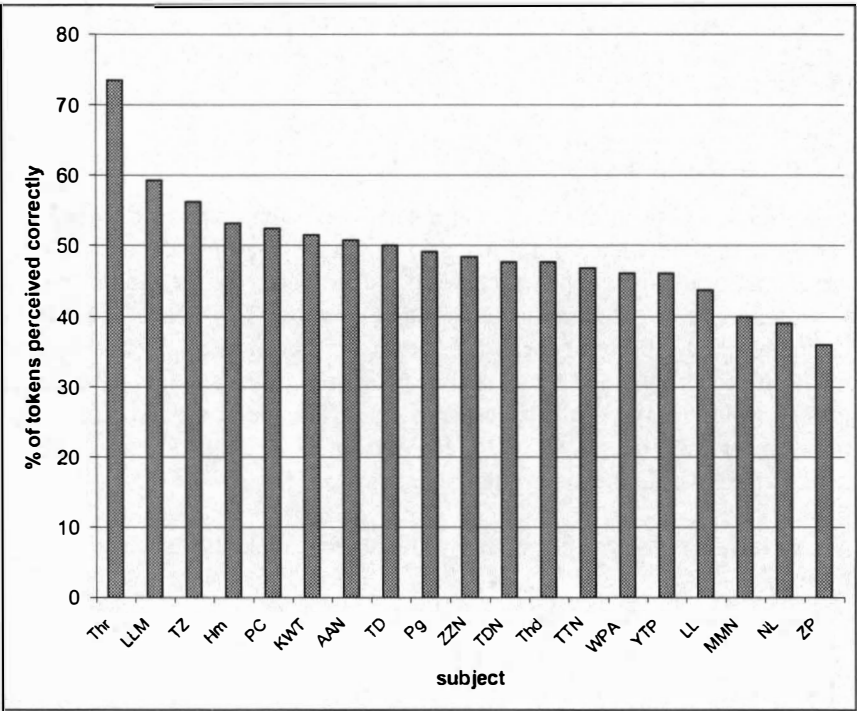
- (68) % of tokens perceived correctly by all subjects, ranked by speaker  
Mean = 48.75%



Conversely, chart (69) shows the percentage of correct judgements made across both experiments by each subject, ranked according to decreasingly successful 'performance'. A few subjects performed much better than most, and a few much worse, but the distribution appears relatively normal. It is perhaps the case that the 'good' subjects learnt to discriminate between categories in the test which might not be considered normally

perceptible, and that some subjects never really grasped the purpose of the task in hand. Again, this variation between subjects has to be taken into account when interpreting the results.

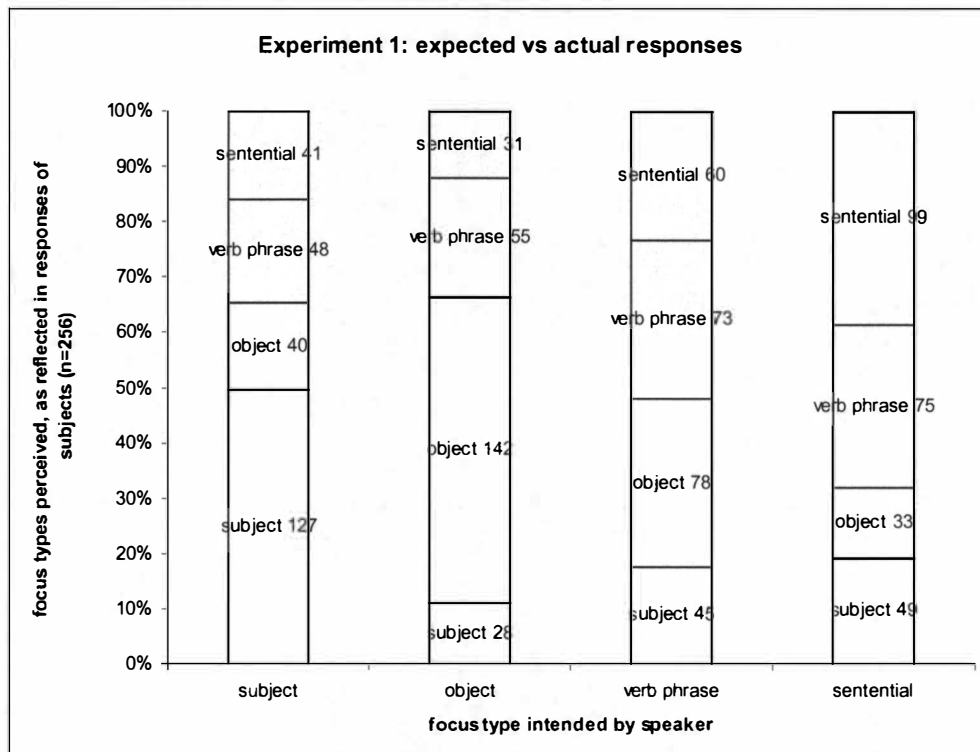
(69)        % of tokens perceived correctly by all subjects, ranked by subject  
Mean = 49.34%



***Perception Experiment 1***

The results of Perception Experiment 1 are set out below in (70); the data in (70) is expressed in percentages in (71).

## (70) Judgements of focus type in sentence (54) categorised by intended focus of stimulus in Perception Experiment 1



(71) Perception Experiment 1		intended focus in stimulus			
		subject focus	object focus	VP focus	sentential focus
% of tokens (n=256) perceived as each focus type, rounded to whole integers (* = correct judgement)	sentential	16%	12%	23%	*39%
	VP focus	19%	21%	*29%	29%
	object	16%	*55%	30%	13%
	subject	*50%	11%	18%	19%

*Observations*

The results above indicate that the type of focus which was correctly perceived most easily from the acoustic signal was object focus: subjects labelled this category correctly in 55% of cases, more than twice as often as might have been judged correctly by pure chance. When sentences with object focus (i.e. answers to questions eliciting the object as new information) were not perceived correctly by subjects, the latter most commonly mistook these sentences for sentences with VP focus (i.e. answers to questions eliciting both the object and the verb as new information). This corroborates the findings made in the production experiments that the phonetic correlates of stressing objects as foci are observed to a degree on the verb as well, so that the verb often appears to be given additional stress in instances of simple object focus. Hearers then seem to rather naturally

mistake certain cases of simple object focus for instances of VP focus where both verb and object have increased stress.

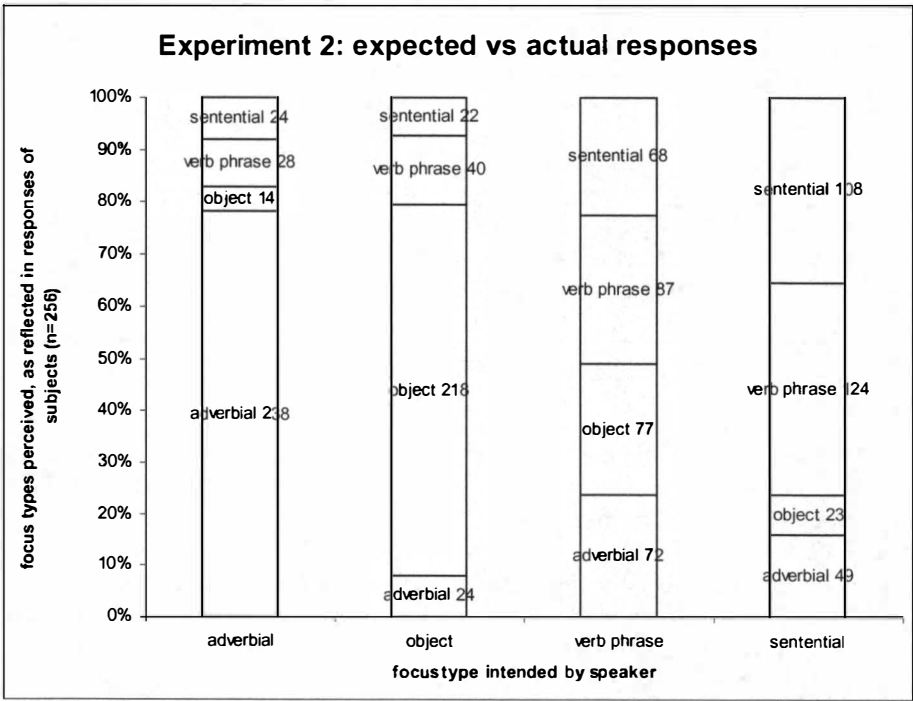
The next easiest focus type for subjects to identify correctly was subject focus: 50% of sentences with intended subject focus were perceived without error. As with object focus, this again indicates that there is often sufficient prosodic information in the production of focus sentences for hearers to disambiguate the intended meaning of the sentence without additional, contextual clues. When instances of subject focus were not correctly identified, however, it was found that subjects were likely to hear any of the other focus types with roughly equal probability, suggesting that the percept of subject focus is not readily confused with – and perhaps not acoustically similar to — other focus types.

Broad sentential focus was found to be somewhat more difficult for subjects to judge correctly: 39% of stimuli produced with intended sentential focus were correctly categorised, significantly more than chance. Nearly half the errors made here were labelled as VP focus, further evidence of the acoustic similarity between VP and sentential focus.

Finally, subjects found VP focus the hardest to identify correctly, and this was judged correctly only slightly more often than might be expected by chance. In addition to this, it was found that when mistakes were made, subjects mistook VP focus for any of the other categories of focus with more or less equal probability.

*Perception Experiment 2*

(72) Profile of judgements of focus type in sentence (55) categorised by intended focus of stimulus in Perception Experiment 2.



The data in (72) are expressed in percentages in (73):

(73) Perception Experiment 2		intended focus in stimulus			
		adverbial focus	object focus	VP focus	sentential focus
% of tokens (n=256) perceived as each focus type, rounded to whole integers (* = correct judgement)	sentential	8%	7%	22%	<b>*36%</b>
	VP focus	9%	13%	<b>*29%</b>	40%
	object	5%	<b>*72%</b>	25%	8%
	adverbial	<b>*78%</b>	8%	24%	16%

The results of Perception Experiment 2 corroborate the findings from Perception Experiment 1, and lead to some firm conclusions. In common with Experiment 1, VP focus was not readily discernible for subjects. The responses are evenly distributed across all four categories. Sentential focus was identified moderately well, and was most often mistaken for VP focus. Both adverbial phrase focus and object phrase focus are identified with considerable accuracy — 78% and 72%, respectively. As in Experiment 1, object focus is slightly more likely to be mistaken for VP focus than either broad or VP focus.

## 5 General conclusions

Having detailed the findings of the individual production and perception experiments, we are now in a position to highlight certain broad conclusions resulting from the production/perception experiments and the syntactic investigation of word order in focus constructions. Quite generally, the results of the production/perception experiments confirm that stress is most definitely employed in the signaling of new information focus in Burmese, and was observed in the production experiment in the form of increased *f0* (higher pitch), increased amplitude (loudness) and longer duration of syllables/words in focus. In the perception experiments it was found that the presence of stress on constituents in focus is also well perceived by hearers, and most clearly so when there is narrow focus on an argument (subject, object) or adverbial.

If such observations are now combined with the conclusion of the syntactic investigation that elements in focus are most naturally positioned in pre-verbal position, as in a range of other verb-final languages (e.g. Turkish, Hindi), it can be seen that the stress associated with new information focus will characteristically be realised and occur towards the end of a sentence, in pre-verbal position. This is an observation which has been made for a significant number of languages, both verb-final languages and verb-medial languages (such as, for example, English), and has often been attributed to the workings of a rule of 'nuclear stress' applying in various languages. It is suggested (e.g. Cinque 1993) that the syntactically most deeply-embedded position in a sentence is where a regular 'nuclear stress' is pronounced, and where syntactic constituents occur in such a position, they will be naturally highlighted and focalised by the stress which is regularly generated there. In such a view, stress is an automatic feature of a sentence's most deeply-embedded position, and the requirement that focused elements be highlighted by stress is seen to attract such elements to this position. A natural question in the light of what has been observed in the course of the present chapter is therefore whether the situating of focal elements in pre-verbal position in Burmese should be assumed to be the result of a similar nuclear-stress rule operating in Burmese? We believe that this would actually *not* be an

appropriate characterisation for Burmese, and that the relation of focus to intonation and stress is rather different in Burmese, as will be suggested below.

A first reason to be doubtful that a nuclear stress rule is responsible for attracting new information foci to pre-verbal position in Burmese is that pre-verbal (nuclear) stress does not seem to be obviously present in other sentences in Burmese which are not specifically responses to questions asking for new information. In an add-on to the major production and perception experiments, informants were asked to read passages of Burmese text in which sentences similar to (54) and (55) were embedded, and where the elements present in such sentences could naturally be interpreted as constituting new information. Measurement of the intonation patterns used in the reading of such texts showed very little of the regular application of stress which occurred when the same informants produced similar sentences as the responses to direct questions (though informants also did not pronounce the sentences in the text with any special, flat, 'reading' intonation). Studies of nuclear stress in other languages have observed that the occurrence of sentence-final nuclear stress is, by way of contrast, generally automatic and present in all sentence-types, and is not restricted just to the answer-forms provided to questions. The apparent absence of clear pre-verbal stress patterns in Burmese sentences which are not the answers to questions therefore seems to suggest that automatic nuclear stress is not a characteristic property of Burmese. Secondly, the syntactic investigation of focus in Burmese showed that it is not only new information focus that occurs in the special pre-verbal position, but also contrastive and corrective focus, and speakers commonly resist the placement of contrastive focus in other non-pre-verbal positions. Nuclear stress is, however, assumed to be a rule which regulates only the placement of new information focus in a language, and does not enforce the placement of contrastive foci in any similar, sentence-final position. Hence whereas new information foci are restricted to the sentence-final position of nuclear stress in languages such as Italian and German (Zubizarreta 1998), contrastive foci are free to occur stressed in any position within a sentence. In Burmese this is not so, and both new information foci and contrastive foci are found to naturally target the same pre-verbal position. The fact that elements in contrastive focus are also drawn to the pre-verbal position suggests that it is not the occurrence of nuclear stress which marks out this position as special, as nuclear stress would only be expected to attract elements instantiating new information focus (and not contrastive foci, which would be anticipated to occur stressed in other positions within a sentence).

Consequently, a more accurate characterisation of focus and the occurrence of stress in Burmese would seem to be that there is a more primitive notion of sentential prominence associated with the pre-verbal position in Burmese (i.e. more primitive than simple association with a nuclear stress), and this naturally attracts all elements which have a focal role within a sentence, both new information foci and elements in contrastive focus. Highlighted thus *primarily* via a positional strategy, it can be suggested that a *secondary* reflex of focal prominence is the addition of stress to an element located in the pre-verbal position. The use of stress on focal elements can therefore be suggested to function as an *ancillary* encoding of sentential prominence, which is more basically communicated by structural means<sup>2</sup>, and foci are located in the pre-verbal position not explicitly to acquire

<sup>2</sup> Prominence can also be encoded via focus-related particles in certain instances. The use of focus particles has not been made part of the present study, for simple reasons of space, and is intended to be the subject of extensions of the current work.

the stress which may be assigned to such a position (as might be assumed under a nuclear stress type approach), but to acquire the more basic positional prominence naturally associated with sentence-final positioning before the verb. In other words, the occurrence of stress on elements in focus can be viewed as a common natural side-effect of such elements being made prominent via other (structural) means, and not as a primitive force driving focal elements to the pre-verbal position.

A second general finding of the production experiments discussed in section 4 was the occurrence of *de-accenting* of certain non-focal material in sentences with new information focus. Critically this was seen to occur in certain instances where the constituent in focus actually did *not* occur in the canonical pre-verbal focus position. Such a situation was noted (in section 3.3) to occur in the special circumstances where a subject or an adverb is the element in focus, and the object of the verb is both indefinite and non-specific. Due to its non-topic-like informational status, there is a strong resistance to positioning the object before a focused subject or adverbial, and it therefore regularly occurs between the focus and the verb, resulting in sequences such as (74):

- (74) a. Subject<sub>FOCUS</sub> Object V  
       b. Subject Adverb<sub>FOCUS</sub> Object V

Because of the unavailability/unnaturalness of positioning a non-specific indefinite object before the subject or adverb in a sentence, focus sentences containing non-specific indefinite objects are potentially ambiguous, and in principle allow for hearers to assume that the focus is either the indefinite object itself, or the subject/adverb which precedes it. Because there are no natural alternative ways to arrange the constituents of the sentence, the identity of the focus of the sentence can in such cases *not* be determined from word order alone, and it cannot be concluded that the element in immediately pre-verbal position is necessarily the intended focus of the sentence. Here, therefore, intonation and stress potentially do have important roles to play, and can function to disambiguate the intended meaning of a sentence. In the production experiment, two effects of this were noted to occur. The first of these was that stress occurred on the element in focus.<sup>3</sup> The second effect, when the focus did not immediately precede the verb (i.e. cases of subject or adverbial focus), was that the intervening indefinite object was observed to undergo de-accenting and a clear reduction in f0, duration and amplitude. Such prosodic attenuation of the object seems to function to make it less 'visible' in pre-verbal position and allow for a preceding focus to be perceived as having sentence-final prominence, even though not immediately adjacent to the verb. Consequently, in certain instances, the dominant positional encoding of focus in Burmese can be found to be well assisted by the availability of stress and its intonational converse, the de-accenting of sentence constituents.

Finally, it should be remembered and emphasised that the production and perception experiments carried out in the present study have restricted themselves to lexical items which have exclusively low (level) tone. It will be an important question for future research projects to establish whether the results generated here with regard to the occurrence and manifestation of stress may carry over in the same or different ways to

<sup>3</sup> Stress occurred in particular on focused adverbs and objects. Focused subjects showed increased duration, but no clear increase in pitch, as sentence-initial elements regularly occur with a high level of pitch.

lexical items with other tones in Burmese. We also feel that it will be instructive to compare the type and level of stress present in contrastive and corrective focus with that of new information focus, something which we were not able to undertake in this pilot exploration of prosody and focus. Hopefully, the present study will serve as a useful baseline reference for careful future investigations of this type.



# 3 *Reflexives in Literary and Spoken Burmese*<sup>1</sup>

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## 1 Introduction

The Burmese reflexive has three alternative forms. The oldest form, which attests from the Myazedi/Rajkumar inscription onwards, and persists in modern literary Burmese, uses မိမိ *mimi* as the reflexive pronoun; for direct objects this is usually followed by the noun ကိုယ် *kò* 'body', thus literally meaning 'self's body'. This reflexive has numerous cognates in Loloish languages and ultimately derives from the Tibeto-Burman etymon \**mi* 'person'. In the second reflexive form the noun ကိုယ် *kò* 'body' is reanalysed as the reflexive pronoun. The direct object ကိုယ့်ကို(ယ်)ကိုယ် *kòkòkò* is the most frequent example of this form. This comprises two occurrences of 'body', the first in possessive form, and the second as the object marker which also ultimately derives from 'body'. As discussed below the constituency of this quite frequent form is a point of disagreement among Burmese grammarians, with the result that it may be seen spelt in various ways. This reflexive also enters into a variety of other constructions, parallel to the မိမိ *mimi* form. The third reflexive form, derived by reanalysis of the second, uses any pronoun twice, separated by the noun ကိုယ် *kò* 'body' or less frequently another body part noun. This is primarily used as a direct object form.

Modern literary Burmese still uses the မိမိ *mimi* reflexive, but modern spoken Burmese normally uses either the ကိုယ့်ကို(ယ်)ကိုယ် *kòkòkò* form or the pronoun + ကိုယ် *kò* + pronoun form. In a reflexive context, the use of one of these reflexives is not obligatory, but if a reflexive is not used, the sentence is ambiguous and would normally be interpreted as non-reflexive. Burmese uses reflexives quite frequently with abstract verbs for mental attitudes and states, but considerably less frequently with concrete action verbs.

Both the မိမိ *mimi* form and the ကိုယ့်ကို(ယ်)ကိုယ် *kòkòkò* form lack marking of the person and number of the subject, and are thus ambiguous if an overt subject is not present

<sup>1</sup> A previous version of this paper was presented at the Australian Linguistics Society Conference, Adelaide 1993 (see Bradley 1995). I would like to thank various speakers of Burmese including Daw Tin Tin Nyunt, U Sein Win and Mo Mo Atung for providing examples. I am also very grateful to various colleagues including John Okell, U Thein Tun and Anna J. Allott for comments. The transliteration of Burmese inscriptions and the transcription of Burmese follow the conventions used elsewhere in this volume. Naturally any errors in data or analysis are my own responsibility.

in the context. This may be one motivation for the development of the pronoun + ကိုယ် + pronoun form.

## 2 Pronouns in Burmese

For full details of the pronoun system in Burmese and its development from Old Burmese to Modern Burmese, see Bradley (1993). During the nine centuries of records of written Burmese, there have been very substantial changes including the appeggioration or replacement of virtually every pronoun, in some cases more than once. Unlike most other function words, these pronouns do not differ between the modern literary High and the spoken Low. The usual modern forms are cited in (1) below.

### (1) Pronominal forms in Modern Burmese

ကျွန်တော်	təənə	I (male speaker)
ကျွန်မ	təəmə	I (female speaker)
ငါ	ŋà	I (speaking to intimate or inferior)
ကျုပ်	təou?	I (used in rural areas, mainly by male speakers)
ခင်ဗျား	kʰəmjà	you (male speaker)
ရှင်	ʃin	you (female speaker)
နင်	nin	you (speaking to intimate or inferior)
မင်း	mín	you (speaking to intimate or inferior)
သူ	θù	he/she (usually human, always animate)

In Burmese, pronoun forms are fairly infrequent in running discourse; the unmarked assumption is that a statement has a first person subject and that a question has a second person subject, unless the context shows or implies otherwise.

Pronouns also have an attributive/possessive form which replaces a final heavy or level tone with a creaky tone (<sup>CRK</sup>), e.g. ကျွန်တော့် təəŋə I<sup>CRK</sup> 'my (male speaker)'; those which already end in creaky tone, such as ကျွန်မ təəmə 'I/my (female speaker)', have the same form. The pronoun plural marker was ဝိုဝ် *atuiv* from the earliest inscriptions, regularly giving modern ဝို့ pronounced dō. This was originally voiceless tō and can be related to the fairly widespread Loloish etymon \**daw*<sup>3</sup> 'body'; cognates are also used as a reflexive in some of those languages. In Burmese, the plural marker may be productively added to any of the above pronouns, but pronouns without the plural marker do also occur in plural contexts. All of these pronouns, with or without plural marker, may occur in the 'attributive or possessive form pronoun + ကိုယ် kò + pronoun' reflexive construction discussed later. The same marker with the formative prefix အ- *ʔə-* as seen in the inscriptional form အဝိုဝ် *atuiv* was most likely a first person plural exclusive. When the prefix was later lost, it retained medial juncture voicing and this is the source of the modern first person plural (inclusive or exclusive) ဝို့ dō. There are various restrictions on the plural marker in reflexives, as discussed below.

While the earliest Burmese inscription, the Rajakumar (dated 1112 C.E.), provides evidence for juncture voicing in noun compounds such as မင်းကြီး *mañ' grī* 'king' + 'big' > 'great king' (lines 15–16), in almost all such cases later spellings show the unvoiced forms instead. The modern form is now written မင်းကြီး *mañ' krī* showing the base form of the

second element, but is pronounced မင်းငြိ *mín.dzí*, with medial voicing. Other dialects of Burmese show much less medial voicing: some do not voice medial aspirates, others do not voice medials at all, except where a Burmese doublet form has been borrowed. In standard Burmese this juncture voicing is one of the main markers of unity between the noun or verb stem and any following associated components of a compound – suffixes, modals and other markers. It is also regular for reduplicated verbs but not reduplicated nouns.<sup>2</sup>

Many of the modern Burmese pronoun forms are denominal: this includes the reflexives. The literary reflexive appears to be derived from a reduplication of Sino-Tibetan etymon \**mi* ‘person’, while the spoken reflexive is derived from the Sino-Tibetan etymon \**s-ku* ‘body’. Parallels for this semantic development can be found in a number of languages of the region, as well as elsewhere.

It is often difficult to disentangle the literal ‘body’ and the extended object marker or pronominal uses of ကိုယ် *kuiv* in early inscriptions, since they are written the same. The reanalysis of ကိုယ် *kò* as a reflexive appears to have been fairly early. More recently, as in many other languages, this reflexive has itself shifted to a nonreflexive pronominal use. Thus, in early modern Burmese ကိုယ် *kò* alone could also be used as a second person pronoun, to which the pronoun plural marker တို့ *tò* could also be added. Judson (1853) provides some examples of ကိုယ် *kò* used as a second person pronoun by male or female intimates to women; Tun Nyein, which is often somewhat archaic for its period, includes ကိုယ် *kò* in the list of second person pronouns. However, in current spoken Burmese ကိုယ် *kò* alone is used mainly but not only by male speakers as an informal first person pronoun, and not as a second person pronoun, further illustrating the instability and openness of the pronoun system in Burmese. With the royal or honorific suffix တော် *tò*, ကိုယ်တော် *kò.dò* ‘body.HON’ could formerly be used as a second person pronoun to address superiors – monks and others. This is clearly another extension of the ‘body’ meaning. Its replacement by the current အရှင်ဘုရား *ʔəjɪn.pʰəjáj* ‘master.deity’ is another example of the relatively rapid changes in the Burmese pronoun system.

Yet another independent development, discussed further below, is the modern spoken object/goal/allative noun marker ကို *kò* from the same nominal source; this has been differentiated from the nominal/reflexive spelling as noted below.

### 3 Case marking in Burmese

Burmese is a typical SOV language: all case marking is done with suffixed cliticised markers. These are phonologically joined to the preceding nominal by various juncture phenomena which likewise link the verb and associated modals and other markers. Many of these markers are historically derived from grammaticalised nominal, verbal or other forms. This case marking is largely optional, and used relatively sparingly in spoken language. Probably due to the influence of Pāli as the liturgical language of Buddhism, written language marks a far greater proportion of cases on NPs, and makes some distinctions absent from spoken style.

<sup>2</sup> For example ကောင်း *káun* ‘good’, reduplicated ကောင်းကောင်း *káungáun* ‘well’, but ဆစ်ကို *ʔəkò* reduplicated ကိုကို *kòkò* ‘older brother’.

The well-known productive grammatical tone sandhi process links a possessor noun to the following possessed noun: the final syllable of the pronoun or other noun (if not already creaky tone) changes to creaky tone. The most obvious example of this is the attributive/possessive pronouns. This process is attested from the earliest inscriptions to the present. For example, the 'Myazedi' lines 36 and 37 has *c n̄a* plus various kinship terms, e.g. line 36 *c ဘာ n̄a s̄a* 'my son', instead of the usual subject pronoun form *c l̄ n̄a* found elsewhere. More relevantly, on the *လေးမျက်နှာ* *lémjɛʔnà* 'Four Face' Pagoda inscription dated 1232 (Burmese calendar 594) (Aung Thaw 1972), lines 12, 19, 24 and 29 on stone three, face four, show *c l̄ ʔ̄ n̄a kuiv̄* 'me' (lit. 'my body'), here ambiguous between a pronoun plus the noun 'body' and a pronoun plus direct object marker — a perfect example of the right environment for a reanalysis! The origin of the ʔ̄ *kò* object marker from a possessor Noun + possessed 'body' NP is further indicated by the productive application of the noun tone creaking process before this noun marker, probably of possessive origin.

The early orthographic indication of the creaky tone is a final glottal stop. This and the heavy tone written (if at all at that period) with a final *-ʔ̄ -h'* are only very sporadically indicated in the earliest inscriptions.<sup>3</sup> Alternatively, Indic short vowels (creaky tone) as opposed to long vowels (other non-stop final tones) may indicate the contrast for the vowels *a*, *i* and *u*,<sup>4</sup> but the writing of this vowel-length distinction is also not very consistent in the twelfth and thirteenth centuries. Given also the provisional nature of the spelling in most of the earliest Burmese inscriptions, it is difficult to be absolutely certain that the grammatical sandhi creaky tone was already regular and productive in the twelfth century, but it is quite likely. This grammatical sandhi process can perhaps be derived from a fused form of the possessive marker, inscriptional and literary *၏ ʔ̄* (modern spoken *ချဲ ʔ̄*).

A similar alternation can be observed in possessive forms of pronouns in several other Burmese-Lolo languages including other dialects of Burmese, other Burmish languages such as Hpun, and Loloish languages in each subgroup of Loloish including Southern Akha among others, Central Lisu, Jino and others, and Northern Nosu and others.

As noted above, other noun marker forms also come at the end of the noun phrase, which consists maximally of a relative clause or a demonstrative, the head noun or compound noun with suffixes such as plural if any, and a quantifier expression consisting of one or more sequences of number plus classifier. Various markers have continued in use from the earliest inscriptions to the modern literary style, but most of these have been replaced in the modern spoken language. In early inscriptions, objects (direct and indirect) could be followed by the marker *အား ā*, while some direct objects, especially human ones, could be followed by *ʔ̄ n̄a kuiv̄* (from 'body') instead. This situation is preserved in the distribution of modern literary Burmese *အား ʔ̄ á* and *ʔ̄ kò*, but with wider distribution and greater frequency of *ʔ̄ kò* after direct objects. In modern spoken Burmese *ʔ̄ kò* has

<sup>3</sup> This is not too surprising given that many early writers of Burmese would have been Mon speakers, whose language was then non-tonal. Bradley (1982) suggests that the Burmese tones at that period may have included various phonation, duration and vowel quality characteristics which also exist in modern Burmese though they are less prominent than the pitch differences.

<sup>4</sup> Here, the short vowels and the syllables written with a subscript glottal stop are differently transliterated following the usual practice outlined in the introduction to this volume; though both presumably represented creaky tone.

completely replaced အ: ၊ with both indirect and direct objects, and there is a strong constraint restricting the occurrence of ကို kò to only one NP in a sentence.

The process and chronology of the replacement of အ: ၊ by ကို kò in Burmese is a fascinating topic which falls beyond the scope of this discussion. Other changes in markers are mostly one-for-one replacement of existing markers in spoken Burmese, with the Old Burmese forms still retained in literary Burmese. Some of the elaboration of markers, for example the subject form in modern written Burmese, can perhaps be attributed to the influence of word-by-word calquing of Pāli texts. See Okell (1967) for details of this so-called Nissaya Burmese.

What can be noted is that Old Burmese, from its earliest inscriptions, already shows the accusative marking on nouns, which is characteristic of Burmese-Lolo languages and southeastern Tibeto-Burman in general. There is no evidence of ergativity in Burmese from the beginning of the twelfth century, which is rather inconvenient for those who wish to postulate ergativity as a Tibeto-Burman characteristic.

#### 4 Reflexives in Burmese

The modern reflexive forms are literary မိမိ mimi and spoken ကိုယ် kò. More specifically, the spoken direct object reflexive is one of either (2) or (3):

(2) ကိုယ်ကိုယ်ကိုယ် kòkòkò

(3) Pro<sub>i</sub><sup>CRK</sup> + ကိုယ် kò ‘body’ (or other body part noun) + Pro<sub>i</sub>

The formula in (3) represents any pronoun form in its possessive form with creaky tone applied on the final syllable (if not already creaky), plus ကိုယ် kò ‘body’, plus the pronoun repeated in full. Other body part nouns may also be used in place of ကိုယ် kò, as in (9)h below. The literary form occurs from the earliest inscriptions; the kòkòkò spoken form comes in gradually, and is derived from the noun ‘body’; the Pro<sup>CRK</sup> kò Pro form results from reanalysis of the kòkòkò form. The spoken forms are unusual in that their components do not undergo juncture voicing.<sup>5</sup>

Burmese speakers disagree about the ‘correct’ spelling of the kòkòkò reflexive. Some prefer ကိုယ်ကိုယ်ကိုယ် ‘body<sup>CRK</sup>.OBJ body’, i.e. ‘body + object marker + body’; others prefer ကိုယ်ကိုယ်ကို ‘body<sup>CRK</sup>.body.OBJ’, i.e. ‘body’s body + object marker’. Both spellings are given in Ba Han (1966). It is said that the government and the Burmese Department at Rangoon University prefer the latter. Both are grammatically plausible reflexives: given the semantic change ‘body’ > ‘self’, the former suggests ‘self + object marker + self’, as two separate NPs; the latter implies ‘self’s body + object marker’, as a single NP. However, neither is parallel to the ‘attributive–possessive pronoun + body part noun + pronoun reflexive’ construction, which would instead suggest ကိုယ်ကိုယ်ကိုယ်, ‘body’s body + body’, as a two-NP construction. Perhaps the various alternatives have all contributed to the modern kòkòkò construction; but the lack of juncture voicing suggests

<sup>5</sup> While reduplicated nominal forms such as kinship terms like ကိုကို kòkò ‘older brother’ are also not subject to juncture voicing, the ကိုယ်ကိုယ်ကိုယ် kòkòkò reflexive is not synchronically a reduplication, even though each of its three components is ultimately derived from the noun ‘body’.

that neither the second nor the third *kò* is the object marker, as this would normally be voiced to *gò* in either of the two environments suggested by the alternative spellings.

This noun 'body', Old Burmese ကိုဝ် *kuiv*⁴, modern ကိုယ် *kuiy*⁴ *kò* and the reflexive derived from it contain a false etymology in the modern spelling, adding a final orthographic ယ် *y*⁴ based on the unrelated but lookalike Sanskrit/Pāli form *kāya*. The word 'body' may also be expressed using longer, more formal versions which start with ကိုယ် *kò* and continue with a Pāli doublet, e.g. ကိုယ်ကာယ *kò.kàjā* or ကိုယ်ခန္ဓာ *kò.kʰàndà* – both 'body + body'. These forms may be further extended with a Burmese nominal doublet, e.g. ကိုယ်ခန္ဓာ အကောင်အထည် *kò.kʰàndà. ʔəkàunʔətʰɛ̀*, in which all three components mean 'body'.

An earlier grammaticalised form from the same noun was the noun object marker ကို *kò*, but this is spelled without the spurious Pāli-influenced final ယ် *y*⁴. In this object marker use, it is absent from the earliest inscriptions starting in 1112, but starts to appear by 1147. It was at first only with animate patients, but by 1169 was occasionally being used with inanimate (noncorporeal) noun direct objects, and by 1182 with complement clauses and in an allative sense. It has subsequently, as in the undated but early *Lawka Hteikpan* လောကထိပ်ပန်း *lókə.tʰeiʔpán* inscriptions (Ba Shin 1962), generalised further to goals in ditransitive or causative constructions as well, and in current spoken Burmese covers all these functions.

It is now stylistically unacceptable to have more than one object marker ကို *kò* in a clause, and in normal running discourse few of the direct or indirect objects have ကို *kò* suffixed to them. Like other such suffixes, it normally voices when the immediately preceding syllable does not end in a stop.

In Burmese, only a noun phrase coreferential with the subject can be reflexive. This can be in the same clause, in an embedded clause within the same sentence, or in a following conjoined clause or subsequent sentence in the same discourse context where the antecedent is clear. As Burmese is a typical verb-final language, most embedded clauses precede the subject. Accordingly, the reflexive in an embedded clause often precedes its subject antecedent if that antecedent is present. Furthermore, as Burmese is a language which does not require overt subject pronouns, the antecedent may be completely unexpressed; in such a case the reflexive is ambiguous or generic if the antecedent is not clear from the context. Like most verb-final languages, Burmese is most frequently SOV but the exact order of noun phrases is pragmatically determined. For the reflexive direct object the grammaticalised unitary construction requires what is an O+S order, or for some speakers alternatively an O+S preceded or followed by the nonreflexive form of the S.

Reflexives occur in various case roles; the main one is direct object, with more or less fossilised possessive and embedded subject forms. Other case roles, such as indirect object and so on, are filled by the possessive form of the reflexive pronoun (ကိုယ့် *kə* 'REFL.<sup>CRK</sup>') plus a noun form. The Burmese reflexive does not also have a reciprocal meaning: with a plural antecedent, the action is distributive, not reciprocal. Unlike the corresponding non-reflexive pronouns, the ကိုယ် *kò* reflexive may not add the plural marker, but the literary မိမိ *mimi* may do so, as in (24) below. On the other hand, the extended *kò* non-reflexive pronoun may have been the plural marker. This pluralised usage was attested by the early nineteenth century, as indicated by an example in Judson (1853:203).





- b. ကိုယ့်ကိုယ်ကိုယ် ကလေး: ကိုက်တယ်။  
 kòkòkò kʰəlé kaiʔ.tè  
 self child bite.REAL  
 'The child bites itself.'

The meaning difference between (6)a and (6)b is one of focus. Of course, (5) and (6) could also be expressed with the 'Pro<sup>CRK</sup> + ကိုယ် kò (or other body part noun) + Pro' construction, as in (7) and (8). (7)a is not ambiguous so an extra pronoun is not necessary, but some speakers prefer to put one in as in (7)b, always pausing after the reflexive, perhaps on the model of sentences like (5). Other speakers reject sentences like (7)b as excessively redundant. Some Rangoon speakers will accept sentences like (7)c with the extra subject pronoun first, if the additional subject pronoun is to be there at all, but for most the preference is for OS order as in (7)b rather than SO order as in (7)c. There are also some speakers, especially from Mandalay, who prefer sentences like (7)c to those like (7)b: for them the tendency towards OS order in reflexives may be less strong. These pronominal reflexives do not occur in literary style. Sentences like (6) with an overt NP subject are in any case not ambiguous, so the 'Pro<sup>CRK</sup> kò Pro' construction is not necessary to disambiguate them. Many speakers reject the SO order possibility in (8)b, but this is not as unlikely as the corresponding sentence with pronouns only, (7)c. Similarly, some speakers, especially those from Mandalay, may prefer (8)b to (8)a because of a preference for SO, just as they prefer (6)a and (7)c.

- (7) a. ကျွန်တော့်ကိုယ်ကျွန်တော် ရိုက်တယ်။  
 tɕəŋɡ.kò.tɕəŋɡ jaiʔ.tè  
 I<sup>CRK</sup>.REFL.I hit.REAL
- b. ? ကျွန်တော့်ကိုယ်ကျွန်တော် ကျွန်တော် ရိုက်တယ်။  
 tɕəŋɡ.kò.tɕəŋɡ tɕəŋɡ jaiʔ.tè  
 I<sup>CRK</sup>.REFL.I I hit.REAL
- c. ?? ကျွန်တော် ကျွန်တော့်ကိုယ်ကျွန်တော် ရိုက်တယ်။  
 tɕəŋɡ tɕəŋɡ.kò.tɕəŋɡ jaiʔ.tè  
 I I<sup>CRK</sup>.REFL.I hit.REAL  
 'I hit myself.'
- (8) a. သူ့ကိုယ်သူ ကလေး: ကိုက်တယ်။  
 θu.kò.θu kʰəlé kaiʔ.tè  
 he<sup>CRK</sup>.REFL.he child bite.REAL
- b. ? ကလေး: သူ့ကိုယ်သူ ကိုက်တယ်။  
 kʰəlé θu.kò.θu kaiʔ.tè  
 child he<sup>CRK</sup>.REFL.he bite.REAL  
 'The child bites itself.'



This 'Pro<sup>CRK</sup> + body part + Pro' construction occurs with any of the core pronouns listed in the previous section, with or without a plural marker. The pronominal form in first and third slots must be identical apart from the attributive creak on the final syllable of the first, therefore sentences like (9)a, (9)b or (9)c<sup>6</sup> are grammatical, while sentences like (9)d and (9)e are ungrammatical. Those like (9)f and (9)g are not reflexive: the object marker does show juncture voicing, and there can be a pause before the second pronoun. Some speakers find the reflexive forms with plural marker clumsy, because they can get rather long, hence sentences like (9)c with the plurality marked in the verb but not the reflexive may be preferred. The most frequent body part noun, not suprisingly, is ကိုယ် *kò* 'body' itself, but others do occur, as in (9)h which is otherwise exactly parallel to (8)a and (8)b.

- (9) a. သူတို့ကိုယ်သူတို့ ကိုက်တယ်။  
 θùdò.kò.θùdò kaiʔ.tɛ̃  
 they.REFL.they bite.REAL  
 'They bite themselves.'
- b. သူတို့ကိုယ်သူတို့ ကိုက်ကြတယ်။  
 θùdò.kò.θùdò kaiʔ.tɛ̃.dɛ̃  
 they.REFL.they bite.PL.REAL  
 'They bite themselves.'
- c. သူကိုယ်သူ ကိုက်ကြတယ်။  
 θù.kò.θù kaiʔ.tɛ̃.dɛ̃  
 he<sup>CRK</sup>.REFL.he bite.PL.REAL  
 'They bite themselves.'
- d. \*သူတို့ကိုယ်သူ ကိုက်ကြတယ်။  
 θùdò.kò.θù kaiʔ.tɛ̃.dɛ̃  
 they.REFL.he bite.PL.REAL
- e. \*သူကိုယ်သူတို့ ကိုက်တယ်။  
 θù.kò.θùdò kaiʔ.dɛ̃  
 he.REFL.they bite.REAL
- f. သူတို့ကို သူ ကိုက်တယ်။  
 θùdò.gò θù kaiʔ.tɛ̃.dɛ̃  
 they.OBJ he bite.REAL  
 'He bites them.' (fronted, topicalised object)
- g. သူကို သူတို့ ကိုက်ကြတယ်။  
 θù.gò θùdò kaiʔ.tɛ̃.dɛ̃  
 he<sup>CRK</sup>.OBJ they bite.PL.REAL  
 'They bite him' (fronted, topicalised object).

<sup>6</sup> (6b) and (6c) include the verb marker ကြ *kr* which indicates multiplicity of the action and therefore usually a plural subject; (6c) shows that the plurality of the subject may be marked on the verb without necessarily being marked on the reflexive or the subject.

- h. ကလေး: သူ့လက်သူ ကိုက်တယ်။  
 kʰələ́ ʈù.ləʔ.ʈù kaiʔ.tè  
 child he<sup>CRK</sup>.hand.he bite.REAL  
 'The child bites its own hand.'  
 or 'The child bites himself on the hand.'

These sentences are also perfectly natural with a subject noun, before or after the 'Pro<sup>CRK</sup> + body part + Pro' construction. Some speakers also allow this construction with kinship terms used in core or extended pronominal senses, as in (10).

- (10) အဖေကိုယ်အဖေ ကိုက်တယ်။  
 ʔəpʰɛ.kò.ʔəpʰɛ kaiʔ.tè  
 father<sup>CRK</sup>.REFL.father bite.REAL  
 'Father (or older man) bites himself.'  
 or 'You bite yourself.' (said to father)

As for the *kòkòkò* construction, literate speakers disagree as to the spelling which should be used for these spoken-style reflexives. It is usual to write the 'Pro<sup>CRK</sup> + *kò* + Pro' reflexive with the noun *ကိုယ်* *kò* 'body' rather than the object marker *ကို* *kò* in the middle, but some people prefer the latter. The former implies the analysis 'possessive Pro + 'body' + object marker *ကို* *kò*', parallel to the *ကိုယ်ကိုယ်ကို* spelling of *kòkòkò*; the latter suggests object Pro in attributive form + object marker *ကို* *kò* + Subject Pro, parallel to the *ကိုယ်ကိုယ်* spelling of *kòkòkò*. Neither is in accord with the actual phonological form or the unitary nature of this reflexive, within which there is also no possibility of pause.

The *kòkòkò* and 'Pro<sup>CRK</sup> + body part noun + Pro' constructions are parallel and both derived from a two-NP object-subject structure. In this the object comprises possessive pronoun (reflexive or non-reflexive) + 'body' or other body part NP, and the following subject is an identical non-possessive pronoun. As the two are linked there cannot be a pause between them. This overcomes the problems of lack of voicing of the putative object marker and lack of creak of the form preceding the putative object marker which make both of the spellings of *kòkòkò* dubious. Effectively, it is here suggested that etymologically and syntactically it ought to be spelled *ကိုယ်ကိုယ်ကိုယ်*, with all three components derived from 'body'.

A further possibility for the form with non-reflexive pronouns eliminates the ambiguity by having both present, as in (11) which is otherwise identical to (7)a above. In this case the object marker voices as would normally be expected, and there is often a pause after the object marker. In effect, this is another argument against the analysis of the medial in 'Pro<sup>CRK</sup> + body part noun + Pro' as the object marker and thus for the analysis proposed here.

- (11) ကျွန်တော့်ကိုယ်ကို ကျွန်တော် ရိုက်တယ်။  
 tɕəŋɔ̌.kò.gò tɕəŋɔ̌ jaiʔ.tè  
 I<sup>CRK</sup>.body.OBJ I hit.REAL  
 'I hit my (own) body.' (i.e. myself)

The literary reflexive also supports this analysis, showing in its direct object form မိမိ *mimi* ‘self(’s)’ + ကိုယ် ‘body’ followed optionally, as in (8), by the voiced /gò/ form of the object marker ကို *kò*. As it is unusual in diglossia — the coexistence of the parallel literary and colloquial forms of Burmese — for the syntactic structure as opposed to the forms employed to differ too greatly, this parallelism is another argument for the analysis proposed here. On the other hand, those literate speakers who write the middle *kò* in both constructions with the object marker ကို *kò* may have reanalysed their two spoken reflexives to give the structure ‘direct object Pro + object marker ကို + subject Pro’, but they still do not have juncture voicing for the middle *kò*, reflecting the original structure as retained by others.

The earliest example of a literary reflexive is in the first extant dated inscription, the Myazedi or Rajakumar (lines 14–16), shown in (12):

- (12) ထိုဝ် ရာဇကုမရ်မည့်သူ ပယ်မြာသာ  
*thuiv’ rājakumar’ maññ’sū pay’mrā.sā*  
 that Rajakumar.named.person dear.wife[’s].son
- မိမိ ကိုဝ် မုယ်သော မင်ဂြိ ဣညံဇော အောက်မိရကာ။  
*mimi kuiv’ muy’.so mañ’grī klaññ’jo ok’mi rakā*  
 self’s body raise.ATTR king.great thanks recall.because  
 ‘Since the son of the beloved wife, who was called Rajakumar, called to mind  
 the favours of the king who had nurtured him.’ (Taw Sein 1919:25)

Note that the reflexive is the direct object in a relative clause, showing that reflexivisation for direct objects did continue beyond the clause in which they are subject, even at that early stage. Moreover, unlike modern Burmese, the reflexive in the relative clause is coreferential with the subject of the main clause, which is not the head of the relative clause. See (21b) below for the situation in the modern language.

As is usually the case when modern spoken and written forms differ, the form of the Old Burmese reflexive is the same as the modern literary form,

The full modern literary direct object reflexive is မိမိ *mimi* plus, optionally, the possessive marker ၏ *ʔi* and then, obligatorily, the noun ကိုယ် *kò* ‘body’, optionally followed by the object marker ကို *kò* in its juncture-voiced form *gò*. Unlike the spoken ကိုယ့်ကိုယ်ကိုယ် *kòkòkò* reflexive, မိမိ *mimi* may also be pluralised by the addition of တို့ *tò*. Naturally, this precedes the various markers to give a maximal မိမိတို့၏ကိုယ်ကို *mimi.dò.ʔi kò.gò* REFL.PL.POSS.body.OBJ ‘our/your/themselves’

Unlike the reflexive, the direct object reciprocal is expressed with the reduplicated deverbal adverb ချင်းချင်း *tɕʰín.ɕʰín*, as in (13). Usually, but not obligatorily, the clause also contains the verb marker ကြဲ *tɕə* ‘plural/multiple action’, as a reciprocal must involve more than one actor doing something. This plural marker may also occur in reflexives with plural subjects as in (9)b, (9)c and (9)g above.

- (13) သူတို့ ချင်းချင်း ရိုက်တယ်။  
*thūdò tɕʰín.ɕʰín jaiʔ.tɛ̀*  
 they RECIP hit.REAL  
 ‘They hit each other.’

As in many other similar cases, the distinction between literary and spoken reflexive forms is gradually breaking down; this usually involves literary forms being brought into occasional spoken use. Indeed, quite a few expressions with မိမိ *mimi* are now heard in more formal spoken Burmese. Conversely, spoken Burmese forms can also filter into informal prose. (14) is the first sentence of the short story တိဋ္ဌိနာ *TV Sickness* published in 1982 by မစန္ဒာ Ma Sanda (cited in Allott 1990).

- (14) ဦးမောင်မောင်လတ်သည် မှန်ထဲတွင် သူ့ကိုယ်သူ အသေအချာ  
 ʔú.màun.màun.laʔ.θì ၎်.ḁḁ.dwìṇ ၎်.kò.θù ʔəθè.ʔətɕʰà  
 U Mg Mg Lat.SUBJ glass.inside.in he<sup>CRK</sup>.REFL.he carefully

ကြည့်မိသည်။

ʔɕj.mj.ðì

look.INADV.REAL

‘U Maung Maung Lat had a careful look at himself in the mirror.’

In (14), သူ့ကိုယ်သူ ၎်.kò.θù is spelt as it would be by most literate Burmese speakers. Despite the presence of a mainly spoken-form reflexive, all the noun and verb markers here have their literary forms.

## 6 Reflexives in proverbs

One of the most frequent occurrences of the reflexive other than as a direct object is in proverbs. These have the form of (15)

- (15) ကိုယ့် ကို <sup>CRK</sup>REFL + Noun + ကိုယ် ကို <sup>REFL</sup> + Verb

and can be appear in literary or spoken style by the addition of the appropriate sentence-final verb markers. The first ကိုယ့် ကို is a creaked possessive, and the second ကိုယ် ကို is a subject pronominal reflexive form which is no longer productive outside proverbs, but survives in a mildly productive capacity in this proverb construction, as well as in some adverbials discussed below. Some examples are seen in (16)–(18):

- (16) ကိုယ့်အား ကိုယ် ကိုး။  
 kò.ʔá kò kó  
 REFL<sup>CRK</sup>.strength REFL rely on  
 ‘Rely on one’s own strength.’

- (17) ကိုယ့်လမ်း ကိုယ် ရှာ။  
 kò.lán kò ʃá  
 REFL<sup>CRK</sup>.road REFL seek  
 ‘Find one’s own way.’

- (18) ကိုယ့်အလုပ် ကိုယ် လုပ်။  
 kò.ʔəlouʔ kò louʔ  
 REFL<sup>CRK</sup>.work REFL do  
 ‘Mind one’s own business.’

There are some other proverbs with the ကိုယ် *kò* used as a subject instead, such as (19), which also shows SVO order. However, these are unusual and much less productive.

- (19) ကိုယ်ထင်                      ခုတင်                      ရွှေနန်း  
*kò.tʰìn*                      *gədìn*                      *ʃwè.nán*  
 REFL.think                      bed                      gold.palace  
 ‘One’s bed may be a golden palace if one thinks so.’

Some other proverbs combine elements in different ways, as in (20), where the second part of the sentence has a particle သာ *thà* ‘only’ following the subject ကိုယ် *kò*.

- (20) ကိုယ့်ဝမ်းနာ                      ကိုယ်သာ                      သိ။  
*kò.wún.nà*                      *kò.ṭhà*                      *θi*  
 REFL.<sup>CRK</sup>.belly.hurt                      REFL.only                      know  
 ‘Only oneself knows one’s own bellyache (problem).’

Alternatively, (20) could be derived from the more normal proverbial (21) from ဝမ်းသာ *wún.θà* ‘belly.pleasant’ > ‘happy’, actually a subject–verb construction, broken up by the insertion of the two verbs, နာ *nà* ‘hurt’ and သိ *θi* ‘know’.

- (21) ကိုယ်ဝမ်း                      ကိုယ်သာ။  
*kò.wú*                      *kò.ṭhà*  
 ‘REFL.belly REFL.pleasant’  
 ‘Be happy in oneself’

Apart from these syntactically aberrant proverbial reflexives, it has been argued above that the origin of the direct object reflexive, and its current structure in literary and (for most speakers) spoken Burmese, is underlyingly from a possessive pronoun plus the noun ကိုယ် *kò* ‘body’ and then an identical pronoun. It will be seen below that a similar structure can be postulated for reflexives in the ‘ကိုယ် *kò* + Noun’ construction. In both cases a reanalysis has become possible as a result of the grammaticalisation of this noun to an object marker, homophonous with ‘body’ but written differently as ကို and behaving differently by voicing in close juncture with the preceding nominal element which acquires an attributive creaky tone on its final syllable if it is not already creaky.

As noted above, the literary possessive reflexive is မိမိ *mimi* or, with the literary possessive marker, မိမိ၏ *mimi.ʔi*, plural မိမိတို့ *mimi.dò* or မိမိတို့၏ *mimi.dò.ʔi*. As these already have creaky tone on their final syllables, they can have possessive meaning with or without the marker, as seen in the direct object forms which are optionally without the ၏ *ʔi*. These are used much more productively with NPs than ကိုယ့် *kò*, and may even be heard in spoken Burmese as possessive reflexives. The example in (22) is in a complement clause: the main clause lacks an overt subject but the context suggests ‘we’.

- (22) မိမိတိုင်းပြည်                      ကောင်းအောင်                      ကြိုးစားမည်။  
*mimi.táinpjì*                      *káun.ʔàun*                      *tsózá.mjì*  
 REFL.<sup>(POSS)</sup>.country                      good.PURP                      try.IRR  
 ‘(We) will try to make our (own) country better.’

## 7 Possessor reflexive

A variety of nouns occur in the construction ‘ကိုယ် *kə* + Noun’. The most frequent examples are the pronominal ဟာ *hà* ‘thing’ and the nouns ဖာသာ *pʰàðà* ‘behalf’ and အတွက် *ʔətweʔ* ‘sake’. Like the proverbial and adverbial usages above, this is effectively a reflexive, in this case possessive, and therefore with creaky tone. It is exactly paralleled by corresponding non-reflexive forms with other pronouns in possessive form as in (23)b and (23)d below.

- (23) a. ကျွန်တော် ကိုယ့်ဖာသာ အလုပ်လုပ်တယ်။  
            $\text{təonò}$        $\text{kə.pʰàðà}$        $\text{ʔəlouʔ}$        $\text{louʔ.tè}$   
           I            REFL.<sup>CRK</sup>.behalf      work            do.REAL  
           ‘I work for myself.’
- b. သူ ကျွန်တော့်ဖာသာ အလုပ်လုပ်တယ်။  
            $\text{mù}$              $\text{təonə.pʰàðà}$        $\text{ʔəlouʔ}$        $\text{louʔ.tè}$   
           He            I<sup>CRK</sup>.behalf      work            do.REAL  
           ‘He/she works for me.’
- c. ကျွန်တော် ကိုယ့်အတွက် စာအုပ်တစ်အုပ် ဝယ်တယ်။  
            $\text{təonò}$        $\text{kə.ʔətweʔ}$        $\text{sàʔouʔ.tə.ʔouʔ}$        $\text{wè.dè}$   
           I            REFL.<sup>CRK</sup>.sake      book.one.CLF      buy.REAL  
           ‘I buy myself a book.’
- d. သူ ကျွန်တော့်အတွက် စာအုပ်တစ်အုပ် ဝယ်တယ်။  
            $\text{mù}$              $\text{təonə.ʔətweʔ}$        $\text{sàʔouʔ.tə.ʔouʔ}$        $\text{wè.dè}$   
           he            I<sup>CRK</sup>.sake      book.one.CLF      buy.REAL  
           ‘He/she buys a book for me.’

An indirect object or other non-core case can only occur with a reflexive in a construction like this. There is an elaborate four-syllable ဖာသီဖာသာ *pʰàðìpʰàðà* form of ဖာသာ *pʰàðà* which, unusually for elaborate expressions in Burmese, has the free-form second rather than first.

The literary equivalent of the ‘ကိုယ် *kə* + Noun’ constructions is ‘မိမိ *mimi* + Noun’, for example မိမိ(တို့)အတွက် *mimi(də)ʔətweʔ* as in (24).<sup>7</sup>

- (24) လူတို့သည်      မိမိတို့အတွက်      အကျိုး      ရှိအောင်  
            $\text{lù.də.ðì}$        $\text{mimi.də.ʔətweʔ}$        $\text{ʔətəó}$        $\text{ʃì.ʔàun}$   
           person.PL.SUBJ      REFL.PL.sake      benefit      have.PURP  
           ‘In order for people to have some benefit for themselves, ...’

<sup>7</sup> This is cited in Allott (1990) from a Burmese primary school textbook. It is typical of countries with diglossia that schools teach only the literary (High) style; this of course makes education in the language much more difficult and less useful for nearly half of Burma’s population whose first language is another language or dialect.

## 8 Subject Intensifier and other Adverbial Reflexives

Apart from the archaic or proverbial usage of ကိုယ် *kò* alone as a subject pronoun in (19) above, the main reflexive-like form used adverbially after the subject is ကိုယ်တိုင် *kòdàin* as in (25). This also may occur without a subject pronoun as in (26), in which case it is ambiguous out of context. Some speakers reject sentences like (25) and (26), requiring a subject noun or pronoun to immediately precede ကိုယ်တိုင် *kòdàin*.

- (25) သူ            ကိုယ်တိုင်            လုပ်တယ်။  
            $\theta\ddot{u}$             *kòdàin*            *louʔ.tè*  
           he            self            do.REAL  
           ‘He(∼she) does(∼did) it himself(∼herself).’

- (26) ကိုယ်တိုင်            လုပ်တယ်။  
           *kòdàin*            *louʔ.tè*  
           self            do.REAL  
           ‘Someone does it himself.’

The ကိုယ်တိုင် *kòdàin* form cannot be pluralised by the addition of the pronoun plural marker တို့ *dō*. If plurality is to be indicated at all, it must be elsewhere in the sentence, for example using the verbal marker ကြ *ṭṭ* *ṭṭṭ* as in (27), or plural marking on the subject nominal if that is present. (26) and (27) are likely to be interpreted as referring to first person ‘I’/‘we’, respectively, unless the context shows otherwise.

- (27) ကိုယ်တိုင်            လုပ်ကြတယ်။  
           *kò.dàin*            *louʔ.ṭṭṭ.dè*  
           self            do.PL(V).REAL  
           ‘Some people do it themselves.’

Unlike the object reflexive, which operates as a unit and within which it is not usually possible to pause, a pause is normally required between the subject nominal and ကိုယ်တိုင် *kòdàin*. Furthermore, like the other reflexives, in sentences like (23) the initial *k-* does not voice to *g-*. Both of these phonological facts imply that ကိုယ်တိုင် *kòdàin* is a separate, appositional constituent which immediately follows the subject. It is unusual for the two to be separated by any other constituent.

Like ကိုယ့်ကိုယ်ကိုယ် *kòkòkò*, ကိုယ်တိုင် *kòdàin* can occur in embedded clauses as, for example, in (28)a, but ကိုယ်တိုင် *kòdàin* must be coreferential with the underlying subject of the clause in which it is situated, not necessarily the subject of the main clause. Likewise, the sentence (28)b with ကိုယ့်ကိုယ်ကိုယ် *kòkòkò* in a relative clause is also not ambiguous: it must be coreferential with the subject of the embedded clause, ‘person’, and not the subject of the main clause, ‘I’. This may be related to the fact that only a third person nominal can be the head of a relative clause, as noted below, but see also (12) above which indicates that this constraint did not operate in Old Burmese. (28)c also shows that the constraint on multiple ကို *kò* object markers in one sentence can extend beyond a single clause.

- (28) a. ကိုယ်တိုင်      ရိုက်တဲ့      လူကို      ကျွန်တော်      သိတယ်။  
 kòdàin      jaiʔ.tɛ      lù.gò      tɛənò      θj.dɛ̃  
 self      hit.REAL<sup>ATTR</sup>      person.OBJ      I      know.REAL  
 'I know the person who (himself) hits (someone else).'
- b. ကိုယ့်ကိုယ်ကိုယ်      ရိုက်တဲ့      လူကို      ကျွန်တော်      သိတယ်။  
 kòkòkò      jaiʔ.tɛ      lù.gò      tɛənò      θj.dɛ̃  
 self      hit.REAL<sup>ATTR</sup>      person.OBJ      I      know.REAL  
 'I know the person who hits himself.'
- c. ကျွန်တော့်ကို      ရိုက်တဲ့      လူကို      ကျွန်တော်      သိတယ်။  
 tɛənɔ.gò      jaiʔ.tɛ      lù.gò      tɛənò      θj.dɛ̃  
 I.OBJ      hit. REAL<sup>ATTR</sup>      person.OBJ      I      know.REAL  
 'I know the person who hits me.'

The literary equivalent of ကိုယ်တိုင် *kòdàin* is မိမိကိုယ်တိုင် *mimi.kòdàin*, which quite often occurs without any pronominal form in the sentence. In effect the reflexive မိမိ *mimi* is functioning as the head subject pronoun here. Again, unlike the spoken reflexive form ကိုယ် *kò*, a plural is possible for this literary form: မိမိတို့ကိုယ်တိုင် *mimi.dò.kòdàin* (REFL.PL.self).

Burmese also uses a number of other adverbial reflexive forms, set out in (29), all containing a reflexive subject pronoun.

(29) Adverbial reflexive forms

ကိုယ်စီ	kò.zì	REFL.DISTR	'each person acting separately'
ကိုယ်တူ	kò.t <sup>h</sup> ù	REFL.help	'by oneself'
ကိုယ်ထူး	kò.dú	REFL.special	'alone'
ကိုယ်ပိုင်	kò.bàin	REFL.own	'one's own', 'under one's own control'

Most of these reflexive adverbials also have elaborate<sup>8</sup> four-syllable alternatives, set out in (30):

(30) Elaborate derivatives of adverbial reflexive forms

Basic form	Elaborate form(s)	gloss
ကိုယ်တိုင်    kòdàin	ကိုယ်တိုင်ကိုယ်ရပ်    kòdàin.kòjaʔ ကိုယ်တိုင်ကိုယ်ရ    kòdàin.kòja ကိုယ်တိုင်ကိုယ်ကျ    kòdàin.kòdza	'oneself', 'in person'
ကိုယ်စီ    kò.zì	ကိုယ်စီကိုယ်စီ    kò.zì.kò.zì ကိုယ်စီကိုယ်င    kò.zì.kò.ŋa	'each person acting separately (for the same purpose)'
ကိုယ်တူ    kò.t <sup>h</sup> ù	ကိုယ်တူကိုယ်ထ    kò.t <sup>h</sup> ù.kò.t <sup>h</sup> a	'by oneself', 'on a self-help basis'
ကိုယ်ထူး    kò.dú	ကိုယ်ထူးကိုယ်ချွန်    kò.dú.kò.tɛ <sup>h</sup> ún	'alone', 'by one's own efforts'

<sup>8</sup> This term is due to Matisoff (1973). It refers to formal ABAC or ABCB reduplications corresponding to the usual AB forms. Often the C form is etymologically interesting as it may preserve an otherwise lost cognate.



Interestingly, there is juncture voicing of most unaspirated and some aspirated voiceless stops within these adverbials, unlike the direct object reflexives which do not voice internally.

Instead of an adverbial reflexive, it is occasionally possible to use the direct object ကိုယ့်ကိုယ်ကိုယ် *kòkòkò* in subject position with the meaning 'alone', as in (31)a. Of course there are other ways to express this, such as with a subject intensifier as in (31)b or a non-reflexive quantifier as in (31)c, which are much more frequent and are universally acceptable.

- (31) a. ကိုယ့်ကိုယ်ကိုယ်                      သွားတယ်။  
           *kòkòkò*                                      *θwá.dè*  
           self    go.REAL  
           'Someone goes alone, by himself (~herself).'
- b. ကိုယ်တိုင်                                      သွားတယ်။  
           *kòdàin*                                      *θwá.dè*  
           self    go.REAL  
           'Someone goes himself (~herself), in person.'
- c. တစ်ယောက်တည်း                      သွားတယ်။  
           *tə.jauʔ.tʰé*                                      *θwá.dè*  
           one.CLF.only                                      go.REAL  
           'One person goes alone, by himself (~herself).'

Most speakers reject sentences like (31)a when presented in isolation, but they do occur in Burmese discourse.

## 9 Reflexive in embedded, conjoined and linked clauses

Given the flexibility of order of NPs in a Burmese sentence, embedded clauses may be preceded by the subject of the main clause. For example, an alternative way of interpreting a sentence like (24) above would be to take လူတို့သည် *lù.dò.ði* 'person.PL.SUBJ' as subject of the top clause which continues after the complement, rather than as subject of the complement itself. On the other hand some types of embedded clauses, such as relative clauses, normally precede their heads, so it is also possible for the antecedent of the reflexive in such an embedded clause to follow its coreferential reflexive, as in the following examples (32)a–d which show the two alternative spoken forms. As in many languages, relative clauses in Burmese are restricted to third person heads, as in (31).

- (32) a. ကိုယ့်ကိုယ်ကိုယ်                      ရိုက်တဲ့                      လူ                      မကောင်းဘူး။  
           *kòkòkò*                                      *jaiʔ.tɛ*                                      *lù*                                      *mə.káun.bú*  
           self    hit.REAL<sup>ATTR</sup>                                      person                                      NEG.good.NEG  
           'The person who hits himself is not good.'

- b. သူ့ကိုယ်သူ                      ရိုက်တဲ့                      လူ                      မကောင်းဘူး။  
 0y.kò.0y                      jaiʔ.tɛ                      lù                      mə.káun.bú  
 he<sup>CRK</sup>.REFL.he                      hit.REAL<sup>ATTR</sup>                      person                      NEG.good.NEG  
 'The person who hits himself is not good.'
- c. \*ကိုယ့်ကိုယ်ကိုယ်                      ရိုက်တဲ့                      ကျွန်တော်                      မကောင်းဘူး။  
 kòkòkò                      jaiʔ.tɛ                      tɕəŋò                      mə.káun.bú  
 self                      hit.REAL<sup>ATTR</sup>                      I                      NEG.good.NEG
- d. \*ကျွန်တော့်ကိုယ်ကျွန်တော်                      ရိုက်တဲ့                      ကျွန်တော်                      မကောင်းဘူး။  
 tɕəŋò.kò. tɕəŋò                      jaiʔ.tɛ                      tɕəŋò                      mə.káun.bú  
 I<sup>CRK</sup>.REFL. I                      hit.REAL<sup>ATTR</sup>                      I                      NEG.good.NEG

In general the tendency towards zero anaphora in Burmese is very strong, especially within the sentence. It is very bad style to repeat pronouns all through a long sentence or discourse. Therefore many sentences which might be candidates for reflexivisation in other languages have little or no overt pronominalisation in Burmese. The reflexive is a highly topical and marked construction, and where semantically motivated it may also occur within non-main clauses embedded in a complex sentence, in conjoined clauses of a compound sentence, or even in a later sentence in the same discourse. Sentence (12) above shows that this has been the case since the earliest attested Burmese inscriptions.

Because they are so markedly topical, it is unusual to have more than one reflexive in a clause in Burmese. Combinations like those in (33)a–e below are considered to be very bad style. Some speakers accept sentences like (33)c which involve two reflexives neither of which is ကိုယ့်ကိုယ်ကိုယ် *kòkòkò* or 'Pro<sup>CRK</sup> Pro'.

- (33) a. \*ကျွန်တော်                      ကိုယ်တိုင်                      ကိုယ့်ကိုယ်ကိုယ်                      ရိုက်တယ်။  
 tɕəŋò                      kòdàin                      kòkòkò                      jaiʔ.tɛ  
 I                      self                      self                      hit.REAL
- b. \*ကျွန်တော့်ကိုယ်ကျွန်တော်                      ကိုယ်တိုင်                      ရိုက်တယ်။  
 tɕəŋò.kò.tɕəŋò                      kòdàin                      jaiʔ.tɛ  
 I<sup>CRK</sup>.REFL.I                      self                      hit.REAL
- c. ??ကျွန်တော်                      ကိုယ်တိုင်                      ကိုယ်အတွက်                      စာအုပ်                      ဝယ်တယ်။  
 tɕəŋò                      kòdàin                      kò.ʔətweʔ                      sà.ʔouʔ                      wɛ̀.dɛ  
 I                      self                      REFL<sup>CRK</sup>.sake                      book                      buy.REAL  
 'I myself buy myself a book.'
- d. \*ကိုယ့်ကိုယ်ကိုယ်                      ကိုယ်အတွက်                      ရိုက်တယ်။  
 kòkòkò                      kò.ʔətweʔ                      jaiʔ.tɛ  
 self                      REFL<sup>CRK</sup>.sake                      hit.REAL
- e. \*ကျွန်တော့်ကိုယ်ကျွန်တော်                      ကိုယ်အတွက်                      ရိုက်တယ်။  
 tɕəŋò.kò.tɕəŋò                      kò.ʔətweʔ                      jaiʔ.tɛ  
 I<sup>CRK</sup>.REFL.I                      REFL<sup>CRK</sup>.sake                      hit.REAL

This is parallel to a similar surface constraint on the spoken object marker ကို *kò*, which normally may only occur on one NP in a clause. However the relevant pronoun or noun still may show the creaked form as if it had the following ကို *kò*, so this may be a surface deletion. Where two or more such NPs are present, it is usually an animate NP which is marked, as in the following sentences. See also (28)c above which shows that the constraint may also extend over more than one clause of a sentence. This reflects the origin of ကို *kò* from ‘body’ and the tendency for it to be used in its object marker function more frequently with animate objects in early inscriptions.

- (34) a. ကျွန်တော် စာအုပ် တစ်အုပ် သူ့ကို ပေးတယ်။  
            $\text{təʔnə}$        $\text{sà.ʔou?}$        $\text{tə.ʔou?}$        $\text{θy.gò}$        $\text{pé.dè}$   
           I            book            one. CLF      he<sup>CRK</sup>.OBJ      give.REAL  
           ‘I gave him(~her) a book.’
- b. ခင်ဗျား ကျွန်တော့်ကို စာအုပ်တစ်အုပ် သူ ပေးစေတယ်။  
            $\text{kʰəmja}$        $\text{təʔnə.gò}$        $\text{sà.ʔou?.tə.ʔou?}$        $\text{θy}$        $\text{pé.zè.dè}$   
           you      I<sup>CRK</sup>.OBJ      book.one.CLF      he<sup>CRK</sup>      give.CAUS.REAL  
           ‘You make me give him(~her) a book.’
- c. ခင်ဗျား ကျွန်တော့် စာအုပ်တစ်အုပ် သူ့ကို ပေးစေတယ်။  
            $\text{kʰəmja}$        $\text{təʔnə}$        $\text{sà.ʔou?.tə.ʔou?}$        $\text{θy.gò}$        $\text{pé.zè.dè}$   
           you      I<sup>CRK</sup>      book.one.CLF      he<sup>CRK</sup>.OBJ      give.CAUS.REAL  
           ‘You make me give him(~her) a book.’  
           or ‘You make him(~her) give my book.’

In (34)c ကျွန်တော့်  $\text{təʔnə}$  I<sup>CRK</sup> is ambiguous between a possessive and a causee meaning as it has no object marker. With a pause after it, the former meaning is more natural; without pause, the possessive meaning is more natural.

The literary reflexive မိမိ *mimi* also occurs in non-main clauses in the same ways: for an example see sentence (22) above.

## 10 Conclusion

In summary, the reflexive in Burmese has three forms: the earliest, still used in literary style, is မိမိ *mimi*. As discussed in Bradley (1995), this may have had a reflexive function in Burmese-Lolo and ultimately derives from a Tibeto-Burman etymon meaning ‘person’. This etymon is hardly attested within Burmese-Lolo in its original nominal meaning.

More recently the noun ကိုယ် *kò* ‘body’, derived from one of the Tibeto-Burman etyma for ‘body’, has grammaticalised in Burmese and become a spoken-style reflexive, and even more recently this latter construction has been used analogically to produce a third reflexive pattern using any pronoun in place of the *kò* form and a variety of other body part nouns as alternatives to *kò*. The analogy is confused by the fact that the noun ‘body’ has also become independently and somewhat more opaquely grammaticalised into the object marker ကို *kò*/ဂဲ *gò*, and this has affected the spelling of the two spoken reflexives.

Burmese reflexives of the *kòkòkò* and ‘Pro<sup>CRK</sup> *kò* Pro’ forms described here are restricted to direct objects coreferential to a subject within the same discourse, but not

necessarily within the same clause or sentence. Since zero anaphora for subjects is very frequent in connected discourse, the subject may be absent: such sentences are ambiguous or generic. In addition, parallel constructions using the same pronominal forms (literary မိမိ *mimi*, spoken ကိုယ် *kò*) are used with reflexive subject meaning in some adverbials; there is also a possessive form, used to express indirect objects and other nominal reflexive arguments with a following noun head, such as ဖာသာ *pʰàðà* ‘behalf’ or အတွက် *ʔətweʔ* ‘sake’ for indirect objects. The possessive and subject form reflexives are also combined in frozen proverbial expressions.

# 4 *Syntactic and morphological markers in Burmese: are they really optional?*

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## 1 Preliminaries: the problem

Amongst other things, the languages of South-East Asia are well known for the so-called *optionality* of certain grammatical morphemes (markers), both syntactic and morphological.<sup>1</sup> Burmese is no exception. In plain terms, this means that derivational and relational morphemes of such languages, to recall Edward Sapir's classification, are used or not used (left out, dropped), simply according to the speaker's 'free will'. If we were to imagine for a moment that in English one were free to choose between alternatives a and b in examples(1), (2) and (3), this would be similar to the 'optionality' which, it is claimed, characterises languages such as Burmese, Chinese, or Thai.

- |     |                              |                            |
|-----|------------------------------|----------------------------|
| (1) | a. I want to eat.            | b. I want eat.             |
| (2) | a. He likes me.              | b. He likes I.             |
| (3) | a. Yesterday I walked a lot. | b. Yesterday I walk a lot. |

Accepting optionality as fact, understood in this way, entails extremely serious consequences for the theory of grammar applicable to the Asian languages in question, as well as for linguistic theory in general. Let us recall Roman Jakobson's famous maxim that languages differ not so much by the set of meanings they *can* express but, rather, by the set of meanings they *cannot* leave unexpressed. In turn, this leads us to think that *some* meanings are *obligatory* rather than subject of being expressed or unexpressed at the speaker's 'free will'. It is commonly believed that it is precisely the meanings belonging within the domain of grammar that are obligatory. For instance, speaking in English, one is not *obliged* to specify (4)a over (4)b, where the word 'fast' is obviously a lexical item.

- |     |   |
|-----|---|
| (4) | a. John is crazy about driving cars.      |
|     | b. John is crazy about driving fast cars. |

However, one is not equally free to drop, say, -s in (5), where the -s is grammatical material.

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<sup>1</sup> In this short paper, I have sought to keep bibliographical references to a minimum. For references to early contributions (by Henri Maspero and others) see, for instance, Solntseva 1963.

- (5) There are many books on the table.

Taken the other way round, such reasoning enables a definition of grammatical morphemes as distinct from lexical ones, namely that grammatical morphemes are such that their use in appropriate contexts is obligatory, and that such morphemes are not subject to deletion or suppression unless one grammatical structure is changed for another.

Certainly the above definition is not sufficiently rigorous (for details see Kassevitch 1977, 1986). But, anyway, some such definition *is* necessary, for, after all, a language is composed, roughly, of a grammar and the lexicon, and we simply cannot offer any rule or constraint in our description of a language without being able to distinguish lexical items from grammatical ones. Once agreed upon, this definition would lead us to think that, in Southeast Asian languages, there is no grammar at all or, at least, the domain of grammar is much more restricted compared to that of modern Indo-European languages. The situation is reminiscent of another famous problem, also intimately concerned with the scope of grammar in Chinese, Burmese and the like languages, namely that of parts of speech. If parts of speech are defined as declensional and conjugational classes (categories), neither Chinese nor Burmese discern any parts of speech.

Let us, however, return to the traditional line of reasoning explained above to see if it is really as logically flawless as usually believed.

To begin with, there seems to be a subtle shift in emphasis when it comes to drawing consequences from a possible deletion of items, by all standards describable as grammatical morphemes, *but* suppressible. The Jakobsonian maxim referred to above insists on the inadmissibility of ignoring certain *meanings* rather than on the inadmissibility of leaving out certain *morphemes*. Yet the interdependence of meanings and corresponding morphemes is not as strict as it might seem to be. For instance, in (6), there are no subject or direct object markers (as distinct from (7), where both are present), but the *meanings* of subjecthood and objecthood are obviously preserved in spite of the absent markers.

- (6) မောင့်ဘ            စာအုပ်            ဖတ်တယ်။  
 máunbǎ            sàʔou?            pʰaʔ.tè  
 Maung Ba            book            read.REAL  
 'Maung Ba reads (is reading) a book'.

- (7) မောင့်ဘက            စာအုပ်ကို            ဖတ်တယ်။  
 máunbǎ.gǎ            sàʔouʔ.kò            pʰaʔ.tè  
 Maung Ba.SUBJ    book.OBJ            read.REAL  
 'Maung Ba reads (is reading) a book'

In other words, even if a meaning is obligatory, this does not necessarily presuppose that the morpheme associated with that meaning is equally obligatory. The meaning can be still there, its manifestation being relegated to the word order, word-class specification or even to the context. In our simple examples (6) and (7) above, at least two factors seem to be at play to preserve the syntactic meanings in the absence of the syntactic markers. First is word order: on which special comment is hardly necessary. Second, the set of arguments associated with the verb ဖတ် pʰaʔ 'read' must include one with the semantic

(thematic) role of Agent and the other one with that of Patient (or Theme, depending on the framework adopted). If we further take into account that in transitive constructions (and both (6) and (7) are undoubtedly transitive), the Agent is syntactically the Subject, we have no option but to admit that 'Maung Ba' has to be interpreted as the grammatical (syntactic) Subject, whatever its markers, if any. The same reasoning tells us that 'book' in the same examples should be recognised as the grammatical (syntactic) Object, irrespective of the lack of any overt markers.

Yet the problems with optionality are not yet explained away by the analysis attempted above. In order to place into a broader theoretical context one of the most important aspects of the problem now under scrutiny, one could say that we are faced here with a situation where speakers are 'allowed' to adjust *the level of redundancy of the text*. After all, in the Latin phrase in (8) the masculine nominative singular adjectival ending *-us* is also redundant, but speakers of Latin were not 'allowed' to make an utterance such as (8) 'less redundant' by omitting *-us*.

- (8) *puer robustus* *currit*  
 boy strong-[*masculine/nominative/singular*] runs  
 'The strong boy runs.'

One more aspect not yet considered in our analysis is concerned with a theoretically possible interpretation of such forms as *Maung Ba* in (6) as unmarked. As is well known, unmarked forms are special precisely in that they can be used in place of the marked member of the opposition, at least in some contexts. For instance, in the singular-plural opposition *man* – *men*, the first member is unmarked. In some contexts, we can see that the marked form can be replaced by the unmarked one, as in (9) and (10):

- (9) Unlike animals, men are endowed with the faculty of language.  
 (10) Unlike animals, man is endowed with the faculty of language.

Last but not least, one cannot be absolutely sure that deletion of markers like that in (6) vs. (7) can be claimed to produce a perfect equivalent of the original sentence. When taken in isolation, many utterances can be manipulated quite freely: nobody would object if, instead of (11), one produced (12), *if* the two sentences are taken outside of any context:

- (11) They sing quite well.  
 (12) They are singing quite well.

The factors mentioned above can be summarized as follows:

- (i) the possibility of limiting redundancy as a typological feature of Burmese (and other languages) vs. no possibility of limiting redundancy, normally typical of Indo-European languages;
- (ii) the possibility of designating marker-free words as unmarked in Burmese;
- (iii) context-free analysis of the marker deletion processes vs. context-dependent analysis.

The first two points are mostly theoretical, and we shall return to them later. The third is largely empirical, since the question of how important it is for a syntactic or morphological marker to rely on context is presumably testable in the course of an *experiment*, where

native speakers of the language can be asked to assess the acceptability of texts transformed by the experimenter.

## 2 Experimental design and main results

These were the considerations which gave rise to a set of experiments, where subjects were asked to insert missing words or syllables, if any, and, vice versa, to delete words or syllables, if the latter are felt unnecessary or even put wrongly.

The text used in the experiment was a 1000-syllable excerpt from the novel ထောင်နှင့်လူသား *t'hàun n̥jɪn lùðá Prison and Humans* and six folk tales, each about 1,500 syllables long, by Ludu U Hla လူထုဦးလှ *lùdu ʔúʔá*. The experimental data were collected by Katia Manicheva and Esuna Dugarova. In the first experiment, the text was presented to the subjects after certain words had been deleted: a sample of the text is shown in (13), where the grammatical markers which were deleted are underlined.

- (13) ကြက်ကလေးက ရှေ့ဆောင်တဲ့ သူရဲကောင်းအုပ်စုဟာတော့ ကြောင်နေတဲ့  
 tɕɛʔkələ.ɡə ʃɛháu.dɛ ʈɪjɛ́ɡáun.ʔouʔsɥ.hà.dɔ tɕáun.nè.dɛ  
 chick.SUBJ lead.REAL<sup>ATTR</sup> hero.group.TOPIC.but cat.live.REAL<sup>ATTR</sup>

အိမ်ကို ညသန်းခေါင်းလောက်မှာ ရောက်တော့ ကြက်ကလေးက  
 ʔèin.ɡò ɲá.ðəɡáun.lauʔ.mà ʃáʊʔ.tɔ tɕɛʔkələ.ɡə  
 house.to night.midnight.about.at arrive.when chick.SUBJ

ကျည်ပွေ့ကို အိမ်တံခါးဝမှာ စောင့်ဖို့နေရာ ချထားတယ်။  
 ɕəbwe.ɡò èin.dəɡá.wə.mà sáun.bɔ.nèjə tɕə.tʰá.dè  
 pestle.OBJ house.door.opening.in guard.PURP.place place.set.REAL

မြွေကိုတော့ ရေအိုးထဲမှာ ဝင်ပြီး ခွေးနေစေတယ်။  
 mʃɛ.ɡò.dɔ jè.ʔó.dɛ.mà wɪn.bí kʰwé.nè.zè.dè  
 snake.OBJ.but water.pot.in enter.SUBORD curl\_up.CONT.CAUS.REAL

‘At about midnight the gang of smart guys led by the chick reached the wild-cat house, and the chick placed the pestle to guard the gate to watch the entrance, while the snake was made to creep into the water jug and to stay there curled’.

In another experiment, grammatical markers were introduced into a text in places where they had not originally been present. An sample text is shown in (14), with the ‘new’ marker inserted in the text underlined.

- (14) သူရဲကောင်းတစ်စုဟာ ကပွဲကြီးကို ဆင်းပြီး ပျော်ကြတယ်။  
 ʈɪjɛ́ɡáun.tə.sɥ.hà kə.bwɛ.ɕá.ɡò sʰín.bí pʃò.tɕə.dè  
 hero.one.group.TOPIC dance.event.big.to organise.SUBORD enjoy.PL.REAL  
 ‘The heroes organised a dance and enjoyed themselves.’

In the experimental design reported in this paper, we tested the degree of optionality of syntactic markers like ကို *kò*, က *kə*, ဟာ *hà*, မှာ *mà* and the like. The subjects were fourteen



native speakers of Burmese, aged between 25 and 40, all postgraduates of various technical universities, who took part in the experiment voluntarily.<sup>2</sup>

In this paper, I report the data concerning three syntactic markers, namely က က, ဟာ hà and ကို kò, whose primary function is to identify the subject, topic and object of the sentence.<sup>3</sup>

In our experimental texts, 29 instances of က က were identified and then deleted from the test texts presented to our subjects, who were then asked to correct the text. The subjects had no way of knowing which places in the text the markers had been removed from. The results were as follows: 63 percent of the markers removed were restored by the subjects to their original positions, and 33 percent of the 'blanks' — places from where က က had been removed — were left unfilled. In the remaining 4 percent of cases, subjects inserted some marker other than က က.

The conclusion drawn is that the absence or presence of က က is not as arbitrary as might have been expected. In fact, the markers are neither obligatory, nor optional. This claim is further substantiated by closer scrutiny of the individual positional and structural subtypes of က က. At least two positional-*cum*-structural contexts can be singled out where our subjects were absolutely unanimous in restoring the marker. These are as follows:

- (a) speaker-indicating က က, where the NP containing the speaker and the verb or speaking or uttering are disconnected by the clause containing the directly quoted speech itself, such as the က က underlined in (15);
- (b) 'long NP'-marking က က, underlined in (16), where a complex NP is made 'long' due to one or more modifiers, especially relative clauses.

- (15) ဒီအခါ ကြက်ကလေးက ငါရဲ့အမေကို သတ်တဲ့ကြောင်ကို  
 dì.ʔək'hà tɛʔkələ́.gá ṇà.jɛ.ʔəmè.gò θaʔ.tɛ.tə̀aUN.gò  
 this.time chick.SUBJ I.POSS.mother.OBJ kill.REAL<sup>ATTR</sup>.cat.OBJ
- ကလဲစားချေဖို့ သွားမလို့ သူရဲကောင်းတွေ လိုပါတယ်။  
 gəlɛzà.tɕ'hè.bò θwá.mə.lò θùjɛ́gáUN.dwè lò.bà.dè.  
 revenge.wreak.PURP go.will.SUBORD hero.PL need.POL.REAL
- သင် လိုက်နိုင်ရင် လိုက်ပါလို့ ပြောတယ်။  
 θìn laiʔ.nàin.jìn laiʔ.pà.lò pjɔ̀.dè  
 you follow.can.if follow.POL.QUOT say.REAL
- 'At that the chick said: "I set out to take revenge over the wild cat who has murdered my mother, so I need people to take action. If you can follow me, just follow"'.

<sup>2</sup> A second experimental design not reported here tested the exchangeability of markers such as ငါ, ပါ, ဤ, ညွှဲ, ကော့တု, က က and similar, using eight subjects.

<sup>3</sup> I won't go into discussion of the important problems concerning the markers က က and ဟာ hà in Burmese. Leaving aside relatively 'easy' questions, such as the polyfunctionality of က က and its appropriateness in both formal and colloquial styles, an adequate interpretation of the markers under study would be crucial for categorising Burmese as either a subject-prominent or a topic-prominent language (or as a mixed type).

- (16) ရေအိုးထဲမှာ                      ခွေးနေတဲ့                      မြွေကလေးက                      ပေါက်လိုက်တယ်။  
 jè.ʔó.dé.mà                      k<sup>h</sup>wé.nè.dɛ                      mwè.gəlɛ.gə                      pauʔ.laiʔ.tè  
 water.pot.inside.in                      curl.CONT.REAL<sup>ATTR</sup>                      snake.little.SUBJ                      strike.just.REAL  
 '[At that moment] the snake, which was lying curled up in the water pot, struck  
 [the wild cat].'

In some other cases, not examined further here, the situation was less clear. The reactions of our subjects were less than 100 percent unanimous, although still very substantially tending towards non-acceptance of the 'blanks' where the က qā had been removed from.

It should be added that the converse experiment, where potentially possible but 'missing' markers were artificially introduced, led mostly to the acceptance of the sentences transformed in that way. We can generalise the findings with the statement that over-differentiation of grammatical (syntactic) functions is more tolerated than an under-differentiation.

Another marker tested, as mentioned above, was ဟာ hà. There were 22 occurrences of this marker in the test texts. Once deleted, the 22 instances of ဟာ hà were found to be restored by the same set of subjects in 25 percent of cases, while in 39 percent of cases the blanks were left unfilled. In 36 percent of cases, the position originally occupied by ဟာ hà was filled instead with က qā, which shows that the difference between the two is sometimes sufficiently blurred to permit a degree of interchangeability. We might could be hypothesise that က qā marks the Topic, while ဟာ hà indicates the grammatical Subject, which would explain the different behaviour of the two, but this is a topic to be discussed separately.

Without giving exact data, it can be said that practically all the features revealed in the experiments on က qā were observed with ကို kò also, with the obvious exception of the speaker-marking function, which does not apply to ကို kò. This similarity between က qā and ကို kò seems natural, since these two markers form the structural core of a transitive verb sentence. Leaving aside the difficult question of the difference between က qā and ဟာ hà, the situation could be reduced to the formula in (17) which reads, 'in terms of structural "strength", က qā and ကို kò exhibit equal strength or resistance to being dropped, while ဟာ hà is less resistant.'

- (17) (က qā = ကို kò) > ဟာ hà

In other words, optionality can be weighted. In the terms of these experiments, optionality might be said to range from 0 to 100 percent, though we are not yet in a position to compute the actual value of optionality even for most typical cases. However, our experimental data seem to show that this is generally feasible. The language mechanism is no less probabilistic than deterministic, and our case is one more illustration of the above point. In the above presentation I have not analysed the data pertaining to the 'agreement coefficient' demonstrated by the subjects. Not only do individual entries of the markers differ with respect to being restorable or not, individual subjects also tend to display different sensitivity to the lack of markers. Leaving aside the 100 percent restorable entries, each individual entry was restored by three to nine subjects out of the total fourteen.

### 3 Optionality and discourse: mark-drop and *pro*-drop

We must admit, at the same time, that the very fact of optionality, however partial it may be, and regardless of the factors constraining it, makes Burmese and other languages like Chinese or Thai typologically special.

An obvious parallel that readily comes to mind (although, to the best of my knowledge, it has not been explored yet in the relevant literature) is the well known distinction between so called *pro*-drop and non-*pro*-drop languages. *Pro*-drop languages tend to omit pronominal and other grammatical Subjects, while the non-*pro*-drop languages do not. Compare the Russian *иду idu* '(I) go', where the pronoun *я ja* 'I' is freely dropped, and its English equivalent, where the Subject cannot be omitted. If I might venture to coin a new term, I would describe Burmese and other languages of the same typological class as *mark-drop* or *marker-dropping* languages.

An important difference between the *pro*-drop and the proposed *mark-drop* typological classes lies, of course, in that the former refers to a special behaviour of *lexical* items, while the latter refers to *grammatical* ones. It could be argued, however, that the items typically dropped in *pro*-drop languages are pronouns, which are the lexical class which most closely resembles grammatical markers in terms of both functional and semantic features. After all, diachronically, pronouns are often subject to cliticisation, which, in turn, may give rise to affixation and other grammatical devices.

Since it is unconstrained and unbound, optionality does seem to enlarge the set of candidate constructions accessible to the speaker as compared with non-*mark-drop* languages, for the latter normally rule out any element of free choice where it comes to grammatical structures.

### 4 Optionality and redundancy

Now let us come back to the other theoretical issues briefly delineated at the beginning of this paper.

With regard to the question of whether it is reasonable to claim that Burmese and other languages ('*mark-drop*' languages) make it possible for speakers to control the degree of redundancy of a text, we have to answer yes, but not without certain reservations.

At this point, it seems appropriate to introduce one more subset of our experimental data, this time concerning two *morphological* markers  $\text{တၢ်}$  *twè* and  $\text{တၢ်}$  *tə*, both plural markers, the former for nouns, the latter marking the plurality of the subject of verbs. Without analysing the data in unnecessary detail, we can state simply that both these markers were restored by the subjects in only 25 percent of the total cases where the markers had been removed.

It is clear that in any language, whenever we encounter an utterance like (18), the plural suffix *-s* is redundant, since the same information about plurality is encoded thrice: once lexically, using the word *many*, and twice grammatically, by the plural suffix *-s* on the noun and the plural form *are* of the auxiliary verb *to be*. Yet English speakers are not allowed to drop plural suffixes like *-s*, nor to violate the rules of grammatical agreement by using *is* instead of *are*. Although redundant, the markers are kept obligatory.

- (18) Many books are quite useless.

Could it be said that *redundancy control* is just another term for *optionality*, that the two terms refer to the same phenomenon seen from slightly different perspectives? A possible answer to this question may be found by conceding that these two phenomena, optionality and degree of redundancy — and, consequently, the control of redundancy by the speaker — overlap rather than coinciding exactly. Redundancy, as it is generally understood, presupposes that the information INF is already there, coded at least once by a lexical or grammatical item X, and an item Y is used to duplicate the same information INF, presumably in order to make the exchange of information flow more reliably, robust and resistant to noise, etc. Redundancy, thus, operates within the context of the text and language. In contrast, optionality embraces both linguistic devices and paralinguistic resources to lower the redundancy level of the text, so long as this does not lead to communicative failure.

In the context of Burmese, what we mean by paralinguistic resources is that default knowledge is allowed to be a player in the 'language game' (Wittgenstein 1953) in that within an individual speech act, shared background information, easily deducible information, etc., may be equated functionally with information encoded by means of linguistic devices.

Put another way, redundancy involves only linguistic devices, it is more often than not obligatory, and it *adds* information to the text (albeit old information), thus when the level of redundancy is high, it increases the density of information flow. Optionality, on the other hand, involves all accessible sources of information, it is intrinsically not obligatory, and it *subtracts* information from the text, thus decreasing the density of information flow.

It is by no means coincidental that mark-drop languages constitute, in effect, a subset of pro-drop languages: every mark-drop language is also a pro-drop language, although the reverse does not hold true. In fact both phenomena, pro-drop and mark-drop, seem to be triggered by broadly similar factors. At least in part, these factors transcend the scope of language (and, hence, linguistics) reaching into the domain of culture. It is first of all the high level of shared background knowledge which makes it possible for speakers to omit items that can be readily and accurately restored by relying on information available both within and outside the text. A high level of shared background knowledge and a tendency to structure a discourse along the lines of a face-to-face communication are recognised as distinctive features of *traditional culture* societies (see Kassevitch 1997). In other words, formal properties of the Burmese (or Chinese, for that matter) text such as the tendency to drop both Subject and Object markers, and Subjects themselves, are culture-dependent rather than grammar-dependent.

## 5 Optionality and markedness

Finally, returning to the issue of markedness, let us restate the question: Can we argue that, by dropping a marker, the speaker actually substitutes a marked form for its unmarked counterpart? To answer this question, we first establish that we are dealing with a binary opposition, simply because it is this kind of opposition that gives rise to the marked–unmarked relationship. I do not think that a NP with a marker and and NP with no marker make a real opposition, let alone a binary opposition, the most typical of all kinds of grammatical oppositions. Take, for instance, the contrasting phrases in (19). This does not seem to be a *morphological* paradigm, which could be organised by a set of oppositions. It

looks more like a set of postpositional phrases (PPs), comparable to the English translations of these phrases. If this is really the case, the theory of markedness is not applicable to interpret the phenomenon of mark-drop.

(19)

အိမ်	အိမ်ဟာ	အိမ်ကို	အိမ်က	အိမ်မှာ
ʔèin	ʔèin.hà	ʔèin.gò	ʔèin.gà	ʔèin.mà
house	house.TOPIC	house.to	house.from	house.in
'house'	'house (as topic)'	'to the house'	'from the house'	'in the house'

The situation is slightly different where it comes to the subtype exemplified above by the Plurality markers. In this case, it appears that the pair of phrases in (20) display a 'regular' morphological opposition and, hence, a 'regular' morphological paradigm.

(20)

အိမ်	အိမ်တွေ
ʔèin	ʔèin.dwè
house	house.PL
'house'	'houses'

Yet, here too, the situation is not that simple. There are good reasons to argue that bare, unaffixed nouns simply lie outside any morphological opposition; such nouns are just lexical items which *lack* any grammatical information pertaining to number. However, lacking information about number is not the same as being unmarked for number. The former means that the feature  $[\pm \text{plural}]$  is not applicable to the noun in question, while the latter presupposes that the noun is characterized by *both* values of this feature, the positive value  $[+\text{plural}]$  and the negative  $[-\text{plural}]$  or  $[+\text{singular}]$ . Burmese nouns are simply devoid of any information about number. When plural markers တွေ *twè* or များ *mjá* are introduced, these are on an equal footing with any other specifier like ကလေး *kalé* 'small' or ကြီး *tsá* 'big'; မ *má* 'female' or ဖို *p'hó* 'male' (if applicable), as in (21).

(21)

ကြက်	ကြက်တွေ	ကြက်များ	ကြက်ကြီး	ကြက်မ	ကြက်ဖို
tsɛʔ	tsɛʔ.twè	tsɛʔ.mjá	tsɛʔ.tsá	tsɛʔ.má	tsɛʔ.p'hó
chicken	chicken.PL	chicken.PL	chicken.big	chicken.female	chicken.male
chicken	chickens	chickens	big chicken	hen	rooster

Taking another example, we could argue that, for instance, that in English 'dog' is  $[\pm \text{feminine}]$ , that is to say unmarked for gender, while 'bitch' is  $[+\text{feminine}]$ , i.e. marked for gender. To sum up, the notion of markedness does not seem to present an efficient theoretical framework for explaining the phenomena of mark-drop in Burmese.

## 6 Conclusions

Now, let us draw some conclusions – preliminary in that they are subject to being proven or rejected by further experimental work on a larger corpus of data.

The syntactic markers of Burmese (at least က *ká*, ဟာ *há* and ကို *kò*) are *not* optional in the sense that the choice between their absence or presence is not purely stylistic, made

according to the speaker's 'free will'. There are a number of structural parameters that constrain or license dropping of the markers.

On the other hand, the markers *are* optional in the sense that even in the same structural position, there may be more than just one acceptable option to drop the marker or use it. Burmese, therefore, can be classified as a 'mark-drop', a category which encompasses also Chinese, Thai, and other East and South East Asian languages.

The proposed mark-drop characterisation is found to be correlated with the *pro*-drop categorisation. Both properties may be partly culturally determined.

Morphological markers in Burmese (at least တွဲ *twè* and တွဲ *te̤a*) are not optional at all. Although the observational adequacy principle would be satisfied, if one states simply that morphological markers are used as irregularly as the syntactic ones (in fact, it is not exactly the case in terms of probability of occurrence, see above), this does not do full justice to the deep structural features of these markers. The contrast between marker-free and marker-present nouns does not constitute a formal opposition which would be a regular paradigm, since the marker-free noun is simply devoid of any grammatical information, except for that implicitly defining its part-of-speech affiliation. *Mutatis mutandis* the same could be repeated with reference to the verb plural marker တွဲ *te̤a*.

The lack of oppositions and paradigms also explains why the principle of markedness does not seem to be an appropriate theoretical tool for explaining the phenomena traditionally discussed under the label of 'optionality'.

# 5 *The verb ‘give’ as a causativiser in colloquial Burmese*<sup>1</sup>

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## 1 Introduction

It is widely known that many lexical verbs are also used as functional words in Burmese. Used as functional words, some of these verbs precede the main verb, and some follow. A few verbs can both precede and follow the main verb. For example, when preceding the main verb, the verb ကြည့် တဲ့ ‘look’ has an adverbial function meaning something like ‘with discretion, carefully’; when it follows the head-verb, it means ‘try to [verb]’.

The verb ပေး pé ‘give’ also has functional usages. Following the head verb, its function is benefactive (or applicative), as in (1), or else it denotes the ‘destination of action’, as in (2) (the opposite direction, with လူ jù ‘take’ is shown in (3)). It can also have a transitive/causative meaning, as in (4).

- (1) ကျွန်တော် ခင်ဗျားအတွက်/အစား/ကို ဖတ်ပေးမယ်။  
tənə̃ kʰinbjá.ʔətweʔ/ʔəsá/gò pʰaʔ.pé.dɛ̃  
I you.for/on behalf of/to read.pé.IRR  
‘I will read it for/on behalf of/to you.’
- (2) သူ့အဖေ တက္ကသိုလ်မှာ အင်္ဂလိပ်စာ သင်ပေးတယ်။  
θy.ʔəpʰè tɛʔkəθò.mə̃ ʔingəleiʔ.sà θin.pé.dɛ̃  
his.father university.in English.language learn.give.REAL  
‘His father teaches English at university.’
- (3) သူ့သမီး တက္ကသိုလ်မှာ အင်္ဂလိပ်စာ သင်ယူတယ်။  
θy.ʔəpʰè tɛʔkəθò.mə̃ ʔingəleiʔ.sà θin.jù.dɛ̃  
his.daughter university.in English.language learn.take.REAL  
‘His daughter learns English at university.’

<sup>1</sup> I would like to thank to Mr Kato, Associate Professor at Osaka University of Foreign Studies, who brought this phenomenon to my attention. I also thank U Khin Aye ဦးခင်အေး, Professor in the Department of Myanmar Language and Literature at Yangon University, and other teachers there. While I was studying at Yangon University, they always supported me and put up with my endless questioning.

- (4) အမေ သမီးကို ဂျပန်ဝတ်စုံ ဝတ်ပေးတယ်။  
 ʔəmè θəmí.gò dzəpàn.wuʔsòun wuʔ.pé.dè  
 mother daughter.OBJ Japan.clothing wear.pé.REAL  
 'The mother helps her daughter to put on her Japanese dress.'

In the examples (1)–(4) in functional use, the verb ပေး pé 'give' always follows the head verb, having one of the three meanings outlined above. However, I will describe here a further usage of ပေး pé, preceding the head verb and with 'causative' meaning, as in (5).

- (5) သူ့ကို ပေးဝင်တယ်။  
 θú.gò pé.wìn.dè  
 he.OBJ pé.enter.REAL  
 'He/she was allowed in.'

There is some evidence that this is a recent phenomenon, reported, to my knowledge, for the first time by Kato (1998). I can find no published references to ပေး pé which pre-date this. Soe (1999) does not list ပေး pé as a pre-head versatile causativiser, again suggesting that the grammaticalisation of causative ပေး pé is recent. I have been told by older speakers of Burmese that this construction is not pure Burmese, but despite this, I want to describe it for two reasons. Firstly, it seems that many people have already accepted the causative ပေး pé construction and make habitual use of it – perhaps unconsciously. Secondly, it is possible that causative ပေး pé is an example of recent grammaticalisation in Burmese. In this short article, I will provide various examples of causative ပေး pé, and consider its syntactic and semantic features.

## 2 Predicate structure

Before proceeding further, I will outline briefly the structure of verbal predicates in Burmese. Okell (1969) regards all analysable (complex) verbs as compounds, which he classifies as ordinary, pre-verb and auxiliary compounds (Okell 1969:24–25). Okell's classification and terminology will be adopted in this article. According to Okell and Allott (2001), causative ပေး pé is common pre-verb. As for Okell's definition, pre-verb compounds can be paraphrased with complex sentences using the subordinate clause marker ပြီး pí, as in (6) and (7). I will refer to verbs separated from the preceding causative ပေး pé as main 'head' verbs, without attempting a precise definition of 'head'.

- (6) ဆက်လုပ်တယ်။  
 sʰɛʔ.louʔ.tè  
 continue.do.REAL  
 '(He) continues to do.'
- (7) ဆက်ပြီး လုပ်တယ်။  
 sʰɛʔ.pí louʔ.tè  
 continue.SUBORD do.REAL  
 '(He) continues to do.'



### 3 Examples of causative ပေး pé

In this section, I will list some examples of causative ပေး pé I have found. First, examples from Okell and Allott (2001:120–121).

- (8) တခါတလေတော့ ကောင်လေးကို ပေးမောင်းလိုက်ပါလား။  
 təkʰàtəlè.dɔ̌ kàunlé.gò pé.máun.laiʔ.pà.lá  
 sometimes.but boy.OBJ pé.drive.just.POL.Q  
 'Why don't you just let the boy drive sometimes?'
- (9) တစ်နှစ်ထက် ပေးမလုပ်တော့ဘူး။  
 tə.ŋiʔ.tʰɛʔ pé.mə.louʔ.tɔ̌.bú  
 one.year.than pé.NEG.do.anymore.NEG  
 '[We] don't allow [them] to work for more than one year.'
- (10) မောင်လေးကို မပေးကိုင်နဲ့။  
 màun.lé.gò mə.pé.kàin.nɛ  
 younger-brother.obj NEG.pé.hold.NEG/IMP  
 'Don't let your younger brother touch it.'
- (11) သူ့ဆီ စာ သတ်သတ် မရေးဘူးနော်။ ဒီစာကိုသာ  
 θy.sʰi sà.gò θaʔθaʔ mə.jé.bú.nò dì.sà.gò.ðà  
 s/he.place letter.OBJ separately NEG.write.NEG.OK? this.letter.only  
 ပေးဖတ်လိုက်ပါ။  
 pé.pʰaʔ.laiʔ.pà  
 pé.read.just.POL  
 'I won't write separately to her, all right? Would you please just have her read this letter?'
- (12) စက်ဘီး မပေးစီးချင်ဘူး။  
 sɛʔ.béin mə.pé.sí.dʒin.bú  
 bicycle NEG.pé.ride.want.NEG  
 'I don't want to let you ride my bike.'

The following examples were collected in Yangon from 2000 to 2002. They are described further in Okano (2002:139–140).

- (13) ကျွန်တော့်ကို ဒီအိမေး(လ်) ပေးသုံးတယ်။  
 tɕəŋɔ̌.gò dì.ʔimé pé.θóun.dè  
 I.OBJ this.e-mail pé.use.REAL  
 'They let me use this e-mail [account].'
- (14) မဟာဗန္ဓုလပန်းခြံထဲကို ပေးဝင်မယ် ထင်တယ်။  
 məhàbàndulə.pánɕəŋ.dé.gò pé.win.mè tʰin.dè  
 Maha Bandula.park.inside.to pé.enter.IRR think.REAL  
 'I think that [they] will allow us to go into Maha Bandula Park.'

- (15) ဂျပန်ဆရာက လာရင် ခင်ဗျားကို ပေးတွေ့မယ်။  
 ၎်ပန်ဆရာက လာရင် ခင်ဗျားကို ပေးတွေ့မယ်။  
 Japan.teacher.SUBJ come.if you.OBJ ပေးတွေ့မယ်.IRR  
 'If the Japanese teacher comes here, I'll have you meet him.'
- (16) a. သုဇာတက နွားတစ်ထောင်ကို နွယ်ချို ပေးစားခိုင်းတယ်။  
 သုဇာတက နွားတစ်ထောင်ကို နွယ်ချို ပေးစားခိုင်းတယ်။  
 Sujata.SUBJ cow.one.thousand.OBJ licorice ပေးစားခိုင်းတယ်.REAL  
 'Sujata provided licorice for a hundred cows.'
- b. သုဇာတက နွားတစ်ထောင်ကို နွယ်ချို ပေးစားတယ်။  
 သုဇာတက နွားတစ်ထောင်ကို နွယ်ချို ပေးစားတယ်။  
 Sujata.SUBJ cow.one.thousand.obj licorice ပေးစားတယ်.REAL  
 'Sujata provided licorice for a hundred cows.'

The example (16)a is an utterance which was subsequently corrected to (16)b. Of course, we could produce a forced parsing of (16a) 'Sujata ordered a hundred cows to give and to eat licorice', though of course such an interpretation would be rejected as meaningless in any context, and so the only plausible interpretation is that of (16b). This pair of sentences sheds light on the grammaticalisation in progress.

- (17) \*ကလေးတွေကို အရင် ပေးပို့လိုက်တယ်။  
 ကလေးတွေကို အရင် ပေးပို့လိုက်တယ်။  
 child.PL.OBJ before ပေးပို့လိုက်တယ်.REAL  
 '[I asked the driver to] drop the children off first.'  
 (e.g. before coming to pick us up.)

(17), an utterance I actually heard, is not acceptable to all Burmese speakers. Although it follows the syntactic pattern of causative ပေး ပေး, it is unacceptable possibly because there exists a bimorphemic formal register verb ပေးပို့ ပေးပို့ with the meaning 'send', which is applicable to things rather than people.

Although we may encounter causative ပေး ပေး frequently in spoken Burmese, it is less common in written forms of the language. The following examples (18) and (19) are taken from the novel ငရုပ်မှန်လျှင် စပ်လွန်မယ် ဂျော့ကလေးကလေး sa?le?in.mè If it's real chilli, then it will be hot by Maung Thara မောင်သာရ, written in 1982 in colloquial style Burmese.

- (18) ကိုဘဦးက ရှိတုန်းကတော့ ဒီကလေးနှစ်ယောက် သစ်ပင်တက်ဖို့  
 ကိုဘဦးက ရှိတုန်းကတော့ ဒီကလေးနှစ်ယောက် သစ်ပင်တက်ဖို့  
 KoBaU.SUBJ exist.time.when.but this.child.two.CLF tree.climb.PURP  
 နေနေသာသာ အပင်ကအသီးကို တံချူနဲ့တောင် ပေးမစွတ်ဘူး။  
 နေနေသာသာ အပင်ကအသီးကို တံချူနဲ့တောင် ပေးမစွတ်ဘူး။  
 let-alone tree.from.fruit.OBJ pole.with.even ပေးမစွတ်ဘူး.NEG  
 'When Ko Ba Oo was alive, he didn't even allow his two children to pick fruit from the tree with a pole, let alone climb up it.' (p.28)

- (19) ကုန်ကုန်ပြောရရင် သားနှစ်ယောက်ကို ဘောလုံးတောင် ပေးမကစားဘူး။  
 kòungòun.pjǝ.jǝ.jìn θá.nǝ.jauʔ.kò bǝlòun.dàun pé.mə.gəzá.bú  
 complete.ADV<sup>REDUP</sup>.tell.must.if son.two.CLF.OBJ football.even *pé*.NEG.play.NEG  
 'To tell the whole story, he didn't even allow his two sons to play football.' (p.29)

Another example (20) in print is an essay by Kan Chun (1997), also written in colloquial style.

- (20) ကဲ ဒီဆောင်းပါးကို သမီးတို့ရဲ့ လူကြီးမိဘတွေကိုပါ ပေးဖတ်လိုက်ပါအုံး။  
 kɛ́ dí.sháunbá.gò θəmí.jɛ́ lùdʒí.mibǝ.dwè.gò.bà pé.pʰaʔ.laiʔ.pà.ʔòun  
 so this.article.OBJ daughter.POSS adult.parent.PL.OBJ.also *pé*.read.just.POL.further  
 'So, have your your parents read [my] article as well, girls.'

Causative *ပေး* *pé* seems to be restricted mainly to spoken Burmese, since I have found only a very few examples of it in print, and no examples of it in literary style Burmese, though Okell and Allott (2001:120) do list a formal, literary Burmese entry for causative *ပေး* *pé*.

#### 4 Syntactic features of causative *ပေး* *pé*

I will now consider the syntactic features of the causative *ပေး* *pé* construction. An analysis of the syntactic features of complex predicates in Burmese must take account of

- constituent order;
- negation;
- the possibility of paraphrasing the predicate by substituting a complex sentence using some dependent clause marker;
- ellipsis.

As mentioned above, causative *ပေး* *pé* precedes another head verb. This position is syntactically highly independent. As with other pre-verbs, normally the negative *မ* *mə* prefixes not to causative *ပေး* *pé* but to the head verb. Also, causative *ပေး* *pé* can be paraphrased to form a complex sentence by using the dependent marker *ပြီး* *pí* (see example (7) above). These phenomena are re-examined here.

In fact, the negative particle *မ* *mə* sometime precedes both causative *ပေး* *pé* and the head verb. This is noted by Okell and Allott (2001), who provide some examples, (10) and (12) above. This construction may, however, not be acceptable for all speakers. It seems that speakers from Mon state do not accept sentences negated in this way (more in section 6 below on the intuition of Burmese speakers from Mon state).

A paraphrased causative *ပေး* *pé* construction is usually considered grammatical and acceptable. However, they are difficult to find in spontaneous contexts. I was unable to obtain any examples of complex paraphrasings of causative *ပေး* *pé* despite many attempts to elicit them from informants. Again, it seems that speakers from Mon State find such constructions completely unacceptable. I conclude that the construction is grammatically possible, but not used.

As for ellipsis, Okell (1969:30) notes that 'questions containing [complex predicates containing pre-verbs] are sometimes (but not invariably) answered with the second

member only.' He adds that this feature distinguishes pre-verbs from ordinary compounds. However, in one-word answers to questions containing causative **ပေး** pé constructions, it is not the pre-verb **ပေး** pé which is ellided, but the other verb. Compare (21) and (22):

- |      |  |   |   |
|------|--|---|---|
| (21) | ဆက်လုပ်မလား။<br>s <sup>h</sup> εʔ.louʔ.mə.lá<br>continue.do.IRR.Q<br>'Will you carry on doing [it]?' | လုပ်မယ်။<br>louʔ.mè<br>do.IRR<br>'Yes, I will.'     | ?ဆက်မယ်။<br>ʔs <sup>h</sup> εʔ.mè<br>?continue.IRR<br>'?Yes, I will.' |
| (22) | ပေးလုပ်မလား။<br>pé.louʔ.mə.lá<br>pé.do.IRR.Q<br>'Will you allow me to do [it]?'                      | *လုပ်မယ်။<br>*louʔ.mè<br>*do.IRR<br>*'Yes, I will.' | ပေးမယ်။<br>pé.mè<br>pé.IRR<br>'Yes, I will.'                          |

We can account for this apparent anomaly by noting that the causativiser cannot be ellided because it changes valency. In causative constructions, the subject of the embedded clause (the subject of V) is assigned the object case marker **ကို** kò and another noun appears as the subject of the matrix clause. If **ပေး** pé is omitted, the sentence would become ungrammatical because the matrix predicate no longer satisfies its argument structure.

## 5 Semantics of causative **ပေး** pé

Burmese has, traditionally, two grammatical forms to express causative meaning. These are **စေ** sè and **ခိုင်း** k<sup>h</sup>áin. These two are, of course, different not only in meaning but also in syntactic category. Here we shall consider only their meanings.

Okano (1994) described the characteristics of **စေ** sè as follows: if the subject NP is *animate*, it does not intentionally obstruct the occurrence of the event expressed by the verb; if the subject NP is *inanimate*, it is the cause of the occurrence of the event expressed by V.

If the subject of the verbal predicate containing **စေ** sè is animate – typically human – it is difficult to say that the event is caused directly or intentionally by the subject. Moreover, in modern use **စေ** sè is not used alone, but rather is usually accompanied by other modal auxiliaries such as **ချင်** t<sup>h</sup>in 'want', or **ရ** ja 'must'. Okell and Allott (2001:120) note that [verb]**စေ** sè is being superseded in colloquial Burmese by **ပေး** pé [verb] and by [verb]-**ခွင့်ပြု** k<sup>h</sup>wɪn.pju 'give someone permission to [verb]'. Note that both **ပေး** pé [verb] and [verb]-**ခွင့်ပြု** k<sup>h</sup>wɪn.pju typically have human subjects. If the subject is inanimate, then the verbal predicate is more transitive rather than causative.

In the case of [verb]**ခိုင်း** k<sup>h</sup>áin causatives, the subject intentionally approaches the causee to get something done. Here **ခိုင်း** k<sup>h</sup>áin preserves much of its full lexical meaning 'order' or 'put to work' – usually by word of mouth. In other words, **ခိုင်း** k<sup>h</sup>áin is a compulsive causative, while **စေ** sè implies approval.

There is a further difference between **စေ** sè and **ခိုင်း** k<sup>h</sup>áin. When it occurs with realis verb sentence marker **တယ်** tè, **စေ** sè entails realisation of the event expressed by the verb, while V, while **ခိုင်း** k<sup>h</sup>áin does not.

The causative **ပေး** pé construction is more similar in meaning to **စေ** sè than to **ခိုင်း** k<sup>h</sup>áin. Both [verb] **စေ** sè and **ပေး** pé [verb] express approval or permission. Basically, both

express that the causee – the subject of the main verb – has the desire to do something and the causer – the subject of **ပေး** pé – gives the causee permission to carry out the action. Of course this applies only when both causee and causer are human or animate. Additionally, causative **ပေး** pé also entails realisation of the event.

## 6 Additional implication of **ပေး** pé causative

Sometimes the causative **ပေး** pé construction implies its original meaning 'give'. Consider examples (11), (16) and (20). The predicates in these examples can be interpreted as 'give and [verb]'. For example, (20) could be translated 'please give your parents this article and have them read it.' In a few cases, the accomplishment of the event denoted by the verb presupposes an act of giving. For example, if someone wants to read a book you possess, he or she must ask for the book from you before reading it. The temporal order of the occurrence of the two events — in this case giving and reading — corresponds to the order of **ပေး** pé and the main verb in a causative **ပေး** pé construction. Is such a correspondence inevitable? It may be certain that the implication of giving something in causative **ပေး** pé construction is caused by the constituent order of the verbal predicate.

Moreover, when causative **ပေး** pé implies actually giving something, the meaning will become close to that of a causative **ပို့** k'áin construction. The reason for this is that there is a sense that the subject actively approaches the causee to have some action accomplished — the compulsive meaning referred to above.

## 7 Mon influence?

The causative **ပေး** pé construction may have been influenced by the Burmese spoken in Mawlamyine (Moulmein), in Mon State. An expression of this kind is mentioned in the Burmese–Japanese Dictionary (Harada and Ohno 1979:262): **ပေးခိုက်** péjai? 'give.hit' is glossed as 'to allow to beat; Mawlamyine dialect, the speech of Mon people'. One of my informants, U Hla Maung, a 66-year-old from Mon State, told me the following when I questioned him on this point:

'In the 1970s and early 1980s, many necessities were smuggled over the Thai border into Mon state. Mon merchants carried these necessities to Yangon and they opened a black market at Seingyun, near today's Mingalar market. This black market was very crowded because it was almost the only way to obtain daily necessities in Yangon.'

It is suggested that Burmese may have borrowed the causative **ပေး** pé construction from Mawlamyine dialect Burmese, itself influenced by Mon, where the verb **က** ko 'give' is a productive causativiser. If this situation is true, then this construction may have begun to appear in Yangon Burmese during the 1970s, before the 1982 stories by Maung Thara quoted above.

Is the Mon causative the source of the Burmese causative **ပေး** pé construction? Did the Mon construction directly influence Burmese? In my opinion, this is unlikely: Burmese speakers have associated with Mon speakers for at least a thousand years, which means it is difficult to explain why causative **ပေး** pé exerted its influence over Burmese only in the 1980s. One might speculate that Mon affected the Mawlamyine dialect of Burmese, and that it was this, rather than Mon, which influenced Yangon Burmese.

## 8 Conclusion

The causative ဇဝ: pé construction is a recent development in colloquial Burmese. Causative ဇဝ: pé occurs preceding the main verb in a verb phrase, and is syntactically somewhat independent. Unlike other pre-verbs, causative ဇဝ: pé cannot be elided in any context; this suggests that it is absolutely vital in the construction. Semantically, causative ဇဝ: pé expresses approval, and in this respect it is similar to causative ဇဝ: sè which is rarely used with human subjects and human causees. Causative ဇဝ: pé sometimes implies its lexical meaning 'give'; in such cases, the verb ဇဝ: pé may be interpreted twice: once with the meaning 'giving something to someone' and then again with the meaning 'asking him/her to use it'. When causative ဇဝ: pé carries the meaning 'give', it is no longer similar to the causative causative ဇဝ: sè.

It remains difficult to give a full account of the grammatical status and meaning of the causative ဇဝ: pé construction. Many speakers use this expression unconsciously while others do not wholly accept it as grammatical Burmese, a situation which makes it difficult to interpret consistently the judgements of informants. Nonetheless, it is worth describing this phenomenon to provoke further inquiry into Burmese syntax.

# 6 *Is the Myanmar language really tenseless?*

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## 1 Introduction

Whatever happens does so within a framework of space and time. Accordingly, the human mind is bound to make use of these dimensions when reporting actions. When expressing the contents of our minds language must also reflect somehow the relationship between the reporting of the event and the time when the event actually happens. Time is understood here to be a directional process which usually is divided into three stages: anterior–simultaneous–posterior, corresponding to the grammatical terms past–present–future tenses, respectively.

The concept of tense as the grammatical category of the verb that expresses this relationship is based predominantly on analyses of Indo-European languages, most of which have well defined systems to denote which time interval the speech is related to.

Tenselessness, on the other hand, implies that a language does not invoke specific grammatical forms for this purpose but prefers lexical or other means. The Myanmar language is said to be a language of this kind. Taking a closer look, however, Myanmar turns out to be ambiguous with respect to tense (as well as in other respects). Generations of students of the Myanmar language have been told that certain particles mark tense, or at least a state that corresponds with our understanding of tense. These particles, however, turn out to have more than this one grammatical function: they mark the end of the predicate and, because of the predicate's position, very often the end of the sentence. Moreover, they convey a sense of actuality or non-actuality which can outweigh the temporal meaning. This has led to the conclusion that tense is not a category in Myanmar grammar, and that the respective particles' basic function is to show *realis* or *irrealis*, i.e. actual or potential mood (see Allott 1965:287ff.).

The aim of this paper is to scrutinise once again the effect of the markers in question in order to find out whether they have any bearing upon an interval of time and, if so, which attitude towards time they reveal under which circumstances. In this paper morphemes with syntactic functions will be called 'markers', and those which refer to aspect, mood etc. will be called 'particles'. I apologise now for the fact that in order to make my point I cannot avoid repeating a number of well established facts that have been discussed in depth by distinguished researchers into the Myanmar language.

I shall start with the truism that if a category ‘tense’ in Myanmar language is assumed, then two tenses are distinguished: a clearly defined future tense on the one hand, and a non-future tense otherwise.

## 2 Functions of the sentence-final verb phrase markers မယ်မဲ (မည် mji), တယ် တဲ (သည်ထိ, ခ် ?) and ပြီ ပါ

### 2.1 မယ်မဲ(မည် mji)

Sentences ending in မယ်မဲ (မည် mji) may refer to an event which has not yet taken place, as can be seen in (1)–(3):

- (1) ဒီလယ်သူမ ငါးဟင်း စားမယ်။  
 dì.lè.ðù.mə ၵᵃ.hín sá.mè  
 this.peasant.female fish.curry eat.IRR  
 ‘This peasant woman will eat fish.’
- (2) ဒီနေ့ည ဦးလှဖေ ကျွန်မတို့ အိမ်ကို လာလည်မယ်။  
 dì.nɛ.ɲə ʔí.ɬəpʰè tɕəmə.dɔ ʔèin.gò là.lè.mè  
 tonight U Hla Pe I.PL house.to come.visit.IRR  
 ‘Tonight U Hla Pe will visit our house.’

This also applies to markers derived from မယ်မဲ (မည် mji), such as the relative clause marker မယ်မဲ in (3):

- (3) ဖခင် ဖြစ်သူ စားမပြီးသေးလို့ သိမ်းမယ် သမီးတွေက  
 pʰə.gìn.pʰji.ʔ.θù sá.mə.pí.ðé.lɔ θéin.mɛ θəmí.dè.gə  
 father.be.person eat.NEG.finish.because clear.IRR<sup>ATTR</sup> daughter.PL.SUBJ

စောင့်နေကြတာ။

səun.nè.ɬə.dà

wait.CONT.PL.REAL

‘But as the father had not yet finished his meal, yet the daughters who were to clear (the table) kept waiting.’

In (1)–(3), မယ်မဲ corresponds with future tense. But မယ်မဲ can also occur in sentences which do not refer to future time, as in (4)–(7):

- (4) သူ အသက် ၃၀-လောက် ရှိမယ်။  
 θu ʔəθɛ? θóunzè.lau? ʃi.mè  
 he age 30.approx exist.IRR  
 ‘He will/must be aged about thirty.’
- (5) ကျုပ်ဆရာ ဒီတောတွေ တစ်ဝိုက်မှာပဲ ရှိရမယ်။  
 tɕou.ʔ.sʰəjə dì.tó.dwè təwəi.ʔ.ᵃ.bé ʃi.jə.mè  
 my teacher this.forest.PL one.area.in.EMPH exist.must.IRR  
 ‘My teacher must be around in these forests.’



- (6) ကရင်လူမျိုးတို့တွင်      ၁၈၃၂ ခုနှစ်ထက်      စော၍  
 kajin.lùmjò.dò.dwìn      1832-k<sup>h</sup>u.ɲiʔ.t<sup>h</sup>ɛʔ      sò.jwɛ  
 Kayin.race.PL.in      1832.CLF.year.than      early.SUBORD
- စာရေးနည်းပညာ      တစ်ခုခု      ရှိနေရမည်။  
 sà.jé.ní.pjìɲɲà      tək<sup>h</sup>uɡu      ʃi.nɛ.jə.mɛ  
 script.write.method.learning      something      exist.CONT.must.IRR  
 'The Kayin must have had some kind of writing system before 1832.'

- (7) ၁၈၀၀ ပြည့်နှစ်      ပတ်ဝန်းကျင်ခန့်တွင်      မြန်မာနိုင်ငံ၏  
 1800.bjɛ.ɲiʔ      paʔ.wún.jìn.gàn.dwìn      mjànma.nàinɲàn.ʔi  
 1800.CLF.year      region.approx.in      Myanmar.country.POSS
- လူဦးရေသည်      လေးသန်းကျော်      ရှိရမည်      ခန့်မှန်းကြသည်။  
 lùʔújɛ.ði      léðán.ɬə      ʃi.jə.mji      k<sup>h</sup>amán.ɬə.ði  
 population.SUBJ      four.million.exceed      exist.may.IRR      estimate.PL.REAL  
 'It is estimated that the population of Myanmar around 1800 may have amounted to more than four million.'

In these sentences မယ် mɛ or မည် mji indicate hypothetical events: things that might happen or might have happened. All other occurrences of မယ် mɛ or မည် mji (including the attributive forms မယ် mɛ and မည် mji and the nominalising form မှာ ၎် derived from it) can be classified as one of these two types.

The same applies to the marker အံ့ ʔṇ which nowadays is used only in very formalised or elevated language, but was common in ancient inscriptions (8)–(11).

- (8) ဣယ် ငါ အမှောအံကာ သဗ္ဗိညုတညာဏ်      ပြဿာ      ရအိဉ်သူ  
 iy' nà amho'.kà sabbraṇṇūtaṇṇāṇ'      praṇṇjā ra.am<sup>u</sup>.sù  
 this my merit.TOP      omniscience      wisdom      gain.IRR.person
- အကြောင်      ဖြစ်စိယ့်တေဟ်။  
 akron'      phlac'.ciy<sup>u</sup>.teh'  
 reason      be.CAUS.EMPH

'May this my merit cause me to gain omniscience and wisdom.'

Rajakumar I, Bagan. 1113 A.D., lines 34–35 (Department of Archaeology 1972:5)

- (9) ငလဲကျပ်      မည်သော      အရပ်နှိုက်      က္လောင်      ပြုအမ်  
 nalaikyap'      maṇṇi'.so      arap'.nhuik'      klon'      plu.am'  
 Ngalekyat      named      place.in      monastery      make.IRR  
 'I will make a monastery in a place named Ngalekyat.'

Inwa, 1440 A.D., line 3–4 (Aung Thaw 1972–1983, vol 5, p10)

- (10) အောက်တွင်      ရေးသားအံ့သော      အဖြစ်အပျက်ကလေးမှာ  
 ʔauʔ.twìn      jéθá.ʔṇ.N.ðə      ʔəp<sup>h</sup>jiʔəpjɛʔ.kələ.ṇà  
 below      write.IRR.ATTR      incident.small.SUBJ  
 'The small incident I will report below...' (Shwe Hmya 2000:59)

- (11) မောင်မောင်ကြီးကို မည်သည့်နေရာတွင် ရှာတွေ့ရပါအံ့နည်း။  
 màun.màun.tɕí.gò mǐd̥j̥.nèj̥à.dwɪn ʃa.twej̥a.bà.ʔaŋ.ní  
 MaungMaungKyí.OBJ which.place.in search.meet.must.POL.IRR.Q  
 ‘Where shall I trace Maung Maung Kyi?’ (Zeyya 1998:87)

In sentences (8)–(11) အံ့ ʔaŋ denotes actions which have not yet taken place but which can be identified with the future. Like မယ် mè however, it can express the subjunctive as well, depending on the context, as in (12):

- (12) ခုနစ်တန်း အောင်မြင်သူတို့အဖို့ကား အသို့ ဆိုဖွယ်ရာ ရှိတော့အံ့နည်း။  
 khùn.nnə.tán ʔaunmjìŋ.dũ.dɔ.ʔəpʰɔ.gá ʔəθɔ ʃhò.pʰwèj̥à ʃi.dɔ.ʔaŋ.ní  
 seven.standard succeed.person.PL.for.EMPH how say.thing exist.still.IRR.Q  
 ‘How could anything be left to say about those who passed the seventh standard?’  
 (Maung Wa 1965:136)

## 2.2 တယ် တဲ (သည် ဖိ, န် ʔi)

There is common agreement that တယ် တဲ (formal variants သည် ဖိ, န် ʔi) marks events that are not related to the future, i.e. general statements as well as events which have happened or are ongoing in the present, as in (13)–(17). The distinction between past or present can be specified by time phrases, as necessary.

- (13) မောင်ဘထူး မကွေးမြို့မှာ နေတယ်။  
 m'auŋbatʰú mægwe.mjɔ.mà nè.dè  
 MaungBaHtoo Magway.town.in live.REAL  
 ‘Maung Ba Htoo lives~lived in Magway.’
- (14) ဧပြီလမှာ နေပူတယ်။  
 ʔèpjì.lə.mà nè.pù.dè  
 April.month.in sun.hot.REAL  
 ‘April is hot.’ (general statement)
- (15) လွန်ခဲ့တဲ့လကလည်း နေပူတယ်။  
 lùŋgɛdɛ.lə.gə.lé nè.pù.dè  
 last.month.in.also sun.hot.REAL  
 ‘Last month it was hot as well.’ (past time specified by time phrase  
 ‘last month’ and choice of nominal marker ‘in’).
- (16) ဗမာတွေက ဥဩငှက်ကလေးတွေကို ချစ်ကြပါတယ်။  
 bəmə.dè.gə ʔouʔ.ɔ.ŋɛʔ.kələ.dè.gò tɕʰiʔ.tɕə.bà.dè  
 Bamar.PL.SUBJ ouk-aw.bird.little.PL.OBJ love.PL.POL.REAL  
 ‘The Burmese love the little ouk-aw birds.’ (general statement)

- (17) ရှေးရှေးတုန်းက ခမ်းတီးလုန်ဒေသမှာ စော်ဘွားတစ်ဦး ရှိတယ်။  
 ʃéjédóungə kʰántilòun.dèθə.mə sàbwà.ta.ʔú jì.dè  
 long ago.when.in Khamtiloun.area.in Sawbwa.one.CLF exist.REAL  
 'Long time ago in Khamtiloun there lived a Sawbwa.'  
 (past time specified by the time phrase)

Such is the normal use of တယ် tè. Under certain circumstances, however, it can occur in a sentence which refers to an event in the future, as in (18)–(20):

- (18) တွေ့သေးတာပေါ့။  
 twɛ.ðé.dà.bɔ  
 meet.still.REAL<sup>NOM</sup>.EMPH  
 'See you later!'
- (19) မန္တလေး ရောက်ရင် ဝင်ခဲ့တာပေါ့။  
 mǎndalé jauʔ.jìn wìn.gɛ.dà.bɔ  
 Mandalay arrive.if enter.REM.REAL<sup>NOM</sup>.EMPH  
 'When you come to Mandalay, must drop in to see us!'
- (20) ကျုပ် ဦးလေးလို ဗိုလ်စကား တတ်ရင် ကျုပ် တကယ် စပိုင် လုပ်တယ်။  
 tɕouʔ ʔúlé.lò bò.zəgá taʔ.jìn tɕouʔ təgè səpàin louʔ.tè  
 I uncle.like foreign.talk can.if I really spy do.REAL  
 'When I can speak English like you, I really will be a spy.'

Again we find that the marker is fulfilling a twofold task: while as a rule it marks events happening at any time except the future, under certain circumstances it can also indicate determination with respect to a future action, outweighing tense.

### 2.3 ပြီ pí

This marker is classed with မယ် mè and တယ် tè because of its syntactic capacity to conclude the predicate and the sentence. As regards the time dimension, however, it differs from them because its focus is not on an interval of time but on the result at which the action or happening denoted by the verb has arrived. It can mark the beginning of this arrival, the continuity of the state reached or just the fact of the result itself. This explanation tallies with the definition of the 'perfect' tense in an Indo-European context, though describing is as such is not generally accepted. Although ပြီ pí indicates some kind of completion it should not be identified with perfective aspect as seen in (21)–(25) below. As ပြီ pí has no parallel in Indo-European languages, it can be rather difficult to define. Many of the scholars who have investigated this intriguing issue have arrived at the same conclusion as above, describing ပြီ pí as 'point of realisation', 'punctative', 'change of state' etc. (See also Pe Maung Tin 1953:134, Okell 1968:2, 383–386; Allott 1965:290–291; Wheatley 1982:219–221).

- (21) ကျုပ် အကြံ ရပြီ။  
 tɕouʔ ʔətcàn jà.bì  
 I idea get.pí  
 'I have (had) an idea!'

- (22) အိပ်ချိန် ရောက်ပြီ။  
 ʔeiʔ.tɕʰèin jauʔ.pì  
 sleep.time arrive.pì  
 'It's time to sleep.'
- (23) ငါ ပြန်ရောက်တာ သုံးရက် ရှိပြီ  
 ၵà pjàn.jauʔ.tà θóun.jɛʔ ʃi.bi  
 I back.arrive.REAL<sup>NOM</sup> three.days exist.pì  
 'I have already been back for three days.'
- (24) ဘထွေးရာ ဒီအယူအဆတွေဟာ ခေတ်ကုန်ပါပြီ။  
 baɰwé.jà di.ʔəjùʔəsʰa.dwè.hà kʰiʔkòun.bà.bi  
 uncle.APPEL this.view.PL.TOP outdated.POL.pì  
 'Uncle, such views are out of date!'
- (25) ဒါလောက်ဆို ငါတို့ နားလည်ပါပြီ။  
 dà.lauʔ.sʰò ၵàdɔ náɬè.bà.bi  
 that.extent.if we understand.POL.pì  
 'We have understood thus far.'

In (21)–(25) the action has been realised before or, at the latest, at the moment of speech, and one might therefore say, as the Myanmar grammarians do, that ပြီ ပီ can be considered to indicate non-future tense. But there are cases where ပြီ ပီ can be used where context defines the time of the event as future, as in (26)–(27):

- (26) ပြီလမှာ ဆရာမ ဂျာမနီကို ပြန်ရောက်ပြီ ထင်တယ် (~ဖြစ်မယ်။)  
 ʔèpji.lə.mà sʰəjəma ɕàməni.gò pjàn.jauʔ.nè.bi tʰin.dè (~pʰjiʔ.mè)  
 April.month.in teacher.female Germany.to back.arrive.PERF think.REAL (~be.IRR)  
 'You [teacher] will be back in Germany in April, [I] suppose.'
- (27) မနက်ဖြန်ည သူ ရောက်ပြီ ထင်တယ်။  
 mənɛʔpʰjàn.ja θù jauʔ.pì tʰin.dè  
 tomorrow.night he arrive.PERF think.REAL  
 'I think [he] he will have arrived tomorrow night.'

Both sentences can end with 'I think', indicating that the event is taking place in the mind of the speaker, where the outcome is already established. The same applies to situations where the coming of a person is announced by the phrase လာပြီ là.bi 'come.PERF' even if the person has not yet set out, or to a situation where the driver of a car might be warned not to overtake by saying ကားလာပြီ ká.là.bi 'car.come.PERF'.

When I have discussed the phenomenon of ပြီ ပီ with linguists unfamiliar with the Myanmar language, they have suggested that it should be defined as perfective aspect instead of perfect tense. The idea is intriguing as ပြီ ပီ indeed marks some kind of accomplishment. However, this is contradicted by the fact that the verb phrase can contain the progressive form နေ nè. Perfectivity demands boundedness and change of state, but the inclusion of နေ nè implies that the action is ongoing, as in (28)–(30):

- (28) ဟိုမှာ နင့်အဆက် လာနေပြီ။  
 hòmə n̥j̥n.s<sup>h</sup>ɛ? là.nè.bì  
 there your.sweetheart come.CONT.PERF  
 'There comes your sweetheart walking.'
- (29) မင်းက တော်လှန်ရေးသမားကြီး ဖြစ်နေပါပြီ။  
 mín.gə tòtàn.jéθamá.ɬáí p<sup>h</sup>ji?nè.bà.bì  
 you.SUBJ revolutionary.great be.CONT.POL.PERF  
 'Now you have become a great revolutionary!'
- (30) ယခုတော့ ပုံတောင်ပုံညာမြေက များစွာ ပြောင်းလဲနေပြီ။  
 jək<sup>h</sup>u.ɬə pòundàun.pòun.jà.mjè.gə mjá.zwà pjáunlè.nè.bì  
 now.however Pondaung.Ponnya.area.SUBJ much.ADV change.CONT.PERF  
 'Now, however, the Pondaung Ponnya area is changing a lot.'

Although inserting the grammaticalised သွား θwá 'go' in the verb phrase supports the idea of perfectivity by indicating the conclusion of a process, လာ là 'come' on the other hand, contradicts it, since it suggests the initial phase of the process, as in (31)–(34):

- (31) လကလည်း ကုန်ခါနီးနေပြီ။ လစဉ် ကုန်နေကျ  
 là.gə.lé kòun.gá.ní.nè.bì làzìn kòun.nè.ɬə  
 month.SUBJ.also exhaust.time.near.CONT.PERF monthly exhaust.CONT.HABIT  
 လခလည်း ကုန်သွားလေပြီ။  
 là.gə.lé kòun.ðwá.lè.bì  
 salary.also finish.'go'.EUPH.PERF  
 'The end of the month is drawing near, and the salary, which gets spent every month, is used up and gone.'
- (32) အခု သူမိန်းမ သေသွားပြီ။  
 ək<sup>h</sup>u θu.méin.mə θè.ðwá.bì  
 now his.wife die.'go'.PERF  
 'Now his wife has died [~is dead].'
- (33) မိုးက ပိုသည်းလာပြီ။  
 mò.gə pò.θé.là.bì  
 rain.SUBJ more.pour.'come'.PERF  
 'The rain is pouring more heavily [now]'

However, perfectivity is indicated unmistakably if the verb phrase is complemented with the grammaticalised variant of the verb ပြီး pí 'finish' – identical in form to 'perfective' ပြီ pì except for the tone. Examples are in (34)–(36):

- (34) အခု ကျွန်တော်နှစ်ဦး လက်ထပ်ပြီးပြီ။  
 ?ək<sup>h</sup>u tɕənə.nɛ.zán lɛ?t<sup>h</sup>a?pí.bì  
 now I.and.Zan marry.'finish'.PERF  
 'Now Zan and I are married.'

- (35) ဒီလို ဖြစ်ပြီးမှ သူ အခန်းထဲကို ရောက်ပြီးပြီလား။  
 dì.lò p'hji?..pi.mə θù ?ək'hán.dé.gò jau?..pi.pi.lá  
 this.like be.finish.only-if he room.inside.to arrive.'finish'.PERF.Q?  
 'Did he enter the room only after it had happened like that?'
- (36) ကျွန်မ ပြောချင်တာတွေ ပြောပြီးပြီ။  
 tɕəmə pjɔ̌.dɛ̌n.dà.dwè pjɔ̌.bi.bi  
 I say.want.REAL<sup>NOM</sup>.PL say.finish.PERF  
 I have said everything I wanted to.'

Applicable to non-future and future situations alike, ပြီ *pi* seems to support the idea of tenselessness. Yet in most cases the result of the event indicated by ပြီ *pi* coincides with a non-future situation. Occurrences with subsequent situations are reminiscent of future perfect tense in Indo-European languages. ပြီ *pi* mainly refers to the result of the action denoted by the verb in the verb phrase it concludes, but it has an additional, secondary function which may tentatively be described as aspectual, perhaps in the sense of *Aktionsart*. For a more comprehensive picture, we extend our examination to negation.

## 2.4 Negation

It is an established and incontrovertible fact that a negated verb is not marked for tense, as in (37)–(39):

- (37) သူ ရန်ကုန်မှာ နေသလား။ နေသလား။ မနေပါဘူး။  
 θù jàngòun.mə nè.θə.lá mə.nè.bà.bú  
 he Yangon.in live.REAL.Q NEG.live.POL.NEG  
 'Does he live in Yangon?' [no tense specified] 'No[, he does not].'
- (38) ဒီစာအုပ်ကို ဝယ်မလား။ မဝယ်ပါဘူး။  
 dì.sàou?..kò wè.mə.lá mə.wè.bà.bú  
 this.book.OBJ buy.IRR.Q NEG.buy.POL.NEG  
 'Will [you] buy this book?' 'No[, I will not].'
- (39) သူ ရောက်ပြီလား။ မရောက်သေးပါဘူး။  
 θù jau?..pi.lá mə.jau?..θé.bà.bú  
 he arrive.PERF.Q NEG.arrive.yet.POL.NEG  
 'Has he arrived?' 'No[, not yet].'

Nevertheless, negated verbs are also not marked for actual or potential mood. Thus negated sentences do not seem to provide any clue regarding tense or mood, for which lexical means are used, for instance by negating a positive statement by appending a negated copula မဟုတ် *məhou?* 'is not':

- (40) စလေငွေ့မင်း မိမိ၏ အလိုအလျောက်  
 sələŋgək'hé.mín mimi.ʔi ?ələð.ʔəljau?  
 Salay Nga Khway.king self.POSS wish.according

ပုဂံထီးနန်းမှ ဆင်းမည် မဟုတ်ချေ။  
 bəgàɴ.tʰínánm̥a sʰín.mjì məhouʔ.tɕʰè  
 Bagan.palace.from step-down.IRR NEG.true.PART

'King Salay Nga Khway will not abdicate the Bagan throne voluntarily.'

However, the use of verb-phrase final markers with negated verbs is not necessarily ungrammatical. The shortened nominalising forms တာ *tà* and မှာ *m̥à* are often used with negated verbs, thus marking the predicate for tense or mood. As John Okell and Anna Allott demonstrate, တယ် *tè* or မယ် *mè* can follow a negated verb under certain circumstances, namely when the fact reported is already known (Okell and Allott 2001:96). In the formal language we may also find ပြီ *pì* following a negated verb. It is not merely a stylistic variant as some scholars assume, but accompanies certain conditions: it can underline the finality of the event, equivalent to the construction မVERBတော့ဘူး *məVERBtɔ̃.bú* 'not VERB any more' (Okell and Allott 2001:130), or it indicates that the event will not take place, equivalent to the construction VERB မည် မဟုတ်။ *VERBm̥jì.mə.houʔ* 'will not VERB' (Pe Maung Tin 1953:135). Examples of this construction are shown in (41)–(43):

- (41) ယခုမှ ရွာ၌ မယဉ်နွယ်လည်း မရှိပြီ။  
 jəkʰp̥.mù jwà.ŋai? məjìɴɴwè.lé məjì.bì  
 now.but village.in MaYinNwe.also NEG.exist.PERF

[=မရှိတော့ဘူး]

[=məjì.dɔ̃.bú]

[=NEG.exist.anymore.NEG]

'But now Ma Yin Nwe was also no longer in the village.'

- (42) ကျွန်တော်၏ ဝမ်းသာခြင်းကား မဆုံးနိုင်ပြီ။  
 tɕəɴ.ʔì wúnθà.dʒín.gá mə.sʰóun.nàin.bì  
 I.POSS happy.NOM.SUBJ NEG.end.can.PERF

[=ဆုံးနိုင်မည်

မဟုတ်]

[=sʰóun.nàin.m̥jì mə.houʔ]

[=end.can.IRR NEG.be]

'My happiness, however, was endless.'

- (43) ဤခေါင်းပိုင်းသည် မသန့်ပြီ။ [=မသန့်တော့ဘူး]  
 ʔì.gáunbáin.ði mə.θáɴ.bì [=mə.θá.dɔ̃.bú]  
 this.head.SUBJ NEG.clean.PERF [=NEG.clean.anymore.NEG]  
 'This head is no longer clean.'

ဆရာရဟန်း

စား၍

မတော်ပြီ

[=တော်မည်

မဟုတ်]

sʰəjà.jəhán

sá.jwɛ

mə.tò.bì

[= tò.m̥jì

mə.houʔ]

master.monk

eat.SUBORD

NEG.suitable.PERF

[=suitable.PERF

NEG.be]

'It is not suitable for the monk to eat [the head].'

From the above examples it can be seen that the common feature of မယ် *mè*, တယ် *tè* and ပြီ *pì* is their basic function to conclude the verb phrase. Besides this, မယ် *mè* and တယ် *tè*

refer to the relationship between the moment of speech and the time interval of the reported event. Here the demarcation seems clear: anything subsequent to the moment of speech is to be marked by မယ် *mè*, and all other events by တယ် *tè*. This is compatible with the concept of tense. On the other hand, however, တယ် *tè* can sometimes be found with future events while မယ် *mè* occurs not infrequently in situations where the context—often made explicit with time phrases—cannot be described as future tense. With တယ် *tè* such usage appears to be an exception to the rule invoked for reasons of emphasis or style. The same applies to ပြီ *pì*: its usage with coming events expresses imminence or definiteness, comparable to the use of the resultative or perfect in other languages.<sup>1</sup> The case of မယ် *mè*, however, is different. မယ် *mè* does indeed regularly denote subjunctive mood, such as assumptions or other kinds of hypothetical propositions, irrespective of the moment of speech. In order to clarify whether this function upsets the assumed classification as a tense marker, we must take a closer look at the interaction of verb-phrase final markers with other grammatical morphemes within the verb phrase.

### 3 Degree of realisation

One of the main features of the Myanmar language is the insertion of various grammatical morphemes between the verb and the verb-phrase final marker, which further qualify the proposition by interacting with the latter and with the verb's lexical meaning. Among them there are a few which are specialised in showing the degree to which an event is realised or completed as well as how events are interrelated with each other and with time. Some of those relevant to this issue are outlined below:

#### 3.1 တော့ *tə*

The basic idea of တော့ *tə* is to convey the definiteness of an event and to give it a sense of finality. In detail the effect varies according to the verb-phrase final marker: with တယ် *tè* finality becomes pronounced, as in (44):

- (44) ဒီတစ်ခုတည်းပဲ ကျန်တော့တယ်။  
 di.tə.kʰu.dɛ̃.bé tɕàN.dɔ̃.dè  
 this.one.CLF.just.only remain.tə.REAL  
 'Only this one piece was left [at that point].'

With negation, တော့ *tə* confirms that the event has passed and will no longer happen, as in (45)–(47):

- (45) ဒီတစ်ခါတော့ ငါ ခံနေလို့ မဖြစ်တော့ဘူး။  
 di.tə.kʰà.dɔ̃ ɲà kʰàN.nè.lə mə.pʰjiʔ.tɔ̃.bú  
 this.one.time.but I endure.CONT.SUBORD NEG.manage.tə.NEG  
 'This time, however, I will definitely not put up with it any more.'

- (46) ကျွန်တော့်မှာ အမေမွေးတဲ့အသက် မရှိတော့ပါဘူး။

<sup>1</sup> For example, in German we might say *Ich bin schon weg* 'I've gone' instead of *Ich gehe gleich* 'I'll be going' in order to confirm the realisation of the planned action.



တေဂ္ဂ့.မ္ဘဲ      ?မဲ.မ္ဘဲ.တေ့.ဘဲမဲ?      မဲ.မ္ဘဲ.သ့.ဘဲ.မ္ဘဲ  
 I.TOP      mother.bear.REAL<sup>ATTR</sup>.life      NEG.exist.t2.POL.NEG  
 'My life is no longer the one my mother gave me.'

- (47) ဒေါ်ကြီးရယ်၊ ကျွန်တော့်ကို ဒါတွေ မေးမနေပါနဲ့တော့။  
 dǎi.kɿ.jè      tseŋg.dɔ̌.gò      dà.dwè      mé.mə.nè.bà.nɛ̌.dɔ̌  
 aunt.APPEL      I.but.OBJ      that.PL      ask.NEG.CONT.POL.NEG.t2  
 'Don't ask me any more about it, Auntie!'<sup>2</sup>

Combined with မယ် မဲ, တော့ တဲ့ reduces the hypothetical character of the statement thus marking imminent future 'about to VERB', as in (48)–(49):

- (48) သင်္ဘော      ထွက်တော့မယ်  
 θɪnbó      t<sup>h</sup>wɛʔ.tɔ̌.mè  
 ship      leave.t2.IRR  
 'The ship will depart immediately.'
- (49) ဟိုမှာ      ကျုပ်အမေ      သေတော့မယ်  
 hò.mà      tseuʔ.ʔəmè      θè.dɔ̌.mè  
 there.in      my.mother      die.t2.IRR  
 'My mother is about to die over there!'

### 3.2 ဦး ဖုံ

Similarly ဦး ဖုံ, which is confined to non-realised actions, adds definiteness to the assertion and neutralises the effect of non-actuality inherent in the verb-phrase final marker မယ် မဲ. The result is an expression of future proceeding from the present, as in (50)–(52):

- (50) ငါ      မယည်နွယ်တို့      အိမ်      ဝင်ခဲ့ဦးမယ်။  
 ɲà      mājɪnnwè.dɔ̌      ?èin      wɪn.ʔóun.mè  
 I      Ma Yin Nwe.PL      house      enter.REM.ʔóun.IRR  
 'I will [go on and] pay a visit at Ma Yin Nwe's house'
- (51) ကော်ဖီတစ်ခွက်လောက်      သောက်ပါဦးမယ်။  
 kòp<sup>h</sup>i.tə.k<sup>h</sup>wɛʔ.lauʔ      θauʔ.lauʔ.ʔóun.mè  
 coffee.one.cup.about      drink.POL.ʔóun.IRR  
 'I will [go on and] have another cup of coffee.'
- (52) တံခါးကို      ပိတ်ဦးမယ်။  
 dǎgá.gò      peiʔ.ʔóun.mè  
 door.OBJ      close.ʔóun.IRR  
 'I will [go ahead and] close the door.'

<sup>2</sup> I agree with Anna Allott (1965:295) that in the case of imperatives, the ancient marker လုံ လုံ may have merged with တော့ တဲ့. This would explain why the sense of finality cannot always be traced, except in negative imperatives.

## 3.3 ခဲ့ ကံ

The diverse functions of ခဲ့ ကံ have made it a favourite object of investigation, discussion, and argument. Proceeding from the definitions of Cornyn (1944), Kassevich (1976), Allott (1965) and others, I conclude that it can be aptly described as a ‘particle of the other dimension in time, space and actuality’ — glossed generally in this volume as ‘REMOTE’. Which of these dimensions predominates depends on the grammatical and semantic context. In sentences subsequent to the moment of speech (unrealised/*irrealis*), besides showing definiteness, ခဲ့ ကံ indicates a spatial relationship implying movement towards the speaker with imperatives, as in (53), (54) and (55)a, and towards another person — often the addressee—in sentences concluding in မယ် မဲ, as in (55)b, (56) and (57).

- (53) ဝင်ခဲ့ပါ။  
wìn.gɛ.bà  
enter.kh̥.POL  
‘Come in!’

- (54) ဆရာမ နောက်တစ်ခေါက် လာရင် အင်္ကျီ ဝယ်ခဲ့ပါ။  
shəjəmǎ nauʔ.tə.khauʔ lə.jìN ʔín.dzì wɛ̌.gɛ.bà  
teacher next.one.time come.if blouse buy.kh̥.POL  
‘When you come next time, bring a blouse along for me!’

- (55) a. ဆက်ဆက်ကြီး ပြန်ခဲ့ပါ။      b. ဆက်ဆက်ကြီး ပြန်ခဲ့မယ်။  
sh̥ɛʔsh̥ɛʔtɕi pjàn.gɛ.bà      sh̥ɛʔsh̥ɛʔtɕi pjàn.gɛ.mɛ̌  
definitely return.kh̥.POL      definitely return.kh̥.IRR  
‘Be sure to come back!’      ‘I will come back without fail.’

- (56) မနက်ဖြန် ကျွန်တော် ဆရာမီကို လာခဲ့မယ်။  
mənpȟjàn tɕənò shəjə.sȟi.gò lə.gɛ.mɛ̌  
tomorrow I teacher.vicinity.to come.kh̥.IRR  
‘Tomorrow I will come over and visit you [teacher].’

- (57) ဆရာ ဖတ်ချင်တဲ့စာအုပ်ကိုလည်း ယူခဲ့မယ်။  
shəjə pȟaʔ.tɕìN.dɛ̌.sàʔouʔ.kò.lé jù.gɛ.mɛ̌  
teacher read.want.REAL<sup>ATTR</sup>.book.OBJ.also take.kh̥.IRR  
‘I will also bring along the book you want to read.’

If, however, the semantics of the verb entail remaining in one place instead of movement, the interpretation of ခဲ့ ကံ changes accordingly, as in (58) and (59):

- (58) ကျန်မ ကားကို အိမ်ရှေ့မှာပဲ ထားခဲ့မယ်။  
tɕənò ká.gò ʔèin.jɛ̌.mà tʰá.gɛ.mɛ̌  
I car.OBJ house.front.in.EMPH put.kh̥.IRR  
‘I will leave the car in front of the house.’

- (59) သွားချင်တဲ့နေရာကို သွား၊ ကျွန်တော်ကတော့ ဒီမှာပဲ နေခဲ့မယ်။  
θwá.dzìN.dɛ̌.nèjə.gò θwá tɕənò.gə.dɔ̌ dī.mà.bé nè.gɛ.mɛ̌  
go.want.REAL<sup>ATTR</sup>.place.to go I.SUBJ.but here.in.EMPH stay.kh̥.IRR  
‘You go wherever you want; I’m going to stay here.’

In conditional clauses concluded by ရင် jìn 'if' (or sometimes တော့ tɔ 'since'), far from emphasising realness, ခဲ့ kʰɛ intensifies the hypothetical character, as in (60) and (61):

- (60) မနက်ဖြန် မိုးရွာခဲ့ရင် ငါ ကျောင်း မသွားဘူး။  
 mənɛʔpʰjàn mɔ.jwà.gɛ.jìn nà tɛáun mə.θwá.bú  
 tomorrow rain.rain. kʰɛ.if I school NEG.go.NEG  
 'If it rains tomorrow, I won't go to school.'

- (61) ကျွန်မသာ ထိပေါက်ခဲ့ရင် အိမ်ဝယ်ထားတာ ကြာပြီ။  
 tɛəma.ðà tʰì.pauʔ.kʰɛ.jìn ʔèin.wè.tʰá.dà tɛá.bi  
 I.only lottery.win.REM.if house.buy.REAL<sup>NOM</sup> long.PERF  
 'If only I had won in the lottery, I would have bought a house long ago.'

Together with the verb-phrase final marker တယ် tɛ, ခဲ့ kʰɛ shows that the respective event took place in a different time interval from the moment of speech. As တယ် tɛ marks realised actions this interval can only be past. More often than not, therefore, ခဲ့ kʰɛ is mistakenly described as a past tense marker. The Myanmar Language Commission (1993b:67) strongly opposes this view: if ခဲ့ kʰɛ were a past tense marker, it would be used obligatorily for denoting past tense which it is not. Rather, it is applied whenever necessary to indicate that an event is over and finished with, in the completed past. Here, the effect of ခဲ့ kʰɛ can be compared to the pluperfect tense of Indo-European languages, as in (62)–(64):

- (62) မောင့်ဘ ထောင် ကျခဲ့[ဖူး]တယ်။  
 màunbà tʰàun tɛá.gɛ.[bú.]dɛ  
 Maung Ba jail fall.REM.[EXP.]REAL  
 'Maung Ba had been in jail.'

- (63) ခင်ဗျားမှာ သားသမီး ရှိလား။  
 kʰəmjà.mà θá.θəmí jì.lá  
 you.at son.daughter exist.Q?  
 'Do you have children?'

ရှိခဲ့ပါတယ်။ ဒါပေမဲ့ စစ်အတွင်းက သေသွားပါပြီ။  
 jì.gɛ.bà.dɛ dàbèmə siʔ.ʔatwín.gá θè.ðwá.bà.bi  
 exist.REM.POL.REAL but war.within.PAST die. 'go'.POL.PERF  
 'I did have, but they died in the war.'

- (64) အမအတွက် သုံးရက် ဆက်၍ ကျန်တော် ငိုကြွေးခဲ့သည်။  
 əmá.ʔatwɛʔ θóun.jɛʔ sʰɛʔ.jwɛ tɛənò nòtɛwé.gɛ.ðí  
 mother.for three.day continue.SUBORD I cry.REM.REAL  
 'I had wept for mother for three days.'

Simultaneously, ခဲ့ kʰɛ can interleave an indication of time with an indication that the event took place somewhere else: compare (65) without ခဲ့ kʰɛ with (66) and (67) with ခဲ့ kʰɛ:

- (65) ရန်ကုန်ကို ဘယ်တုန်းက ရောက်ခဲ့သလဲ။  
 jàngòUN.gò bè.dòUN.gà jau?.θə.lé  
 Yangon.to which.time.PAST arrive.REAL.Q  
 'When did you arrive in Yangon?'
- (66) ရန်ကုန်ကို ဘယ်တုန်းက ရောက်ခဲ့သလဲ။  
 jàngòUN.gò bè.dòUN.gà jau?.kʰɛ.ðə.lé  
 Yangon.to which.time.PAST arrive.REM.REAL.Q  
 'When were you [over] in Yangon?'

- (67) ကော်ဖီ သောက်မလား။ သောက်ခဲ့ပါတယ်။  
 kəpʰi θau?.mə.lá θau?.kʰɛ.bà.dè  
 coffee drink.IRR.Q drink.kʰɛ.POL.REAL  
 'Would you like coffee?' 'I had some [elsewhere, before I came].'

While adding definiteness to the action and denoting a dimension beyond the event frame, *ခဲ့* *kʰɛ* is related to time. When it combines with *မယ်* *mè*, the sense of realness counterbalances the inherent sense of non-actuality so that future tense prevails. If combined with *တယ်* *tè*, *ခဲ့* *kʰɛ* places the event as anterior with respect to the time dimension. The issue of actuality or non-actuality does not arise in combination with verb phrase final markers; it occurs only in conditional clauses.

The verb particle *နှင့်* *nj̃N* 'PRIOR' also defines actions which materialise before another event in question, as in (68)–(70):

- (68) ဦးပုညာ ရှိနှင့်နေတာ ကျုပ်တော့ သဘောကျတယ်။  
 ʔupòUNj̃à ʃi.nj̃N.nè.dà t̃əouʔ.tɔ̃ θəbɔ̃t̃ɛ.dè  
 U Ponnya exist.PRIOR.CONT.REAL<sup>NOM</sup> I.but like.REAL  
 'But it pleased me that U Ponnya had been [there] before me.'
- (69) အို ခင်စောမယ်တို့ ရောက်နှင့်ကြပြီလား။  
 ʔò kʰinsómè.dɔ̃ jauʔ.nj̃N.ɛ̃.bì.lá  
 oh Khin SawMay.PL arrive.PRIOR.PL.PERF.Q  
 'Oh, Khin Saw May, you've got here before us!'
- (70) ငါ ပြန်နှင့်မယ်။  
 ŋà p̃j̃àN.nj̃N.mè  
 I return.PRIOR.IRR  
 'I'll go home [ahead of you].'

One of the effects of the grammaticalised form of the verb *ထား* *tʰá* 'place' is to indicate that the action expressed by the preceding verb is completed and established before another one, as in (71) and (72):

- (71) လွတ်ရာ ပြေးတော့၊ ဘုရင့်တပ်တွေက ဝိုင်းထားကြပြီ။  
 luʔ.jà p̃j̃é.dɔ̃ bəj̃j̃N.taʔ.tè.gà wáin.tʰá.ɛ̃.bì  
 free.place run.EMPH king<sup>POSS</sup>.troop.PL.SUBJ encircle.tʰá.PL.PERF  
 'Run away! The king's troops have encircled us!'

- (72) မနက်ဖြန် လာပါဦး။ ကျွန်တော် ဖုန်း မှာထားလိုက်မယ်။  
 mānɛʔpʰjàn là.bà.ʔóun tɕəŋɔ̃ pʰóun m̥à.tʰá.laiʔ.mè  
 tomorrow come.POL.CONT. I telephone order.tʰá.EMPH.just.IRR  
 'Come again tomorrow: I will have booked the telephone call.'

To summarise, *ခဲ့* *kʰɛ* in combination with *တယ်* *tè* implies that the respective event occurred before the moment of speech and remains there—corresponding to the past in the real-time dimension. However, the effect of *နှင့်* *ŋjɪn* is confined to the linear sequence of actions irrespective of the time interval and *ထား* *tʰá* has no bearing on the time element of the verb, so neither is taken into consideration in the present discussion.

### 3.4 လိုက်လါ?

Basically *လိုက် လါ?* conveys a sense of actuality to the action concerned denoting imminence and determination. It can be combined with all verb-phrase final markers to emphasise orders or confirm statements. Generally confined to functionive verbs it can occur with stative verbs in exclamations such as (73):

- (73) ကောင်းလိုက်တာ။  
 káun.laiʔ.tà  
 good.laiʔ.REAL<sup>NOM</sup>  
 'Wonderful!'

Accordingly *လိုက် လါ?* lends actuality to non-realised actions ending in *မယ်* *mè*, thus again reducing the degree of potentiality, as in (74) and (75). It often appears with *ဦး* *ʔóun*.

- (74) တံခါးကို ပိတ်လိုက်ဦးမယ်။  
 dǎgá.gò peiʔ.laiʔ.ʔóun.mè  
 door.OBJ close.laiʔ.CONT.IRR  
 'I will just close the door first.'
- (75) ကျွန်မကို အနိုင်ကျင့်တယ်လို့ အော်လိုက်မယ်။  
 tɕəma.gò ʔə̀nàinteɪn.dè.lə ʔò.laiʔ.mè  
 I.OBJ bully.REAL.QUOT shout.laiʔ.IRR  
 'I will shout that you are bullying me.'

### 3.5 ပါပု

With creaky tone, the 'politeness' particle *ပါ* *pá* acquires a sense of definiteness in statements ending with the marker *မယ်* *mè*, as in (76)–(78):

- (76) မောင် သစ္စာ ထားခဲ့ပါမယ်။  
 màun θiʔsà tʰá.gɛ.ba.mè  
 I faith keep.REM.DEFINITE.IRR  
 'I will remain faithful to you!'

- (77) မောင်ကြီး အပြန်ကို မျှော်နေပါမယ်။  
 màundzì ʔəpjàN.gò mjò.nè.bà.mè  
 brother return.OBJ look-forward.CONT.DEFINITE.IRR  
 'I will be waiting for your return.'

- (78) လူတွေ မြင်ကုန်ပါမယ်။  
 lù.dè mjìN.gòUN.bà.mè  
 people see.all.DEFINITE.IRR  
 'People will all see it!'

In questions such as (79)–(81), however, ပါ *pa* conveys rhetorical doubt or some reservation about the feasibility of the action, thus increasing the hypothetical notion:

- (79) ဖြစ်ပါမလား။  
 pʰiʔ.bà.mə.lá  
 be.DOUBT.IRR.Q  
 'Will that really work?'

- (80) မောင်မိဘတွေက ဖြူလို တောသူကို  
 màun.mìbà.dwè.gà pʰjù.lò tó.ðù.gò  
 brother<sup>POSS</sup> parents.PL.SUBJ Phyu.like country.person.OBJ

ဘယ် သဘောတူပါမလဲ။  
 bɛ ʈəbótù.bà.mə.lé  
 how agree.DOUBT.IRR.Q  
 'How could your parents accept [your marrying] a country girl like me?'

- (81) ပုံပြင်မကြိုက်တဲ့လူရယ်လို့ လောကကြီးမှာ ရှိပါမလား။  
 pòunb.jìN.mə.tɕaiʔ.tɛ.lù.jɛlɔ lókà.dzì.mà jì.bà.mə.lá  
 tale.NEG.like.REAL<sup>ATTR</sup> person.QUOT world.big.in exist.DOUBT.IRR.Q  
 'Are there people in the world who do not like stories?'

### 3.6 လိမ့် *lein*

Found only in verb phrases with the final marker မယ် *mè*, လိမ့် *lein* conveys a sense of probability from the speaker's point of view. လိမ့် *lein* frequently, though not exclusively, implies future time, as in (82)–(84). A fusion of 'euphonic' လေ *lè* and 'irrealis' အံ့ *ʔàN*, လိမ့် *lein* is glossed elsewhere in this volume as 'EUPH/IRR'.

- (82) တုန်ကင်းတွေက တစ်ပတ်လောက် ကြာမှ ရောက်လိမ့်မယ်။  
 tòungín.dwè.gà tɛ.paʔ.lauʔ tɕà.mà jauʔ.lein.mè  
 cargo-barge.PL.SUBJ one.week.about elapse.only-if arrive.EUPH/IRR.IRR  
 'The cargo barges will probably only arrive in a week's time.'

- (83) သူ ရန်ကုန်မြို့မှာ နေခဲ့ဖူးလိမ့်မယ်။  
 ʈù jàngòUN.mjɔ.mà nè.gɛ.bù.lein.mè  
 he Yangon.city.in live.REM.EXP.live.EUPH/IRR.IRR  
 'He will have lived in Yangon [at some point].'

- (84) ကျွန်တော် ဒီတစ်ခါ မသားရင် ဒုက? ရောက်ကုန်လိမ့်မယ်။  
 tʃənò d̪i.tə.kʰà mə.θwá.jìn douʔkʰǎ ʃauʔ.kòun.lɛ̌in.mè  
 I this.one.time NEG.go.if suffering arrive.entirely.EUPH/IRR.IRR  
 'I'll get into trouble if I don't go this time.'

The effect of လိမ့် *lɛ̌in* can be achieved by lexical means, i.e. by attaching ထင်တယ် *tʰìn.dè* 'I think' to the statement. This is very common, and with the first person is preferred to လိမ့် *lɛ̌in*.

#### 4 Conclusions

I very much appreciate the approach to the study of Myanmar grammar adopted by Anna Allott (1965) in her paper on the verbal syntagma. I believe that the grammar of a language is only comprehensible if analysed in its own terms. This kind of approach is for me also an essential prerequisite for teaching the language effectively, and so it is the one I adopt myself. Simultaneously, however, teaching a language so different from ones own requires one to build bridges between familiar linguistic concepts and alien ones. In this context, I do not think that defining new terms or categories alone will help to get to the heart of a language.

Rather, it seems necessary to search for universal concepts which straddle both languages. Existence in space and time is one such universal concept, which no language can avoid referring to, although, admittedly, such reference may be expressed in a variety of ways. In German, time can be expressed by lexical means such as perfectivity and progressive aspect. Similarly, many languages known to have tense use syntactic means as well to express time. In the Myanmar language there are, besides time phrases, other ways of expressing time, such as the negation of a sentence ending with မယ် *mè* or conferring actuality to such a sentence by attaching a predicate with တယ် *tè* or some equivalent, as in (85):

- (85) ခိုင်တို့အိမ်တွင် တစ်ညအိပ်ပြီး  
 kʰàin.dɔ.ʔèin.dwìn tə.nɔ.ʔeiʔ.pí  
 Khine.PL.house.in one.night.sleep.SUBORD

နန်းလီ နောက်တစ်ည ရထားဖြင့် ပြန်မည် ဖြစ်၏။  
 nán.lì nauʔ.tə.nɔ ʃəʔhà.pʰjìn pʃànɲmji pʰjiʔ.ʔi  
 Nan Li next.one.night train.with return.IRR be.REAL

'After staying one night at Khine's house, Nan Li is to return home by train the night after.'

The aim of this paper has been to show that the Myanmar language has developed specific syntactic strategies for expressing the position of an event in the time dimension, namely verb-phrase final markers in interaction with other verb particles.

The verb-phrase final marker မယ် *mè* clearly defines a predicate as temporally posterior, characterising all others as anterior or simultaneous, marked by တယ် *tè* or ပြီ *pì*. The demarcation line between the two categories is more exact than, for example, in German, where present forms are used to refer to the future: 'Ich komme morgen' *I come tomorrow*. In the Myanmar language, such usage is largely ungrammatical. If an unsophisticated person, perhaps a child, is shown an isolated sentence such as (86), he/she

would substitute မယ် *mè* for တယ် *tè* because the combination of မယ် *mè* with a time phrase indicating past does not concur with the ingrained understanding of time intervals. It can work only within a context where မယ် *mè* is marking an assumption, perhaps by adding ထင်တယ် *tʰɪndè* ‘[I] think’ to it.

- (86) မနေ့က သူ လာမယ်။ [ထင်တယ်]  
 mənɛɡə θù lə.mè [tʰɪn.dè]  
 yesterday he come.IRR [think.REAL]  
 ‘[I thought] he would come yesterday.’

The markers မယ် *mè* and တယ် *tè* reflect a concept of time that corresponds to the time dimension of reality and, therefore, can be assumed to express tense. On the other hand, it has been shown that verb-phrase final markers also denote mood, as (86) indicates, i.e. မယ် *mè* non-actual (*irrealis*) mood vs. တယ် *tè* and ပြီ *pì* actual (*realis*) mood. This is not peculiar to the Myanmar language; rather it reflects the natural correlation between future tense and non-actual potential mood or between non-future tense and actual mood: only events which did happen or are happening or used to happen can be actual; all events after the speech moment can only be potential or hypothetical. Both grammatical categories are interdependent, and thus ‘temporal distinctions may be expressed by morphosyntactic categories that have wider modal or aspectual functions’ (Chung and Timberlake 1985:206). This in particular refers to the way future tense is often used to express assumptions even in a language like German with distinct subjunctive verb paradigm. A hypothetical statement like ‘Er wird wohl dreissig Jahre alt sein’ *He will probably be around thirty years old* is common, but would one refute the existence of tense in German because of it? As the Myanmar language has no grammatical device to express subjunctive distinctively, it naturally uses for this purpose the very form which expresses another kind of potential event, namely future time. Thus it seems to be mainly a matter of approach or terminology whether an event is called potential or future, actual or past/present. To me it seems pointless to contrast these complementary capacities which are inherent in the verb-phrase final markers.

The following quotation from a history tale by Zawgyi ဇော်ဂျီ illustrates this point. It reports the same event related to different intervals of time or different planes of actuality. In (87) the monk defines the conditions under which Maung Shin Nge can become the king. His words are orders referring to future time or potential mood. (88) reports what Maung Shin Nwe did. By now, the monk’s advice has been acted on and become reality; the action is no longer future, but present or past — *realis* mood. In (89), first the results of the efforts are reported in the foreground, marked by ပြီ *pì* as perfective, and what follows are completed events.

- (87) နောက်တစ်နေ့ မိုးသောက်လတ်သော် ဆရာရဟန်းသည် မောင်ရှင်ငယ်ကို ခေါ်၍  
 nauʔ.tə.nɛ mʊθauʔ.laʔ.θò sʰəjə.jəhán.ðì mǎun.jìn.ŋɛ.gò kʰəʔ.jwɛ  
 next.one.day dawn.EUPH.when teacher.monk.NOM MSN.OBJ call.SUBORD
- ငါ့တပည့် သင်သည် မင်းဖြစ် လတ္တံ့။  
 ŋə.təbɛ θìn.ðì mɪn.pʰjiʔ laʔtəŋ  
 my.pupil you.NOM king.become EUPH/IRR



သို့ရာတွင် ပညာကို ကြိုးစား၍ သင်ရမည်။  
 0ɔjədwɪn pjɪnɲà.gò tɛózá.jwɛ 0ìn.jə.mji  
 However learning.OBJ strive.SUBORD learn.must.IRR

သီလမြဲရမည်။ သည်းခံတတ်ရမည်။ ချစ်ဖွယ်သော စကားကို  
 0ilə.mjɛ.jə.mji 0íkʰàn.taʔ.jə.mji tɛʰiʔ.pʰwɛ.ðɔ zəgá.gò  
 moral.firm.must.IRR tolerate.HABIT.must.IRR love.-able.ATTR speech.OBJ

ဆိုရမည်ဟု ဆုံးမလေသည်။  
 sʰò.jə.mji.hu sʰóunmá.lè.ði  
 speak.must.IRR.QUOT advise.EUPH.REAL

‘On the next morning the monk summoned Maung Shin Ngeh and admonished him: “My disciple, you will be a king. However, you must strive hard for knowledge, must have firm morals, must be tolerant, and must speak in a lovely way”.’

- (88) မောင်ရှင်ငယ်လည်း ဘဝင့်မမြင့်။ ဆရာရဟန်း  
 màun.ɲin.ŋɛ.lé bəwɪn.məmɲin sʰəjə.jəhán  
 MSN.OBJ heart.mind.NEG.high teacher.monk

ဆိုဆုံးမသည့်အတိုင်း ပညာကို ကြိုးစား၍ သင်၏။  
 sʰò. sʰóunmá.ðɪ.ʔətáin pjɪnɲà.gò tɛózá.jwɛ 0ìn.ʔi  
 speak.advise.REAL<sup>ATTR</sup>.according learning.OBJ strive.SUBORD learn.REAL

သီလကို မြ၏။ ချစ်ဖွယ်သော စကားကို ဆို၏။  
 0ilə.mjɛ.ʔi tɛʰiʔ.pʰwɛ.ðɔ zəgá.gò sʰò.ʔi  
 moral.firm.REAL love.GER.ATTR speech.OBJ speak.REAL

‘Maung Shin Ngeh was not conceited. As the monk had advised him, he studied hard, was tolerant, and spoke in a lovely way.’

- (89) ဆရာရဟန်းသည် မောင်ရှင်ငယ်၌ ပညာလည်း စုံပြီ၊  
 sʰəjə.jəhán màun.ɲin.ŋɛ.ŋaiʔ pjɪnɲà.lé sòun.bi  
 teacher.monk MSN.SUBJ learning.also complete.PERF

သီလလည်း မြီပြီ၊ သည်းခံခြင်းကိုလည်း တတ်ပြီ၊  
 0ilə.lé mjɛ.bi 0íkʰàn.ɬáin.gò.lé taʔ.pì  
 moral.also firm.PERF tolerate.NOM.OBJ.also know.PERF

ချစ်ဖွယ်သော စကားကိုလည်း ဆိုတတ်ပြီဟု သိသောအခါ  
 tɛʰiʔ.pʰwɛ.ðɔ zəgá.gò sʰò.daʔ.hu 0i. ðɔ.ʔəkʰà  
 love.-able.ATTR speech.OBJ say.know.PERF.QUOT know.ATTR.time

မောင်ရှင်ငယ်ကို လူထွက်စေ၍  
 màun.ɲin.ŋɛ.gò lù.tʰwɛʔ.sè.jwɛ  
 MSN.OBJ lay-person.leave.CAUS.SUBORD

အမတ်စစ်သူကြီး	တစ်ဦးထံ၌	အပ်လေ၏။
ʔəmaʔ.sɪʔ.θu.ɔ́ɪ	ta.ʔu.tʰàN.ɲaiʔ	ʔaʔ.lè.ʔi
official.military.person.big	one.CLF.place.at	enroll.EUPH.REAL

‘When the monk realised that Maung Shin Ngeh had become learned, had proved firmness of morals, had been tolerant, and had been able to talk in a lovely way, he told him to leave the order and entrusted him to the care of a high military officer-minister.’

The concept of tense is further supported by a number of verb particles whose attributes qualify them as tense markers. As has been shown above this is particularly true of မယ် *mè*, for which the ‘irrealis’ component can be played down in favour of a designation as a future tense marker. The main function of a considerable number of grammatical morphemes in the predicate is to characterise the event with regard to the degree of realisation or modality in various ways, as categorised in (90), and others besides.

(90)	continuity	နေလျက်ဆဲမြဲသေး	nè ʔəjɛʔ shé mjé θé	progressive: VERBing continuative: while VERBing in the process of VERBing always VERB VERB yet
	limits/sequence	ပြီးထားတော့ခဲ့ဖူးနှင်	pí thá tɔ khɛ phú ɲín	finish VERBing VERB permanently VERB after all remoteness in space or time experiential: have ever VERBed VERB previously, in advance
	habitualness	တတ်လေ့ရှိနေကျ	taʔ lə.ʃi nè tɕa	VERB habitually VERB habitually used to VERBing
	sentiment	ရှာရက်	ʃa jɛʔ	compassion/sympathy for the subject of the verb VERB considerably
	specific factors	မိ	mi	happen to VERB; VERB inadvertently/accidentally

This elaborate system of verb particles, for which we often fail to find equivalents when translating, suggests that the Myanmar language pays particular attention to aspect and mood. Nevertheless, in my opinion, however characteristic of the language this particular trait might be, it does not challenge the existence of the grammatical verb category ‘tense’.

Being aware that this contribution may be controversial, I look forward to responses, however critical they may be, for the sake of further findings on the nature of the fascinating Myanmar language.

# 7 *Towards a formal cognitive theory of grammatical aspect and its treatment in Burmese*

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## 1 Introduction

In this paper I am going to discuss the so-called theory of grammatical aspect. This discussion was initially motivated by some correspondence between Alice Vittrant and me about a paper she presented at the October 2000 Burma Studies Conference at Northern Illinois University (Vittrant 2000) and subsequent correspondence between Anna Allott and me about my remarks on Vittrant's paper. Vittrant's paper was a systematic attempt to make sense of a series of non-final verbal elements in Burmese including both 'particles' and auxiliary verbs.<sup>1</sup> Vittrant attempted to try and account for these elements using the grammatical categories of tense, aspect, and mode, and I would like to try and systematise these using a point of view that neither Vittrant nor Allott have employed, namely that of formal syntax and logical-cognitive semantics. My purpose in this paper is less to add any new treatment of the various Burmese formatives in question, and more to try and put the whole matter into a framework of modern formal linguistics, and therefore I shall not recapitulate Vittrant's examples. My attempt to restate aspects of Vittrant's treatment and make specific proposals concerning some of the formatives has benefitted greatly from Mrs Allott's comments (pers. comm. 2000) and her references to Okell and Allott (2001) and Stewart (1955). This has enabled me to place the formatives within this technical framework, thus improving upon previous treatments of these elements. I am especially grateful to Mrs Allott for pointing out to me a number of places in my original correspondence where my phrasing, if only through infelicitous and misleading renderings into English, obscured my point, even, in some cases, mis-stating my claims about some of the aspectual particles and auxiliaries. However, I am certain she will still disagree with

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<sup>1</sup> I am omitting from this paper any serious attempt to deal with the fact that, although aspect is clearly a fundamental category of the verb phrase as a whole, there is no unique syntactic 'slot' to be identified with it. In the final analysis, and given the current situation of formal, generative syntactic theory, this seems to be of at most minor importance. Moreover, this is in fact a morphological matter, or how an abstract 'functional' syntactic category is realised lexically or 'spelled out'.

some of my analysis. In her earlier work on the matter (1965), Allott's motivation was to make the various particles and auxiliaries easier for her language students to understand; she employed a much more restrictive notion of aspect, based in part, so she has said (pers. comm.), on her intimate acquaintance with aspect-marking Slavic languages (Czech and Russian). In particular, she did not, and perhaps still does not, think that categories of perfect and perfective belong to the notion of aspect, unlike most syntacticians in current formal linguistics (see Comrie 1976, Hopper 1982, or Klein et al. 2000). However, she has also noted that when she wrote the 1965 paper, she had not yet read any technical linguistics. So first I would like to, at some length, discuss the notions of tense, mode and aspect, respectively, and then see how various elements in Burmese might fit into such a framework. This will require me to generalise the idea of aspect beyond current formal linguistic treatments.

#### A Modal-aspectual 'particles':

တယ်	tè	<i>realis</i> mode finite verb ending
မယ်	mè	<i>irrealis</i> mode finite verb ending. Its default reading is future.
ပြီ	pì	marks the perfect aspect and requires no overt modal ending (inherently <i>realis</i> )
သေး	thé	marks the imperfective aspect as 'still' going on (not yet over)
တော့	tɔ	marker of a 'sharp' transition between aspectual states
အုံး(ပြီး)	ʔóun	marker of a 'smooth' transition between aspectual states
ခဲ့	kʰɛ	marks very definite, remote perfective aspect
မိ	mì	'happen to VERB', 'manage to VERB'; a qualification of the perfect aspect, but, unlike ပြီ pi PERF, requires a modal ending

#### B Aspectual auxiliaries:

ပြီး	pí	'to finish' → in grammaticalised form indicates perfectivity, commonly used before ပြီ pi PERF
နေ	nè	'to remain' → grammaticalised as imperfective; continuative, progressive marker
လိုက်	lai?	'to follow' → in grammaticalised form can indicate an immediate realisation of an intended state; glossed in this volume as 'just'.
ထား	thá	'to place' → in grammaticalised form indicates definitive, permanent, lasting enactment; applicative
သွား	thwá	'to go' → used in grammaticalised form with manner of motion main verbs to indicate motion away from a starting point; with other verbs to indicate states 'departing' from what is normative.
လာ	là	'to come' → used in grammaticalised form with manner of motion verbs to indicate proceeding towards the present state; with other verbs to indicate movement towards or arrival at a normative condition

A comment here with regard to သေး thé and တော့ tɔ: morphologically they seem to fall within the scope of negation, as in (1):

- |   |  |
|---|--|
| (1) မညရေဗသေးဘူး<br>ma.VERB.0é.bú<br>NEG.VERB.yet.NEG<br>'not yet VERBing' | မညရေဗတော့ဘူး<br>ma.VERB.tə.bú<br>NEG.VERB.any_more.NEG<br>'not VERBing any longer' |
|---|--|

However, syntactically and semantically the aspectual particles take wide scope over negation, since the actual meanings are 'still not VERBing' and 'at last not VERBing'. We must conclude that the usual formal semantic treatment of negation as taking wide scope over a whole predication or proposition, as in the logical formulation 'NOT  $p$ , for any proposition  $p$ ', is incorrect, and that, for Burmese certainly, NEG+VERB is to be understood as a present, or current state, the absence or contrary (not the logical contradictory) of the state meant by VERB alone, rather than a *denial* of the affirmation of the state.

## 2 Tense, mode and aspect

English and many other European languages are tense-marking languages: aspect is less systematically or obligatorily marked in the verb phrase than tense. However, many languages mark a verb phrase for aspect rather than tense. Aspect concerns the very fundamentals of the idea of an *event* (see Tenny & Pustejovsky 1999; Pustejovsky 1991; Chit Hlaing 2000) as figured in an utterance or sentence. It is easy to see that a verb, and hence the sentence, is always about some event — real or imaginary, which we can equally call a State of Affairs, or simply *state*. A verb can be about a process, happening, or a non-dynamical state, for example 'John came,' 'This is a book,' 'Nothing is happening.' Aspect indicates what is marked about the way an event is understood with regard to its conceptual definition or 'boundary' conditions (see Klein et al. 2000). What 'boundary' means here is simple. Time is continuous so how does a given portion of what goes on in the flow of time become a conceptually specifiable event? As an initial and somewhat stark approximation, it is connected with the cognitive construal of the flow of happening in time: that an event or state is understood to come into being, and also — sooner or later — come to an end. Events are conceptual objects and these are mapped onto the real time line. But, as I shall demonstrate, such boundaries cannot be identified with literal points in time.

We can understand aspect in terms of what have been called 'state diagrams'. A state diagram shows the various ways an event is related to its boundaries. Obviously, aspect has a lot to do with grammatical–lexical–semantic time or tense, rather than the 'real' time line. Real time is, after all, smoothly continuous with no designated partitions at all (the mathematician's expression for this is 'everywhere dense'); past, present, and future do not exist in time except as relative to events. 'Now' is just the topological neighbourhood of a given event or state of affairs, namely the event of speaking of some discourse, or the state of the speaker of the said utterance. Save for such a construal, the beginning and end of an event, in particular, are not defined literally as points in real time and it is this construal which enables aspect to be mapped onto the real time line. To use a silly but perfectly adequate example, even the moment when the first nerve impulse is sent that allows you to start taking a step is too coarse grained to be truly equivalent to a dimensionless point!

However, aspect cannot be sensibly discussed without also talking about *mode* or *modality*. Let me begin with the latter. An event which has not yet transpired is conceived of as not yet 'realised', so it is said to be modally *irrealis*. What we commonly call 'future' is actually *irrealis*. In many languages there is a close relationship between the future form of a verb and the forms marking subjunctive or hypothetical construals of an event, for example in English 'will' and 'would'; 'shall' and 'should', and so on. Aspectually, the future is what we can call 'inchoative' — the state of some event, possibly imagined, which is either about to take place, on the point of taking place, or just barely starting to take place; or else which is simply non-perfect, by which we mean it is, in some sense, not (yet) happening, and possibly, in the case of 'contrary-to-fact' utterances such as 'If it were the case that...' or 'It may be the case that...', not ever going to happen. But notice that we can lie, tell an imaginary tale, or simply be in error, and still relate something as being 'so'. Of course from an objective point of view it remains 'unreal', but cognitively it is modally *realis* within the framework of the discourse in so far as we ask our hearers to accept or maybe just imagine it as an actualised event. But if we claim in a discourse that such and such a proposed event has not yet happened, or will not (yet) happen, it is modally *irrealis*. For now, this is sufficient discussion of mode and I will return to aspect.

Basic aspect category may be defined roughly as an aspectual distinction that is always marked in aspect marking, even if other, finer distinctions are not made in a given language. The perfect aspect is concerned with the state in which an event has at least begun to be realised, and is modally *realis*. This aspect is what we mean when we use the so-called 'perfect tense' in English. For instance, if I say 'I have seen such and such,' I indicate that I have at least begun to notice it, and though in English, as a tense-marking language, this is commonly construed as past, it is not necessarily so, I may be still noticing whatever it is. In order to grasp this, 'hear' may be a better example than 'see'; another example is if I say 'I've understood you,' notice that it does not mean I no longer do so. The discursive literature on such matters tends to comment that it is a kind of past that remains 'relevant' to the present, but this is unhelpfully vague. In fact what is significant here is that it is unspecified whether or not the state or event mentioned is completed.

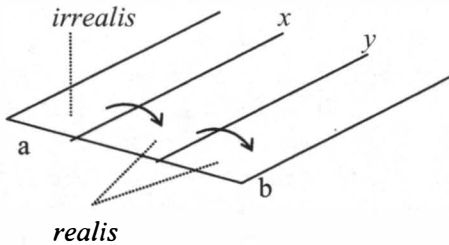
In an aspect-marking language, such as Thai, if I say about someone มาแล้ว *ma léəw* '(He) has come,' it does not mean that he has got here, but only that he is, at least, already known to have started on his way. In Thai แล้ว *léəw* means 'to finish' and signifies that one has, as it were, finished with the *inchoative* state, finished, let us say, waiting for the event to start to be *realis* modally. In Burmese, the same goes for သွားပြီ *θwá.bì* 'go.PERF'. Even in English, if I say 'He has gone to London,' he may not necessarily have finished the going, but he is at least *en route* to a destination. Burmese provides good illustration of this, if I say about my friend လာပြီ *là.bì* 'come.PERF', he may well not be here at all, but perhaps I can see him in the distance on his way.

Another basic aspect category is the *imperfective*, which has to do with an event that has clearly not only begun but is also explicitly not yet over. 'He is going' is imperfective in English. In language teaching, we sometimes refer here to the 'progressive', and obviously, if something is 'in progress' it certainly has not finished, nor can it have not yet begun.

Finally the *perfective aspect*, which marks an event as completed. In English, the past tense is in fact aspectually perfective. If I tell you that yesterday 'He went to Chicago,' you understand that his going is an event that is no longer to be considered on-going: either he may be supposed to have reached the Windy City, or else the journey may have been aborted. If I want to say that the event may still be in progress, in English I am better off saying that 'Yesterday he *left* for Chicago.' In Thai, at least for many, but not all, speakers, ไปแล้ว pay léəw 'to have finished with having brought into being the event of going', at the very least signifies that the event is irrelevant to what is going on 'now', to the current 'state of affairs'. It is not construed as being in the topological neighbourhood of 'now'. In Burmese the matter is more subtle, since we can distinguish rather nicely, though not absolutely, between culminative and non-culminative perfective aspect i.e.. between perfectives that do not necessarily imply that an act with a goal has reached that goal and those that strongly imply such a conclusion.

Really, the only major distinction between tense and mode-and-aspect marking languages is that in the latter we do not explicitly categorise the verbal phrase as either past or present, both being *realis* mode and at least perfect aspect. Thus, if in Burmese we say သွားတယ် θwá.dè 'go.REAL', it can mean in English either 'he goes' or 'he went'. If I want to indicate it is past (or 'preterite', as we might say in school grammar), I need to make it either aspectually perfective: သွားခဲ့တယ် θwá.gè.dè 'go.REM.REAL', or at least specify the past adverbially with 'yesterday' or 'formerly' etc., rather than marking the verbal expression itself with ခဲ့ k<sup>h</sup>è, which refers to remoteness, or 'other times and places' as Cornyn (1944) put it, echoing Stewart (1936; see also Stewart 1955: 39). But two or three further remarks are in order. It is frequently said about Burmese and other similar languages that they do not systematically mark the verb for tense. Though accurate, it is not quite that inasmuch as perfective aspect is necessarily past in time. As I pointed out above, even a tense-marking language like English has a perfect aspect which is no more exactly or uniquely either past or present than it would be in Burmese; it is simply *realis*, which from a logical-semantic standpoint subsumes both of those tenses: it is a combination of *realis* mode and perfective aspect. This is not just a trivial observation: on independent grounds already mentioned above, tense cannot be plausibly taken as a basic category of an event because it is a consequence of the mapping of aspectually defined events onto the time line.

Secondly, it is always possible to embed events inside other events, and so, unsurprisingly, aspectual states can be grammatically embedded within other aspectual states. To say 'By the time I came he *had* (already) gone,' is to indicate that the event of his going was aspectually perfect whilst mine was inchoative. My third point follows from these considerations: the absence of a 'real' boundary between 'now' and 'then'. The real time line has an infinite number of points between any two designated moments, and it is accordingly senseless to define the point onto which the supposed boundary might fall. This is so regardless of whether 'then' is past or future. The future may then be defined as those states of affairs ordered after the present state of affairs is to be considered over and done with (aspectually perfective). Similarly, the past is that portion or 'neighbourhood' of the time line such that the current state of affairs is still aspectually inchoative whilst some other state of affairs is at least aspectually perfect. All this can be graphically represented using very simple 'state diagrams', such as Figure 1.

**Figure 1:** A simplified representation of the state-space of mode and aspect.

In this diagram the line *ab* is the real time line. Line *x* marks the point at which we consider a given event or state of affairs to go from *irrealis* mode to *realis* mode. The arrow of the left hand curve serves to indicate the event being aspectually perfect. Line *y* marks the point at which the event may be considered over and done with, as indicated by the directionality of the right hand curve. It is only necessary to observe that once an event has happened, i.e. once it has become modally *realis*, it can never be undone - it can never 'not have happened', and so the past and present are alike modally *realis*. This is of course a direct reflection of the irreversibility of the unidirectionality of the physicists' 'arrow of time'. 'Now' (the 'present') can **only** be defined as the indefinite neighbourhood of *any* point (by default, the mid-point) on *ab*, lying between its intersection with *x* and *y* just in case the event represented is that of the present utterance itself. More accurately, 'now' lies between the neighbourhood of the midpoints of the left and right hand curves, respectively, between when the event could be considered inchoative and when it could be considered perfective and hence no longer relevant to some event ordered after the event of the utterance.

Note the relation between the aspectual event-space and the space of modal distinctions: *irrealis* mode is everything to the left of vertical line *x*, with the inchoative being a limiting case transitional to *realis*. *Irrealis* implies the distinctions mentioned elsewhere, between, let us say, 'future', conditional contrary-to-fact, hypothetical-subjunctive, and so on. The resulting total event-space has to be orthogonal to the plane *a-x*, making the entire space three-dimensional. Then the region of this three-dimensional space that would lie behind the plane *xy-b* would, of course, be the part of this conceptual event-space having to do with such matters as imaginary events, namely so-called 'possible worlds' semantics (see Wilson and Keil 1999: index under 'possible worlds semantics'). These are concerned with *realis* mode fictions, lies, and so on, and though grammatically *realis*, are not subject to truth-functional or extensional tests of meaning. The dotted lines tentatively indicate this latter consideration. Anna Allott has pointed out (pers. comm.) that informally we view time as proceeding towards the right, into the future. One might plausibly suppose that since the future is clearly *irrealis* and the past by definition cannot be made not to have been, therefore everything to the left is necessarily *realis*. Bear in mind, however, that I am talking about event-spaces. Once we go into the temporal 'future', simply forward from the present 'moment', any given event that has once happened cannot ever be otherwise; whilst there is, inevitably, a time before an event has begun, when it can be said to be 'going to happen' and is accordingly *irrealis*. This is the best available demonstration of the difference between real time and event-spaces.

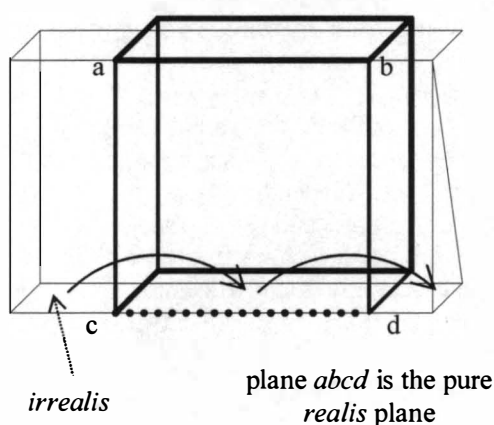


### 3 Extensions of Mode and Aspect Theory

Though the foregoing construction is a useful initial approximation, the final analysis will ultimately require more dimensions than the two of the simple diagram above. One basic reason for this is that aspectual or conceptual events (the kinds of events designated by propositions) in *realis* mode apply both in the real world — where truth-functional tests apply, and also in an imagined world — where extensional truth-functional tests clearly cannot apply. If I say ‘The cat sat on the mat,’ then it is true, if and only if, there is empirical evidence of a given cat actually reclining on a certain sort of mat at some point *t*, in space and real time, and in *realis* mode. Yet I can tell an imaginary story containing that same proposition and still mentioning ‘past’ — the perfective aspect referred to as ‘past tense’ which has to do with an event being over and done with, but where extensional truth-tests are inapplicable. This is why the representation requires modelling in more than two dimensions: we have to imagine that even perfect, imperfective, and perfective events (ones that in tense languages are present and past), though *realis* in imaginative and hypothetical discourse, are, in some unclear sense, *irrealis* relative to the space of events not construed as imaginary. Therefore I have initially represented the space of modality as a sort of L-shaped plane orthogonal to that of the aspectual state space. Even this is still problematic, hence my continued work to perfect the representation.

The problem (which modal logic and possible world semantics are built to try and handle) is that is necessary to embed parts of these spaces in themselves. This is because in ‘real-world-and-time’ (where truth functionality/extensional reference applies) *irrealis* mode is neatly defined as the left hand side of the state space, i.e. left of the line over which, to the right, we define perfect aspect. However, is it not the case that in the ‘realm of imaginaries’ (as I call it in Lehman n.d. the ‘post-inchoative’ portion of the state-space ‘plane’ in effect embeds *realis* within *irrealis*? How can such a claim be proved? Let us examine a possible extension of my graphic representation:

**Figure 2:** An elaborated state-space diagram for both real and imaginary states.



This illustration is not entirely satisfactory. Firstly, there are two cuboids: the larger is the three-dimensional space of what is conceptually imagined material — pure intensionality — labelled ‘irrealis’. The smaller, interior cuboid, embedded within the larger one, is

state-space, onto which aspect is defined. These cuboids must be co-extensive left and right. Within the interior cuboid is a third cuboid defined by planes projecting back from the vertical lines whose bases are *c* and *d*, respectively. The plane *abcd*, defined by the front of the interior cuboid, is the plane containing 'pure' *realis* - the region where Extensionality or Truth Evaluation (Truth-conditional semantics) uniquely applies, just to the right of the vertical line with base *c*. In all other regions of the embedded state-space cuboid, *realis* is embedded within *irrealis*. In either part though, one proceeds, left to right, from 'pure' *irrealis* to *realis*; and then proceeds towards the right, crossing over the plane defined by a projection from the vertical line with base *y*, to perfective.

This can be slightly simplified by imagining, the outer being 'possible world space' (in the sense of 'possible world semantics'), and the inner being defined only by the imperfective region of state-space. Then one defines the domain of *realis* event-states as everything to the right of the left end of the embedded cuboid (over which the left curved arrow goes), and it still remains the case that the front plane of the whole construction is the region for Truth Valuation, within which plane we define the region of pure *realis* to the right of the left-hand side of the interior cuboid (the plane extending back from the line *ab*). This leaves us with the leftmost portion of the front face of the construction as a region of what I may call 'potential (inchoate) Truth Valuation'. Behind this front face, to say that all the *realis* is properly contained within *irrealis*, is to say that everything is imaginary, whilst preserving the idea that a distinction exists between *realis* and *irrealis* statements and notions: even in imaginary, contrary-to-fact discourse one uses present and past tense; perfect, imperfective or perfective aspect, and so on. So, to a great degree, it turns out to be correct to define *irrealis* as the domain of all statements not subject to Truth Valuation semantics and to define *realis* as the domain of all statements at least imagined as having been realised, whether or not this imagined realisation can be tested by Truth Valuation.

#### 4 Burmese verbal adjuncts and the foregoing theory of mode-and-aspect

I will now begin to analyse the Burmese means for expressing aspectual distinctions semantically and continue with commentary specific to Vittrant's paper. I start with the auxiliary verb လိုက် လိုက် လာ်, glossed as 'just' elsewhere in this volume. If this is really aspectual instead of merely an auxiliary of a verbal compound, then it is certainly not perfective, but rather some sort of 'perfect'. That is, it appears to always mean that the action of the main verb is or was (depending upon the temporal adverb) undertaken precipitately - 'at once' or even, 'all of a sudden', as in Vittrant's (2000) analysis. This is especially notable when this verb occurs before 'future' မယ် မဲ, as in (2) where the strict implication seems initially to be that my going will immediately follow the moment of the statement, and the verb လိုက် လိုက် လာ် in this usage retains its lexical meaning of 'follow'.

- (2) သွားလိုက်မယ်  
 θwá.laiʔ.mè  
 go.'follow'.IRR  
 'I'll go at once.'

However, this is a complete and adequate statement as it is, as Allott (pers. comm.) has reminded me. The reason for this is that we are dealing with event structure rather than the time line, and so the translation ‘at once’ can be badly misleading. In fact, the intended meaning is that one will definitely or definitively go; it is not merely a plan or hope, but rather an intended action to ‘follow’ (literally) through on the intention! Okell and Allott (2001:214) write on လိုက် လာ?:

‘(a) to V away, out, thoroughly, decisively; to just V, to V ... simply, *minimizing the time and effort involved in the action....*’ (my italics)

Incidentally, I claim that လိုက် လာ? is not itself an aspect marker at all (see Note 1), though it certainly has semantic implications for the function of grammatical aspect, it is an error to confuse grammatical aspect with its merely semantic parallels. In any event, the semantic force of လိုက် လာ? is inchoative, or more accurately ‘inchoative–perfect’ for it indicates that an event begins, began, or will begin, precipitately, without regard to its ending or not. Thus, future usage is one of figurative overstatement: (2) is said to give the impression that my going will follow so rapidly that, for all intents and purposes, by the time you can notice, I shall already have gone!

Similarly, consider the auxiliary ပြီး ပါ ‘finish’. Of course, ပြီး ပါ is used aspectually as a perfective auxiliary. This function follows from its lexical meaning ‘finish’, but it is, as nearly as you please, grammaticalised in its perfective function. When followed by the perfect aspectual particle ပြီ ပါ, its force is mainly perfective: as in (3) which may literally translate as ‘I have finished going,’ and therefore signifies that it is all over and done with, hence ‘I went.’

- (3) သွားပြီးပြီ  
 θwá.bí.bi  
 go.‘finish’.PERF  
 ‘I went.’

Otherwise, if ပြီး ပါ ‘finish’ stands alone in VP-final position as an auxiliary, it marks only a participial–subordinate clause, ပြီး ပါ ‘finish’ alone being a participial form like any bare verb root. This is how it comes to serve as a subordinating conjunctive marker in (4), which in English and French etc. would be a co-ordinate clause conjunction.

- (4) သူသွားပြီး ငါအိပ်သွားတယ်။  
 θù.θwá.bí ၵà.ʔeiʔ.θwá.dè  
 he.go.PERF I.sleep.go.REAL  
 ‘After he’d left, I went to bed.’

It is interesting to note that when ပြီး ပါ is used perfectively, the state of being finished with any action or event is such that, the perfect and perfective collapse together: to start to have finished is, *tout court*, to be done with whatever it is.

ထား တာ ‘put’ is another interesting case. Again, it preserves its lexical meaning ‘to put’, so that (5), from Vittrant (2000), can be translated as ‘I took a bath’ in English, though literally it says ‘I took (instead of ‘put’) a bathing’ or ‘I took and bathed myself.’

- (5) ရေချိုးထားတယ်  
 jè.tɕʰó.tʰá.dɛ̃  
 water.bathe.RESULT.REAL  
 'I took a bath.'

More colloquially, where the clear implication seems to be that if I 'take' an action, then the action has to be 'whole' and hence, as Vittrant indicates, complete. This does not, as Allott has pointed out to me, entail that I am clean now. Stated in the terminology of aspectual categories, grammaticalised ထား တယ် is not necessarily resultative, although to the extent that ထား တယ် is at least semantically, if not morphologically, perfective, it *is* also resultative: if I 'put' something somewhere, that is then where it *is*, however, I would suggest this has to do more with this verb in its non-grammaticalised, non-auxiliary usage. This is also true for English: there is a similar distinction between 'I took a bath' and 'I bathed.' Semantically aspectual use of the auxiliary ထား တယ် is, then, what is commonly called 'applicative,' meaning it indicates an application of a whole action, of a given sort, in a given instance (see Chit Hlaing *in press* on Lai Chin).

Let me now consider (6), another example from Vittrant (2000), which indicates that the girl is *decidedly* beautiful; it is not that she has suddenly become beautiful, but rather that the very instant one sees her one recognises her beauty. More literally, perhaps, she immediately falls into the category of being beautiful.

- (6) လှလိုက်တယ်  
 ʔá.laiʔ.tɛ̃  
 pretty.just.REAL  
 'She is pretty.'

What may seem confusing is that adjectives of quality, such as ကောင်း káun 'good' collapse perfect and perfective together, for if you are 'no longer not yet good', say, then you are as good as it gets, such qualities being essentially binary: the state of goodness is accomplished as soon as it starts. This is complicated: clearly, there are degrees of goodness; this is clear from the fact that adjectives of quality have comparative and superlative forms. But these are *measures* of goodness or badness, and not degrees to which we may question whether the quality is present at all. One falls into the category of being tall as soon as one is any taller than someone or something else. Shortness, however, is a lesser degree of 'height'. The lower limit of height is exactly identical with the lower limit of shortness, namely, null height (zero). Similarly, one may be less good or more bad than someone or something else, but again the limits of these typically polar adjectival qualities overlap.

Consider (7), another example from Vittrant (2000):

- (a) လှထားတယ်  
 ʰa.tʰá.dè  
 pretty.result.real  
 'She is pretty.'

This is hardly distinguishable from (6), save that in the latter the beauty is, as it were, immediately obvious, whereas the former emphasises the possible fact that it is 'proper' or 'prototypical' beauty. She 'takes proper place' (ထား တ်း) in the category of being beautiful: the category naturally applies to her.

I shan't say much here about the auxiliaries သွား θwá 'go' and လာ là 'come'. As an auxiliary သွား θwá indicates that the event or state is, as it were, 'proceeding towards' perfectivity, or towards being culminative — reaching its limit. It is therefore, in some sense, inchoative. But then we need to distinguish inchoativity at both ends of the state-space of events and states, something never even imagined by Comrie (1976). A state or event can be 'about to' start or 'about to' complete itself. I am much indebted to Vittrant (pers. comm.) for making me see this so clearly. For instance (7), another example from Vittrant (2000), tells us that one Cho Cho has already 'gone on' to knowing how to talk our language:

- (b) ပြောတတ်သွားတယ်။  
 pjɔ̌.daʔ.θwá.dè  
 speak.can.'go'.REAL  
 'She can speak (our language now).'

It is not definitely stated how near to linguistic competence Cho Cho has come: she is simply at least on the way, and no longer possessed of no ability at all. But in (9), from Vittrant (2000), we find that Win Win has reached the point of competence, for she has literally 'come to' that state:

- (c) ပြောတတ်လာပြီ။  
 pjɔ̌.daʔ.là.bì  
 speak.can.'come'.PERF  
 'She has learned to speak now/already.'

If something such as being sleekly fat is thought of as a good thing, then it is hard (though not in fact impossible) to say (9) in good Burmese, because that would imply 'going away' from some limit, a departure from a norm or ideal. Still, note that this is only a cancellable pragmatic implicature and not a strict implication (see Gazdar 1976). So, in addition to the resultative-inchoative distinction between လာ là 'come' and သွား θwá 'go' as auxiliaries, there is additionally at least a pragmatic implicature that in this function လာ là 'come' supposes 'arrival' at some goal state, whilst သွား θwá 'go' supposes 'departure' from a norm or ideal. Note, however, that this is not strict implication. Of course one can say (10) and this will commonly imply that this instance of fatness is *not* a good thing—maybe the speaker thinks being fat is unhealthy, or maybe the person referred to is just too fat for his/her own good.

- (d) ဝသွားပြီ။  
 wə.ðwá.bì  
 fat.'go'.PERF  
 'You've become fat.'

The paradigmatic example would of course be (11), a standard way of commenting on a death.

- (e) သေသွားပြီ။  
 θè.ðwá.bì  
 die.'go'.PERF  
 'She has died.'

It is always a bad thing to confuse pragmatics with grammar. Pragmatic constraints are about what it makes sense to say under certain assumptions about the world; that is *not* what grammatical constraints do.

This reminds me to remark on the relation between the use of these two auxiliaries in the above contexts and their use after verbs of specific manner of motion, such as ထွက် *tʰwɛʔ* 'leave' or ဝင် *wìn* 'enter' or လမ်းလျှောက် *lánʃauʔ* 'walk.' The two uses as auxiliaries of generalised movement verbs of directionality လာ *là* and သွား *θwá* are very closely connected. So in principle, using လာ *là* 'come' and သွား *θwá* 'go' as auxiliaries is often no different from using them after manner-of-motion verbs.<sup>2</sup>

Comparing (12)a and (12)b, the first indicates leaving from 'here' to 'there' - 'went out', while the second indicates leaving, from 'there' to 'here' - 'came out'. It would be quite wrong to treat the use of these auxiliaries after verbs like ပြောတတ် *pjɔ̌.daʔ* 'say.can' 'know how to speak' or ဝ *wə* 'fat' in any way differently from their use after manner-of-motion verbs like ထွက် *tʰwɛʔ* 'leave' or ဝင် *wìn* 'enter' or လမ်းလျှောက် *lánʃauʔ* 'walk'.

- |        |                |    |                 |
|--------|----------------|----|-----------------|
| (f) a. | ထွက်သွားတယ်    | b. | ထွက်လာတယ်       |
|        | tʰwɛʔ.θwá.dè   |    | tʰwɛʔ.là.dè     |
|        | leave.go.REAL  |    | leave.come.REAL |
|        | 'He went out.' |    | 'He came out.'  |

Therefore, we cannot think of လာ *là* 'come' and သွား *θwá* 'go' as grammaticalised aspectual markers, even though their semantics have aspect-like interpretative consequences. But this is no different from English, where we do not mark grammatical aspect morphosyntactically. We can say, 'He got fat,' which certainly means what we mean in Burmese by saying (13), namely that he definitely reached the state of being physically filled out.

<sup>2</sup> See Talmy (1987) for similar phenomena in such romance languages as French and Spanish, using generalised verbs of directional motion, with participials to indicate the manner of the movement (e.g. 'go slowly walking' as against English 'walk slowly').

- (g) ဝလာပြီ။  
 wá.là.bì  
 fat.'come'.PERF  
 'He got fat.'

Next,  $\text{နဲ } k^h\varepsilon$  'REMOTE'. There is no doubt that  $\text{နဲ } k^h\varepsilon$  is the true morphosyntactic perfective aspectual marker in Burmese. Its semantic perfectivity is much more definitive than that indicated by the use of ပြီ: pí 'finish' as an auxiliary (see above). After all, if an event is 'over and done with' we cannot demand to know 'how remote' in either time or space it needs to be in order to be described correctly using this particle. I can say (14) with complete correctness, as long as I wish it to be understood that the circumstances of the offering are quite over and have nothing to do with my present state of affairs. Using  $\text{နဲ } k^h\varepsilon$  is even better in (15), where the place of the *nat* offering is distinct from where I am now as I talk to you.

- (h) ဒီမနက် ငါ နတ်ကို တင်ခဲ့တယ်။  
 dì.mənɛ? ɲà naʔ.kò tìn.gɛ.dè  
 this.morning I nat.to offer.REM.REAL  
 'This morning I made an offering to the *nat* spirits'

- (i) ဒီမနက် အိမ်ကမသွားခင် ငါ နတ်ကို တင်ခဲ့တယ်။  
 dì.mənɛ? ʔèin.gá.mə.θwá.gìn ɲà naʔ.kò tìn.gɛ.dè  
 this.morning home.from.NEG.go.before I nat.to offer.REM.REAL  
 'This morning I made an offering to the *nat* spirits before leaving home.'

It is easy to show that  $\text{နဲ } k^h\varepsilon$  does not absolutely require remoteness in time or place, though it was Cornyn (1944), following Stewart (1936), who glossed this particle with the epithet 'other times, other places'.<sup>3</sup> So, for instance, in (16)  $\text{နဲ } k^h\varepsilon$  is indeed a definitive-perfective, but the pragmatics of its use (and here I refer neither to its meaning nor the grammatical rule for its use — those are its syntactic selectional-subcategorisational requirements) is such that the more remote you make it seem in time and space/place, the better it is. The translation of (16) implies 'I'll go and fetch it at once – so directly or definitively that, for all intents and purposes, you can imagine it is indeed all done with even now!')

<sup>3</sup> It occurs to me that one may properly explain the distinction between the two ways of marking perfective aspect (with ပြီ pí.bì and with  $\text{နဲ } k^h\varepsilon$ .) as follows: The first is properly *culminative* as well as merely perfective, the second not particularly so. Thus, if I say ထမင်းစားပြီးပြီ tʰəmín.sá.bì.bì rice.eat.finish.PERF 'I've eaten' it generally means not that I simply finished the action of eating but that I ate the meal up or ate as much as I could or wanted, whereas with စားခဲ့တယ် sá.gɛ.dè eat.REM.REAL 'I ate' the event is all done with but I may not have reached the goal of finishing my meal. Of course, this distinction tends to collapse when the main verb does not necessarily have a culminative state, as with the compound verb ထွက်သွားတယ် tʰwéʔ.θwá leave.go 'go away'.

- (j) သွားယူလိုက်ခဲ့မယ်  
 θwá.jù.laiʔ.kʰɛ.mè  
 go.take.just.REM.IRR  
 'I'll go and fetch it at once.'

These are also the conditions that make it so very useful in conveying in Burmese what might be said in English by using the pluperfect: 'When I *had* finished doing that, I [then] did something else,' as in the two Burmese sentences in (16):

- (k)
- |    |   |              |                  |               |
|----|---|--------------|------------------|---------------|
| a. | အဲဒီ  | အလုပ်အကိုင်  | ပြုလုပ်ခဲ့ပြီး   | အိပ်သွားပြီ။  |
|    | ʔédi  | ʔəlouʔʔəkáin | pjɹ̥.louʔ.kʰɛ.bí | ʔeiʔ.θwá.bí   |
|    | that  | work         | do.rem.subord    | sleep.go.PERF |
|    | 'I only went to bed after I had completed that other task.' |              |                  |               |
- 
- |    |   |       |      |                 |
|----|---|-------|------|-----------------|
| b. | အဲဟို   | အခါ   | (ငါ) | ပြုလုပ်ခဲ့တယ်။  |
|    | ʔéhò  | ʔəkʰà | (nà) | pjɹ̥louʔ.kʰɛ.dè |
|    | that  | time  | (I)  | do.REM.REAL     |
|    | 'At that time (in the past) I had (already) done (it).' |       |      |                 |

One further remark: the distinction between fully grammaticalised ways of marking semantic aspect and marking it with what are still auxiliary verbs that keep their root meaning as an independent verb, is that with the latter, there is the option of placing negative *ə-* *mə-* immediately before the auxiliary. Thus (18) a. and b. are both grammatical.

- (l)
- |    |                      |    |                      |
|----|----------------------|----|----------------------|
| a. | ထွက်မသွားဘူး         | b. | မထွက်သွားဘူး         |
|    | tʰwɛʔ.mə.θwá.bú      |    | mə.tʰwɛʔ.θwá.bú      |
|    | leave.NEG.go.NEG     |    | NEG.leave.go.NEG     |
|    | 'She did not leave.' |    | 'She did not leave.' |

Note however that here we find distinct evidence for how far ပြီး ပါ is from full grammaticalisation: in order to say something like 'I didn't eat' or 'I didn't finish eating' we seem to have no option other than to treat ပြီး ပါ as the main verb and then modify it with the aspect marker that indicates imperfectivity, i.e. သေး ထဲ 'yet, still', as in (19)a, but (19)b and (19)c are ungrammatical.

- (m)
- |    |                           |    |                    |    |                        |
|----|---------------------------|----|--------------------|----|------------------------|
| a. | စားမပြီးသေးဘူး            | b. | *မစားပြီးဘူး       | c. | *မစားပြီးသေးဘူး        |
|    | sá.mə.bí.ðé.bú            |    | mə.sá. bí.bú       |    | mə.sá. bí.θé.bú        |
|    | eat.NEG.finish.yet.NEG    |    | NEG.eat.finish.NEG |    | NEG.eat.finish.yet.NEG |
|    | 'I didn't finish eating.' |    | *                  |    | *                      |

Though of course as any student of Burmese knows, the answer to the question (20)a is simply (20)b.



(n)

- |  |   |
|--|---|
| a. ထမင်းစားပြီးပြီလား<br>tʰəmín.sá.bí.bì.lá<br>rice.eat.finish.PERF.Q-?<br>'Have you eaten?' | b. (စား)ပြီးပြီ<br>(sá).bí.bì<br>(eat).finish.PERF<br>'I have [eaten].' |
|--|---|

This shows that while ပြီး ပီ effectively remains a verb when used for semantic (and non-definitive) perfectivity, its negation, which by definition entails imperfectivity, uses a genuinely grammatical aspect particle သေး ထဲ. In this last regard, note that သေး ထဲ marks imperfectivity especially strongly. It effectively makes the claim that one has 'not yet' done with the event. Ordinary, weaker imperfectivity is of course marked by an auxiliary verb, နေ nè 'dwell, remain'. Thus while (21)a 'He still goes' (i.e. 'he's not done with his going') does not tell us if the going is done with, (21)b 'He is going.' can be said without any implicature of the latter question; and, of course (21)c literally and distinctively indicates that '(he) still remains going.'

(o)

- |   |   |  |
|---|---|--|
| a. သွားသေးတယ်<br>θwá.ðé.dè<br>go.yet.REAL<br>'He still goes.' | b. သွားနေတယ်<br>θwá.nè.dè<br>go.CONT.REAL<br>'He is going.' | c. သွားနေသေးတယ်<br>θwá.nè.ðé.dè<br>go.CONT.yet.REAL<br>'He is still going.'<br>'He still remains going.' |
|---|---|--|

One thing that complicates the way mode-aspect relates to real time, and the way aspectual particles relate to one another, is the fact that one can readily embed aspects within aspects, modes within modes, and so on. This, I think, is well understood. A perfective can be in *irrealis* mode, as in (22), though given such evidence, it would be easy to make the error of supposing that ခဲ့ kʰɛ were not in itself perfective.

(p)

- လိုက်ခဲ့မယ်  
laiʔ.kʰɛ.mè  
follow.REM.IRR  
'He still goes.'

There is no more problem in this than there is in the pluperfect or its equivalent in Burmese, as in (17)a above: 'I only went to be after I *had* completed that other task'.

Finally, let me say a word or two about aspectual တဲ့ တဲ့, which, in some sense, complements imperfective သေး ထဲ (mentioned above, and see also Okell 1979). As we know, this particle indicates what ought to be called definite and, perhaps, ultimately inevitable, change of state, in the sense of the state diagram Figure 2 above; 'abrupt' only in the non-temporal sense that the change finally occurs *after a possibly long period of expectancy*. In this regard, it is useful to compare it to အုံး (ခိုး) ဖုန် 'further', which indicates gradual or smooth transition of transition. Thus (23)a means 'to go finally, no longer waiting for the act of going to start or become *realis*,' whilst (23)b means 'to go on or to proceed to go — not to hesitate in an action already inchoate.'

(q)

- |  |   |
|--|---|
| a. သွားတော့<br>θwá.dɔ̌<br>go. 'after_all'<br>'Off you go then' | b. သွားအုံး<br>θwá.ʔóUN<br>go. 'further'<br>'Go on then.' |
|--|---|

Therefore, we will say that these two are 'second order' aspectuals: they modify other, 'first order', markers of aspects such as perfect or perfective that indicate the basic three (သေး: θé, တော့ tɔ̌ and အုံး ʔóUN) 'second order' particles qualify the states or transitions as to 'manner'. But of course this is complicated because a change of *mode* is also involved. (24)a indicates that an event which is currently *irrealis* will ultimately and definitively change to *realis*, whilst (24)b involves a modal change which is less sharp: what is now *realis* was until just a moment ago only 'waiting to occur,' that is to say *irrealis*.

(r)

- |  |   |
|--|---|
| a. သွားတော့မယ်<br>θwá.dɔ̌.mè<br>go.after_all.IRR<br>'I'll just go then.' | b. သွားအုံးမယ်<br>θwá.ʔóUN.mè<br>go.further.REAL<br>'I'll go ahead and go.' |
|--|---|

But both တော့ tɔ̌ and အုံး ʔóUN can also directly modify other aspectuals, as said above, as in (25), from Okell (1969: II, 444):

(s)

- |                    |  |
|--------------------|--|
| မိုး<br>mó<br>rain | ရွာတော့ပြီ<br>jwà.dɔ̌.bi<br>rain.after_all.PERF<br>'It's finally begun to rain.' |
|--------------------|--|

This certainly signifies that a change of state has taken place, from waiting for rain to start to a situation where rain has begun to fall. Two crucial observations here account for what would otherwise be an anomaly. Firstly, state-changes in the intended sense invariably and inevitably also involve a change of mode. Secondly, it is no accident that aspectual ပြီ pí stands in verb-final position without any further modal ending: if there is a state-change from *irrealis*, then it is wholly redundant to mark the resulting state as *realis*. But at the other end of the state-space diagram, so to speak, we do need further marking with *irrealis* တယ် tè, since, after all, the change from imperfectivity to perfectivity involves *no* change of modality. We can repeat here that an event which is over and done with, owing to the irreversibility of real time, is irreversibly *realis*. Compare (26)a and (26)b:

(t)

- |   |   |
|---|---|
| <p>a. မိုးရွာပြီ<br/>mó.jwà.bì<br/>rain.rain.PERF<br/>'It has rained'<br/>(and the rain may or may not be over)</p> | <p>b. မိုးရွာခဲ့တယ်<br/>mó.jwà.gè.dè<br/>rain.rain.REM.REAL<br/>'It rained'<br/>(and that is true, once and for all,<br/>forever)</p> |
|---|---|

Having said something about တော့ တဲ့, I feel obliged to mention another aspectual marker, မိ မှီ and also to say something more about သေး ထေး. Since သေး ထေး is more commonly treated as aspectual than is မိ မှီ, let me deal with the former first. သေး ထေး is extremely interesting because there is a strong relationship between its peculiar function relating to the scope of negation on the one hand, and its complementarity with တော့ တဲ့, on the other, a relationship noted some years ago by Okell (1979). That is, သေး ထေး really means that the event is 'not yet perfective' and so it is a second-order imperfective, again inchoative in the direction of perfectivity. This explains the complementarity to တော့ တဲ့ because a definitive change of state cancels out the implication of သေး ထေး. If, for instance it has finally (တော့ တဲ့) begun to rain, then, *a fortiori*, it is cannot still (သေး ထေး) be 'waiting to rain'. At the same time, the scope of the negation is neatly accounted for: (26) does not mean 'not still going' but rather 'still not going'. The overt negation cancels out the implicit negation of သေး ထေး so that the underlying meaning is close to 'not "not-yet finished" going.'

- (u) မသွားသေးဘူး  
mà.θwá.ðé.bú  
NEG.go.yet.NEG

In a similar vein, the particle မိ မှီ, signifying an 'accidental' or 'inadvertent' (INADV) change of state is another second-order aspect marker, thus comparable to တော့ တဲ့. There is an interesting complementarity between the two particles. As we know, the sequence VERB-တော့တယ် VERB-tò.dè is questionable, and for some people ungrammatical.<sup>4</sup> However, there must be a way to express the sense that 'VERB is now/finally the case,' without at the same time indicating anything but *realis* mode, and without indicating of any aspect other than imperfectivity resulting from a perfect-aspectual transition. Sure enough, there is a way, namely (27): 'Ah! I am going/was going,' which might commonly be glossed as 'happen(ed) to go.'

- (v) သွားမိတယ်  
θwá.mì.dè  
go.INADV.REAL  
'Ah! I am going/was going.'

It may be correct to describe မိ မှီ as a 'weak' equivalent of တော့ တဲ့, in that it indicates definitive change of state with the implication that the change may have been accidental

<sup>4</sup> Expressions such as [x minutes] ကျန်တော့တယ် kʰàɴ.dò.dè remain.after\_all.REAL '[x minutes] now (finally, at last) remain' are for some speakers awkward; they would say ကျန်တော့ပြီ kʰàɴ.dò.bì remain.after\_all.PERF.

(hence the gloss ‘happen(ed) to...’). A summary of the sense conveyed by မိ့ မိ and တော့ တဲ့ is this: a state is arrived at by some other-than-inevitable means, happily, but not as it might have been. In the case of တော့ တဲ့, the sense of near-inevitability is at least nearer what is understood. Also, certainly in such expressions the *result* is conceptually imperfective, because the progression towards it is not necessarily more than started. This distinction between မိ့ မိ and တော့ တဲ့, located on the left side of the state diagram (Figure 2), is perhaps the reflex of a distinction which no analyst has yet dealt with, namely the distinction between perfective (over and done with) and culminative (final achievement of an entailed result). This treatment of မိ့ မိ and တော့ တဲ့ owes a great deal to my correspondence with Anna Allott. Consider (29), the examples she has suggested:

(w)

- |   |   |  |
|---|---|--|
| a. မှတ်မိ<br>məʔ.mɿ<br>recognise.INADV<br>‘happened to recognise’ | b. သွားမိ<br>θwá.mɿ<br>go.inadv<br>‘happened to go’ | c. ဖမ်းမိ<br>phán.mɿ<br>catch.INADV<br>‘managed to catch/arrest’ |
|---|---|--|

As in Okell and Allott (2001:153), Allott (pers. comm.) assigns two different glosses to မိ့ မိ, simply treating the two as homomorphs: ‘manage to’ in (29)a and ‘happen to’ in (29)b and c. These cases again involve a state of affairs which is somewhat accidental, not necessarily guaranteed or to be expected. It seems therefore that having two, independently glossed formatives can’t be correct. I suspect, but cannot claim forcefully, that the difference lies in the semantics of the verbs to which မိ့ မိ is affixed. One can hardly be said to catch or arrest someone without having had an intention or plan to achieve this *result* by means of various possible courses of action. The same applies to ‘recognise’ in its apparently intended sense of having tried to recall who or what someone or something is (hence ‘manage to...’). But as for ‘going’ in (29)b, the intention to go may or may not have been present beforehand; if one does find oneself going, either it is indeed quite inadvertent (‘happen to...’) or else one may have intended it without knowing that it would turn out to be possible in current circumstances, and in any case the result of actually ‘going’ is its own result and not the result, intended or otherwise, of any other independently definable course of action.

## 5 Conclusion

I think I have said enough to indicate, by examining a number (though hardly all) of the most interesting indicators of semantic aspectual distinctions for Burmese verbal expression, both morphosyntactic aspectual affixes and verbal auxiliaries, how in this language, aspect in general can, indeed should, be accounted for by a proper formal theory of semantic-syntactic aspect-and-mode. And with that, I rest my demonstration:

ပြီးတော့ပါစေ။  
pí.də.bà.zè  
finish.after\_all.POL.CAUS  
‘The end’

# 8

## *Burmese as a modality-prominent language*

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### 1 Introduction

It is currently accepted that the grammatical categories tense, aspect and modality are related to each other. See Chung and Timberlake (1985): 'Tense, aspect and mood are all categories that further specify or characterise the basic predication, which can be referred as the event. However, languages generally do not attribute the same importance to each of them: one category is usually prominent. Payne (1997) write that: 'Some languages pay more attention to tense (e.g., English), others to aspect (e.g., Austronesian and African generally), others to mode (Eskimo), and still others to location and direction (many American, Australian, Papuan languages).' According to Bhat (1999:91, 95), this prominence in a given language can be evaluated on the basis of three criteria (at least), namely degree of grammaticalisation, obligatoriness and pervasiveness.

Using Bhat's criteria and Bybee's theoretical framework on modality reviewed in light of my analysis of Burmese data, I intend to show that modality is the prominent category in Burmese, that is to say, according to Bhat's typology, that Burmese is a 'mood-prominent (or modality-prominent) language'. The terms mood (mode) and modality are often used interchangeably, though some linguists make distinctions among these terms. According to Bybee et al. (1994) or Palmer (1986), who refers to other linguists such as Lyons or Jespersen, 'mood' refers traditionally to a category expressed in verbal morphology as a grammatical or syntactic category, whereas 'modality' is considered as a notional one. Given that I refer here to the notion rather than the category, I will avoid the term 'mood' and use 'modality'.

This article will deal with modality in standard Burmese spoken in Yangon. In section 2, I will give a brief definition of what I subsume under the term 'modality'. My analysis of this category will be based on Bybee (1994:178ff.), De Haan (1997:4-9) and Palmer (1986:14-33), with some modification suggested by Burmese data. Then, in section 3 I will review the different morphemes occurring in Burmese verbal phrases to show that modality is highly grammaticalised. (In this paper I concentrate on modality expressions in the verb phrase; Vittrant (2004) shows that modality is grammaticalised elsewhere besides the verb phrase, for example in evidential sentence markers.) In section 4, I will

analyse the small class of obligatory verbal morphemes and come to the conclusion that they convey mainly modality. Then, in the section 5, using Bhat's third criterion of *pervasiveness*, I will explore other parts of the grammar to show that modality is involved not only in what are usually called non-finite clauses or complement clauses, but also in relative clauses and nominalisation.

## 2 Definition of modality

A definition often proposed is that *modality* is the grammaticalisation of speakers' attitudes or opinions (see Chung and Timberlake (1985), Bybee et al. (1994)). But according to recent cross-linguistic studies on the subject such as Palmer (1986:20-21, 51), modality covers a larger range of notions, and it is useful to distinguish different types of modality (see Bybee et al. 1994:2); also Payne (1997), Bhat (1999) and De Haan (1997). According to these authors and my analysis of Burmese, I will divide modality into three types that I have called, for the time being:

- i. Clausal (or objective) modality;
- ii. Subjective modality;
- iii. Speech modality.

## 2.1 Clausal modality

The first type, clausal modality, deals with external constraints or internal conditions, compelling or enabling an agent to do the action expressed in the predicate. The modality expressed here is internal to the clause: it concerns the agent of the clause and has nothing to do with the speaker's opinion or will. Clausal modality is also referred to as *agent-oriented modality* by Bybee et al. (1994:44), and as *non-subjective* or *dynamic* modality by Palmer (1986:102). It deals with semantic notions such as obligation, necessity, ability, and desire. In Burmese, morphemes such as နိုင် *nàin* 'can' and ချင် *ṭhìn* 'want' are of this type, as in (1).<sup>1</sup>

- (1) ကောင်းကောင် ဖတ်နိုင်တယ်။  
:  
káungáun      pʰaʔ.nàin.dè  
good.ADV<sup>2</sup>    read.be\_able.REA  
                        L  
‘[He] is able to read well.’

## 2.2 Subjective modality

The second type, subjective modality, refers to the relationship between the speaker and his or her utterance. Subjective modality may be divided into three sub-categories: *epistemic modality*, *evidentials* and what we have called, according to our Burmese data, *appreciative modality*. I agree with De Haan's (1997) statement that 'epistemic modality in terms of the speaker's opinion or attitude leads to a very broad domain'. For this

<sup>1</sup> The transcription of Burmese in this paper follows the conventions adopted throughout the volume. Earlier drafts of this article followed Bernot's (1980) phonological transcription.

reason, I reserve the use of this term for ‘those categories that indicate the degree of commitment by the speaker to what he says’ and propose two other sub-categories for evidentiality and what De Haan calls ‘notions as the expression of satisfaction or dissatisfaction with the event or situation described’.

*Epistemic modality* indicates the speaker’s opinion or judgment regarding the actuality of an event, or to quote Bybee ‘the extent to which the speaker is committed to the truth of the proposition.’ (Bybee, 1985:179) It covers, amongst other things, the semantic notions of actuality (realis vs. irrealis; see section 1.4) and probability. In Burmese, for instance, this last notion can be expressed by the morpheme လိမ့် *lejin* ‘OPTATIVE’ in (2)

- (2) လုတ်ပါလိမ့်မယ်။  
 louʔ.pà.lejin.mè  
 work.POL.OPT.IRR  
 ‘(They) may work.’

Evidentials may indicate the source of the information used by the speaker to claim that an event has occurred, or to quote Bhat ‘the kind of evidence that is available for the speaker to form a judgment.’ (Bybee et al. 1994:63) I have not found any specific morpheme which represents this category in the Burmese verbal phrase — which is the phrase I concentrated on in this article — although some quotatives or ‘hearsay’ morphemes can be used as sentence markers, and one verb-final morpheme conveys often, as a secondary value, an ‘action witnessed’ value (see ပြီ *pì* in (23)).

The sentence marker တဲ့ *te* is used for reported speech as in (3)a but may indicate also that an event is known by hearsay, as in (3)b.

- (3) a. သူတို့ လိုက်ပို့ပေးမယ်တဲ့။  
 thū.dō laiʔ.pō.pé.mè.dɛ  
 he.PL accompany.send\_off.BEN.IRR.‘hearsay’  
 ‘[She] said that they would accompany [me].’  
 b. အမွှေးများအားလုံး ကျွတ်ကုန်လေတော့တယ်တဲ့။  
 ʔəm.wé.mjá.ʔálóun tɕuʔ.kòun.lè.dɔ.dɛ.dɛ  
 hair.PL.all drop\_off.all.EUPH.after\_all.REAL.‘hearsay’  
 ‘[Apparently ~ I heard that] all his hair fell out after that.’

Finally, *appreciative modality* expresses a speaker’s feelings about what is happening. It includes evaluative statements such as approval, moral judgments such as indignation, feelings such as compassion, all about the event reported by the proposition. In Burmese, the verbal morpheme ရှာ *ʃa* ‘COMPASSION’ is an example of this category. It expresses the compassion of the speaker towards the agent of the event reported as shown in example (4).

- (4) သူ ဘတ်(စ်)ကားပေါ်က လိမ့်ကျပြီး သေသွားရှာတယ်။  
 thū baʔsəká.bò.gə lejin.tɕə.bí θè.ʃwá.ʃa.dè  
 he bus.on.from roll.fall.ABS die.‘go’.COMP.REAL  
 ‘After falling off the bus, he died [poor man!].’

### 2.3 Speech modality

The relation between the speaker and his addressee, or the speaker's will or wish to interact with the addressee is dealt with in the last type: *speech modality*. This type is related to the *speaker-oriented* category in Bybee's description of modality, and to subcategories of deontic modality (*directive* category, imperative) found in Palmer (1986:96-97). In the first sub-category of *speech modality*, we will include notions such as assertion (supply of information), interrogation (asking for information) and injunction (asking for action); illocutionary acts will be treated as a second sub-category. The definitions of modality in section 1.2 are summarised in (5).

#### (5) Categories of modality.

(i) Clausal Modality <i>Objective modality</i>	<i>Internal to the event</i> 1 Agent-orientated modality - ability, desire, obligation
(ii) Subjective modality <i>Relation between speaker and utterance,</i>	<i>External to the event</i> 2a Epistemic modality - Truth commitment: realis vs irrealis - Degrees of probability: certainty / doubt 2b Evidential modality - Source of the information 2c Appreciative modality - Evaluation based on speaker's feelings; moral judgment of the event
(iii) Speech Modality <i>Relation between speaker and hearer</i>	3a Sentence Modality - Assertion: supply of information - Interrogation: asking for information - Injunction: asking for action; wish, permit, order 3b Illocutionary Acts

### 3 First criterion: modality as the most grammaticalised category

Having presented the theoretical background for this study, I move now to illustrate my claim that Burmese is a modality-prominent language. According to Bhat, different criteria may reveal the prominence of tense, aspect or modality in a particular language. His first criterion is *the degree of grammaticalisation* of these notions. Before looking at the Burmese verb phrase and its components, we must remember that Burmese has no grammatical category for person, and that marking plurality is largely optional both in verb and noun phrases.

Burmese is a 'zero-pronominalisation' language which allows sentences with no NP when arguments of the predicate can be inferred from the context (e.g. first and second person in a dialogue). Unlike 'pro-drop' languages such as Italian and Spanish, where the omission of pronouns may be replaced by a rich verb-agreement system which defines the subject, in Burmese there is no obligatory verbal agreement of person (though optional agreement of number is possible).

Marking plurality of an NP is not optional in the following contexts: a plural marker must appear whenever the NP is specified/determined/referenced (as opposed to not



referenced or not isolated). For instance, a noun or NP appearing with a relative clause or with the demonstrative ဒီ *dì* has to be specified for plurality. Moreover, a plurality marker must also appear on the NP whenever the verbal marker တဲ *tə* appears in the sentence.

### 3.1 General structure of the Burmese verbal phrase

Verbal components are of two kinds: optional and obligatory. Obligatorily present are the main verb and the final verbal particle, and auxiliaries and/or verb particles may also additionally be present. (Although referred to here as ‘verb particles’, at least one of these particles can occur in nominative sentences, for instance, the politeness marker ဝါ *pà*; Bernot (1980) uses the term ‘predicative’ particles for them.) This formula may be represented as follows, with brackets indicating the elements which are not necessarily present:

(VERB PARTICLE and/or AUX) MAIN VERB (PART and/or AUX) FINAL VERB PARTICLE

Now, we will look at the 3 notions, tense, aspect and modality ‘that characterise the basic predication’ (Chung and Timberlake 1985:202) and the various components of the Burmese verb phrase which I assume to convey mostly aspect and modality. Indeed, it is generally admitted among Burmese specialists that tense is not a relevant category for the analysis of the verbal phrase (see Allott 1965:288–89; Bernot 1980:57–58). This claim is exemplified in examples (6)a and b.

- (6) a. နေ့တိုင်း ရန်ကုန် သွားတယ်။  
            $n\acute{e}d\acute{a}in$        $j\grave{a}ng\grave{o}un$        $\theta w\acute{a}.d\grave{e}$   
           day.every Rangoon go.REAL  
           ‘[I] go to Rangoon every day.’

- b. မနေ့က ရန်ကုန် သွားတယ်။  
            $m\acute{a}n\acute{e}g\grave{a}$        $j\grave{a}ng\grave{o}un$        $\theta w\acute{a}.d\grave{e}$   
           yesterday Rangoon go.REAL  
           ‘Yesterday, [I] went to Rangoon.’

### 3.2 Verbal morphemes and grammaticalisation

Reviewing previous studies on the Burmese verbal phrase (Allott (1965) and Bernot (1980)), I have found around fifty morphemes which may occur as auxiliaries or verb particles in the verb phrase, that is to say morphemes that can appear in the following structure ‘VERB + particle + FVP’ or ‘particle + VERB + FVP’. (FVP – Final Verbal Particles – are morphemes which are necessarily present in a verbal sentence, illustrated in section 1.4 below.)

I exclude from my set of auxiliaries and verb particles verbal modifiers such as နိုး *nó* which are used only in certain syntactic structures. Allott and Okell (2001) list of 70 verbal modifiers, analysed with regard to their syntactic behaviour and the register of language (colloquial or formal Burmese) with which they are associated. For instance, they include in their list the morpheme နိုး *nó* (Okell and Allott 2001:108, နိုး 2) which appears doubled or followed by a comitative marker (နှင့် *njīn* or ဖြင့် *pʰjīn*), but never between a verb and a final verbal particle.

Some of these morphemes are grammaticalised verbs which can also occur independently as main verbs. For instance, in (7)a the verb  $\text{ᎠᎵᎦ}$  'go' retains its full lexical meaning whereas in (7)b it has been grammaticalised. Similarly, the morpheme  $\text{ᎠᎵᎦ}$  'live' has its lexical meaning in (8)a but has a grammatical function in (8)b.

- (7) a. **ဈေးမှာ သရက်သီး သွားရောင်းတယ်။**  
 zé.mà θajɛʔ.θí θwá.jáun.dè  
 market.in mango go.sell.REAL  
 ‘(He) went (and) sold mangoes at the market.’
- b. **နီသွားလို့ ကား ရပ်တယ်။**  
 ní.ðwá.lò ká jáʔ.tè  
 red.RESULT.becaus car stop.  
 e  
 ‘Yesterday, [I] went to Rangoon.’
- (8) a. **ဘယ်မှာ နေသလဲ။**  
 bè.mà nè.ðə.lé  
 where live.REAL.Q-WH  
 ‘Where do [you] live?’
- b. **စားနေတယ်။**  
 sá.nè.dè  
 eat.CONT.REAL  
 ‘[He] is eating.’

Some other elements have been grammaticalised to a greater degree, such that their lexical forms are obsolete or unrecoverable. Some of them may be identified diachronically as verbal in origin but they do not appear as main verbs any more. For instance the affixes ၼိုင် ၵဲၵ် 'want' or ၼ် ၵ် 'dare' were used as main verbs in classical Burmese, but in the modern language they are bound forms which cannot appear except in conjunction with another main verb. Another feature used to distinguish these bound elements from grammaticalised verbs (or auxiliaries) is negatibility, which is one of the universal criteria used for distinguishing verbs from verbal particles (see Matisoff 1991:392). The former cannot be independently negated whereas the latter can be preceded by the negation morpheme မာ. Note that there is a phonetic distinction between free and bound verbal morphemes too. The bound type is subject to the voicing rule, such that the initial consonant, if unvoiced, may become voiced if the preceding syllable does not end in a glottal stop (i.e. carries any tone other than *killed*).

### *Grammaticalised verbs*

Bernot gives a list of 33 auxiliary verbs, which she divides into two sets depending on whether they occur after the main verb (26 verbs) (Bernot 1980:287–88) or before it (7 verbs) (Bernot 1980:354). These pre-verbal auxiliaries, called ‘pre-verbs’ by other authors (for example Allott and Okell (2001)), are part of an open class of morphemes

which have begun a process of grammaticalisation or lexicalisation. It is difficult therefore to include them in our evaluation of the most grammaticalised category. Bernot's definition of auxiliary is based on the two following criteria, optionality and existence of an homophonous verb with related semantic content (Bernot 1980:281–288). I propose to add to this list some other morphemes, according to Allott (1965:303–306). I do not take into account Allott and Okell (2001) when reviewing the list of verbal auxiliaries, because this work appeared only after the main draft of this article was written.

I have excluded the verb *sa* 'begin' from my list, as it seems to me that the uses of this verb described by Bernot (1980:360–361) are cases of verb juxtaposition. The inceptive aspect of *sa* is lexical and not due to grammaticalisation. This may be corroborated by applying the negation test to determine the degree of grammaticalisation: (9)a is possible while (9)b is ungrammatical:

- |  |  |
|--|--|
| (9) a. <i>sa.mə.louʔ.pʰú</i><br>start.NEG.work.NEG<br>'[He] does not start to work.' | b. * <i>ma.sa.louʔ.pʰú</i><br>NEG.start.work.NEG<br>**'[He] does not start to work.' |
|--|--|

The main meaning of each auxiliary is given in (10), and the grammatical category it belongs to, according to my analysis. To verify my hypothesis, I tried to classify all these morphemes, auxiliaries plus verbal particles in (10) and (11) below. I decided not to deal with multi-valued morphemes in this paper, although I have noticed that some of them convey different values depending on the context. Moreover, the analysis I give for the aspectual values can be considered only preliminary. I will use labels such as progressive, perfective, perfect, durative, inceptive, completive, iterative that are not controversial and for which a definition is commonly accepted. I will use Payne's (1997:238ff.) definitions of these terms. I will also use certain labels in a broad sense (such as 'boundaries' which will be used here as a generic term for either 'cessative', 'continuative' and 'prospective' aspects, given that these aspects refer to limitation, closure, or the boundaries of an event. Some of these notions of aspect are described by Payne (1997:239–41) as follows:

'In perfective aspect the situation is viewed in its entirety, independent of tense. [...] In imperfective aspect the situation is viewed from 'inside', as an ongoing process. Habitual and progressive aspects are subtypes of imperfective. [...] Completive aspect expresses the completion of an event. Similarly, inceptive aspect expresses the starting point of an event. [...] Continuative or progressive aspect implies an ongoing, dynamic process. [...] Iterative aspect is where a punctual event takes place several times in succession.'

See Comrie (1976:64), Chung and Timberlake (1985:213–40) and Cinque (1999:94–100) for further description of cited aspects. Arriving at a comprehensive definition of aspect in Burmese is beyond the scope of the present paper, and so just the basic value of each morpheme is given, in (10), (11) and (12) below. The definitions for each morpheme appearing in Bernot (1980) are based on her original descriptions. For those morphemes not on her list, I have used Allott's descriptions. Rare morphemes, or those used exclusively in the written language, are shaded. The categorisation of modality in the right hand column follows the schema in (5), thus:

Modality 1 = clausal modality;

Modality 2a = epistemic modality;

Modality 2b = evidentiality;

Modality 2c = appreciative modality.

(10) Auxiliary verbs in Burmese: Post-verbal Auxiliaries

Burmese	meaning as main VERB, as AUXILIARY; description according to Bernot 1980	category
နေ nè	VERB: to stay, to dwell AUX: continuing action, progressive event <i>'se réfère au cours même du procès ou à sa répétition'</i>	Aspect: progressive; durative
လာ là	VERB: to come AUX: inceptive, progression of the event <i>'devenir d'un état, ou progression dans l'action'</i>	Aspect: progressive; inceptive
လိုက် lai?	VERB: to follow AUX: pursuing the action to its logical conclusion <i>'poursuite du procès jusqu'à son terme logique'</i>	Aspect: completive
ဖြစ် p <sup>h</sup> ji?	VERB: to be, to become, to happen, to occur AUX: to manage to V, to consider doing V, ability to V <i>'aspect effectif du procès: accompli'</i> <sup>2</sup>	Modality 1
ပြီး pí	VERB: to finish AUX: completion of the action <i>'accomplissement du procès'</i>	Aspect: perfective
သွား θwá	VERB: to go AUX: resultative, terminative, perfect <i>'irréversible, décisif, accompli et instantané'</i>	Aspect: perfect <sup>3</sup>
ထား t <sup>h</sup> á	VERB: to put AUX: completed action for which a present result is implied <i>'implique que le procès a un résultat'</i>	Aspect: perfect
ပစ် pji?	VERB: to throw (away), to pull AUX: event completed <i>'procès exhaustif ou suppressif'</i>	Aspect: completive
လှ tá	VERB: to be beautiful AUX: (stative verbs only) superlative <i>'superlatif (avec verbe d'état)'</i>	Modality 2c
လောက် lau?	VERB: to be enough AUX: information on the quantity of the event (enough), probability <i>'équivalence, suffisance (formules usuelles)'</i>	Modality 2c, 2a

<sup>2</sup> Bernot describes this auxiliary as conveying an aspectual value. She does not comment on the modality that it conveys today in spoken Burmese, although Allott (1965) describes the 'manage to' meaning of this morpheme.

<sup>3</sup> 'Perfect' is defined as an aspect which 'normally describes a currently relevant state brought about by the situation (normally an event) expressed by the verb.' (Payne, 1997:239).

ကောင်း káun	VERB: to be good AUX: good quality of the event <i>'exprime la bonne qualité, la légitimité du procès'</i>	Modality 2c
မိ mí	VERB: to grab, to catch, to bump into AUX: unexpected event, non-volitional <i>'aspect inopiné du procès'</i>	Modality 1 (non-volition)
ရ já	VERB: to get, to obtain AUX: possibility, obligation (external) <i>'possibilité, obligation (due aux circonstances)'</i>	Modality 1
နိုင် nàin	VERB: to dominate, to surpass AUX: possibility, ability (can, to be able) <i>'pouvoir'</i>	Modality 1
တတ် taʔ	VERB: to know AUX: natural or learned ability, habitual <i>'avoir l'habitude, savoir'</i>	Modality 1
ကြည့် təj	VERB: to look (at) AUX: to try to V, <i>'aspect expérimental du procès (essayer de)'</i>	?Modality 1 or aspect <sup>4</sup>
ရဲ jé	VERB: to be brave, daring, bold AUX: to dare to V, not to be afraid to V <i>'oser'</i>	Modality 2c
စေ sè	VERB: to ask for, to order AUX: allowed action, wished action <i>'procès permis, souhaité ou causé (permissif)'</i>	Modality 3
ခိုင်း kʰàin	VERB: to cause to V AUX: factitive <i>'faire faire (factitif)'</i>	Modality 3 or Voice?
စမ်း sán	VERB: to test, to put to the test AUX: attempt to realise V <i>'tentative pour réaliser le procès (injonctif)'</i>	Modality 3
ပေး pé	VERB: to give AUX: action for the benefit of a recipient <i>'procès en faveur d'un tiers (bénéfactif)'</i>	Benefactive
ခဲ kʰé	VERB: to be hard, solid, robust AUX: to have difficulties to V <i>'exprime la difficulté'</i>	Modality 2c
ကုန် koun	VERB: to be used, finished, not available anymore AUX: complete action, totally completed action <i>'(lit.) caractère extrême, total du procès'</i>	Aspect: completive

<sup>4</sup> Morphemes expressing that the State of Affairs (SoAs) is attempted but not finished may belong to modality or to aspect depending on the authors we refer to (See Bybee and al. (1994) for instance). However although Burmese morpheme ကြည့် တဲ့ do convey the attempt idea, it does not give any information on the finiteness of the SoAs.

လို lò	verb: to desire, to miss aux: need, desire ' <i>auxiliaire du besoin, du désir (rare)</i> '	Modality 1
လွယ် lwè	VERB: to be easy AUX: to be easy, to have an aptitude to V ' <i>exprime la facilité (rare)</i> '	Modality 2c
ကျ tea	VERB: to fall, to happen AUX: regular occurrences of an event (usually follows နေ nè) ' <i>(formule) aux. d'occurrence régulière (rare)</i> '	Aspect: iterative

## (11) Auxiliary verbs in Burmese: Bernot's second set of auxiliaries

ဆက် sʰɛ?	VERB: to join, to be continuous, to combine AUX: gerund, continuing to V ' <i>gérondif ou 'en continuant, en poursuivant'</i> '	Aspect: continuative
ထပ် tha?	VERB: to add AUX: V again ' <i>de nouveau</i> ', ' <i>une fois de plus</i> '	Aspect: iterative
ပို pò	VERB: to be more, to be superior AUX: superiority comparison ' <i>comparatif de supériorité</i> '	Modality 2c
လှမ်း tán	VERB: to spread AUX: to V from a distance ' <i>prolonge le procès dans l'espace</i> '	Spatial
ဆိပ် θei?	VERB: to compress, to stuff <sup>5</sup> AUX: very V, so V ' <i>procès porté à un haut degré, excès</i> '	Modality 2c
ပြန် pjàn	VERB: to return AUX: V back; V again <sup>6</sup> ' <i>procès en sens inverse ou différent</i> '	Aspect: iterative

<sup>5</sup> Bernot (1980:358) notes that the lexical meaning of this verb is quite far from that of its grammaticalised form, but she gives examples of sentences where ဆိပ် θei? behaves syntactically in the same way as a main verb (subordinated with ပြန် pí or ဆော့ tɔ) but keeps the grammaticalised meaning. She suggests that the main verb ဆိပ် θei? with this meaning is obsolete: it may be developing into a verbal particle rather than an auxiliary.

<sup>6</sup> ပြန် pjàn can precede or follow the main verb, with a slight difference in meaning. See Okell and Allott (2001:134–135) for examples.

(12) Auxiliary verbs in Burmese: morphemes added by the author to Bernot's list<sup>7</sup>

ရက်၂၉?	VERB: to be bold, swift or decisive AUX: to show a lack of consideration, to dare <i>appréciation critique parfois indignée du locuteur</i>	Modality (2c)
သာစာ	VERB: to be pleasant, peaceful, to exceed, to excel AUX: to be feasible, to V easily, to denote faisability or possibility	Modality (1) or (2c)
အပ် ၇a?	VERB: to be proper, to be appropriate AUX: to be suitable, right to, should (formal Burmese)	Modality (2c)
အား၇ာ	VERB: to be vacant, free AUX: to have the heart to V, be callous enough to V (formal Burmese)	Modality (2c)
ထိုက် t <sup>hai</sup> ?	VERB: to be worth, to deserve AUX: to fit in, deserving of	Modality (2c)

In my analysis, 22 of the morphemes in these lists convey modality, 12 convey aspect, and 3 convey other values (benefactive, spatial, voice?).

*Verb particles*

The bound-form category of verbal morphemes includes six of the kind which are necessarily present in a verb phrase and nineteen which can occur non-obligatorily. After illustrating the use of the non-obligatory verb particles with examples, I will give a brief analysis of the value conveyed by each optional affix. The six (sentence)-final verb particles (FVP), one of which is obligatorily present in any verb phrase, are discussed in section 1.4.

In (13), there are two non-obligatory particles between the main verb and the final verb particle (FVP), and one each in (14) and (15).

- (13) မြန်မာပြည်ကို ရောက်ဖူးကြတယ်။  
mjànma.pjì.gò jau?.p<sup>h</sup>u.dza.dè  
Burma.country.to arrive.EXP.PL.REAL  
'[They] (~we etc) have already been to Burma.'
- (14) သွားတော့မယ်။  
θwá.dɔ̌.mè  
go.after\_all.IRR  
'[I] am leaving'~'I will go (then)' (Said when departing)

<sup>7</sup> The first term is originally classified as a verbal particle and not as an auxiliary by Bernot (1980:212–267). The others come from Allott (1965). I found five terms in her list which are not included in Bernot (1980). Some are rarely used these days or only found in written Burmese.

- (15) စားလွန်းတယ်။  
 sá.lún.dè  
 eat.excede.REAL  
 '[He] eat(s) too much!'

(16) lists the non-obligatory verb particles with their basic values according to Bernot (1980), and the functional category to which I have assigned them, as in (10).

(16) Non-obligatory verb markers.

Burmese	meaning <i>description according to Bernot 1980</i>	category
လိမ့် leɪn	probability of the event ' <i>procès très probable où le locuteur n'est pas acteur</i> '	Modality 2a
ချင် tɕʰin	to desire, to wish, to feel like ' <i>désirer, avoir envie de</i> '	Modality 1
ဝံ့ wʊn	to dare speaker 's judgement on the event ' <i>oser jugement du locuteur sur le procès</i> '	Modality 2c
တော့ tə	Imminent and unavoidable event ' <i>procès imminent, inévitable</i> '	Aspect : prospective (at boundaries) <sup>8</sup>
လွန်း lún	to be in excess quality or state ' <i>dénoter l'excès dans la qualité ou l'état</i> '	Modality 2c
ရှာ ʃa	compassion of the speaker ' <i>marque affective, façon de voir du locuteur</i> '	Modality 2c
ပါ pà	politeness ' <i>attitude polie du locuteur</i> '	Modality 2c
ဖူး pʰú	experiential marker; completed event ' <i>procès constaté, expérimenté antériorité-accompli</i> '	Aspect
သေး thé	boundary of the event; event occurred before or after time of utterance ' <i>démarcation: situation antérieure-postérieure au discours</i> '	Aspect (at boundaries)
ခဲ့ kʰɛ	change of state ' <i>différentiation: tournant, transition, mouvement</i> '	Aspect
အုံး/ဦး ʔoun	new stage of an action; repeated event ' <i>point de départ, nouvelle étape, répétition du procès</i> '	Aspect: iterative

<sup>8</sup> On 'boundaries' or 'limitation' see Chung et al. (1985:213, 217):  
 'A basic concept in aspect can be described in terms such as boundedness, limitation, holicity, completion and the like. [...] closure means simply that an event comes to an end and before some temporal point or within the confines of some temporal point. [...] Applied to states, closure implies a complete change of state, specifically inception rather than cessation.'



ရစ် ji?	remnants of the event denoted by the previous V still relevant ' <i>désigne le procès comme résiduel</i> '	Aspect: perfect
ကြ təa	plurality argument present or understandable ' <i>pluralité actant présent ou induit</i> '	Plural
ချိ tə <sup>h</sup> i	adversative marker speaker's opinion <i>adversative le procès se produit en dépit de quelque chose, insistance du locuteur</i>	Modality (2c)
နှိ nɯɪN	event marked by the morpheme occurs before another event. ' <i>implique une précédence</i> '	Aspect: iterative
လဲ lé	invitation to V; injunction ' <i>rare; litt. invite insistante énoncé injonctif</i> '	Modality (2b) ?
ပေ pè	certainity of the event ' <i>litt. formule figée : procès comme 'indubitable, notoire</i> '	Modality (2a or b)
လေ lè	realised and completed event (formal Burmese) ' <i>litt. marque de procès effectif</i> '	Aspect: perfective
လု lu	imminent event, 'nearly V' ' <i>(rare) imminence du procès</i> '	Aspect (at boundaries)

In my analysis of these nineteen markers, nine convey modality, nine convey aspect, and the remaining one is the plural marker ကြtəa.

#### Discussion of verbal affixes

Bhat's first criterion (Bhat, 1999:95-96) states that prominent categories should be the most grammaticalised. I take Burmese to be a modality prominent language, with the implication that:

- verbal morphemes should mainly convey modality,
- verbal particles should grammaticalise modality more than the other affixes (i.e. auxiliaries) and should provide, in proportion, more modal morphemes, given that they are more grammaticalised.

As predicted by Bhat's first criterion (grammaticalisation), the majority of the affixes reviewed convey modality. Indeed, thirty-one non-obligatory affixes and at least five of the 'obligatory' affixes (discussed in section 1.4) convey mainly modality, while only twenty-one convey aspect. The negative morpheme မ...ဘူးမဲ့... bú used in declarative sentence may not be considered as part of modality. However the morpheme used for negative imperative မ...နဲ့...မ... nɛ̃ conveys 'speech modality'.

(17) shows the functional distribution of verbal affixes:

(17) Grammaticalisation of modality and aspect

	non-obligatory verbal morphemes			obligatory verbal morphemes
	verbal particles	auxiliaries	total	
modality	9	22	31	5
aspect	9	12	21	
other	1	3	4	1

With regard to the criterion of degree of grammaticalisation, verbal particles — which are the most grammaticalised affixes — should provide a greater number of affixes expressing modality to verify the Bhat criterion. Taking into account the totality of verbal particles (i.e. obligatory and non-obligatory particles), modality is grammaticalised to a greater extent than aspect — but notice that taking into account only non-obligatory verbal particles, the two categories are both equally grammaticalised and provide the same number of affixes. (18) shows the variation in degree of grammaticalisation of verbal affixes.

(18) Degrees of grammaticalisation

	auxiliaries	verbal particles (bound morphemes)		
		non-obligatory	obligatory	total
modality	9	22	5	36
aspect	9	12		21

**4 The prominence of a category revealed by the criterion of obligatoriness**

A well-formed verbal phrase in Burmese consists minimally of, at least, one main verb plus a (sentence)-final verb particle (FVP), as in (19). Unlike Allott and Okell (2001) who list 40 sentence markers, we distinguish verbal final particles from the large group of markers that can occur at the end of a sentence take. This distinction is based on syntactic and distributional criteria.

- (19) ဖတ်တယ်။  
p<sup>h</sup>aʔ.tɛ̃  
read.REA  
L  
‘[I] read.’

Burmese has six main (sentence)-final verb particles (FVP). They are mutually exclusive, which is not the case for the non-obligatory markers reviewed above (see, for example, (13)). At least one of them must be present for a verb phrase to be well-formed. Two of them are negative and a zero morpheme occurs in this slot as well, that is to say the absence of a final verbal particle stands for the imperative. As noticed by other authors (Bernot 1980:137–140; Wheatley 1982:226–27), it does exist other FVPs. Some of them have undergone a narrowing of function, and are related to one of the six main ones. For instance, the particle နဲ့ kɛ̃ is related to the FVP conveying statement. The other FVPs that

are not listed here, are either frozen expressions such as ပါလိမ့် ပါ့.လှိုင် or ပါလာ ပါ့.လာ, or either complex expressions containing reduced forms of the main FVPs, as သလို(လို)ဝဲ  
 ၀ာ.လဲ.(လဲ).ဘဲ.

Of course Burmese also has nominal sentences where no verb or copula is required, such as existential predication as in (12), where no main verb or copula is required and therefore no (sentence)-final verb particle (FVP) either. In such sentences the final noun phrase serves as the predicate. It can be either followed by the polite particle ရာ့ ja or not as shown in (20).

- (20) a. သူ ဆရာပါ။      b. ဆရာပါ။      c. ဆရာ။  
           θu sʰəjə.bà      sʰəjə.bà      sʰəjə  
           he teacher.POL      teacher.POL      teacher  
           ‘He is a      ‘[He] is a      ‘[He] is a  
           teacher.’      teacher.’      teacher.’

The six final verbal particles (FVP) are illustrated by the following examples. FVP occurring in assertive sentences are given in (21): (21)a, b and c contain affirmative FVPs, while (21)d contains a negative one. (22)a shows the markedness of the absence of any final verbal particle, and (22)b is an example of a negative imperative.

- (21) a. လာတယ်။  
           là.dè  
           come.REAL  
           ‘[He] comes (~ came).’  
       b. လာပြီ။  
           là.bì  
           come.PERF  
           ‘[He] has come’; ‘Here [he] is!’  
       c. လာမယ်။  
           là.mè  
           come.IRR  
           ‘[He] will come.’ ‘[He] would come’ (if...)  
       d. မလာဘူး။  
           mə.là.bú  
           NEG.come.NEG  
           ‘[He] does~did~will not come.’
- (22) a. လာ  
           là  
           come.[Ø IMP]  
           ‘Come!’  
       b. လာ  
           mə.là.nɛ

NEG.come.[Ø  
IMP].NEG  
'Do not come!'

The values of the final verb particles (FVP) are summarised in (23).

(23) Final verb particles and their allomorphs

particles and allomorphs	function
တယ် tē	Modality 2a 'realis' + 3a 'assertive'
တာ tà	Modality 2a 'realis' <sup>9</sup>
သိမာ	Modality 2a 'realis' + 3a 'interrogative'
မယ် tē	Modality 2a 'irrealis' + 3a 'assertive'
မှာ မှာ	Modality 2a 'irrealis'
မာမာ	Modality 2a 'irrealis' + 3a 'interrogative'
ပြီ pí	Modality 2a 'realis' + change evident at the time of the utterance [secondary value: Modality 2b (evidential: seeing, hearing)]
မ ... ဘူး mabú	Negation (neutralisation of Modality 2a)
မ ... နဲ့မာ ... နေ	Negation + injunction
မ ... (ဘဲ) မာ ... ဝေ	(Negation + exclamation)
- Ø	Zero-morpheme stands for injunction (Mod (1))

Notice here that Burmese data point to a relationship between negation and modality. The link between tense–aspect–modality and negation has been already noted by Bybee (1985:179), Hartzler (1994:52–53), Payne (1997:283–293), Palmer (1995:454–471) and Forest (1993:130–133), as has the interaction between negation and modality by De Haan (1997:129–139). The Burmese data seem to corroborate these relationships in suggesting that negation can be analysed as a kind of modality, but this hypothesis remains to be confirmed or invalidated by substantial further work on Burmese and other data. The negative verbal particle is in complementary distribution with the other particles which all convey different kinds of modality: subjective modality (epistemic and evidential modalities) and speech modality. All these morphemes seem to belong to the same slot.

The analysis of the final verb particles (FVP) summarised in (23) shows that epistemic modality and speech modality are the main notions expressed by the 'obligatory' verbal markers, e.g. FVP, in Burmese. Returning now to the criteria of obligatoriness, we will see that modality is undoubtedly the more obligatory category in Burmese.

<sup>9</sup> Bernot (1985: 163) called these morphemes 'modal markers of exclamatory speech'. They are used in expressive discourse, but they also occur in nominalised and completive clauses and sometimes replace သိမာ in interrogative clauses.

<sup>10</sup> This negative form can be found in 'exclamatory speech.' Bernot (1980:164) notes that this form does not appear very often in her data; this is true for my data also.

## 5 The pervasiveness of modality as a category in Burmese

### 5.1 Nominalising clauses

I will present epistemic modality as an example of the pervasiveness of modality in Burmese. Indeed, the fundamental distinction in Burmese between realis and irrealis appears in nominalised clauses also (see also Vittrant (2002)).

Various nominalising processes are found in Burmese. သူ့ 'he/she' forms an agentive noun phrase, while အဲဒါ is a prefix used to derive nouns from verbs. There are other ways of creating noun phrases with particular syntactic properties. For the purposes of the present paper, the most interesting nominalising processes are those conveying epistemic modality. They are placed at the end of the clause, as are most nominalisers, and have the same form as the FVPs that convey only *realis/irrealis* modality and not ASSERTIVE modality (see (23)). (24) contains two occurrences of the realis morpheme တာ *tà* used as nominaliser of the verbs 'to settle' and 'to fall' respectively. The two sentences presented in (25) illustrate the process used to focus on a temporal phrase, that is to say the nominalisation of the clause and the use of epistemic markers as nominalisers.

- (24) အိမ်ထောင် ကျတာက                      ထောင်                      ကျတာထက်                      မဆိုးဘူးလား။  
 ?èindàun tɕa.dà.gà                      thàun                      tɕa.dà.de?                      mə.sʰó.bú.lá  
 marriage fall.REAL<sup>NOM</sup>.SUBJ prison fall.REAL<sup>NOM</sup>.than NEG.bad.NEG.Q-?  
 'Isn't getting married worse than going to jail?'

- (25) a. မနက်ဖြန် သူနဲ့                      ကျွန်တော်                      တွေ့မယ်။  
 mənɛʔpʰjàn θù.nɕ                      tɕəno                      twɛ.mɛ  
 tomorrow he.with I meet.IRR  
 'I will meet with him tomorrow.'
- b. သူနဲ့                      ကျွန်တော်                      တွေ့မှာ                      မနက်ဖြန်ပါ  
 θù.nɕ                      tɕəno                      twɛ.mà                      mənɛʔpʰjàn.bà  
 he.with I meet.IRR tomorrow  
 'I will meet with him tomorrow.'  
 lit: 'My [future] meeting with him, it is tomorrow.'

In the following examples (26)a–b and (27)b, the epistemic markers တာ *tà* and မှာ *mà* are required to nominalize the clause used as the verb's complement. Therefore they can be viewed as complementisers, which leads us to say that the realis–irrealis distinction is also relevant for some dependent or 'non-finite' clauses.

- (26) a. ရှားဖိနပ်                      စီးရတာ                      မသက်သာဘူး။  
 ʃupʰənaʔ sɪ.jɔ̌.dà                      mə.θɛʔθà.bú  
 shoes wear.must.REAL<sup>NOM</sup> NEG.comfortable.NEG  
 'Having to wear shoes is not comfortable'  
 'To have to wear shoes is not pleasant.'

- b. ရှိုးဖိနပ်                      စီးရမှာ                      မသက်သာဘူး။  
 jùpʰənaʔ                      sí.jə.mə̀                      mə.θɛʔθà.bú  
 shoes                      wear.must.IRR<sup>NOM</sup>                      NEG.comfortable.NEG  
 'It will (~would) not be pleasant to have to wear shoes.'

- (27) a. အဖေ သားကို ဇာတ်ကို ပြောပြတယ်။  
 ʔəpʰè θá.gò zaʔ.kò pjó.pjə.dè  
 father son.OBJ Jataka.OBJ say.show.REAL  
 'A father tell Jataka stories to his son.'

- b. အဖေ သားကို ဇာတ်ကို ပြောပြတာ ကြိုက်တယ်။  
 ʔəpʰè θá.gò zaʔ.kò pjó.pjə.dà                      tɕaiʔ.tè  
 father son.OBJ Jataka.OBJ say.show.REAL<sup>NOM</sup> like.REAL  
 '[I] like it when (~that) a father tells Jataka stories to his son.'

## 5.2 Relative clauses

Similarly, in relative clauses, we find the same epistemic (realis vs. irrealis) distinction expressed by the relativizer itself, as in (28)a–b and (29)a–b.

- (28) a. မိုးမိုး                      မြင်တဲ့                      လူ  
 mò.mò                      mjìn.dɛ                      lù  
 Momo                      see.REAL<sup>ATTR</sup>                      person  
 'the person who(m) Momo saw'

- b. မိုးမိုးကို                      မြင်မဲ့                      လူ  
 mò.mò.gò                      mjìn.mɛ                      lù  
 Momo                      see.IRR<sup>ATTR</sup>                      person  
 'the person who will (~would) see Momo.'

- (29) a. ကျွန်တော်                      ငှားတဲ့အခွေ                      ကြည့်မယ်။  
 tɕənò                      ɰá.dɛ.ʔəkʰwè                      tɕj.mɛ  
 I                      borrow.REAL<sup>ATTR</sup>.tape                      watch.IRR  
 'I will watch the video that I rented.'

- b. ကျွန်တော်                      ငှားမဲ့အခွေ                      ကြည့်မယ်။  
 mò.mò.gò                      mjìn.mɛ                      lù  
 Momo                      see.IRR<sup>ATTR</sup>                      person  
 'I will watch the video that I am going to rent.'

As shown by previous examples, Burmese uses, as relativisers, the markers that merge epistemic modality (2a) and assertive modality (3a) (see (23)) with a slight phonological difference. The relativizers are marked with grammatical tone to indicate subordination. Note that this grammatical tone is also found in possessive structures to mark a human possessor, and in some verb–complement structures to mark a human argument, as

described by Allott (1967:159-161). The grammatical use of the creaky tone has also been noted by Okell (1969:18) and Bernot (1980:26).

## 6 Conclusion

The use of Bhat's first criterion (grammaticalisation) to reveal the prominence of a category in a specific language was relevant to my claim. Taking into account all the verb markers of Burmese, Bhat's first criterion points to the prominence of modality in Burmese. Bhat's second criterion (obligatoriness) also confirms the prominence of modality as the most obligatory category in Burmese. Thirdly, modality is pervasive in Burmese, being involved in nominalisation process and in relative (and complement) clauses.

The use of Bhat's criteria leads to a classification of languages into three 'idealized' types according to the prominence that each language gives to one or the other of the three major verbal categories, i.e. tense, aspect and modality, although the author agrees with Bhat (Bhat 1999:103) that 'it is quite possible for some languages to remain outside of this classification either because they give equal prominence to two or more of these categories, or because they select some other verbal category, such as location or viewpoint as the most prominent category.'

Thus Dravidian languages, Indo-European languages such as English or German, and Uralic languages such as Finnish, for all of which the grammatical category of Tense is the most grammaticalized and/or pervasive and/or obligatory, could be classified as tense-prominent languages (Bhat 1999:105-120). English, for instance, shows in its verbal inflectional system a basic distinction between past and present (non-past), and aspect and modality distinctions are not grammaticalized to the extent to which tense distinctions are grammaticalised.

Hmong, Sanskrit, Supyire and Koromfe (two languages of the Gur sub-branch of Niger-Congo languages) on the other hand are good candidates to illustrate the aspect-prominent type of language, as they give prominence to the grammatical category of aspect.

A re-examination of some North-Iroquoian languages and some Mayan languages such as Q'eqchi, leads to consider them as modality-prominent languages, since they make a basic modal distinction rather than a temporal one (Bhat 1999:132-133).

Coming back to Burmese, then, my claims about this language were informed by applying Bhat's criteria to reveal the most prominent category. Taking into account all the verbal affixes, Bhat's first criterion (grammaticalisation) points to the prominence of modality in Burmese. His second criterion (obligatoriness) also confirms the prominence of modality as the *most* obligatory category in Burmese, (i.e. we find that three out of the four obligatory morphemes in Burmese express modality). Additionally, modality is pervasive in Burmese, involved in the nominalization process and in relative (and complement) clauses. The application of Bhat's criteria leads us to conclude that modality is indeed the prominent category in Burmese, although aspect is important.

This study also illustrates that the Burmese data that I have collected could support the idea of negation as a kind of modality.





# 9

## *Topicalisation in Burmese expository discourse*

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### 1 Topic and Information Status

#### 1.1 Topic-Comment Propensity in Burmese

Many Asian language families — Sino-Tibetan, Japanese, Austronesian, Tai-Kadai and Mon-Khmer — have often been regarded as topic-prominent languages which emphasise information structure, rather than subject-prominent languages such as English and other European languages which emphasise morphosyntactic structure. Topic-prominence often takes the sentence form of Topic-Comment rather than Subject-Predicate. What distinguishes Topic-Comment structure is that topic is rarely agentive or strongly transitive, in the sense of force dynamics (Talmy 1985).

Burmese tends to be only weakly transitive, as Matisoff (1976) noted for Lahu and some other Tibeto-Burman languages. The semantics of transitivity have been understood from a whole-scene viewpoint, with explicit mention of the source and/or goal as key elements within that viewpoint (DeLancey 1982). Rather than being highly causative, or requiring mention of the source of an action, Burmese sentences and discourses tend to be more focused on the result end of the transitivity spectrum. Though not morphologically ergative, Burmese tends to be semantically absolutive. Many verbs can be used transitively or intransitively, being based more upon the cognitive viewpoint of the speaker than upon the grammatical requirements of a dichotomous transitivity system. The Topic-Comment structure of Burmese is also related to the speaker's cognitive point of view with focus on the result end of the action stream. It appears that the preferred orientation of the language is to take a viewpoint that leaves out the agent/causer and by inferring that role semantically it can have stronger pragmatic force when an explicit mention is made. Topic prominence then follows from a generalised propensity to not mention the agent and to focus on the resulting state of affairs.

#### 1.2 Various definitions related to the notion of topic

The notion of topic and the use of the word in recent linguistic literature has been fraught with confusion. Part of this confusion has been terminological. Part of it has related to scope differences in topicalisation. Part of it has related to the notion of topic as a

grammatical role within the sentence, similar to that of the notion of 'subject'. Another part of the confusion has been the role of sentence constituent ordering and the weight allotted to that important feature of topicalisation. The informational status and introduction process of referents is another aspect to the notion of topic, particularly new versus old information. Another part of the confusion has been the scope of topicalisation – either a more local sense of topic within the sentence, or a much wider sense of topicalisation spanning larger textual units or even the discourse itself.

A binary distinction has been observed between at least two types of status of referents in a text. The difference between referents in the text who are 'on stage', and those being brought 'onto the stage' is recognised under various terminological sets such as: Old/New, Known/New, Given/New (Halliday 1967), Activated/Previously activated (Chafe, 1987), and Presupposition/Focus (Lambrecht 1996, 2000). A yet more complex analysis of the initial binary distinction was made by Prince (1981) who categorised the speaker's assumptions of the hearer's familiarity into three types of information with various subtypes — New (Brand-new (anchored and non-anchored), Unused), Inferable (Non-containing Inferable, Containing Inferable), and Evoked (Textually Evoked, Situationally Evoked). Such finely tuned pragmatics, while helpful in classifying speaker assumptions, is linear and fails to account for the hierarchical structure of textual information across spans of text, which are themselves embedded within other texts and assumption spans.

Givón (1983) proposed a system for tracking discourse referents across the textual span of clauses in which the same referents tend to be evoked repeatedly. The quantifiable measurement for continuous topics (old information or presupposed reference) and for discontinuous topics (new information) lends an empirical basis to the confusion. This notion of topicality refers more to discourse theme and of profiling information across a span of text. Highly continuous referents are assumed to be more topical. Yet continuity tracking fails to net salient topics in languages such as those in Southeast Asia where indirectness, understatement, and the absence of overt mention may be used to indicate a topic. Strategic points in a text may therefore appear non-topical regarding referents, particularly where metaphor or analogy is used, yet be pragmatically effective for an audience's awareness of the topic.

Figure–Ground organisation is the most probable cognitive basis for the binary distinction that linguists have sensed in examining the notion of Topic–Comment or presupposed-focused nature of information structuring. Figure–Ground relations account for the asymmetry felt to exist between two points of information in a sentence. Usually one is topic and the other comment. One is more focal or salient while the other more background and less prominent. One is more mobile or active in relation to the other as field of reference or target of action. The asymmetrical relation between the two (or more) constituents is probably psychological and cognitively hard-wired. Talmy characterises the Figure–Ground relationship in language as follows:

The Figure is a moving or conceptually movable entity whose path, site, or orientation is conceived as a variable, the particular value of which is the relevant issue. The Ground is a referenced entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure's path, site or orientation is characterised. (Talmy 2000:312)

Talmy's insights into cognitive semantics are based principally on the dynamics of motion. Thus for him, and most other linguists using Figure–Ground relations to describe the asymmetrical relations of the sentence, Figure (F) is topical, the most salient, and is typically correlated with the semantic agent, the mover, or causer, and thus with grammatical subject. Ground (G) is a reference entity possessing known properties that characterise the Figure. This schema, following Talmy (2000), can be applied as in (1) to the underlying event structure:

- (1) a. Bill (F) is behind the garage (G).
- b. She (F) resembles him (G).
- c. Her going home (F) was after stopping at the store (G).

While this schema works well for the underlying cognitive semantics of highly transitive sentences with motion verbs and complex spatial relations of objects, it can be observed that for reduced transitivity the situation flips and the Figure shifts to the 'right' toward the new information, toward the grammatical object. Figure changes position to become what the sentence says, the comment, not the reference anchor of the continuing topic. Focus is upon the rightmost element, which gains in saliency and topicality.

The shift of the gestalt Figure–Ground with reduced transitivity begins to look more like the binary structure of Presupposed (P)/Focus (F<sub>o</sub>) of Lambrecht (1996), illustrated in (2):

- (2) a. Q: Who saw the mechanic?  
      A: The mechanic (P) was seen by the principal (F<sub>o</sub>)
- b. Q: When is Mac leaving?  
      A: Mac (P) is leaving tomorrow (F<sub>o</sub>).

The effect of providing the context to the response above gives the status of 'activated' information to the Presupposed elements. When elements become known, old, or given information in this context, they also become Ground, the known, the given, the referenced entity, in the sense of Talmy above.

### **1.3 Burmese postpositions involved in topicalisation**

Burmese postposition particles mark the grammatical relations of the argument nominals of the verb and parse various levels of pragmatic information within the Burmese sentence and text. Some of these particles have been identified as marking topic and others as marking subject, with some marking both in the Burmese sentence (Okell and Allott 2001).<sup>1</sup>

Particles that have been described as topic-marking in Formal Burmese (FB) and Colloquial Burmese (CB) are set out in include:

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<sup>1</sup> Okell and Allott (2001) make an enormous contribution to the grammatical study of Burmese. The analysis here is indebted to, and builds on, their insights.

## (3) Topic-marking particles in Burmese described in Okell and Allott (2001)

ကံ	CB and FB; marks the noun as subject of the sentence, usually for emphasis or contrast, or to distinguish the agent from the patient (the latter often marked by ကို kò or အား ၊á) often indicates the speaker when reporting speech. In FB some writers use မှ မှာ to serve the same function (Okell and Allott 2001:1);
ကံ	CB and FB; marks a phrase as topic of discourse, whether subject or not (Okell and Allott 2001:2);
ကား ká	FB; marks a phrase with the sense of 'however' or 'but', highlighting the subject or topic of a sentence (Okell and Allott 2001:5);
မှ မှာ	FB (sometimes CB); marks a noun as the subject of a sentence, when the subject is a personal agent or an inanimate noun standing for a personal agent. In this usage it is equivalent to FB ကံ ká, but in CB ကံ ká has more contrastive force (Okell and Allott 2001:165);
မှ မှာ	FB (sometimes CB); marks a phrase, and indicates topic of sentence, usually the subject (Okell and Allott 2000:171);
မှ မှာ	FB; marks a phrase as slightly contrastive with some other phrase (Okell and Allott, 2001:154);
တာ tá	CB; nominalises a verb and marks it as the topic of the sentence (Okell and Allott 2001:74).
သည့် ထိ	FB; marks the noun as subject or topic of sentence in Formal Burmese only according to Okell and Allott (2001:245);

These various particles are well illustrated in Okell and Allott (2001), but what is far from clear is why they are used and how they function in specific contexts, and what kind of information the notion of topicalisation encompasses in Burmese. By examining whole texts the extensive linguistic context by which such notions relating to information such as 'given', 'new', 'recoverable', etc. can be shown to be an intrinsic part of the function of the particles. Discourse analysis also lays out the hierarchical structural units by which textual information is organised. Particles have been found to signal information function on multiple levels of clause, sentence, paragraph, section, and the discourse macrostructure as a whole. Many particles which were previously inexplicable have been found to function in tightly organised and beautiful ways through discourse analysis (Longacre 1996; Longacre and Woods 1976-77; Person 2000).

Assuming the notion of topic applies to both sentence and discourse levels, and assuming topic is both informational and grammatical, the present study examines the role of topic as it relates to three particles သည့် ထိ, ကံ ká and ကို kò as observed in one particular text. By restricting the analysis to one text, it is possible to examine more fully the inter-relationships and dependencies across higher level structures. In this article, the basis for generalisation in defining the function of particles is restricted in scope to specific texts or text types and structural contexts, but what is gained thereby is greater explanatory power in examining why a particular particle is used in a particular linguistic situation.

#### 1.4 Types of information relating to topic prominence in Burmese

There are three distinctions important with regard to the notion of topic in Burmese. The first of these is *information status*, namely the classification of information as 'new' or 'old'. This distinction is what some analysts have referred to as a cognitive operation analogous to the reader opening a new file for new information, or for old or already known information noting whether the file which already exists for this information is open and active, or is open but not active (not in immediate awareness). A more contemporary computer analogy might be one where old information is likened to an open file or window. If the file or window is visible from the desktop, it may require only a mild reference in the text (zero or pronominal). On the other hand, if it is buried or actually closed, somewhat more effort is required to retrieve and bring that file (information) into focal view.

Information status has to do with the amount of cognitive effort required to activate information. This effort is mapped iconically to grammatical constructions that serve to stimulate those cognitive operations. It is assumed that a more overt grammatical apparatus is required for old information that is specific but stored away and inactive.

Burmese follows the universal tendency of languages to place old information before new information. Typically in Burmese, new information occupies a position immediately preceding the verb phrase, that is rightmost in the string of phrases which precede the sentence-final verb phrase. In a written discourse, what is new and what is old information is normally recoverable from the immediately preceding text. In spoken discourse, what is old is more often recoverable from the social and speech context. While this generalisation is a function of the difference between written text and oral discourse, it is nonetheless a tendency of text to map greater referential detail due to the presumed loss of information from the social and physical situation of a speech event. The unstated knowledge implied by the writer to the reader can evoke a satisfaction, humour or deeper relevance which brings a peculiar joy in reading creative writing. However, the same implicatory function can leave second-language readers of Burmese perplexed. While much that is implied comes from a shared experience of the world and the expectations of cultural norms, the relation of sentence arguments and adjuncts in Burmese is marked by postpositions, most of which have multiple functions which are often generalised. Understanding the functions of these particles opens up the world of Burmese grammar, particularly for the second-language learner. While the number of particles treated here is small, it is hoped that this study might pave the way for future discourse studies, particularly concerning topic.

The following example from the National Day text (see section 2.1.2) illustrates the change in informational status across two sentences. In (4) National Day is new information; in (5), two sentences later in the text, it has become old information.

##### (4) National Day as new information (Sentence 1)

တန့်ဆောင်မှန်းလဆုတ်	(၁၀)ရက်နေ့သည်	အမျိုးသားနေ့	ဖြစ်ပါသည်။
təzəunmóun.lə.zou?	sʰɛ.jɛʔ.nɛ.ði	?əmjɔ́ðá.nɛ	pʰjiʔ.pà.ði
Tazaungmon.month.end	10.CLF.day.TOP	national.day	be.POL.REAL

The tenth day of the waning moon of the month of Tazaungmon is National Day<sub>[NEW]</sub>.

(5) National Day as old information (Sentence 3)

အမျိုးသားနေ့အထိမ်းအမှတ်အဖြစ်	ဟောပြောပွဲများနှင့်
əmjdə́.á.ne.ʔətʰéinʔəm̥aʔ.ʔəpʰjiʔ	hópjə́.bwé.mjá.ŋjɪn
national.day.commemoration.as	talk.event.PL.and

ပြပွဲပြိုင်ပွဲများကို	ပြုလုပ်ကျင်းပကြပါသည်။
pjə́.bwé.pjə́in.pwé.mjá.gò	pjɪlouʔ.tɕɪnpə.ɕə.bà.dɛ
show.event.compete.event.PL.OBJ	do.celebrate.PL.POL.REAL

'To commemorate National Day<sub>[OLD]</sub>, there are celebrations of lectures, exhibitions and competitions.'

The second type of distinction necessary for topicalisation in Burmese is *information focus*. There are two types of information focus, the first is *positional* and the second is *grammatical role*.

*Positional* information relates to the linear, sentence-initial position or slot of the principal arguments of the verb. Sentence initial devices such as temporal or locative linkage are excluded in information focus, since these devices relate to textual cohesion and background rather than focus. The following example demonstrates these positions, labeled Position 1, Position 2, Position 3, in the sentence. The head of the Burmese sentence is *not at the beginning* but at the end, on the right rather than the left. Thus the numbered positions begin right, next to the verb, and proceed leftwards. Burmese, as head-final, is characteristically left-branching and is felt by Burmese speakers to 'face' toward the final verb. Greater Informational Focus is given to the elements placed in Position 1.

(6) Informational focus (Sentence 6)

Situational	Position 3	Position 2
၁၉၂၀ပြည့်နှစ်တွင်	အင်္ဂလိပ်အစိုးရက	ရန်ကုန်တက္ကသိုလ်ကို
1920.bje.niʔ.twɪn	ʔɪŋgaleiʔ.ʔəsɔ́jə.gə	jəngòun.tɛʔkəθò.gò
1920.CLF.year.in	English.govt.SUBJ	Yangon.university.OBJ

Position 1	Final Verb
ဖွင့်လှစ်ရန်	စီစဉ်သည်။
pʰwɪn.ɦɪʔ.jàn	sìzɪn.ðɪ
open.PURP	plan.REAL

'In 1920 the English government made arrangements to open Rangoon University.'

*Grammatical* role is also a parameter of Informational Focus in the Burmese sentence. Information Focus tends to follow the animacy/empathy hierarchy (Silverstein 1976; Kuno 1976) and directly correlates with semantic and grammatical roles within the sentence. While the three parameters of animacy-empathy, semantic role and grammatical role are interrelated and have each been organised in an implicational hierarchy, and although the semantic role is more salient in Burmese, the choice is made here to focus on the grammatical in order to build on Relational Grammar's insights regarding promotion and demotion of grammatical roles in the sentence.

(7) Hierarchy of animacy in relation to grammatical and semantic roles<sup>2</sup>

animacy-empathy hierarchy	human > animal > instrument >...
semantic role	agent > patient > benefactor > purpose/reason > result
grammatical role <sup>3</sup>	subject > object > indirect object > obliques > genitives...

Due to the fact that unmarked word order in Burmese is SOV, natural or default prominence is accorded to sentence arguments with the grammatical role of subject. The problem of determining exactly what constitutes subjecthood in Burmese lies beyond the scope of this paper, but for present purposes, subject will be defined as the specified agent (or unmentioned agent in 'passive' constructions), the overt leftmost, non-oblique and non-object argument in a sentence. The casual observer may notice that subject is a default role in relation to other more overtly marked grammatical roles.

If an argument of the verb in Burmese is promoted or demoted from its principal grammatical role, e.g. a subject demoted to an oblique role as it does in the English passive construction (8), it is also thereby raised or lowered in focal prominence by grammatical promotion or demotion. Because agents are often unmentioned, default prominence tends to fall on the patient. Demoted agents in oblique roles such as Possessor may be mentioned for pragmatic purposes as we see in (9).

## (8) Demotion in English.

Active: The man hit the cat.

Passive: The cat was hit [by the man] - OBLIQUE DEMOTION

## (9) Promotion and demotion in Burmese (Sentence 4)

*Position 4: Patient      Position 3: Time      Position 2: Oblique agent*

မြန်မာနိုင်ငံသည်      ၁၈၈၅-ခုနှစ်တွင်      အင်္ဂလိပ်တို့၏  
mjàn mǎ.nàin nǎn.ðì      1885.gu.nì.ʔ.twìn      ʔingəleiʔ.tə.ʔi  
Burma.country.TOP      1885.CLF.year.in      English.PL.POSS

*Position 1: Instrument      Final verb*

လက်အောက်ခံဘဝသို့      ကျရောက်ခဲ့ပါသည်။  
lɛʔ.ʔauʔ.kʰàn.bəwə.ðə      tɕə.jauʔ.kʰɛ.bà.ðì  
hand.under.suffer.life.to      fall.arrive.REM.POL.REAL

'In 1885 Burma fell under a life of subjugation to British rule.'

In (9) the Patient, 'the country of Burma' is promoted to the grammatical pivot or in Relational Grammar terms, to number one. The Patient becomes subject-like and is moderately prominent because of the demotion of the agent to an oblique position. We shall see in subsequent sections this example also illustrates another type of focus in the unfolding detail of how topical focus is used in this sample Burmese text.

<sup>2</sup> The convention of using > to indicate 'is above' in the hierarchy indicates 'Human is above Animal, both of which are above Instrument' and so forth for each hierarchy.

<sup>3</sup> The Noun Phrase Accessibility Hierarchy (Keenan & Comrie 1977).





(i) 'Highly transitive' sentence gestalt

In the first type of Figure–Ground configuration, old information is seen as topic. The Figure-as-topic in this type of sentence has a role similar to discourse theme as a continuing topic. The Ground is new, additive information which is always changing across the discourse span. Due to the steadiness of the topic, the Figure information is assigned textual prominence because it is repeated. It is the pragmatic presupposition whereas the Ground is the domain of the pragmatic assertion (Lambrecht, 2000). The Ground is the focus domain, which is more salient. In this configuration, Figure is not focal on a local level, but rather at a textual level. This is the typical form found with transitive, narrative sentences in Burmese and is represented in (11).

(11) Highly transitive sentence gestalt

Figure	Ground
<b>topic (of discourse)</b>	<b>focus</b>
<b>old information</b>	<b>new information</b>
<b>theme</b>	<b>rheme</b>

(ii) Absolutive sentence gestalt

The second type of informational gestalt is where old information is regarded as the Ground: the basis, the known, the background, the drone instrument. Against this, the Figure is a focally figured block of new information which appears as an item of interest. In this conceptualisation, new information, the Figure, is more salient. This reverse configuration is represented in (12).

(12) Absolutive sentence gestalt

Ground	Figure
<b>known</b>	<b>salient</b>
<b>old information</b>	<b>new information</b>
<b>steady reference frame</b>	<b>variable</b>
<b>anchor</b>	<b>focus</b>

Lambert (2000) describes these two similar configurations in terms of presuppositional characteristics. He labels the first gestalt in (11), 'Argument Focus'. This configuration is considered marked because it introduces a new argument to a given predicate. The second gestalt, (12), he labels 'Predicate Focus'. This is regarded as the norm in Subject–Predicate or Topic–Comment constructions where it is the predicate which adds a new assertion to a given argument. For English examples of these two configurations see (1)a and b for the former and (2)a and (2)b for the latter type. Note that English order tends to differ from Burmese order.

(13) summarises the weight of focus (indicated by one or two asterisks) relative to the position of the Ground and the Figure in an unmarked Burmese sentence.

(13) Position and relative focus in an unmarked Burmese sentence.

<i>Position 3</i>	<i>Position 2</i>	<i>Position 1</i>	<i>Predicate</i>
Ground *		Figure **	

Returning to the previous example (9) above, we find a more transitive sentence in which the source of the action is marked by an overtly expressed agent and with an overt mention of the patient, allowing the reader to view the whole conceptual scene of trans-action (DeLancey 1982). With regard to Figure-Ground relations, we review the information device weighting from (10), and find that highly transitive sentences shift the weight back to Figure. The four factors of information status and two information focus types together with Figure-Ground produces and evenly balanced Highly Transitive sentence configuration, as in (14).

(14) Position and relative focus in a Highly Transitive sentence gestalt.

<i>Position 3</i>	<i>Position 2</i>	<i>Position 1</i>	<i>Predicate</i>
Figure **		Ground **	

The notion of topic in discourse is related to the sense of local focus within the sentence, to information structure (both status and focus) and to the wider notion of focus or figure to the background gestalt of the discourse.

How these notions are played out in Burmese relates to the larger chunks of discourse, which may be equivalent to the naive concept of the orthographic paragraph. Here we shall refer to them as 'discourse units'.

## 2 The National Day text — an example of Expository Discourse

In general we can identify texts as belonging to one of four types of discourse: Expository, Narrative, Procedural and Hortatory. The function of an *Expository* text is explanation and persuasion, in contrast to a Narrative text, which sets out to tell a story. *Narrative* texts are typically agent-orientated and are rich in chronological linkage. A third contrasting discourse type is the *Procedural* genre. Procedural texts explain how something is done; they, too, make use of chronological linkage but are activity-orientated rather than agent-orientated. Furthermore, the three discourse types typically prefer different types of clause, sentence, paragraph and discourse structures within the macro-structure of each genre. *Hortatory* text is persuasion not of the truth of something but for the reader to personal action. Hortatory text is typically imperative in mood, not agent-oriented, with logical linkage.

The National Day text comes from the Third Standard Burmese Primer (Myanmar Government Education 1994) and has been found to be an example of a well-crafted Expository text in literary Burmese. Expository text is typically characterised by more logical, non-chronological linkage, although narrative elements are often found embedded within it. It is topic-orientated rather than agent-orientated. The full text is presented below.

## 2.1 The National Day Text glossed sentence by sentence

(Myanmar Government Education Department (1994))

Sentence 1

တန့်ဆောင်မုန်းလဆုတ်	(၁၀)ရက်နေ့သည်	အမျိုးသားနေ့	ဖြစ်ပါသည်။
təzəuɴmóuɴ.lə.zou?	sʰɛ̃.jɛ̃?nɛ̃.ðì	ʔəmjõðá.nɛ̃	pʰji?pà.ðì
Tazaungmon.month.end	10.CLF.day.TOP	national.day	be.POL.REAL

The tenth day of the waning moon of the month of Tazaungmon is National Day.

Sentence 2

ထိုနေ့တွင်	မြန်မာနိုင်ငံတဝန်းလုံး၌	အမျိုးသားနေ့အခမ်းအနားများ
tʰò.nɛ̃.dwɪɴ	mjànmã.nàinɾàɴ.tə.wún.lóuɴ.ɲai?	əmjõðá.nɛ̃.ʔəkʰánʔəná.mjá
that.day.in	Myanmar.country.one.CLF.all.in	national.day.ceremony.PL

ကျင်းပကြပါသည်။

teĩnpə̃.ɕə̃.bà.ðì

hold.POL.REAL

'On that day National Day ceremonies are celebrated all over Burma.'

Sentence 3

အမျိုးသားနေ့အထိမ်းအမှတ်အဖြစ်	ဟောပြောပွဲများနှင့်
əmjõðá.nɛ̃.ʔətʰéinʔəɲaʔ.ʔəpʰji?	hópjõ.bwé.mjá.ɲɪɴ
national.day.commemoration.as	talk.event.PL.and

ပြပွဲပြိုင်ပွဲများကို

pjã.bwé.pjàin.pwé.mjá.gò

show.event compete.event.PL.OBJ

ပြုလုပ်ကျင်းပကြပါသည်။

pjɹlouʔ.teĩnpə̃.ɕə̃.bà.dɛ̃

do.celebrate.PL.POL.REAL

'To commemorate National Day, there are celebrations of lectures, exhibitions and competitions.'

Sentence 4

မြန်မာနိုင်ငံသည်	၁၈၈၅-ခုနှစ်တွင်	အင်္ဂလိပ်တို့၏
mjànmã.nàinɾàɴ.ðì	1885.gu.ɲiʔ.twɪɴ	ʔingəleiʔ.tə.ʔi
Burma.country.TOP	1885.CLF.year.in	English.PL.POSS

လက်အောက်ခံဘဝသို့

lɛʔ.ʔauʔ.kʰán.bəwə̃.ðò

subordination.life.to

ကျရောက်ခဲ့ပါသည်။

tẽə̃.jauʔ.kʰɛ̃.bà.ðì

fall.arrive.REM.POL.REAL

'In 1885 Burma fell under the subjugation of British rule.'

Sentence 5

ထိုအချိန်မှစ၍	အစိုးရက	မြန်မာတို့ကို
tʰò.ʔətɛ̃in.mə̃.sə̃.jwɛ̃	ʔəsóɟə̃.gə̃	mjànmã.dò.gò
this.time.from.start.SUBORD	government.SUBJ	Myanmar.PL.OBJ

အမျိုးမျိုးဖိနှိပ်ချုပ်ချယ်ခဲ့ပါသည်။

ʔəmjómjót.pʰiŋɡeiʔ.tɕʰouʔtɕʰɛ̃.gɛ̃.bà.ðì

variously.repress.restrict.REM.POL.REAL

'From that time onwards the English government oppressed and restricted the Burmese in many ways.'

#### Sentence 6

Situational

Position 3

Position 2

၁၉၂၀ပြည့်နှစ်တွင်

အင်္ဂလိပ်အစိုးရက

ရန်ကုန်တက္ကသိုလ်ကို

1920.bje.niʔ.twìN

ʔìŋɡəleiʔ.ʔəsójə.gə

jàŋɡòUN.tɛʔkəθò.gò

1920.CLF.year.in

English.govt.SUBJ

Yangon.university.OBJ

Position 1

Final Verb

ဖွင့်လှစ်ရန်

စီစဉ်သည်။

pʰwìN.ʔiʔ.jàN

sizìN.ðì

open.PURP

plan.REAL

'In 1920 the English government made arrangements to open Rangoon University.'

#### Sentence 7

တက္ကသိုလ်ဥပဒေကိုလည်း

ပြဋ္ဌာန်းသည်။

tɛʔkəθò.ʔyùbədè.lé

pjaʔtʰáN.ðì

university.regulation.OBJ.also enact.REAL

'The University Act was also established.'

#### Sentence 8

ဤဥပဒေအရ

တက္ကသိုလ်ပညာ

သင်လိုသူတိုင်း

ʔì.ʔyùbədè.ʔəjə

tɛʔkəθò.pjìNŋà

θìN.lò.ðì.dáin

this.regulation.under

university.learning

learn.want.person.every

သင်ကြားခွင့်

မရနိုင်သဖြင့်

θìN.ṵá.gwìN

mə.jə.nàin.ðə.pʰjìN

learn.learn.permission

NEG.get.can.REAL.because

မြန်မာတမျိုးသားလုံးက

မကျေနပ်ကြချေ။

mjànmà.tə.mjótṵá.lóUN.gə

mə.ṵə̀nəʔ.tɕə.ṵə̀

Myanmar.one.national.all.SUBJ NEG.satisfied.PL.NEG

'According to this act, not all who wished to study were permitted to do so. Therefore all the Burmese people were displeased.'

#### Sentence 9

ထို့ကြောင့်

တက္ကသိုလ်ကျောင်းသားကြီးများက

ဦးဆောင်၍

tʰò.ṵə̀UN

tɛʔkəθò.tɕáUN.ṵá.ṵá.mjá.gə

ʔúshàUN.jwè

this.because

university.school.member.big.PL.SUBJ

lead.SUBORD

သပိတ်မှောက်ခဲ့ကြသည်။

ðəbeiʔ.məuʔ.kʰɛ.ɕə.ðì

almsbowl.overturn.REM.PL.REAL

'For that reason the university student leaders led a strike.'

Sentence 10

ရန်ကုန်တက္ကသိုလ်ကျောင်းသားများသပိတ်သည် အနယ်နယ်အရပ်ရပ်သို့

jàngòUN.tɛʔkəθò.ɕəáUN.ðá.mjá.ðəbeiʔ.θì ʔənɛnɛ.ʔəjaʔjaʔ.θò

Yangon.university.school.member strike.TOP area.various.place.various.to

ပျံ့နှံ့သွားပြီး နယ်ကျောင်းများကလည်း သပိတ်မှောက်ကြပါသည်။

pjaŋaUN.ðwá.bí nɛ.ɕəáUN.mjá.gə.lé ðəbeiʔ.məuʔ.tɕə.bà.ðì

spread.SUBORD area.school.PL.SUBJ.also strike.PL.POL.REAL

'The Rangoon University Students' strike spread out to various districts and wards, and as a result even district schoolchildren went on strike.'

Sentence 11

အမျိုးသားကောလိပ်နှင့် အမျိုးသားကျောင်းများကို တည်ထောင်ကြပါသည်။

ʔəmjò.ðá.kóleiʔ.njìN ʔəmjòðá.tɕəáUN.mjá.gò tìtʰáUN.ɕə.bà.ðì

national.college.and national.school.PL.OBJ establish.PL.POL.REAL

'They established a people's college and people's schools.'

Sentence 12

ထိုကျောင်းများကြောင့် အမျိုးသားစိတ်ဓာတ်များလည်း

tʰò.tɕəáUN.mjá.ɕəáUN ʔəmjòðá.seiʔdaʔ.mjá.lé

this.school.PL.because\_of national.spirit.PL.also

ပိုမိုနိုးကြားဖွံ့ဖြိုးလာပါသည်။

pòmmò.nóɕá.pʰjìNpʰjò.là.bà.ðì

more.awaken.evelop. come.POL.REAL

'Because of those schools, a sense of nationalism was further sparked and evolved.'

Sentence 13

အမျိုးသားစာပေလေ့လာမှုလည်း ပွင့်လန်းလာပါသည်။

ʔəmjòðá.sàpè.lələ.njìN ɸwɪnlán.là.bà.ðì

national.literature.study.NOM.also flourish.come.POL.REAL

'The study of national literature also flourished.'

Sentence 14

ထိုအချိန်မှစ၍

tʰò.ʔəɕəin.njìN.sə.jwé

this.time.from.start.SUBORD

မြန်မာအမျိုးသားတို့သည်

mjànmà.ʔəmjòðá.dò.ðì

Myanmar.national.PL.TOP

အင်္ဂလိပ်အစိုးရကို

ʔìngəleiʔ.ʔəsója.gò

England.government.OBJ

ဆန့်ကျင်ဆန္ဒပြပွဲများ

shàNɕìn.sʰànda.pjaɸwé.mjá

oppose.wish.show.event.PL

အဆက်မပြတ်

ʔəsʰɛʔməpjaʔ

continuously

ဆင်နွှဲကာ

shìnnɸwé.gà

participate.while

လွတ်လပ်ရေးကို တောင်းဆိုခဲ့ကြပါသည်။  
 lu?la?jé.gò táunshò.gé.ḁḁ.bà.ḁi  
 independent.NOM.OBJ demand.REM.PL.POL.REAL  
 'From that time on the Burmese demanded independence and held continuous protest demonstrations against the English government.'

## Sentence 15

ထို့ကြောင့် လွတ်လပ်ရေးအစ အမျိုးသားနေ့ဟူ၍ ဆိုကြပါသည်။  
 tʰò.ḁḁaun lu?la?jé.?əsa ʔəmjóḁḁá.né.ga.hù.jwé shò.ḁḁ.bà.ḁi  
 that.because independent.NOM.start national.day.SUBJ.QUOT.SUBORD say.PL.POL.REAL  
 'That is why we say, "Independence began with National Day."'

## Sentence 16

မြန်မာတမျိုးသားလုံးအား မျိုးချစ်စိတ်ဓာတ် တက်ကြွအောင် လှုံ့ဆော်ပေးသော  
 mjàn.mà.tə.mjóḁḁá.lóun.ʔá mjó.tɕʰiʔ.sei?da? tɛʔ.təwə.ʔàun ʔəunshò.pé.ḁó  
 Myanmar.one.national.all.to race.love.spirit rise.PURP arouse.BEN.ATTR  
 'The Burmese people have been aroused by the love and spirit of the National Day.'

ထိုနေ့ကို အမျိုးသားနေ့ဟူ၍ သတ်မှတ်ခဲ့ကြပါသည်။  
 tʰò.né.gò ʔəmjóḁḁá.né.hù.jwé θaʔmʔaʔ.kʰé.ḁḁ.bà.ḁi  
 that.day.OBJ national.day.QUOT.SUBORD designate.REM.PL.POL.REAL  
 'That day, which caused a spirit of patriotism to be aroused in the entire Burmese nation, has been designated as National Day.'

## Sentence 17

မျိုးချစ်စိတ် နိုးကြားစေခဲ့သော အမျိုးသားနေ့ကို မမေ့သင့်ပါ။  
 mjó.tɕʰiʔ.sei? ní.ḁḁá.zè.gé.ḁó ʔəmjóḁḁá.né.gò mə.mé.θiɴ.bà  
 race.love.mind awaken.CAUS.REM.ATTR national.day.OBJ NEG.forget.should.POL  
 'We should not forget National Day, which sparked our patriotism.'

## Sentence 18

အမျိုးသားနေ့ကို နှစ်စဉ်ကျင်းပကာ မျိုးချစ်စိတ်ဓာတ်  
 ʔəmjóḁḁá.né.gò ɴiʔ.sìɴ.tɛɪɴpə.gà mjó.tɕʰiʔ.sei?da?  
 national.day.OBJ year.every.celebrate.SUBORD race.love.spirit

ထာဝစဉ်ရှင်သန်အောင် ကြိုးပမ်းရမည် ဖြစ်ပါသည်။  
 tʰàwəzìɴ.ʃìɴθàɴ.ʔàun tɕó.bán.jə.mjì pʰjiʔ.pà.ḁi  
 always.pure.PURP strive.must.IRR be.POL.REAL  
 'We should strive to keep this spirit of patriotism forever alive by celebrating National Day each year.'

## 2.2 Discourse units of the text

The discourse's macro-structure consists of a hierarchy of summaries, which at the top-most level is the global summary of the text. Each level of the hierarchy consists of summary units which also function as logical stages in the pragmatic strategy of

communication. The discourse structure of the National Day text follows the typical discourse units proposed as universal for Expository text described by Longacre (1996:36) with a problem-solution-evaluation structure proposed by Hoey (1983). The peak structure is set out in detail in (15) below.

(15) Peak Structure of National Day Text

Peak Structure	stces	Surface features	National structure
Aperture: Definition	1–3	Introduction via Presentational Sentence. Plural, polite, slow	Aperture
Pre-Peak: Problem–Causes	4–9	unmarked plural, polite changed, negative mood	Exposition
Pre-Peak: Problem–Results	10–13	increasing complication of S structure, mixed with lighter S	Developing conflict
Peak (Thematic Peak): Solution	14–15	density of props/participants, verbs of saying, complexity of structure, speed up information, peak S, quote	Climax
Post Peak: Evaluation	16	slow down information, equational clause, repeat quote structure of 15	Final resolution
	17	no plural, imperative mood	
Finis: Admonition (Didactic Peak)	18	no plural, irrealis mood embedded in existence clause	Conclusion

Each discourse unit within the macrostructure is marked by boundary features and displays internal lexical cohesion. Tail–head linkage structurally binds some sentences together as, for example, between sentences 14 and 15 where the last noun ‘independence’ in 14 begins sentence 15. Structural parallelism is another form commonly used in Burmese to rhetorically underline a key point and bind a unit together, while also serving to slow down the text. In the Aperture of the discourse such a parallelism is found between sentence 2 and 3. Here the discourse topic of ‘national day’ is repeated with amplification by deverbal nouns in the same semantic domain – ‘ceremony’ and ‘commemoration’. Such a slowing down of the textual information is a common technique when introducing the discourse theme and may be typical of Burmese expository text. A full study of the types and functions within this discourse must be left for another paper as space will not allow details of these and other structures.

Each discourse unit also has a role or function in the text. Each role is in turn manifest by further structure. For instance, after the Definition of the discourse theme of ‘national day’ in sentences 0–3, we find a Problem unit having an internal structural role of Cause, sentence 4–9, and Result, sentences 10–13. This is followed by a Solution unit, sentences 14–15, and then an Evaluation, sentences 16–18.

The macro-structure of the whole text is illustrated in Figure 1. It features two discourse peaks: a thematic peak and a didactic peak, as seen in the far right columns. The thematic peak relates to the discourse theme and some type of resolution concerning that theme. The didactic peak relates to the teaching function of the text. This expository text has the Problem–Solution form followed by an Evaluation, a pattern typical of Expository

texts (Hoey 1983). The initial sub-unit of Cause within the Problem unit takes the form of a brief embedded Narrative discourse, sentences 4-9. Another embedded discourse is found in the Evaluation unit — this time a Hortatory discourse with its own internal structure which displays the characteristics of command and admonition, sentences 16-18.

**Figure 1:** Macro-units of the National Day text

National Day Text Discourse, Sections, Paragraphs, Logic										
Discourse Type & Structure	Role of Discourse Unit	Embedded Discourse	Discourse Macro structure	Themes	Transitivity	Sections	Section Beginning Sentence and Paragraph	Sentence	Peak Structure - Thematic	Peak Structure - Didactic
Expository  <i>Theme</i>	Definition		Title	Statement of discourse theme: <b>national day</b>	none	none		0	<b>Aperture: Definition</b>	<b>Aperture: Definition</b>
			Introduction		stative & reduced	Day	S 1 P 1 & 2	S1		Didactic peak
			Expansion of Definition					S2-3		
Problem Background	Supporting Arguments: a) Causes	Narrative Discourse	Setting		increased	Burma	S 4 P 3 & 4	S4	<b>Pre Peak: Argument Build-up</b>	Thematic peak
			Inciting Moment					S5-7		
			Developing Conflict					S8		
			Climax					S9		
	b) Results		Expanded setting		reduced	University Strike	S 10-13 P 5	S10		Thematic peak
			New cause					S11		
			Result					S 12		
			Expanded result					S 13		
Solution	Thematic Result		Solution		reduced	Burmese People	S 14-18 P 6 & 7	S14	<b>Peak: Solution</b>	
			Summary					S15		
Evaluation	Admonition	Hortatory Discourse	Theme	Restatement of result New theme: <b>patriotism</b>	reduced via: unrealistic mood			S 16	<b>Post Peak: Evaluation</b>	<b>Pre-Peak</b>
			Command					S17		<b>Peak: Main Point of Discourse</b>
			Admonition					S18		



Each discourse unit has its own structure and boundaries. For instance, the Cause unit is a unit with these boundaries is the fact that it is an embedded narrative discourse, with the typical features of narrative genre – chronological linkage, is actor-focused, demonstrates motion or active verbs, has an inciting moment and a climax of the action. This section lacks the consistent polite particle, which is found in every sentence in the rest of the text, indicating the narrative discourse units of Inciting Moment, Developing Conflict, and Climax are each not statements to someone requiring pragmatic politeness, but about something. Transitivity was also found to be increased in this unit, as discussed below in section 2.2.2.

## 2.2 The textual role of topic in the National Day text

### 2.2.1 Use of NP marker သည် စီ within discourse units

What follows is a survey of the four instances in the National Day text, set out in (16), where သည် စီ appears as a NP marker rather than as a sentence-final verb marker.

(16) သည် စီ as NP marker correlated with discourse units

Sent	Role in Sentence	Role in Text	Corresponding discourse unit
1	Old (known) Information	Introduction of Text Theme, serves as Ground	Theme: Definition (sentences 1–3)
4	Old (previously introduced -Sent 2) Information	Introduction of paragraph theme	Pre-Peak Arguments: Problem Causes (sentences 4–9)
10	Old (previously introduced - Sent 6,8,9) Information	Introduction of Section	Pre-Peak Arguments: Problem Results (sentences 10–13)
14	Old (previously introduced)	Re-establish the discourse theme as Ground	Peak: Solution (sentences 14–15)

NP marker သည် စီ marks the beginning sentence of each of four discourse units of the text, and as such is distributed to coincide with the major divisions of the peak structure. We can interpret the function of NP marker သည် စီ as an initial topic marker identifying the old information that establishes the Ground of that discourse unit. The content marked by topicaliser သည် စီ then serves as the anchor or the reference point upon which the rest of the new information is built within that particular discourse unit.

At the sentence level, the function of NP marker သည် စီ in the National Day text is to establish information assumed by the writer as known to the reader. This type of information is designated old, or established, information.

Burmese tends to follow the universal that old information precedes new information. Sentence 1 presents the topic of the whole discourse — National Day — as the *second* element — new information — after the *first* element, the month and date, which has been marked with သည် စီ. The purpose is to mark out the information which the author assumes

to be resident in the general cultural knowledge of the readership. The same assumption does not follow for the second element. The second element is new information: this is what is salient in Sentence 1.

To reverse the linear sequence of the information in this equational sentence would violate the rules of information structure. Despite being an equational clause, it cannot be reordered in Burmese, as it could in English, to read 'National Day is the 10th tenth day of the waning moon of Tazaungmon.' To do so in Burmese would alter the Topic–Comment structure and change the assumptions about what information is known to the reader, i.e. it would assume that the reader knows what National Day is. This is not the task in hand here: the purpose of this text's discourse is to explain what National Day is and why it should be honored and celebrated.

At the sentence level NP marker သည် *thì* establishes the Ground of the sentence, while at the text level, the function of NP marker သည် *thì* is to establish the Ground at the broader discourse level, upon which the general development and processing of focused information takes place through a discourse unit, in which a series of new informational chunks may be introduced and developed via a series of sentences or paragraphs. The known entity or quality of the Ground serves to establish the context within which newly introduced information should be interpreted, following the Absolutive Ground–Figure gestalt (see (12)). Thus a single NP marker may perform two functions simultaneously, at different textual levels. (17) lists the Ground themes flagged with NP marker သည် *thì* which serve to introduce Figure topics, in the Absolutive gestalt.

(17) Content of Ground and Figure units in the discourse

<i>Sentence</i>	<i>Discourse unit</i>	<i>Ground (theme)</i>	<i>Figure (focus)</i>
1	Theme	Month and date	(9) National Day
4	Problem: Causes	Burma	(9) English subjugation
10	Problem: Results	University student strike	(9) District school children
14	Solution	Burmese People	(9) Independence

The process of establishing the Ground is like opening a general topic file which will be relevant to that section of the text. Within each discourse unit, after the first NP marked with သည် *thì* new focal Figures are introduced. The Figures which are most immediate within each discourse unit are listed as a column in (17).

In each discourse unit, the Ground–Figure framework of textual information progresses along the Expository macrostructural sequence. One of the textual functions of the NP marker သည် *thì* is to establish a new textual Ground: an informational unit within that macrostructure.

## 2.2.2 Use of Marker က *kā* within Discourse Units

Another postposition commonly described as a 'topic marker' is က *kā*. (18) lists the sentences in the National Day text where က *kā* is used explicitly to mark either the agent or the Figure in the Transitive gestalt (11). The first four occurrences of က *kā* are in the discourse unit Problem 'Causes'. This unit, which comprises sentences 4–9, is in fact an embedded Narrative discourse. Each of the NPs subject marked with က *kā* functions as a semantic agent. These sentences are high in transitivity, particularly sentences 5 and 6

which contain overtly marked agent and patient arguments. The marking of these agent–patient pairs with ၵ က (agent) and ၵ ကံ (patient) raises transitivity and heightens drama. The prominence of the embedded Narrative is created by informational focus based on grammatical role, as described in Table 1, Hierarchy of Animacy in Relation to Grammatical and Semantic Roles. The grammatical role of agent as subject is expected in narrative genre, but it is not necessary to specify the agent after first mention, provided the agent continues in that semantic role.

The semantic agent in sentences 5 and 6 of the embedded narrative is ‘the English government’. Following the introduction of this participant in an oblique possessor semantic role in sentence 4, it is striking that it is made explicit as agent in both sentences 5 and 6, rather than being indicated by pronominal or reduced reference. Furthermore, it is not technically necessary for the agent to be marked explicitly with ၵ က, given that the semantic patient is marked by ၵ ကံ. Repetition of the same NP in full and marking it ၵ က in the following sentence is exceptional. The norm would be for explicit mention to fade into some oblique role or into zero anaphora (as happens in sentence 7). The repetition has the force of rhetorically marking ‘the English government’ as the source of force, the aggressor. As a textual device, this grammatical use of ၵ က iconically mirrors an interpretation of the real-life, non-textual context. The drama of this tension is heightened by the increased transitivity caused by overtly marking the animate patient or victim (the Burmese people) with ၵ က. The effect of the heightened transitivity is to shift the Ground–Figure information gestalt from the Absolutive configuration (Ground–Figure) of sentence 4 to a Highly Transitive configuration (Figure–Ground).

(18) Distribution of ၵ က in relation to peak segments

<i>stce</i>	<i>Position in Peak structure</i>	<i>Agent (ၵ က)</i>	<i>Patient (ၵ ကံ)</i>
5	Pre-Peak: Problem–Causes	British govt	Burmese people
6	Pre-Peak: Problem – Causes	British government	University
8	Pre-Peak: Problem – Causes	Burmese people	(zero)
9	Pre-Peak: Problem – Causes	University student leaders	(strike) [unmarked]
10	Pre-Peak: Problem – Results	District school children	(strike) [unmarked]
15	Peak: Solution	National Day	Beginning of independence

The strengthened transitivity iconically imitates the polarisation of political forces (agent–patient as oppressor–oppressed). The discourse participant in the ၵ က role is in a position of power, while the ၵ ကံ role identifies the semantic undergoers and links together those parties opposed to the British: the Burmese people (S8), university student leaders (S9) and district school children (S10).

In sentence 8, the power relations of the entity marked with ၵ က change. Here the context is a power struggle in which the winner — ‘the Burmese people’ — becomes the overtly marked sentential agent. However ၵ က marks not only semantic agent, but also semantic experiencer, the one affected by his own agency, as with the verb ‘displeased’. A range of semantic roles may be marked with ၵ က: agent, experiencer, instrument, source.

Finally to map the categories of informational status on the analysis of ၵ က we notice that in sentence 8 ‘the Burmese people’ is marked by all three informational devices: *information status* and both types of *informational focus*. In terms of relative weight (see

(10)), the agent in sentence 8 has maximum weight by being agent and being promoted rightward to the focus position next to the predicate.

In sentences 8, 9 and 10, there is a build-up of agents marked with ကံ ကာ denoting parties on the 'Burmese' side of the struggle introduced in sentence 6. Sentence 8 has 'the Burmese people', sentence 9 has 'the university student leaders' and sentence 10 'the district school children'. The agents in these three sentences, each marked with ကံ ကာ, intensify from the general to the specific, conveying a sense that power on the Burmese side is strengthening. Marking with ကံ ကာ reinforces agency and power, and also signals solidarity between the agents thus marked. Interestingly, there is no overt patient paired with these 'Burmese' agents. The effect of this is to reduce tension and reduce transitivity. The absence of an overt patient reduces the degree to which an agent's power is sensed as oppression.

The last sentence in which ကံ ကာ is found is sentence 15, which marks the end of the ascent to the discourse Peak. Sentence 16 begins a new discourse unit: the Post-Peak phase of Evaluation. The phrase 'National Day' in sentence 5, which is marked with ကံ ကာ is inanimate, unlike the earlier phrases marked with ကံ ကာ. However, it is all the more weighty for returning to the theme of the whole discourse - National Day.

Where ကံ ကာ marks an inanimate object, it lacks the typical features of transitivity-kinesis, volitionality, punctuality, agency, affectedness, or individuation (Hopper and Thompson 1980) and thus is interpreted as non-transitive. With an inanimate noun, ကံ ကာ is interpreted not as source of power or volitionality, but as temporal or spatial source with a reading in English as 'from'. In sentence 15, these typical ကံ ကာ functions do not make sense except to reinforce the semantics of the temporal nominal 'the beginning of independence'. More significantly for discourse linguistics, ကံ ကာ in sentence 15 functions at the discourse Peak to mark the resumption of the discourse topic 'National Day'. It is therefore functioning here mark the summit of the Peak.

### 2.2.3 Discourse function of *kui kò* in relation to topic

The patient-marker ကို ကို is involved in the marking of topic in two ways, both of which are indirect in this text. The first function of ကို ကို is to show positional information focus as the normal occupant of Position 1 (see (10)). In the last three sentences of the text, ကို ကို marks the return of the textual theme 'the day', or specifically, 'National Day'. The repeated pattern of ကို ကို with the same lexical content or referent reinforces the whole discourse topic in the Post-Peak unit of Evaluation.

The final section of the discourse is actually an embedded Hortatory discourse and demonstrates a pragmatic shift from explaining to preaching. An admonition or moral when tagged onto the end of an expository text often serves as its conclusion or Post Peak. Burmese typically signals pragmatic functions toward the end of a linguistic unit – the end of the sentence, paragraph or discourse (Hopple, 2003). A secondary discourse Didactic Peak functioning independently from the Thematic Peak (see Figure 1) arises at the end of the discourse. Many languages use varying strategies for similar didactic functions, so plotting a separate peak has been found to be useful to understand particle usage. The Post-Peak Admonition has prominence by its final position, and contrasts with the preceding text by employing a different grammatical mood – negative imperative and irrealis. The

information structure here is Ground-Figure, the Absolutive Gestalt, and is manifest by a series of overtly ၵိုကဲ-*kò*-marked nominals.

A binary view of information structure has been presented here. When the complement of ၵိုကဲ, that is ၵိုကဲ is used to indicate an argument as Figure, then ၵိုကဲ, plays a background role by strengthening distinctness of the opposite side of the gestalt. Depending on which gestalt one uses, Transitive or Absolutive Sentence Gestalt (see (12)), ၵိုကဲ has a systemic role in topicality.

### 3 Conclusion and future research

The topicalising and thematic functions of postpositional particles သည် *thì*, က *kà* and ၵိုကဲ *kò* in the literary style Burmese text 'National Day' have been examined in the context of discourse analysis. These particles were found to function beyond the sentence as discourse stage markers of argument structure: သည် *thì* marks the background theme of discourse units, while က *kà* and ၵိုကဲ *kò* mark, respectively, dominant versus subordinate social status of participants, and signal role reversals within an embedded narrative discourse. They also signal a shifts in the Figure–Ground gestalt from Absolutive to Highly Transitive. At the discourse Peak က *kà* was found to highlight discourse topic and in the Post-peak of an embedded Hortatory discourse ၵိုကဲ *kò*-marked background discourse topic.

A sentence perspective of Burmese grammar makes particle selection of sentential topic and theme appear random. Discourse considerations demonstrate a motivated, cognitively perceptive, and hopefully language-learner accessible role of what has been labeled topic in Burmese.

Future research of discourse-based topicalisation in Burmese utilising the present discoveries and hypotheses is to be encouraged, particularly by native speakers of Burmese. Analysis based on a single text (as is the case in this study) is valid in text linguistics, but ample studies are required to firmly ground particle functions across textual genre. Studies may be undertaken of a particular particle in a specific genre, or a genre as a whole. The great gulf between Formal and Colloquial Burmese is most obviously seen in the use of particles. Further research is needed to compare the functions of particles, in particular the role of ဟံ *hà* and က *kà* in Colloquial Burmese as opposed to သည် *thì* and က *kà* in Formal Burmese.

The current study is a first contribution to text-linguistic studies of Burmese particles. It is the beginning of what should be a productive and enlightening linguistic adventure.



# 10 *Discourse particles in Burmese*

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## 1 Introduction

‘The grammar of Burmese is almost entirely a matter of the correct use of particles.’  
Stewart (1955)

It is generally known that in learning Burmese, or in the endeavours of speakers of Burmese to acquire a better understanding of the way the Burmese language functions, one of the greatest difficulties seems to be the heavy use of lexical items such as က *kā*, လေ *lè*, ပေါ့ *páw*, ရယ် *jè*, usually referred to as *particles*. While their grammatical functions have been extensively described in recent reference grammars, such as Okell and Allott’s (2001) *Dictionary of grammatical forms* and the *Manuel de Birman* Vol. 2: *Grammaire Birmane* (Bernot et al. 2001), discourse studies on spoken Burmese are still very rare. Although the situation-dependent nature of these particles has been taken into account in the current literature, there is still a need for a more systematic description of Burmese discourse structures through the use of these particles. This study therefore is born of my intention to identify discourse functions that are typically associated with a set of particles in Burmese, as a step toward a systematic account of Burmese discourse structures.

Using a corpus-based approach, within the framework of discourse analysis, this study examines two particles လှည့် *lé* and ပေါ့ *pə* in natural spoken and written Burmese data. My objective is to demonstrate that these particles serve important discourse functions that have not been included in reference grammars; that their semantic values are context-dependent; and, in addition to their being typically associated with the spoken style of Burmese,<sup>1</sup> that their use may also be genre-specific. The corpora include eight texts from different genres of spoken Burmese, namely

- (1) dialogues in fiction;
- (2) pre-scripted speech in radio plays;
- (3) personal narratives, and

<sup>1</sup> By texts in spoken style, I mean narratives or dialogues, whether they are delivered in a spoken or written medium. This study focuses on spoken style only and excludes expository prose style written texts.

- (4) personal interviews.

## 2 Particles in Burmese

Burmese particles are bound or semi-bound morphemes which are attached postpositionally to lexical units such as nouns and verbs, or larger syntactical units such as clauses or utterances. Some particles are obligatory for indicating grammatical relations between words, clauses or utterances, and therefore often receive grammatical labels such as *subject marker*, *verb attribute marker*, *sentence-final particle*, and so on. Hopple (2003) observes that 'particles have been classified according to their distribution within grammatical constructions, and there is a wide spectrum of particle function between highly semantic to wholly grammatical'. While it is true that Burmese particles 'carry almost all the grammatical information contained in a sentence' (Okell & Allott 2001), a large number of particles seem non-obligatory<sup>2</sup> as they do not have any particular syntactical function, and they do not affect the propositional or conceptual meaning of utterances. Yet, these particles are neither semantically dispensable nor redundant in the discourse, as they convey important information regarding the speaker's attitude towards the message itself, the speech act itself, the speaker's interlocutor or the potential audience. A close examination of these particles in language-in-use reveals that Burmese particles have both syntactical and discourse functions: they often serve an affective function rather than a referential, denotative or cognitive function alone in a discourse, and their interpretation is usually interactionally accomplished. Particles are typically polysemic, and many of the particles do not have one to one equivalent in English, as their semantic values are often highly context-dependent.

For example, the context-dependent nature of particles can be illustrated with sentences that have been made up using the particle က *kā*, which is one of the most studied particles in Burmese linguistics. As can be seen in the examples below က *kā* is equivalent to English 'from' in (1); it is a subject marker, noun marker or marker of agent as it identifies the subject noun or agent of the sentence in (2); and it is a topic marker in (3), where it identifies the topic of the whole discourse, rather than the subject noun in one sentence alone.

- (1) ဦးအုတ်ခဲ      အင်္ဂလန်က      ပြန်လာပြီ။  
 ʔúʔouʔkʰé    ʔìŋgəlàn.gā    pjàn.là.bi<sup>3</sup>  
 Mr Okell    England.from    return.come.perf  
 'Mr Okell is (now) back from England.'
- (2) ဦးအုတ်ခဲက      အင်္ဂလိပ်လူမျိုးပါ။  
 ʔúʔouʔkʰé.gā    ʔìŋgələiʔ.lùmjǝ.bà  
 Mr Okell.SUBJ    English.race.POL  
 'Mr Okell is English.'

<sup>2</sup> It is debatable whether some of the particles are syntactically obligatory or not, but this issue is beyond the scope of this study.

<sup>3</sup> The transcription of Burmese follows the conventions used elsewhere in this volume.



- (3) ဦးအုတ်ခဲက အင်္ဂလိပ်လူမျိုးပါ။  
 ʔúʔouʔkʰé.gə ʔìngəleiʔ.lùmjò.bə  
 Mr Okell.SUBJ English.race.POL

အင်္ဂလိပ်လူမျိုးဆိုပေမယ့် ဗမာလိုကောင်းကောင်း ပြောတတ်တယ်။  
 ʔìngəleiʔ.lùmjò.sʰò.bèmg bəmà.lò.káun.gáun pjó.daʔ.tè  
 English.race.say.although Burma.fashion.good.ADV<sup>REDUP</sup> speak.can.REAL

ဗမာပြည်မှာလည်း အကြာကြီး နေဖူးတယ်။  
 bəmà.pji.mə.lé ʔətɛàdʒí nè.bú.dè  
 Burma.country.in.also long time live.EXP.REAL

'Mr Okell is English. Although he is English, he can speak Burmese well.  
 (He) has also lived in Burma for a long time.'

These examples suggest that in order to make an accurate interpretation of the semantic value of particles, we need to go beyond the sentence level, and study their functions at a discourse level. This study attempts to demonstrate that, besides the syntactic functions described in reference grammars, some particles may serve important discourse functions, and therefore may be categorised as discourse markers.

### 3 Discourse markers

Discourse is 'language which has been produced as the result of an act of communication', and it refers to 'larger units of language such as paragraphs, conversations, and interviews' (Richards et al. 1993). *Discourse marker* is a general term that refers to lexical items used in discourse such as English *well, but, oh, y'know, like*, German *doch, halt, ja, eben*; French *donc, alors, eh bien, bon*; Turkish *yani, i te, ey, ya* (Ozbek 1995) or Norwegian *vel, vissti, nok, da* (Jucker 1993). The concept is a fuzzy one, as there is no consensus on the choice of term: *discourse markers* are also known as 'discourse particles' (Schourup 1985), 'discourse connectives' (Blakemore 1988), 'pragmatic markers' (Fraser 1996), 'interactional particles' (Maynard 1993), or 'particles of rapport' (Uyeno 1971) in the existing literature on discourse studies. However, this diversity of terminology simply reflects the wide range of linguistic approaches adopted by different researchers to describe lexical items that serve various kinds of discourse functions, and therefore the choice of label is only a definitional issue that does not affect the content of the present study. The term 'discourse marker' (henceforth DM) is chosen here, suggesting a broad category which subsumes many discourse functions, including 'discourse connectors, intimacy signals, topic-switchers, hesitation markers, fillers, and attitude markers, hedging devices', and so on (Jucker & Ziv 1998).

Particles in Burmese may be considered discourse markers because they share common features of discourse markers that have often been discussed in the current literature. Among them, I will cite a few that may be applicable to my description of Burmese particles as discourse. Discourse markers are syntactically detachable (Schiffrin 2001), yet their distribution is not random, and they are not freely interchangeable (Wierzbicka 1986). Discourse markers cannot be studied in the absence of context, as they pertain primarily to language-in-use, rather than to language structure (Wierzbicka 1986), and their more

specific interpretation is negotiated by the context (Fraser 1990). Discourse markers convey *procedural* meaning rather than *conceptual* or *propositional* meaning: they do not affect determination of truth conditionality, nor do they contribute to propositional content (Fraser 1990; Jucker 1993; Ochs 1973). Discourse markers have an *affective* or *emotive* (rather than a *referential* or *denotative*) function (Jucker 1993; Maynard 1993).

#### 4 The data corpus

The corpus for this study, profiled in (4), consists of some 20,000 syllables<sup>4</sup> of natural spoken Burmese, which is drawn from eight texts in four different genres. All the spoken data were collected randomly over the last few years, were recorded by various individuals. The data in written form are drawn from various publications. Further descriptions of the data are listed in Appendix A.

This is a small corpus, so it is not possible to report findings in conclusive detail. Prosodic features are excluded from the transcription and analysis. In general, the analysis suggests that certain discourse features are associated with the use of particles လည်: lé and ပေါ့ ပဲ့ in different types of discourse. This finding may improve our understanding of discourse-marking particles of spoken Burmese in general. The objective of this study is simply to identify possible discourse features of the particles, as suggested by actual data, that may extend beyond their description in existing grammars. The analysis of the data is both quantitative as well as qualitative.

##### (4) The text corpus

<i>text</i>	<i>genre</i>	<i>syllables</i>
1 သုခ - သူ့ဘက်ကိုယ့်ဘက် Thu Kha - <i>His Side is my Side</i>	written, fictional dialogue	2,432
2 နုနုရည်(အင်းဝ) - ပြည်သူလူထုကို ကိုယ်နဲ့ထပ်တူ Nu Nu Yi (Innwa) - <i>You're Just Like the People</i>	written, fictional dialogue	827
3 မစန္ဒာ - သံသရာ Ma Sanda - <i>The Cycle of Rebirth</i>	written, fictional dialogue	1,761
4 ဖေဖေအိမ်ထောင်ပြုတော့မယ် <i>Daddy's getting married</i>	scripted, spoken radio- play dialogue	1,855
5 ပြည်တွင်းဖြစ်ကိုကို <i>Home-grown Ko Ko</i>	scripted, spoken radio- play dialogue	2,711
6 Two friends - one recounting a feature film to the other	spoken narrative	4,435
7 Four family members - recounting the plot of	spoken narrative	4,480

<sup>4</sup> It is difficult to apply the notion of 'word' to Burmese, which uses a syllabic script in which 'word' divisions are largely optional and a matter of personal preference. I am therefore quantifying the texts in the Burmese corpus by 'syllable-count' rather than 'word-count'. While corpus-analysis in many other languages has been commonly done through the use of computerised concordancing tools, since it was impossible to use these tools on Burmese text (because of the syllable-division problem), syllables were counted by hand and the particles to be examined were isolated manually.

a film to a visitor	
8 Two people – one asking for opinions about a personal interview radio station	2,369
Total	20,870

#### 4.1 လည်းလဲ

The particle လည်းလဲ has been variously described as a suffix meaning ‘also, as well, too, in addition’ (MLC 1993, Okell and Allott 2001). It is also used to link parallel noun phrases with the meaning ‘not only ... but also’ or ‘both...and’ as in (5)–(7):

- (5) စကားပြောလည်းကောင်း၊ စာရေးလည်းကောင်း  
 sàgá.pjǝ.lé.káun sà.jé.lé.káun  
 speech.talk.also.good script.write.also.good  
 ‘(He’s) not only good at speaking but also at writing.’ (MLC 1993)
- (6) ကဖီလည်း ကြိုက်တယ်၊ လက်ဖက်ရည်လည်း ကြိုက်တယ်။  
 kàpʰi.lé tɕaiʔ.tè ləpʰɛʔjè.lé tɕaiʔ.tè  
 coffee.also like.REAL tea.also like.REAL  
 ‘I like both tea and coffee.’
- (7) ရန်ကုန်မှာလည်း မရဘူး၊ မန္တလေးမှာလည်း မရဘူး။  
 jàngòun.ŋà.lé mə.jà.bú, mǎndələ.ŋà.lé mə.jà.bú  
 Yangon.in.also NEG.get.NEG, Mandalay.in.also NEG.get.NEG  
 ‘We couldn’t get any either in Yangon or in Mandalay.’  
 (Okell and Allott, 2001)

Okell and Allott’s (2001) *Dictionary* includes a separate entry for လည်းလဲ preceded by the noun-marking particle က ká, glossing the whole ကလည်းလဲ ká.lé as ‘as for’. While ကလည်းလဲ ká.lé emphasises the topic of the sentence, the လည်းလဲ လဲ component can sometimes retain the meaning ‘also’ as in (8), where ချမ်းစိုင်းစိုင်း is the verbal adjective ‘be cold.’

- (8) ပတ်ဝန်းကျင် မြူတွေ့ဆိုင်းနေတယ်၊ ချမ်းကလည်းလဲ ချမ်းတယ်။  
 paʔwúnkəɪn mjù.dwè.sʰáɪn.nè.dɛ, tɕʰán.gá.lé tɕʰán.dè  
 surroundings mist.PL.hang.CONT.REAL, cold.ká.lé cold.REAL  
 ‘It was misty, and cold as well.’

With these meanings, ကလည်းလဲ ká.lé occurs very frequently in the corpus, shown in (9). A close examination of the data indicates that ကလည်းလဲ ká.lé also occurs with a discourse-marking function, when marking pronouns or kinship terms used as pronouns.

(9) Occurrence of ကလည်း *kə.lé* in the corpus

text	No. of occurrences	as DM	syllables	No. of DM per 1000 syllables
1	13	5	2432	2.06
2	4	0	827	0.00
3	9	3	1761	1.70
4	20	4	1855	2.16
5	28	9	2711	3.32
6	13	0	4435	0.00
7	120	0	4480	0.00
8	29	1	2369	0.42

When ကလည်း *kə.lé* occurs in this collocation, it is usually in response to the utterance in the previous turn. The speaker seems to be expressing some kind of self-justification, self-defence or reproach, as illustrated and contextualised in examples (10)–(12). More examples from the data may be found in Appendix B.

- (10) အမေကလည်း ပြောလိုက်ရင် ဒေါချည်းပဲ၊  
 ʔəmè.gə.lé pjó.laiʔ.jin dó.dzi.bé  
 mother.kə.lé say.just.if anger.only.EMPH  
 ‘Oh Mother, you’re always angry when you speak!’

Text 1: son to mother in defense to her reproach that he has given too much priority to his own wife and her family.

- (11) ဟင် ဖေဖေကလည်း ဒီအသက်အရွယ်ကြီးရောက်မှ အိမ်ထောင်ပြုမယ်လို့။  
 hin phèphè.gə.lé di.ʔəθɛʔʔəjwè.dzi.jauʔ.mə ʔèindàun.pju.mè.lə  
 oh! daddy.kə.lé this.age.big.arrive.only-when marriage.do.IRR.QUOT  
 ‘Oh, Daddy, so you’re only getting married at this old age?’

Text 4: daughter to father who has just announced that he is going to get married in order to be better looked after.

- (12) သွယ်ကလည်းဟာ မေမိုးကို ထည့်လိုက်ပေါ့၊  
 θwè.gə.lé.hà mèmó.gò tʰɛ.laiʔ.pɔ  
 Thweh.kə.lé.TOP May Moe.OBJ insert.just.EMPH  
 ‘[For goodness’ sake,] Thweh, just send May Moe (in your place).’

(From Text 5: Khin Hnaung is telling Thweh, reproachfully, and in an attempt to protect her, that Thweh does not need to accompany her boss, a male foreigner, to a dinner, but instead could very well send another employee, May Moe.)

As can be seen from the frequency of discourse-marking ကလည်း *kə.lé* in (9) and the contexts described in (10)–(12), ကလည်း *kə.lé* occurs with the discourse meaning of ‘self-justification’, ‘self-defence’ or ‘reproach’, with a higher frequency in dialogues between close friends or family members than in narratives and in personal interviews, perhaps because conflicts are not typically a part of narratives and interviews, where the motivation for speech is straightforwardly to impart or exchange information. The interlocutor may

interrupt when there is a need for information to be checked, or, at times, simply to establish good listenership.

The conclusion to be drawn from these data is that the use of ကလည်း *kə.lé* with this particular discourse meaning may be genre-specific. Among the five texts of fiction (namely Texts 1–5), of which three are in written mode and two in spoken mode, variation in the frequency suggests that the use of ကလည်း *kə.lé* with this discourse function is context-dependent. Where there is no apparent reason for conflict between the two interlocutors, (e.g. in Text 2, which consists mainly of narrative with very little dialogue), this discourse function is not required. Furthermore, Text 3 has the fewest tokens of ကလည်း *kə.lé* with this discourse function because the dialogues in this text consist mainly of the giving and seeking of information or suggestions, except for the part where the husband and the wife enter into a disagreement as in (13). Here, the wife reproaches her husband for suggesting that they should start consuming the Nescoffee (a Burmese brand of instant coffee) that they have just received as a gift; she is inclined to think that they should offer such a precious item as a gift to the doctor who is taking care of her mother, instead of drinking it for their own pleasure. Her reproach is provoked by her husband's lack of understanding and inability to foresee advantages they could gain from such an opportunity.

- (13) ကိုကိုကလည်း                      ခက်တော့တာပဲ၊  
       kòkò.kə.lé                        kʰɛʔ.tɔ̌.tè  
       KoKo.kə.lé                        difficult.after\_all.REAL<sup>NOM</sup>.EMPH  
       ‘[For goodness’ sake], Ko Ko, now you’re being difficult.’ (Text 3)

Texts 1, 4 and 5, all with relatively frequent use of discourse-marking ကလည်း *kə.lé*, consist of reproaches by individuals, and the subsequent defensive utterances of those being reproached. For example, in Text 1 a daughter and son respond to their mother's reproach for each of them giving favours to their in-laws, and a husband reproaches his wife for practising double standards with their son and daughter. In Text 4, a father and his siblings either justify their own actions or blame each other for not taking care of their aging father. In Text 5, a girl reproaches her friend for not being modern enough in her clothing and behaviour.

I have demonstrated the discourse function ‘self-justification’, ‘self-defence’ or ‘reproach’ associated with the use of ကလည်း *kə.lé*. There are other discourse meanings of လည်း *lé* alone (without က *kə*) in different collocations. For example, while ကလည်း *kə.lé* is not typically used in narratives for the discourse function in question, the high frequency of လည်း *lé* tokens in Text 7 suggests that this may be a prominent feature of spoken narrative. Notably, within the total of 120 tokens, လည်း *lé* occurs consistently in the patterns in (14):

- (14)                      VERB လည်း *lé* VERB  
       or                      VERB<sub>1</sub> လည်း *lé* VERB<sub>1</sub> VERB<sub>2</sub>

In these structures, လည်း *lé* serves as a discourse connector ‘and when verb happened...’, picking up the material from the last element in the narrative to introduce the next element, as in (15) and (16):

- (15) ပြောလည်း ပြောရော  
 pjɔ̃.lé pjɔ̃.jɔ̃  
 say.also say.as-for  
 ‘And as [she] said it...’
- (16) မော့လည်း မော့ကြည့်ရော  
 mɔ̃.lé mɔ̃.tɕj.jɔ̃  
 look-up.also look-up.look.as-for  
 ‘And when [he] looked up...’

The selection of this structure over other common structures to express ‘as/when VERB’ such as VERB တဲ့အခါ tɕ.ʔəkʰà, or VERB တော့ tɔ̃ may be determined by specific motives within the discourse to solicit more involvement from the listener, or by a wish to dramatise the story. On the other hand, it may be simply idiosyncratic. These questions may perhaps be answered by investigating larger corpora.

#### 4.2 ပေါ့ ပဲ့

The ‘emphatic’ particle ပေါ့ ပဲ့ is one of the most commonly used particles in spoken Burmese, and it appears with high frequency in all genres represented in the corpus, as shown in (9). ပေါ့ ပဲ့ is described in reference grammars as a ‘particle suffixed to a verb as emphasis’ (MLC 1994) and as a ‘sentence-final phrase particle’ with the meanings ‘of course, by all means, naturally, obviously; presumably, no doubt, I suppose; you know, let’s say, I mean’ (Okell & Allott 2001:122). Given the high frequency of ပေါ့ ပဲ့ tokens in the data, it is not possible to list all its occurrences. Here in (17) some quantitative information about the data is provided; only selective examples drawn from the data will be included in the analysis.

#### (17) Occurrence of ပေါ့ ပဲ့ in the corpus

text	No. of occurrences	syllables	No. per 1000 syllables
1	8	2,432	3.29
2	1	827	1.21
3	4	1,761	2.27
4	7	1,855	3.77
5	18	2,711	6.64
6	69	4,435	15.56
7	105	4,480	23.44
8	56	2,369	23.64

The data reveal some important discourse features associated with the use of particle ပေါ့ ပဲ့ in spoken discourse, discussed below.

When ပေါ့ ပဲ့ is used in utterance-final position, typically followed in narratives in this corpus by one of the two discourse-marking ‘concessive’ particles နော် nò or လေ lè, the speaker seems either to be checking the listener’s comprehension, or soliciting the

interlocutor's involvement in the narrative process. As examples (18)–(21) demonstrate, ㄹㅇ pɔ̃ may be translated into English as 'you know', 'so, naturally', 'let's say', etc., depending on the context.

- (18) ဒါရောင်းတာ    မဟုတ်ဘူးပေါ့လေ။  
dà.jáun.dà                                         mā.houʔ.pʰú.bɿ.lè  
that.sell.REAL<sup>NOM</sup>                              NEG.be.NEG.p₂.OK?  
'He was, like, I'm not selling them, you know?'

(From Text 6: Lwin Moe, the male protagonist, wanted to buy sugar-cane sticks, but was told that they were being distributed free of charge.)

- (19) အဲဒါနဲ့ လွင်မိုးကလည်း ဝမ်းသာအားရပေါ့နော်။  
 ?èdàŋ lwinmó.gà.lé wúnthá.ʔájá.bz.nò  
 thereupon LwinMoe.SUBJ.also pleased.encouraged.p2.OK?  
 ‘So then Lwin Moe was, like, really delighted, you know.’

(From Text 6: Lwin Moe has been told that he can eat as many oranges as he likes, when caught picking them from a plantation.)

- (20) အက်ဒီဒ်                      ဖြစ်သွားတာပေါ့နော်။  
 ʔeʔsɪdɪŋ                      pʰjiʔθwá.dà.pɔ̌.nò  
 accident                      take place.REAL<sup>NOM</sup>.EMPH.OK?  
 ‘So [let’s say] there was an accident, right?’

(From Text 7: The narrator is making an assumption about a protagonist who was injured, but doesn't remember/understand exactly what happened.)

- (21) ကလွဲစားချေတဲ့    သဘောမျိုးနဲ့ပေါ့။  
kə̀lɛ́ʒá.tɕʰè.d̥ɔ̌    θabó.mjò.nɛ.bɔ̌  
revenge.wreak.REAL<sup>ATTR</sup>                              intent.type.with.EMPH  
'It was done as a way of getting even, you know.'

(From Text 7: The male protagonist has tried to seduce the sister of his former fiancée's husband, after the fiancée dissolved her engagement with him.)

The context-dependent use of ပေါ့ပဲ့ and its collocational distribution in the discourse, suggests that there may be other discourse meanings associated with different collocations with ပေါ့ပဲ့. For example, it might be possible to distinguish between the meanings and discourse functions of ပေါ့နော် ပဲ့.နဲ and ပေါ့လေ ပဲ့.လဲ. Using corpus analysis, we can try to determine if each collocation is likely to occur in certain types of contexts, or at certain points of discourse. This is an unexplored area of investigation for future research in Burmese discourse studies.

The particle ပေါ့ ပဲ့ also appears with a high frequency in Text 8, the personal interview. It occurs either in utterance-final position, or after short phrases such as တကယ်လို့ *təgə̀lɔ* 'really', or co-occurs with words used when the speaker is hesitating, such as *ဟို* *hò* 'that', *အဲလို* *?élo* 'like that', or *ဟိုဥစ္စာ* *hò.ʔou?sà* 'that thing'. Naturally, people often express opinions during personal interviews, and ပေါ့ ပဲ့ seems to have the effect of toning down claims or assumptions so as not to appear too assertive, as in (22). In (23), the interviewer

is trying not to appear too imposing in soliciting the interviewee's opinions, displaying the modesty that is considered polite in Burmese culture.

- (22) ကျွန်တော်တို့ နိုင်ငံရဲ့ အနေအထားတွေနဲ့ ဟိုဥစ္စာနဲ့  
 tʃənə̀dɔ̃ nàinŋàɴ.jɛ ʔənèʔtʰá.dwè.nɛ hò.ʔouʔsà.nɛ  
 our country.POSS situation.PL.with that.thing.with

နှိုင်းယှဉ်လို့ရတာပေါ့  
 ။áinʃin.lɔ̃jɔ̃.dà.bɔ̃  
 compare.can.REAL<sup>NOM</sup>.EMPH

'That bears comparison with the situation in our country you know.'

(Text 8)

- (23) အကိုအတွက်က တကယ်လို့ပေါ့ ပြောရမယ်ဆိုရင် ဘယ်ဟာ ပြောမလဲ အကို။  
 ʔəkò.ʔətweʔ təgèlɔ̃.bɔ̃ pjɔ̃.já.mè.sʰò.jin bɛ̀.há pjɔ̃.mə.lé ʔəkò  
 brother.for really.pɔ̃ say.must.IRR.say.if which.thing say.IRR.Q brother  
 'So for you, if you really had to say, what would you talk about?'

(From Text 8: interviewer trying to solicit the opinions of the interviewee – addressed as 'brother' – in a radio program.)

As discussed above, ပေါ့ ပဲ့ typically occurs in phrases where the speaker is hesitating. (24) is list of phrases in the corpus containing ပေါ့ ပဲ့ as a hesitation marker, filler, or hedging device.

(24) common phrases collocating with ပေါ့ ပဲ့.

ဟိုပေါ့ hò.bɔ̃	that
ဒီပေါ့ dī.bɔ̃	this
အဲလိုပေါ့ ʔé.lò.bɔ̃	like that
အဲဒီပုံစံမျိုးပေါ့ ʔédi.pòunzàɴ.mjɔ̃.bɔ̃	in this way
အဲလိုပုံစံမျိုးပေါ့ ʔélò.pòunzàɴ.mjɔ̃.bɔ̃	in that kind of way
အဲဒီပုံစံမျိုးတွေပေါ့ ʔédi.pòunzàɴ.mjɔ̃.twè.bɔ̃	in these sorts of ways
အဲဒါမျိုးတွေပေါ့ ʔéda.mjɔ̃.dwè. bɔ̃	in those kinds of ways
တကယ်လို့ပေါ့ təgèlɔ̃.bɔ̃	really, in actual fact
ဟိုဥစ္စာပေါ့ hò.ʔouʔsà.bɔ̃	so, after all
ဟိုဥစ္စာတွေပေါ့ hò.ʔouʔsà.dwè.bɔ̃	so, after all, well, erm
ဟိုဟာပေါ့ hò.hà.bɔ̃	so, well, erm
အတ္ထုပ္ပတ္တိပေါ့ ʔaʔtʰouʔpaʔti.bɔ̃	a biography indeed
မမခိုင်ကိုပေါ့ məmákʰàin.bɔ̃	Ma Ma Khine indeed

In addition, the varying frequency of ပေါ့ ပဲ့ tokens in the different genres of texts set out in (17) suggests that the use of ပေါ့ ပဲ့ is genre-specific. It occurs with a higher frequency in Texts 6–8, which comprise unplanned, spontaneous speech such as personal interviews and narratives. While dialogues in fiction or in scripted speech usually imitate naturally-occurring dialogues, they may still lack some of the features of spontaneous speech such as



hedging devices. This may explain why ပေါ့ ပဲ့ is absent or less frequent in such texts. It should be noted, moreover, that ပေါ့ ပဲ့ may also be topic-sensitive: in Texts 1–5 the participants are reproaching each other, defending themselves, or exchanging information and consequently, there is not much need or room for modesty and consideration for others, another reason for the absence or lower frequency of ပေါ့ ပဲ့.

The conclusion is that in spoken discourse ပေါ့ ပဲ့ is likely to have one of the following discourse functions: checking comprehension, soliciting involvement from the interlocutor, or toning down the presentation of an opinion or interpretation. In addition the use of ပေါ့ ပဲ့ may be genre-specific and topic-sensitive.

## 5 Conclusion

Adopting a corpus-based approach within the framework of discourse analysis, I have examined the discourse features of two particles, လည်း: *lè* and ပေါ့ ပဲ့, in spoken and written colloquial Burmese. The collocation ကလည်း: *kə.lè* after nouns or pronouns may express self-justification, self-defence or reproach by the speaker. The use of ကလည်း: *kə.lè* seems to be specifically characteristic of dialogues in the corpus which involve conflict and disagreement between close friends or family members. The particle ပေါ့ ပဲ့, on the other hand, may be used as a hedging device when a speaker is trying to tone down claims and interpretations to maintain modesty and humbleness, qualities highly valued in Burmese culture. The use of these particles in the present corpus is found to be context-dependent, topic-sensitive, and genre-specific.

With this study, I have sought to demonstrate that certain particles can express discourse meanings in Burmese, and therefore also be classified as discourse markers. Their discourse functions, however, are often overlooked when they are described in reference grammars. There is certainly a need for further study of discourse in Burmese.

## Appendix A: Brief description of the content of the texts in the corpus

### *Text 1.*

Author: Thukhaသူစာ မဃက<sup>၁</sup>

Title: *His Side is my Side* သူ့ဘက်ကိုယ့်ဘက် မယူမလဲ? *kəbɛ?*

Text type: written, fictional dialogue

Protagonists: nagging mother, daughter, son, a rather submissive father.

Three sets of dialogues and a few short narratives.

Dialogue between mother and daughter: mother is telling her how she should look after her own family instead of her in-laws, and preaching that wife has a right to all the husband's earnings.

Dialogue between Mother and Son: mother is yelling at him because he's giving too much priorities to his in-laws.

Brief dialogue between Father and Mother: he points out the double-standard she's practising, and gets yelled at.

**Text 2.**

Author: Nu Nu Yi (Innwa) နုနုရည်(အင်းဝ) nūnuyì. ínwa

Title: *You're Just Like the People* ပြည်သူလူထုကို ကိုယ်နဲ့ထပ်တူ pjiðùlùdɯ.gò kò.ng.tʰaʔtù

Text type: written, fictional dialogue

Protagonists: a vendor of medicines and buyer who is also a medical doctor, both female, at the market

Very few brief dialogues: buyer asking for information about the medicine, and a large part of narrative mostly reflecting the thoughts of the vendor as she observes and admires the buyer but finally gets disillusioned.

**Text 3. မစန္ဒာ – သံသရာ [fiction in written medium]**

Author: Ma Sanda မစန္ဒာ ma sàndà

Title: *The Cycle of Rebirth* သံသရာ θàɴðǎjǎ

Text type: written, fictional dialogue

Protagonists: four different families.

Five brief but very similar scenes, each with dialogue between husband and wife, or parents and children, and a monologue, mainly about a jar of Nescafe as a gift – where they get it from and who they will give it to. Protagonists mostly agree with each other's plans, except for the last one in which husband unsuccessfully expresses his desire to drink Nescafe. Contains a few brief narratives.

**Text 4.**

Title: *Daddy's getting married* ဖေဖေ အိမ်ထောင်ပြုတော့မယ် pʰèpʰè ʔèindàun.pjɯ.dɔ̌.mè

Text type: scripted, spoken radio-play dialogue

Protagonists: again father, young daughter living with him, older daughter and son, both married and previously living apart, but now have moved in with him.

Three dialogues and a few brief narratives.

Dialogue between father and young daughter: casual conversation about daily routines, father's plan to have the son move in so that he won't be left alone

Dialogue between older daughter and father: she informs him of the need to move in with him because of the high rent.

Dialogue between Father and all three children: Father announces his plan to remarry in order to be better looked after; children start objecting, justifying their unintentional lack of attention and blaming each other as the cause of the father's ridiculous plan. Then everything changes at the end for a happy ending.

**Text 5.**

Title: *Home-grown Ko Ko* ပြည်တွင်းဖြစ်ကိုကို pjìdwínbjìʔ kòkò

Text type: scripted, spoken radio-play dialogue

Protagonists: two young women friends Thweh (T) and Khin Hnaung (KHn), and KHn's mother.

Synopsis: T is modern and KHn is old-fashioned. T gets KHn a job at the company where she is working. T is frustrated with KHn's style of clothing and behaviour and criticizes her. KHn worries about T's audacious behaviour, and expresses her concerns. They get into a dispute, stop talking to each other, but their differences are reconciled in the end.

Different sets of dialogue between T and KHn; a brief dialogue between T and KHn's mother.

Dialogues between T and KHn mainly revolving on the subject of T's passion for everything foreign-made and KHn's naïve fashion sense and social skills.

Dialogue between T and KHn's mother at the beginning: general greeting, and casual conversation.

#### ***Text 6.***

Text type: spoken narrative

Synopsis: A recounting the plot of a film to B. A rich man who hates money and luxury meets a girl. He finds out she's rich and wants to have a fancy wedding, so he runs away. He is assaulted and put on a bus. He finds himself waking up in a bus in the countryside. He meets a girl and her family who look after him. He falls in love with this new life. Then the fiancée shows up, begging him to return to the city. The new girl is broken-hearted. But a happy ending ensues as usual.

#### ***Text 7.***

Text type: spoken narrative

Synopsis: A recounting the plot of a film to B in the presence of two other people. Girl and Boy meet. Both have a passion for music, but since girl's parents do not approve her passion for music nor for Boy, they decide to elope. Boy gets into a motorcycle accident and the whole plan is ruined. Girl leaves for the city, meets Boy 2, and they get married. Boy 2 has a sister, who has a passion for music. Sister meets Boy. Girl finds out, tries to stop Boy from taking revenge on her by using Boy 2's sister, but in vain. Boy and Sister get married, but Boy gets drunk often, singing a song about a broken heart. Sister finds out, gets into a fight, goes to hospital. Then everybody meets, things are resolved, happy ending.

#### ***Text 8.***

Text type: personal interview on confidential material.

Synopsis: A interviews B soliciting B's opinions regarding a radio station. Both A and B are male native speakers of Burmese.

## Appendix B

Sentences from the corpus containing discourse-marking လည်း လဲ with the possible function of ‘self-justification’, ‘self-defence’, or ‘reproach’.

Note: In utterances marked [?], the discourse function of လည်း လဲ is probable but uncertain.

### Text 1.

1. မေမေကလည်း ဘာဖြစ်လို့ကတ်သီးကတ်သတ်မေးနေတာလဲ။  
So, mother, why do you have to keep pestering me with difficult questions?
2. ဪ မေမေကလည်း ခက်လိုက်တာ။  
Oh mother, you're so difficult!
3. အိုဗျာ မေမေကလည်း မလာလိုက်နဲ့။ လာလိုက်ရင် ဆပြီ။  
Oh mother, don't you come [as well]! If you come there'll be too many.
4. ဪ အမေကလည်း အမေတို့ကို ကျွန်တော်အရေးစိုက်သားပဲ။  
Oh mother, but I did pay attention to [what] you [said].
5. အမေကလည်း ပြောလိုက်ရင် ဒေါချည်းပဲ။  
If you say anything, you just get all angry.
6. ဟုတ်သားဘဲကွယ်၊ မမကလည်း အခုနကလေးတင် ခင်ခင်ညွန့်နဲ့တုန်းကတော့ မယားလုပ်စာ အေးပါလေ လင်လုပ်စာ မယားသာ ဆိုင်ရမယ်ဆို။  
Yes of course. Even just now when Khin Khin Nyunt was here it was a case of keeping quiet about the wife's earnings, and the wife taking care of the husband's earnings.

### Text 3.

1. ကိုကိုကလည်း ခက်တော့တာပဲ။  
[Now] you're being difficult, Ko Ko.
2. ဟင် ဒီကော်ဖီမှုန့်ပုလင်းတွေကလည်း လာလိုက်ရင် ဒီနားမှာ ပေနေတာချည်းပဲ။ [?]  
Hmm. As soon as these coffee powder jars get here they're dirty all over.
3. ကိုကိုလွင်ကလည်း နက်စိကော်ဖီဆိုတာ နာမည်သာကြီးတာ။  
Oh Ko Ko Lwin, it's just that Nescoffee has a well-known name.

### Text 4.

1. အို သမီးကလည်းကွယ်။ သူတို့ဖာသာ သူတို့အိုးခွဲစားတာပဲ။  
Oh you [my daughter]! They all live [and eat] separately.

2. ဟင် ဖေဖေကလည်း ဒီအသက်အရွယ်ကြီးရောက်မှ အိမ်ထောင်ပြုမယ်လို့။  
Hm, so[, Daddy,] now you've reached this advanced age you're planning to get married.
3. ညီမလေးကလည်း သိပ်နေနိုင်တာပဲ။  
And you [little sister] really don't seem to care.
4. သမီးကလည်း အလုပ်သွားရတော့ ပြုစုချိန်မှ သိပ်မရတာ။ [?]  
And[, you,] since you've been working, you just haven't had the time to look after [him].
5. ကျွန်တော်တို့လင်မယားနှစ်ယောက်ရဲ့စီးပွားရေးအခြေအနေလည်း ဖေဖေသိပြီးသားပဲ။ [?]  
Dad, you know all about our [my wife and my] financial situation.

*Text 5.*

1. ခေတ်ဆန်ဆန်လေးလည်း ဝတ်ပါဦးဟ။  
Can't you just wear something fashionable?
2. ဟင်း၊ ခင်နှောင်းကလည်း လစာ ဒီလောက်အများကြီးပေးထားတာ။  
Hey, Khin Hnaung, you've got that big salary coming in now.
3. ဆံပင်ကလည်းဟာ၊ တချိန်လုံး ကျစ်ဆံမြီးကြီးနဲ့သားရေကွင်းကြီးချည်လို့။  
And your hair: all the time it's just in a big ponytail tied with an elastic band.
4. ခင်နှောင်းရာ ပိုက်ဆံအိတ်ကလည်း အောက်လိုက်တာ။  
Oh Khin Hnaung, your handbag's all wrong!
5. သွယ်ကလည်းဟာ၊ မေမိုးကို ထည့်လိုက်ပေါ့။  
Thweh, why don't you just tell May Moe to go instead of you?
6. သွယ်ကလည်းဟာ၊ ဇာတ်ရည်မှ မလည်သေး၊ လုပ်စမ်းပါဟာ။  
Thweh, you just don't get it, do you? Just pull yourself together!
7. အို ခင်နှောင်းကလည်း၊ ရုပ်ရှင်တွေထဲမှာလိုပေါ့။  
Oh Khin Hnaung, it was just like [they do it] in those movies.
8. အေးလေ၊ ခင်နှောင်းကလည်း ကိုကိုက ဒီပြည်မှာမွေး၊ ဒီပြည်မှာ ကြီးပြင်းပြီး တော့လူဖြစ်လာရတဲ့ ဗမာလူမျိုးစစ်စစ်လေ။  
Yes, Khin Hnaung, [as you know, after all] Ko Ko was born in this country and grew up here, so he's turned out to be a real, genuine Burmese guy.
9. ကိုကိုကလည်း အသလား မမေးနဲ့၊ တချိန်လုံးကို တိုက်တွန်းနေရတယ်။  
Don't even try to ask how thick Ko Ko is! He needs constant pushing!



# 11

## *Writing Modern Burmese: an examination of the status of colloquial Burmese*

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On Writers' Day, held on 28 November 1965 and sponsored by the Upper Burma Writers' Association အထက်ဗမာနိုင်ငံစာရေးဆရာအသင်း, Maung Tha Noe မောင်သာနိုး (Tha Noe 1966) submitted a monumental paper, *Modern Burmese Writing* ဗမာစာ အရေးအသားသစ် ရဲပြဿနာ on behalf of the Prose Commission စကားပြေ ကော်မရှင် in which he suggested that people begin writing in Modern — or colloquial — Burmese, language spoken by the people, to narrow the gap between the written and spoken languages (Upper Burmese Writers' Association [hereafter UBWA] 1966:86).

Now, nearly forty years later, the use of colloquial Burmese has become noticeably more popular, although not necessarily as a direct result of Maung Tha Noe's paper. The popularity of colloquial Burmese is not limited to prose, the major target of the Commission, but has spread into poetry as well. Nevertheless, the art of writing in Modern Burmese (MB), overshadowed by the older written language, has still not achieved the high status or regard it well deserves for its clarity and effectiveness. In this paper I will point out some remedies for the mishandling of Modern Burmese by mixing it with Formal Burmese (FB).

For those readers with insufficient background knowledge of the movement in 1965, this paper provides a brief account of the literary scene of the time, some statements from the paper by the Commission and its advocates, as well as the voices of readers. I will then give examples of some common writing styles found in current Burmese periodicals and news media, with recommended solutions.

### 1 The Paper *Modern Burmese writing*

At the time of the submission of the paper *Modern Burmese writing*, colloquial Burmese had already appeared in literary writing. The Prose Commission of the Upper Burma Writers' Association expressed their displeasure with the pace of the transition away from writing in literary style language as one reason for calling for change in Modern Burmese writing, which they thought should be based on the actual language the people of that time used. The Commission gave a brief account of the history of Burmese writing from the

Bagan period ဂုဏ်ခေတ် (1110–1300 CE) to 1965, claiming that Burmese writing had diverged into two systems, colloquial and literary, since 1300 when people began to adorn their writing with literary usages even though the practice of the Bagan period was to write in the colloquial Burmese of that time. This also led to the divergence of the colloquial and literary styles in the Nyaunyan period ညောင်ရမ်းခေတ် (1599–1754) with the evidence from the *eingyin* ချင်း poems and the stories of Yathawuddhana ရသဝံန. Scholars credit the favorable reception of U Ponnya's ဦးပုည literary works in the Konbaun period ကုန်းဘောင်ခေတ် (1754–1885) to his cleverness in using the language of the people of his time. P. Moe Nin ပီမိုးနင်း (1883–1940) and Theikpan Maung Wa သိပ္ပံမောင်ဝ (1899–1942) made efforts to avoid the ornamentation of language in their works. The Commission pointed out that some writers were still reluctant to write in the language spoken by the people, although at the same time some had shown certain progress by using literary but simple Burmese.

The Prose Commission suggested that literary Burmese should be replaced by Modern Burmese, pointing out the problems of using the literary language. Because of the wide differences between colloquial and literary writing, the Commission made the following points (UBWA 1966):

1. Students who finished the second grade, as reported by the Educational Research Bureau, were unable to read Burmese after not having reading for a certain period of time (UBWA 1966:62);
2. Young students face the difficulties of learning a foreign or ancient language besides studying the writing system of their own language (UBWA 1966:70, 71);
3. People in the countryside had trouble understanding the educational literature distributed to them (UBWA 1966:74–77).

The Commission hoped that people would derive maximum enjoyment from literature which was written in Modern Burmese. Later, the Commission began to advocate Modern Burmese, drawing a distinction between that and conversational spoken Burmese as actually uttered, including hesitations, groping for words, and words in incorrect order. The proposed Modern Burmese would entail systematic spelling and grammar, and would be divisible into three levels:

1. Formal Burmese, the style of language prepared before presenting to a public audience;
2. Standard Burmese, the style spoken by and comprehensible to most people;
3. Daily conversational Burmese.

The Prose Commission advocated the use of Formal and Standard Burmese.

## 2 Advocates of the Paper

Although the Prose Commission made their statements clear, the matter became complicated when two influential individuals, Dr Than Tun ဒေါက်တာသန်းထွန်း and U Kyaw Yin ဦးကျော်ရင်, added their views. Dr Than Tun, then Professor of the Department of History at Mandalay University, presented a paper *Early Burmese* in support of the proposal made by the Commission. Based on his theory that the people of the Bagan



period wrote as they spoke, he asserted that the spelling and syntax of that time were explicit and simple (UBWA 1966:47). Dr Than Tun concluded his paper advising, 'Burmese, without worry, should be written effectively just as it is pronounced.' U Kyaw Yin, Rector of Mandalay University at the time, expressed his delight as the keynote speaker of the conference when hearing that 'people are going to write [the language] as it is pronounced without paying attention to spelling.' (UBWA 1966:170). Dr Than Tun and U Kyaw Yin clearly misinterpreted the Prose Commission's paper as a suggestion to write the language as it is spoken.

### **3 Against Modern Burmese**

This misinterpretation of the paper continued to spread and sparked a furious debate which did not die down until 1970. Those who disagreed with the paper offered the following reasons (UBWA 1966):

- The entire nation has already accepted the present writing practices (UBWA 1966:196, 255);
- The quality of Burmese prose will decline with the increase in literary work by unskilled writers (UBWA 1966:191, 192);
- The splendour of Burmese — the richness of vocabulary, explicitness and compactness of aesthetic literature — will disappear if a literary work were written in spoken Burmese (UBWA 1966:189, 191, 197);
- Orthographic problems could arise due to the nature of the Burmese language (UBWA 1966:224).

These were the linguistic reasons related to the issue – some participants in the argument suggested that an effort should be made to help village people become literate (UBWA 1966:184), and some argued that a conceptual and political revolution were more important to a literary movement (UBWA 1966:200). I will not address these issues here because they are not linguistic matters.

The most reasonable of the four arguments above is the assertion that the current literary style was comprehensible to and accepted by the whole nation. Thein Aung, who gave his views after reading the Commission's paper thoroughly, said that even Burmese people who had never learned basic writing did not have a problem understanding written Burmese when someone read it to them (UBWA 1966:258). What he said is absolutely right. However, although the current orthography is perfectly intelligible, we should still encourage the development of an easier, improved writing system to promote better communication between readers and writers.

Anxieties about the decline in quality of Burmese literature from the loss of verbal ornamentation are as unfounded as are worries about the rise of orthographic problems associated with the introduction of Modern Burmese. The colloquial Burmese every speaker uses does not lack flavour in comparison to the formal Burmese which people do not read or write in daily lives; in fact, it is even richer. The people of Hladaw village in Upper Burma are one example, described by Aung Naing (1982). Although most of the villagers could not read or write, they adorned their daily language with fantastic similes and metaphors. If we take writing as a tool for communication, then any undue concern

over decorative language is misplaced. Everyday language is clearer because readers and writers are already familiar with it.

Likewise some writers expressed their concerns about the orthographic problems that might arise if they wrote in Modern Burmese. Yan Aung (1968), a well-known veteran writer, mocked the movement saying that his mother, who was not properly trained in writing, made spelling mistakes in the spoken language she wrote in letters. Tet Toe, who is knowledgeable in both Burmese and English literature, also criticized Modern Burmese writing, branding it 'Spoken language writing.' (Tha Noe 1972:204). Thein Pe Myint, a respectable journalist, wrote against the use of Modern Burmese in an articles in the newspaper *Botahtaun* ဗိုလ်တထောင် (Tha Noe 1972:204).

Such mockery and criticism resulted from some zealous advocates overstating the subject, and from some irresponsible critics not reading the paper thoroughly. As noted above, Dr Than Tun and U Kyaw Yin misinterpreted the Prose Commission's paper as a suggestion to write as spoken. Maung Swan Yi မောင်စွမ်းရည်, a well-known poet and literary critic, started his essay of support as if the paper had suggested that one should 'write like we talk' (UBWA 1966:202), a phrase he uses repeatedly throughout his essay. Finally, the original proposal to 'use Modern Burmese' was replaced with the phrase 'spell according to pronunciation' and 'write it the way it's spoken.' Thein Aung (1966:37) misinterpreted the paper as being centred on the suggestion to 'write it the way it's spoken.' No wonder the paper caused anxiety over the future of Burmese literature among readers who never cared to read the paper exhaustively. Yan Aung, Tet Toe and Thein Pe Myint are just a few examples of this kind of reader. Because of these critics, Maung Tha Noe, instrumental in submitting the paper, became unnecessarily preoccupied with defending his proposal, saying that he never meant for people to write exactly as they spoke. Besides not reading the paper thoroughly, the critics' level of linguistic expertise was a source of unnecessary problems. Establishing a great name in Burmese literature does not automatically bring with it a full awareness of the mechanics of the language. No critic of the movement proved himself to be a qualified linguist.

#### 4 The current status of Modern Burmese

Despite such negative reactions, writing in Modern Burmese started gaining a stronger foothold in various media after 1965, although it is hard to say whether this was the outcome of the paper or part of the language's natural course of development.

Weekly journals, distributed throughout the country, have been one area of increased writing in Modern Burmese (see Appendix 1): more pages are written in Modern Burmese today than in periodicals published prior to 1965 (see Appendix 2). Since I am focusing on prose in Modern Burmese, I will not address Modern Burmese in poetry here, although there too its use is apparently gaining in popularity. Modern Burmese is more fashionable than ever in Burma's information media — newspapers and broadcasting stations. Although newspaper reports are still in literary Burmese, most freelance writers use Modern Burmese in their articles. News reports on Myanmar Television are all in Modern Burmese, while the Myanmar Broadcasting Service still uses literary Burmese for news reports. The broadcasting services outside Burma, such as the BBC, RFA and VOA, all use Modern Burmese.

Nevertheless, the language of many sources of information in Burmese is not yet pure Modern Burmese, but continues to be mixed with literary style. Here are some examples

from written reports in some weekly journals. The underlined phrases and grammatical particles in (1)–(5) would never be heard in normal spoken Burmese.

- (1) မြန်မာ့ဘောလုံးရွှေခေတ်                      ပြန်ရောက်ရန်အတွက်  
[NP]    [VP]-jàn.ʔətweʔ  
[Golden Age of Myanmar football]    [return]-PURP.for
- နည်းလမ်းအသွယ်သွယ်များ    စဉ်းစားကြရာတွင်    အထောက်အပံ့ဖြစ်စေရန်အတွက်  
[NP]-mjá    [VP]-jà.dwín                      [NP]-ph̥jiʔ.sè.jàn.ʔətweʔ  
[various methods]-PL                      [think]-NOM.in                      [support]-be.CAUS.PURP.for
- စာရေးသူတို့၏                      စကားဝိုင်းမှ                      ထွက်ပေါ်လာသော  
[NP]-ʔí    [NP]-mja    [VP]-ðá  
[writer]-PL.GEN                      [conversation]                      [emerge]-ATTR
- အချက်များကို တင်ပြလိုက်ခြင်းသာဖြစ်ပါတယ်။  
[NP]-kò    [VP]-dɹín.ðà.ph̥jiʔ.pà.dè  
[facts]-OBJ    [present]-NOM.only.be.POL.REAL  
'I simply present the points that emerged from the writers' conversation to help  
in considering the various strategies to get back to the golden age of Myanmar  
football.'
- Nanetkhin Journal နံနက်ခင်းဂျာနယ် Yangon: Aungtha Press, 17 May 2000, p.2.
- (2) သူတပည့်ကျောင်းသားများစွာကို ဒီလိုစာပေဟောပြောပွဲမျိုးသို့  
[NP]-mjá.zwà.gò    [NP]-ðò  
[students]-many.ADV.OBJ    [literary rallies like this]-to
- တက်ရောက်နားထောင်စေပါတယ်။  
[VP]-zè.bà.dè  
[attend/listen]-CAUS.POL.REAL  
'He asked many of his students to attend literary rallies like this one.'
- Pyi Myanma Gyane ပြည်မြန်မာဂျာနယ် Yangon: Nanthazin Press,  
16 November 2000, p.13.
- (3) သင်္ဘောတပ်တိန်က                      သင်္ဘောခုတ်မောင်းစဉ်                      လက်ဝဲယာမှာမြင်တွေ့ရသော  
[NP]    [VP]-zìn    [VP]-ðá  
[the ship's captain]    [steering the ship]-while    [could be seen to L and R]-ATTR
- ထင်ရှားသည်                      အဆောက်အဦများကို ရှင်းပြသွားပါတယ်။  
[VP]-ðí    [NP]-mjá.gò    [VP]  
[appear]-REAL<sup>ATTR</sup>    [building]-PL.OBJ    [explained]  
'The ship's captain explained about the buildings to be seen on the left and right  
banks of the river while steering the ship.' Shwe Amyutei Monthly, Yangon:  
Zabutalu Press, May 2001, p.116.

- (4) ရူးသွပ်အောင်ဖမ်းဆီးခြင်းခံရမှုကိုလည်း ခုခါမှာတော့  
 [VP]-m̥u.gò.lé [NP]  
 [be possessed and rendered mad]-NOM.OBJ.also [now however]

ရိုးသားစွာ ဝန်ခံပါရစေ။  
 [VP]-zwà [VP]  
 [honest]-ADV [let admit]  
 'Now let me admit honestly how [I] was crazily possessed.' *Shway Amyutei Monthly* ရွှေအမြုတေ, Yangon: Zabutalu Press, February, 2001, p.111.

- (5) တာဝန်ကျေခြင်း၊ သစ္စာရှိခြင်းနဲ့ ဝတ္တရားကိုစွဲစွဲမြဲမြဲဆောင်ရွက်နိုင်ခြင်းတွေဟာ  
 [VP]-d̥áin [VP]-d̥áin.nɛ [VP]-d̥áin.dwè.hà  
 [fulfil duty]-NOM [loyal]-NOM [can carry out duty consistently]-NOM.PL.TOP

ဇနီးတိုင်းမှာရှိရမယ့်အရည်အချင်းတွေ မဟုတ်လား။  
 [NP] [VP]  
 [qualities every wife should have] [isn't it?]  
 'Is it not the case that fulfilling her responsibilities, being loyal and consistently carrying out her duties are the qualities that every wife should have?' *Myanatmaung Monthly* မြားနတ်မောင်, Yangon: Nyeingyanyei Sapei, July 2001, p.83.

Literary Burmese still dominates not only written information but also audio and audiovisual reports. (6) consists of a single sentence: it is an extract from a broadcast by the Myanmar Television Service on 18 December 2000. The numbered, underlined words in Literary Burmese are glossed in the table below the passage.

- (6) ပြည်မှာ ကျန်းမာရေးဝန်ကြီးဌာနမှ <sup>(a)</sup>ဆောင်ရွက်လျက်ရှိ <sup>(b)</sup>တဲ့ တိုင်းရေးဆေးကဏ္ဍမှာ နိုင်ငံတော်မှ <sup>(c)</sup>တာဝန်ရှိသူများရဲ့ဆောင်ရွက်မှုများ <sup>(d)</sup>ကို ဓာတ်ပုံများဖြင့်လည်းကောင်း <sup>(e)</sup>၊ ညွှန်ကြားချက်များ <sup>(f)</sup>ကို ပုံစံတင်ကြီးများရေးသားပြီး လည်းကောင်း <sup>(g)</sup>ပြသခြင်း <sup>(h)</sup>၊ တိုင်းရင်းဆေးဝါးသုတေသနစမ်းသပ်မှုများ <sup>(i)</sup>ကို လက်တွေ့ပြသခြင်း <sup>(j)</sup>၊ တိုင်းရင်းဆေးကောင်စီဝင် ဆရာကြီးများ <sup>(k)</sup>က ဆေးကုထုံးများ <sup>(l)</sup>ကို လက်တွေ့ကုသပေးခြင်း <sup>(m)</sup>၊ မြန်မာနိုင်ငံအတွင်း ပေါက်ရောက်သော ပရဆေးပင်များကို ပန်းခြောက်သန် ပြုလုပ်ပြီး ၎င်းတို့ <sup>(n)</sup>ပေါက်ရောက်ရာဒေသ၊ အသုံးဝင်ပုံတို့ကို ဖော်ပြခင်းကျင်းပြသခြင်းနှင့် <sup>(o)</sup>ပရဆေးပင်များပေါက်ရောက်ရာ ဒေသအလိုက် မြန်မာပြည်မှာ ရေးဆွဲဖော်ပြခြင်း <sup>(p)</sup>တို့ဖြင့် ပြသထားတဲ့အပြင် ပုဂ္ဂလိကတိုင်းရင်းဆေးဝါးထုတ်လုပ်သူများကဏ္ဍနဲ့ ပုဂ္ဂလိကတိုင်းရင်းဆေးဝါး ကုန်ကြမ်း ရောင်းဝယ်သူများ ကကြိုမှာ ပုဂ္ဂလိကဆေးဝါးထုတ်လုပ်သူများက ၎င်းတို့ <sup>(q)</sup>ထုတ်လုပ်သော ဆေးဝါးများကို ခေတ်မီ စက်ကိရိယာများနှင့်တွဲဖက်ပြီး ပြသထားကာ <sup>(r)</sup>ပုဂ္ဂလိကတိုင်းရင်းဆေးဝါး ကုန်ကြမ်းရောင်းဝယ်သူများက မြန်မာနိုင်ငံအတွင်း ထွက်ရှိတဲ့ ပရဆေးကုန်ကြမ်းနမူနာများကို အခန်းငယ်များဖြင့် <sup>(s)</sup>ပြသထားပါတယ်။

a,c	[NP]-မှ	[NP]-mə	[NP]-SUBJ
b	[VP]-လျက်ရှိ	[VP]-ləjɛʔ.jɪ	[VP]-while
d, i	[VP]-များ	[VP]-mja	[VP]-NOM.PL
e,g	[Phr]-လည်းကောင်း	[Phr]-ləgáun	[Phr]-whether
f, k, l	[NP]-များ	[NP]-mja	[NP]-PL
h,j,m	[VP]-ခြင်း	[VP]-dzín	[VP]-NOM
n,q	လည်းကောင်းတို့	ləgáun.dɔ	aforementioned.PL
o	[NP]-ခြင်းနှင့်	[VP]-dzín.njɪn	[VP]-NOM.INSTR
r	[VP]-ကာ	[VP]-kà	[VP]-while
s	[NP]-ဖြင့်	[NP]-phjɪn	[NP]-by means of

The Ministry of Information's reluctance to use Modern Burmese in written and audio-visual reports can be attributed to the tendency of governmental organisations in general to use formal language. Foreign broadcasting stations, however, although active users of Modern Burmese, also have the same problem of unnecessarily mixing literary Burmese in their Modern Burmese in their reports. (7)–(11) are some examples from the BBC Burmese Service evening broadcast of 2 January 2002, with suggested Modern Burmese (MB) equivalents.

- (7) BBC ဥရောပရှိဈေးဆိုင်များ  
 MB ဥရောပကဈေးဆိုင်တွေ  
 'shops in Europe'  
*Changes:* 'in' in the phrase '[NP] in [place]' translated with က kà instead of ရှိ jɪ; noun made plural with တွေ twè instead of များ mja.
- (8) BBC လုံခြုံရေးတင်းကျပ်စွာ ချထားတဲ့အောက်မှာ ကျမ်းသစ္စာ ကျိန်ဆိုခဲ့ပါတယ်။  
 MB လုံခြုံရေးတင်းတင်းကျပ်ကျပ် ချပြီး ကျမ်းသစ္စာကျိန်ခဲ့ပါတယ်  
 'The oath was taken with security strictly imposed.'  
*Changes:* adverbs formed by reduplication rather than -စွာ -swà suffix; subordinate clause formed with [VERB]-ပြီး pí; monosyllabic verbs preferred over disyllabic.
- (9) BBC အောက်စဖို့တက္ကသိုလ်မှ အာဂျင်တီးနားဆိုင်ရာ လေ့လာရေး အစီအစဉ်  
 MB အောက်စဖို့တက္ကသိုလ်က အာဂျင်တီးနားဆိုင်ရာ လေ့လာရေး အစီအစဉ်  
 'Oxford University Argentinian studies programme.'  
*Changes:* location marked with က kà instead of မှ mə
- (10) BBC လမ်းမတွေပေါ်မှာ ဆူပူလှုပ်ရှားစေခဲ့တာဟာလဲအနေနဲ့  
 MB လမ်းမတွေပေါ်မှာ ဆူပူလှုပ်ရှားခိုင်းခဲ့တာဟာလဲ သူ့အနေနဲ့ မလုပ်သင့်တဲ့အလုပ်  
 ရောက်သွားပါတယ်။  
 '[It] turned it into something they shouldn't do — something which might cause unrest on the streets'  
*Changes:* Causative suffix စေ sè replaced by ခိုင်း k'háin;

- (11) BBC      လန်ဒန်မြို့ဘိဘီစီမှ မြန်မာပိုင်းအစီအစဉ်တွေကို နားဆင်နေကြတာဖြစ်ပါတယ်။  
 MB      လန်ဒန်မြို့ဘိဘီစီက မြန်မာပိုင်းအစီအစဉ်တွေကို နားဆင်နေကြတာပါ။  
 ‘You are listening to the programmes of the BBC Burmese section in London.’  
*Changes:* Avoidance of the wordy practice of nominalising verbs with တာ *tà* and re-verbalising them with ဖြစ် *phji*?

Examples (12)–(16) are from the morning programme broadcast by the Burmese service of Voice of America (VOA) on the same day, 2 January 2002:

- (12) VOA      စတင်ပြုလုပ်နေပြီ ဖြစ်ပါတယ်။  
 MB      စလုပ်နေပါပြီ  
 ‘...has started to do...’  
*Changes:* disyllabic verb စတင် *sàtìn* ‘start’ replaced with monosyllabic စ *sà*; redundant copula ဖြစ်ပါတယ် *phji?.pà.dé* removed.
- (13) VOA      အဲဒီ အုပ်စုနှစ်ခုရဲ့သတင်းကို သိရှိလိုလို့  
 MB      အစည်းအဝေးကို ကျင်းပပါမယ်  
 ‘...because one wanted to know news about these two groups...’  
*Changes:* [VERB]-လို *lò* ‘want’ replaced with [VERB]-ချင် *tsìn*
- (14) Broadcast      အစည်းအဝေးကို ကျင်းပမှာ ဖြစ်ပါတယ်။  
 MB      အစည်းအဝေးကို ကျင်းပပါမယ်။  
 ‘A meeting will be held.’  
*Changes:* As in (12), the redundant copula ဖြစ်ပါတယ် *phji?.pà.dé* is removed
- (15) Broadcast      ၅၆ ရာနှုန်းဖြစ်တဲ့ လူ (၁၀၁၃)ဦးက  
 MB      ၅၆ ရာနှုန်း လူ (၁၀၁၃)ဦးက  
 ‘1014 people, or 96%...’  
*Changes:* As in (12), the redundant copula ဖြစ်ပါတယ် *phji?.pà.dé* is removed – here it is in a redundant relative clause.
- (16) Broadcast      ပိုပြီးဆိုးရွားတဲ့အခြေအနေကို တွန်းပို့ခဲ့ကြပါတယ်  
 Mod Bse      ပိုဆိုးသွားပါတယ်  
 ‘the situation became worse’  
*Changes:* As (13).

The evening programme in Burmese from Radio Free Asia (RFA) on 2 January 2002 contained the following:

- (17) RFA      ပိုပြီးဆိုးရွားတဲ့အခြေအနေကို တွန်းပို့ခဲ့ကြပါတယ်  
 MB      ပိုဆိုးသွားပါတယ်  
 ‘it shifted to a worse situation’ → MB ‘it became worse’  
*Changes:* wordy language simplified;  
 monosyllabic verbs preferred over disyllabic

- (18) RFA ကရင်ဒုက္ခသည်များ နေထိုင်လျက်ရှိတဲ့ ...  
 MB ကရင်ဒုက္ခသည်တွေနေတဲ့ ...  
 '...where the Karen refugees lived.'  
 Changes: noun made plural with တွေ *twè* instead of များ *mjá*;  
 monosyllabic verb နေ *nè* 'live' preferred over complex verb string  
 နေထိုင်လျက်ရှိ *nè.t<sup>h</sup>àin.łajɛʔ.ʃi*  
 verb slimmed down from bisyllabic to monosyllabic
- (19) RFA နောက်လိုက်(၂၀)ကျော်မျှကျ  
 MB နောက်လိုက်(၂၀)လောက်ကျ  
 'there were about 20 followers'  
 Changes: [NOUN]-ကျော်မျှ *kwəw.mjə* 'approximately' replaced with Modern Burmese  
 form [NOUN]-လောက် *lau?*
- (20) RFA အဖသတင်းတစ်ရပ်မှ ဖော်ပြထားပါတယ်  
 MB APသတင်းတစ်ရပ်က ဆိုပါတယ်။  
 APသတင်းတစ်ရပ်မှာ ပါပါတယ်။  
 'reported by AP news agency'  
 Changes: Two simplified alternatives given, avoiding the non-colloquial noun  
 marker မှ *mə*
- (21) RFA အမှာညီအကိုအား ပြန်လည် နေရာချထားရေး  
 MB အမှာညီအကိုကို ပြန်နေရာချထားဖို့  
 'In order to resettle the twin brother and sister...'  
 Changes: Two simplified alternatives given, avoiding non-colloquial language  
 such as noun marker အား *ʔá*

## 5 Formal language

Writers and broadcasters are still stumbling out from under the shadow of literary style in their attempts to use Modern Burmese. One of the many reasons for such hesitation is their tendency to use formal language. Maung Tha Noe, the individual instrumental in submitting and defending the Commission's paper, himself exhibits literary-language habits in his recent works. The underlined words he uses in (22) are never found in Modern Burmese unless the writer is trying to be formal.

- (22) ဘုရားသခင်ဟာ သူတစ်ပါးအကူအညီမပါ ကိုယ်တော်တိုင် အားထုတ်ကာ အလုံးစုံ  
 သိမြင်တော်မူတဲ့ သဗ္ဗညုတဉာဏ်တော်ကို ရရှိတော်မူလျက် အမြတ်ဆုံး ဆရာတစ်ဆူအဖြစ်  
 လောကမှာ ပေါ်ထွန်းတော်မူခဲ့တယ်။ (Tha Noe 1966:81)

The sentence in (22) above could be rewritten in pure Modern Burmese as (23), making the substitutions and stylistic changes described in (24) and (25).

- (23) ဘုရားသခင်ဟာ ဘယ်သူ့အကူအညီမှမပါဘဲ ကိုယ်တော်တိုင် အားထုတ်ပြီး အလုံးစုံ  
သိမြင်တော်မူတဲ့ သဗ္ဗညုတဉာဏ်တော်ကို ရတော်မူပြီး လောကမှာ အမြတ်ဆုံးဆရာတစ်ဆူ  
ဖြစ်လာတယ်။
- (24) FB → MB  
က ကà ‘while [VERB]’ → ပြီး pí SUBORD  
ရရှိ jəʃi ‘acquire’ → ရှိ ja ‘acquire’  
လျက် ʔəjɛ? ‘while [VERB]’ → ပြီး pí SUBORD
- (25) FB → MB  
[NOUN]-အဖြစ် ပေထွန်း → [NOUN] ဖြစ်လာ  
[NOUN]-ʔəpʰji? pètʰún [NOUN]-pʰji?là  
‘emerge as [NOUN]’ ‘became [NOUN]’

Although Modern Burmese is acceptable for its clarity, succinctness and effectiveness in comparison to formal Burmese, many writers and broadcasters still use the latter: a muddled mixture of colloquial and literary Burmese.

Although writing in Modern Burmese is now found in contexts where only formal literary Burmese might once have been appropriate, the new language still retains some of the undesirable features of literary Burmese, such as ambiguity and verbosity.

One example is the use of the grammatical particle မှ မှာ in Formal Burmese. While က ကာ is used both as a subject marker and to mean ‘from’ in the spoken language, in the literary language မှ မှာ is used only as the latter, and is not used instead of က ကာ as a subject marker. Yet, during the 1970s, out of an over-eagerness to show respect to authorities, followers of the Burmese Socialist Programme Party မြန်မာ့ဆိုရှယ်လစ်လမ်းစဉ်ပါတီ started to replace subject-marking suffix က ga with the literary equivalent of the homonymous postposition ကာ ga ‘from’ in, for instance, phrases like (26), introducing the chairman in at official meetings, as if the established subject-marking suffix က ကာ to the chairman of the meeting would be insulting, and only a overtly literary suffix such as မှ မှာ would be appropriate. Here, မှ မှာ does not sound right even though it may conform to the perceived preferences of the authorities for its supposed literary weightiness.

- (26) ဥက္ကဋ္ဌကြီးမှ မိန့်ခွန်းပြောပါတော့မယ်။  
ʔouʔkətʰa.dʒí.mə meingún.pjo.bà.dʒ.mè  
chairman.big.?SUBJ address.say.POL.henceforth.IRR  
‘The Chairman is about to make an address.’  
?? ‘It is requested that an address be made to the Chairman.’

The misuse of the literary suffix အား ʔá for colloquial object-marking suffix ကို kò is another example of the problem of unnecessary formality in Burmese. In the belief that အား ʔá sounds more polite, it is common to see အား ʔá used wrongly in place of ကို kò, as in (27). In fact, the postposition အား ʔá is not used in spoken Burmese at all. Thus (27) may be said with the intended meaning of ‘The Chairman is requested to make an address.’ In fact, this can also be parsed as meaning ‘It is requested that an address be given to the Chairman.’ There would be no such potential ambiguity if speakers referred to the speech they might themselves produce.



- (27) ဥက္ကဋ္ဌကြီးအား မိန့်ခွန်းပြောကြားပေးပါရန် ပန်ကြားပါသည်  
 ʔouʔkətʰa.ɕá.ʔá meingún.pjótɕá.pé.bà.jàn pàntɕá.bà.ðì  
 chairman.big.to address.say.BEN.POL.PURP request.POL.REAL  
 'The Chairman is requested to make an address.'  
 ?? 'It is requested that an address be made to the Chairman.'

An alternative rendition in Modern Burmese would be (28).

- (28) မိန့်ခွန်းပြောကြားပေးဖို့ ဥက္ကဋ္ဌကြီးကို ပန်ကြားပါတယ်  
 meingún.pjótɕá.pé.bò ʔouʔkətʰa.ɕá.gò pàntɕá.bà.dè  
 address.say.BEN.PURP chairman.big.to request.POL.REAL  
 'The Chairman is requested to make an address.'

Other problems arise in the use of lexical items. Wordiness results from the unnecessary use of doubled verb agglomerations like ရောက်ရှိ ʔauʔ.ʃi 'arrive.exist' or သွားရောက် ʈwá.ʔauʔ 'go.arrive', where the single verbs ရောက် ʔauʔ 'arrive' and သွား ʈwá 'go' are entirely sufficient for the purpose. The use of the pronoun သူမ ʈùmɰ for 'she' instead of the third-person pronoun သူ ʈù which does not specify gender is unnatural and awkward. The use of သူမ ʈùmɰ presumably arose from the misconception that it was more polite and appropriate to have a specifically feminine pronoun in Burmese to translate the English pronoun 'she' in the literary translations and English lessons during the colonial period.

Further examples of literary habits creeping into colloquial Burmese involve the use of the copula ဖြစ် ʈhjiʔ. Formal sentences like (29) can be written or said more simply in Modern Burmese as (30).

- (29) ကျွန်တော် ဆရာ ဖြစ်ပါတယ်။  
 tɕənò sʰəjà ʈhjiʔ.pà.dè  
 I teacher be.POL.REAL  
 'I am a teacher.'

- (30) ကျွန်တော် ဆရာပါ။  
 tɕənò sʰəjà.bà  
 I teacher.POL  
 'I am a teacher.'

This use of the copula ဖြစ် ʈhjiʔ, which does not exist in modern spoken Burmese, occurs also in the structure in (31), where it detracts from the conciseness of the spoken language equivalent in (32).

- (31) ကျွန်တော် သွားမှာ ဖြစ်ပါတယ်။  
 tɕənò ʈwá.mà ʈhjiʔ.pà.dè  
 I go.IRR<sup>NOM</sup> be.POL.REAL  
 'I will go.'

- (32) ကျွန်တော် သွားပါမယ်။  
 tɕənò θwá.bà.mè  
 I go.POL.IRR  
 'I will go.'

See Appendix 2 for more examples of formal or literary Burmese grammatical and lexical items found in broadcasts, along with their equivalents in Modern Burmese.

## 6 Conclusion

Aware of the Burmese writers who are talented both in the use of spoken and literary Burmese, I have no intention of advocating the sole use of Modern Burmese. The late Ludu U Hla လူထူးလှ, who led the Upper Burma Writers Association, and his wife Daw Ama ဒေါ်အမာ are good examples. Readers recognise their works as great: the earlier works in literary Burmese, and the later ones in colloquial style. Similarly, writers like Aung Thinn အောင်သင်း and Nay Win Myint နေဝင်းမြင့်, to mention just a few, are brilliant in both styles.

However, I do recommend that formal Burmese, which is currently gaining ground in communication media, should be replaced with Modern Burmese in order to enhance the effectiveness of written Burmese for the benefit of Burmese writers and readers. Broadcasters need never be bothered again by the choice of formal literary words they believe to be appealing to their readers and listeners; they can become their own teachers and use the language they currently use in speech without worrying that it might be inappropriate. Some individuals may enjoy mixing literary Burmese into their conversational language, saying the phrases in (33) instead of their equivalents in (34).

- (33) ဒါသော်လည်း အဲဒီလိုပြောပြီးသကာလ  
 dà.ðòlɛ ʔɛ̀dì.lò.pjɔ́.bí.ðə.kàlɔ  
 that.however that.like.say.finish.REAL.time  
 'However...' 'having spoken like this...'
- (34) ဒါပေမယ့် အဲဒီလိုပြောပြီးတော့  
 dà.bèmg ʔɛ̀dì.lò.pjɔ́.bí.dɔ  
 that.however that.like.say.finish.when  
 'However...' 'having spoken like this...'

Listeners and readers may accept the forms in (33) as idiolects. Writers and broadcasters must pay particular attention, however, to arranging their daily language in an acceptable order. Modern Burmese is in many ways simpler and more user-friendly than formal or literary Burmese, yet the use of formal Burmese with the literary features it retains, is annoying for readers and listeners because of its wordiness and vagueness. The use of a standardised form of Modern Burmese, as outlined in this study, will help the users come closer to their target audience for its conciseness and clarity.

## Appendix 1

(35) Approximate proportion of Modern Burmese in some magazines in 1962–1965

magazine name	date	total pages	pages of Modern Burmese
သွေးသောက်စာစာပေ? <i>thwéðau?</i>	Feb 1962	270	18 – correspondence
ရှုမဝ <i>šumawa</i>	Feb 1964	256	7 – story-telling
မြဝတီ <i>mjawədì</i>	Nov 1965	250	3 – a letter
ငွေတာရီ <i>ŋwètàjì</i>	Nov 1965	250	3 – a letter

(36) Approximate proportion of Modern Burmese in some journals in 2001

journal name	date	total pages	pages in MB	%
နံနက်ခင်းသတင်း <i>nànnè?kʰín.ðədín</i>	17 May 2001	14	8	57%
မနောမယ <i>mənoʹməjə</i>	27 Jun 2001	16	6	37%
ပြည်မြန်မာ <i>pjì.mjànmà</i>	29 Jun 2001	14	8	57%

(37) Approximate proportion of Modern Burmese in some magazines in 2000 and 2001

magazine	date	total pages	pages in MB	%
မဟေသီ <i>mənèðì</i>	Feb 2000	200	75	37%
နေ <i>dəna</i>	Nov 2001	168	79	47%
ငွေတာရီ <i>ŋwètàjì</i>	Nov 2001	160	21	13%
ရွှေအမြုတေ <i>šwè?əmjutè</i>	Feb 2001	188	128	68%
မြားနတ်မောင် <i>mjána?màun</i>	Jul 2001	184	105	57%

## Appendix 2

Examples of Formal Burmese (FB) replaced with Modern Burmese (MB)

(38) subject marker [NOUN]မှ *m̥a* → [NOUN]က *kə*

FB

...မှ အသံလွှင့်နေပါတယ်။

...မှ *ʔəθàn.ʔwɪn.bà.dè*

...from/\*SUBJ sound.broadcast.POL.REAL

‘Broadcasting from...’

→ မှ *m̥a* is never used as a subject marker in spoken Burmese; it should be replaced with subject marker က *kə*

MB

...က အသံလွှင့်နေပါတယ်။

...က *ʔəθàn.ʔwɪn.bà.dè*

...from/SUBJ sound.broadcast.POL.REAL

‘[This is]...broadcasting.’

(39) verb nominaliser [VERB]မှု *m̥u* → [VERB]တာ *tà*

FB

အနိုင်ရခဲ့မှုကို

*ʔənàin.jà.gɛ.m̥u.gò*

victory.get.REM.NOM.OBJ

‘honouring the victory’

ဂုဏ်ပြု

*gòunpjù*

honour

MB

အနိုင်ရတာကို

*ʔənàin.jà.dà.gò*

victory.get.REM.REAL<sup>NOM</sup>.OBJ

‘honouring the victory’

ဂုဏ်ပြု

*gòunpjù*

honour

→ Although မှု မှု occurs used in the spoken language as a derivational morphological suffix to generate nouns from verbs (eg အောင်မြင် ?àunmjìN ‘succeed’ → အောင်မြင်မှု ?àunmjìN.မှု ‘success’), it is not used in syntactic constructions requiring a nominalised verb phrase, where a nominalising verb marker (eg realis တာ tà) is found.

(40) [VERB] မှုလုပ် → [VERB]

FB	MB
လိုက်ရောမှု လုပ်တယ်။	→ လိုက်ရောတယ်။
lai?jɔ̌.ʔu.lou?tè	→ lai?jɔ̌.dè
follow.NOM.do.REAL	→ follow. REAL
‘complies’	‘complies’

→ [VERB]မှုလုပ်- can simply be replaced with [VERB]- on its own.

(41) Avoidance of [VERB]ခြင်း တေ်N → [VERB]-တာ တေ်

a. FB	MB
အပစ်အခတ် ရပ်စဲခြင်းဟာ	→ အပစ်အခတ် ရပ်တာ
?əpjɪ??əkʰa?ja?sɛ̌.ɬá.ɬáN.hà	→ ?əpjɪ??əkʰa?ja?dà
shooting.cease.NOM.TOP	→ shooting.cease.REAL <sup>NOM</sup>
‘the end of the shooting’	‘the end of the shooting’

b. FB			
အစောင့်အကြပ်များထားရှိခြင်း	မရှိသေးကြောင်း	ပြောသွားပါတယ်။	→
?əsəuN?ətɛa?mjá.ɬʰá.ɬá.ɬáN	mə.ɬá.ðé.ɬáun	pjɔ̌.ðwá.bà.dè	→
escort.PL.place.be.NOM	NEG.exist.yet.QUOT	say.‘go’.POL.REAL	→

MB

အစောင့်အကြပ်တွေ	မထားသေးတဲ့အကြောင်း	ပြောသွားပါတယ်။
?əsəuN?ətɛa?dwè	mə.ɬʰá.ðé.tɛ̌.ʔə.ɬáun	pjɔ̌.ðwá.bà.dè
escort.PL	NEG.place.yet.REAL <sup>ATTR</sup> .QUOT	say.‘go’.POL.REAL
‘It is said that the escorts are not yet in place.’		

c. FB	MB
ပါဝင်ခြင်း မရှိပါဘူး။	→ မပါဝင်ပါဘူး။
pàwìN.ɬáN.mə.ɬá.bà.bú	→ mə.pàwìN.bà.bú
include.NOM.NEG.exist.POL.NEG	→ NEG.include. POL.NEG
‘there is no inclusion of ...’	‘...is not included.’

Both the meanings of ငင်း lagáun in (42) and (43) can be replaced by a spoken Burmese equivalent.

(42) ငင်း lagáun → အဲဒီ ?édì ‘that; the aforementioned’;  
[PHRASE]-လည်းကောင်း lagáun → [PHRASE]-ရော့ jɔ̌ ‘both...and’

FB

ငင်းစာအုပ်	ငင်းတို့က	→
lagáun.sà?ou?	lagáun.dɔ̌.gə	→
that.book	that.PL.SUBJ	→
‘that book’	‘the aforementioned [people/things]	

MB

အဲဒီစာအုပ်    အဲဒီပုဂ္ဂိုလ်/အဖွဲ့အစည်းတို့က  
 ?édì.sà?ou?    ?édì.pou?gò(?əp<sup>h</sup>wɛ?asi).dɔ.gə  
 that.book    that.person/organisation.PL.SUBJ  
 ‘that book’    ‘the aforementioned [people/things]’

(43) [PHRASE]-လည်းကောင်း lagáun → [PHRASE]-ရော jò ‘either...or...’

FB

ကျောင်းသားတွေကိုလည်းကောင်း၊ ဆရာတွေကိုလည်းကောင်း →  
 tsáunθá.dwè.gò.ləgáun,                      shəjə.dwè.gò.ləgáun →  
 student.PL.OBJ.either,                      teacher.PL.OBJ.either →

MB

ကျောင်းသားတွေကိုလည်းရော၊ ဆရာတွေကိုလည်းရော  
 tsáunθá.dwè.gò.jò,                      shəjə.dwè.gò.jò  
 student.PL.OBJ.either,                      teacher.PL.OBJ.either  
 ‘whether [they be] students or teachers [or whoever]’

FB

တစ်လအတွင်းသော်၎င်း    နှစ်လအတွင်းသော်၎င်း →  
 tə.lə.ʔətwin.θò.ləgáun    n̥ə.lə.ʔətwin.θò.ləgáun →  
 one.month.within.either    two.month.within.either →

MB

တစ်လအတွင်း ဖြစ်ဖြစ်၊                      နှစ်လအတွင်း ဖြစ်ဖြစ်  
 tə.lə.ʔətwin.p<sup>h</sup>ji?p<sup>h</sup>ji?,                      n̥ə.lə.ʔətwin. p<sup>h</sup>ji?p<sup>h</sup>ji?  
 one.month.within.be.SUBJUNC<sup>REDUP</sup>,    one.month.within.be.SUBJUNC<sup>REDUP</sup>  
 ‘be it within one month or two’

(44) [NOUN]ထံ t<sup>h</sup>àn → [NOUN]ဆီ s<sup>h</sup>i. ထံ t<sup>h</sup>àn is unusual in spoken Burmese.

FB

ဝန်ကြီးချုပ်ထံ                      →    ဝန်ကြီးချုပ်ဆီ  
 wundzi<sup>h</sup>dzou?<sup>h</sup>àn                      →    wundzi<sup>h</sup>dzou?<sup>h</sup>i  
 Prime Minister.vicinity                      →    Prime Minister.vicinity

MB

(45) စေ sè → ခိုင်း k<sup>h</sup>áin. Causative စေ sè never appears in normal spoken Burmese except when expressing wishes such as လာစေချင်တယ် là.zè.dzìn.dè come.CAUS.want.REAL ‘I’d like you to come.’

a. FB

မေးစေတယ်။                      →    မေးခိုင်းတယ်။  
 mé.zè.dè                      →    mé.k<sup>h</sup>áin.dè  
 ask.CAUS.REAL                      →    ask.CAUS.REAL  
 ‘[He] had [someone] ask.’

MB

- b. *FB* *MB*  
 အားကစားလုပ်ရင် ကျန်းမာစေတယ်။ → အားကစားလုပ်ရင်  
 ʔágazá.jìN.tɕánmà.zè.dè → ʔágazá.jìN.tɕánmà.dè  
 exercise.if.healthy.CAUS.REAL → exercise.if.healthy.REAL  
 ‘Exercise makes you healthy.’

- c. *FB* *MB*  
 ပြည်သူတွေကို သိစေတယ် → မေးခိုင်းတယ်။  
 pjìdù.dwè.gò.θj.zè.dè → mé.kʰáin.dè  
 people.PL.OBJ.know.CAUS.REAL → ask.CAUS.REAL  
 ‘Let the people know.’

(46) အတွင်း ʔətwin → ထဲ(မှာ) tʰé(ṁà). In spoken Burmese, the location noun အတွင်း ʔətwin ‘within’ is used only in time phrases.

- FB* *MB*  
 မြန်မာနိုင်ငံအတွင်း → မြန်မာနိုင်ငံထဲ(မှာ)  
 mjàn.mà.nàinṁàN.ʔətwin → mjàn.mà.nàinṁàN.dé.ṁà  
 Myanmar.country.within → Myanmar.country.within.LOC  
 ‘in(side) Burma/Myanmar’

(47) မ [VERB] မီ má [VERB] ṁì → မ [VERB] ခင် má [VERB] kʰin (except in the set phrase မကျမီ má.tɕá.ṁì ‘before long’ which is well established)

- FB* *MB*  
 မြန်မာနိုင်ငံမသွားမီ → မြန်မာနိုင်ငံ  
 mjàn.mà.nàinṁàN.má.θwá.ṁì → mjàn.mà.nàinṁàN.má.θwá.gìn  
 Myanmar.country.NEG.go.before → Myanmar.country.NEG.go.before  
 ‘before going to Burma/Myanmar’

(48) [VERB] ṁwà → [VERB].ADV<sup>REDUP</sup> adverb formation

- FB* *MB*  
 ကောင်းစွာ → ကောင်းကောင်း  
 káun.zwà → káun.gáun  
 good.ADV → good.ADV<sup>REDUP</sup>  
 ‘announcing the news’

(49) [VERB] လျက်ရှိ ʔəjɛʔ.jì → [VERB] နေ nè

- FB* *MB*  
 သတင်းများကို ကြေညာလျက်ရှိပါတယ် → သတင်းတွေကို ကြေညာနေပါတယ်  
 θədín.mjá.gò.tɕèjṁà.ʔəjɛʔ.jì.bà.dè → θədín.twè.gò.tɕèjṁà.nè.bà.dè  
 news.PL.OBJ.announce.CONT.POL.REAL → news.PL.OBJ.announce.CONT.POL.REAL  
 ‘announcing the news’

(50) [VERB]ရန်ရှိ jàn.jī → [VERB]နိုင် nàin

a. *FB*

မကြာမီလအနည်းငယ်အတွင်းမှာ	ပြောင်းလဲမှုများဖြစ်ရန်ရှိပါတယ်။	→
mə.tə̀ə.mì.lə.ʔənɛŋɛ.ʔətwin.mə̀	pjájəunléməy.mjá.pʰjiʔ.jàn.jī.bà.dé	→
NEG.long.before.month.little.within.in	change.NOM.PL.be.PURP.exist.POL.REAL	→

*MB*

မကြာခင်လပိုင်းအတွင်းမှာ	အပြောင်းအလဲတွေဖြစ်နိုင်ပါတယ်။
mə.tə̀ə.gìn.lə.ʔəpáin.ʔətwin	ʔəpjájəunʔələ́.dwɛ.pʰjiʔ.nàin.bà.dé
NEG.long.before.month.part.within	change.PL.be.exist.can.REAL

‘There may be changes within a month.’

(51) [NOUN]-ခန့် kʰān → [NOUN]-လောက် lau?

a. *FB*

ကျောင်းသားငါးရာခန့်	→	ကျောင်းသားငါးရာခန့်
tə́əunθá.ŋá.jà.gān	→	tə́əunθá.ŋá.jà.lau?
student.five.hundred.approximately	→	student.five.hundred.approximately

‘approximately five hundred students’

*MB*

Replacing formal lexical items which do not occur in spoken Burmese with MB equivalents, as in (52):

(52) *FB*

ယခု jəkʰy	→	အခု ʔəkʰy	‘now’
ယမန်နေ့ jəmànne	→	မနေ့က mənɛgə	‘yesterday’
သူမ θùmə	→	သူမိ θù	‘she’

*MB*

Bisyllabic verbs where the second verb is unnecessary can be replaced by monosyllabic verbs, or the semantically redundant material from complex verb phrases can be removed altogether to reduce wordiness, as in (53)–(56):

(53) *FB*

ရောက်ရှိ jəuʔ.jī	→	ရောက် jəuʔ	‘arrive’
သွားရောက် θwá.jəuʔ	→	သွား θwáor ရောက် jəuʔ	‘go’

*MB*

(54) *FB*

သတင်းမှာ ဖော်ပြထားပါတယ်။	→	သတင်းမှာ ဆိုပါတယ်။
θədín.mə̀ pʰò.pjə.tʰá.bà.dè	→	θədín.mə̀ sʰò.bà.dè
news.in reveal.show.set.POL.REAL	→	news.in say.POL.REAL

‘...it is reported in the news.’

*MB*

(55) *FB*

[VERB]မှာ ဖြစ်ပါတယ်။	→	[VERB]-ပါမယ်။
[VERB].mə̀ pʰjiʔ.pà.dè	→	[VERB]-pà.mè
[VERB].IRR <sup>NOM</sup> is.POL.REAL	→	[VERB]-POL.IRR

‘will [VERB]’

*MB*

→ the construction [VERB]-မှာ ဖြစ်ပါတယ် [VERB]-mə̀ pʰjiʔ.pà.dè is unusual in Modern Burmese.

(56) *FB*

[PHRASE]ကြောင်း	ပြောကြားသွားကြောင်း	သိရပါတယ်။	→
[PHRASE]-.təáun	pjɔ̌.dʒá.ðwá.dʒáun	θi.jə.bà.dè	→
[PHRASE]-.fact	say.inform.go.fact	know.get.POL.REAL	→

*MB*

[PHRASE]-ကြောင်း	ပြောသွားပါသတဲ့။
[PHRASE]-.təáun	pjɔ̌.ðwá.bà.ðə.dɛ
[PHRASE]-.fact	say.go.POL.REAL.EUPH

‘It is said/known that [PHRASE]...’

→ It is more concise to avoid multiple constructions using ကြောင်း təáun

(57) *FB*

သတင်းများကို	ကြေညာလျက်	ရှိပါတယ်။	→
θədín.mjá.gò	tɕɛ̃jə.ʔəjɛ?	ʃi.bà.dè	→
news.PL.OBJ	announce.cont	exist	→

*MB*

သတင်းတွေကို	ကြေညာနေပါတယ်။
θədín.dwè.gò	tɕɛ̃jə.nè.bà.dè
news.PL.OBJ	announce.CONT.POL.REAL

‘The news is being announced.’

→ the construction VERB-လျက် ရှိ VERB-ʔəjɛ? ʃi- is never used in Modern Burmese

(58) *FB*

အကျဉ်းသားများအပေါ်	ကယ်တင်ခဲ့မှုအပေါ်	ဝေဖန်သွားပါတယ်။	→
ʔətɛín.ðá.mjá.ʔəpò	kè.tìn.gɛ̃.m̥u.ʔəpò	wèpʰàn.ðwá.bà.dè	→
prisoner.PL.on	save.REM.NOM.on	criticise.go.POL.REAL	→

*MB*

အကျဉ်းသားများကို	ကယ်တင်ခဲ့တာနဲ့	ပတ်သက်လို့
ʔətɛín.ðá.mjá.gò	kè.tìn.gɛ̃.dà.nɛ̃	paʔθɛʔ.lə
prisoner.PL.OBJ	save.REM.REAL <sup>NOM</sup> .with	concerning.SUBORD

ဝေဖန်သွားပါတယ်။

wèpʰàn.ðwá.bà.dè

criticise.go.POL.REAL

‘The rescue of the prisoners was criticised.’

→ the construction VERB-မှု အပေါ် VERB-ကျပဲ့.ʔəpò is never used in Modern Burmese

(59) *FB*

ပါဝင်ခြင်း	မရှိပါဘူး။	→
pàwìn.dʒín	mə.ʃi.bà.bú	→
include.NOM	NEG.exist.NEG	→



MB

မပါဝင်ပါဘူး။

mə.pàwɪn.bà.bú

NEG.include.POL.NEG

'...does not include.'

→ the construction VERB-ခြင်းမရှိ VERB-*tc<sup>h</sup>ín mə.ʃi* is never used in Modern Burmese

(60) FB

ပြောင်းလဲမှုတွေ ဖြစ်ရန် ရှိပါတယ်။ →

pjáuɴlɛ̃.m̥u.dwè p<sup>h</sup>jiʔ.jàɴ ʃi.bà.dè →

change(v.).NOM.PL be.PURP exist.POL.REAL →

MB

အပြောင်းအတွေ့ ဖြစ်နိုင်ပါတယ်။

ʔəpjáuɴʔəlé.dwè p<sup>h</sup>jiʔ.nàɪɴ.bà.dè

change(n.). PL be.can.POL.REAL

'there may be changes'

→ the construction VERB-ဖြစ်ရန် ရှိ VERB-p<sup>h</sup>jiʔ.jàɴ ʃi is never used in Modern Burmese

(61) FB

အလားအလာ ရှိနိုင်ဖွယ် မရှိပါ။ →

ʔələʔələ p<sup>h</sup>jiʔ.jàɴ mə.ʃi.bà →

potential exist.can.GERUND NEG.exist.POL →

MB

အလားအလာ မမြင်ပါ။

ʔələʔələ mə.mjɪɴ.bà

prospect NEG.see.POL

'no prospects are envisioned'

→ unnecessary wordiness can be avoided in Modern Burmese



# 12 *Tense in Burmese: a diachronic account*

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## 1 Introduction

The problem of tense in Burmese has been discussed more than once, but no consensus has yet been reached on the interpretation of the role of two opposing sets of verbal markers, namely variants of the marker မယ် *mè* on the one hand, and the set of variants of the marker တယ် *tè* on the other.<sup>1</sup> Some, e.g. Allott (1965), treat မယ် *mè* as a marker of unrealised (*irrealis*) action and တယ် *tè* as that of realised (*realis*) action, while Kassevitch (1990) treats မယ် *mè* as a future tense marker and တယ် *tè* as a non-future or past/present tense marker.

In brief, Allott's arguments are as follows: the marker မယ် *mè*, which, in Allott's analysis, is the colloquial variant of formal Burmese မည် *mjì*, denotes intentions, estimates, future events and assumptions: in other words anything which is not realised. On the contrary, the marker တယ် *tè* is the colloquial variant of formal သည် *thì* and denotes a realised event or state (Allott 1965:289). This approach to the two markers is restated in the grammar dictionary published by Okell and Allott (2001).

Kassevitch, on the other hand, argues that the semantics of intentions, estimates, assumptions is present in the future tense of any language. Defining မယ် *mè* as expressing unrealised – *irrealis* – action renders it indistinguishable from negation, which is an exclusively verbal category in Burmese, and yet one which describes semantically *irrealis* action. It appears also that future time is semantically explicit in the overwhelming majority of utterances containing မယ် *mè*. He argues that the two opposed forms, namely VERB မယ် *mè* and VERB-တယ် *tè* should therefore be treated as expressing future tense and non-future (past/present) tense, respectively (Kassevitch 1990:40–43).

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<sup>1</sup> Burmese examples in this paper are given in phonetic transcription in the introduction. Thereafter, when the discussion turns to Old Burmese, in transliteration, with phonetic transcription of written modern Burmese equivalents where relevant. Grammatical forms under discussion are transliterated rather than glossed in sections where they are under discussion. In transliteration, tones are marked in Old Burmese as they are in Burmese today, except in direct quotations from inscriptions. I have argued (Yanson 2002:163) that the sequence -ꠊ should be transliterated *iu* and not *ui*, which is the ALA-LC convention adopted elsewhere in this volume. The sources of quotations from inscriptions are given in the references.

However convincing the Kassevitch's arguments may seem, it is difficult to avoid the feeling that the semantic content of the Burmese markers မယ် *mè* and တယ် *tè* are essentially different from tense markers in other languages with established tense categories. Two factors prevent us from accepting Kassevitch's analysis: firstly the merging of two tenses — past and present — in one of the markers, and secondly the applicability of both markers far beyond the semantic scope of tense.

Consider also the following example. The experiential verb marker ဖူး (-ဘူး) *pʰú* is used in conjunction with the sentence-final markers မယ် *mè* and တယ် *tè*. Okell and Allott (2001:135) describe the meaning of this particle as 'to have VERB-ed before, have experience of VERB-ing, have ever VERB-ed' (Okell and Allott 2001:135). In fact, this marker is one of few over which most dictionaries and grammars agree in defining its meaning. This marker can combine with both မယ် *mè* and တယ် *tè*. The co-occurrence of ဖူး *pʰú* with တယ် *tè* – here truncated to သာ *ṣá* before the question particle လား *lá* – is quite ordinary, as in (1).

- (1) မာပြည်ကို            ရောက်ဖူးသလား။  
       bəmà.pjì.gò        jauʔ.pʰú.ṣá.lá  
       Burma.country.to arrive.EXP.REAL.QU  
       'Has [he] ever been to Burma?'

However, the question in (2) can be answered with (2), where ဖူး *pʰú* occurs with the marker မယ် *mè*:

- (2) ရောက်ဖူးမယ်။  
       jauʔ.pʰú.mè  
       arrive.EXP.IRR  
       'He probably has.'

In (2) the marker မယ် *mè* cannot indicate that the action has not been realised: if it were interpreted thus, with two particles attached to the verb would be contradicting one another, with mutually exclusive semantic implications. It would be similarly anomalous to interpret မယ် *mè* in (2) as expressing future tense, since this would assign future tense to an action which has already been completed in the past.

It is not the purpose of this article to define the role of the တယ် *tè* and မယ် *mè*, but rather to trace their origins and thereby to document the development of the grammatical expression of temporal semantics from the earliest attested stages of written Burmese.

The common verbal marker လိမ့် *leṣ* (EUPH/IRR), is used almost exclusively in conjunction with မယ် *mè* and other future tense / *irrealis* markers. Its meaning is defined by Okell and Allott (2001:220–1) as: 'probably will VERB, possibly will VERB, will no doubt VERB, will VERB imminently.' It is worth noting that Judson offers no definition of this marker, mentioning only that it is a verbal affix (Judson 1953:910). The definition given in the Myanmar Language Commission's Burmese dictionary (MLC 1991, vol. 4: 124) is: 'marker showing that something is going to happen in the time to come'. This definition is rather evasive and does not distinguish the meaning of လိမ့် *leṣ* from the future tense marker which it usually precedes. The Russian–Burmese dictionary describes လိမ့် *leṣ* as a verbal marker used with verbs in future tense, expressing the personal

attitude of the speaker (Minina and Kyaw Zaw 1976:512). What is meant by 'personal attitude' becomes clear in (3), taken from the grammatical appendix to the dictionary (Kassevitch 1974:753):

- (3) သူ လာလိမ့်မယ်။  
 0ù là.ləiN.mè  
 he come.EUPH/IRR.IRR  
 '[I think] he will come'

I stumbled across a problematic usage of လိမ့် လှိုင် *leṇ* many years ago in Burma. Burmese translators were translating into Burmese (via English) a Russian text along the lines of 'by next year, steel production will amount to [...], oil production will total [...]' and so on. The future tense was consistently translated by the Burmese using လိမ့်မယ် *leṇ.mè*. Although the translators could not explain to me the role of လိမ့် *leṇ* in this case, they resolutely denied any possibility that it admitted even the slightest degree of uncertainty.

Even this is not enough to give a clear impression of the function of the marker လိမ့် *leṇ*. By turning to diachronic data, the picture becomes clearer. Various dictionaries mention that လိမ့် *leṇ* is a lexicalised conflation of euphonic particle လေ *lè* and the archaic future/*irrealis* marker အံ့ *ʔaṇ*. Since လိမ့် *leṇ* itself is almost always followed by a future/*irrealis* marker, the sequence VERB-လိမ့်မယ် VERB-*leṇ.mè* would appear to contain, underlyingly, two future/*irrealis* markers. However, the marker အံ့ *ʔaṇ* was originally a Pali optative suffix. In light of this, the combination VERB-လိမ့်မယ် VERB-*leṇ.mè* does not seem so unusual any more. The Pali optative is usually defined as expressing desire, its meaning corresponding approximately to the English 'let it be that VERB; let it VERB' and so on.

- (4) သူ လာမယ်။  
 0ù là.mè  
 he come.IRR  
 'He will come'

The simple utterance (4) might be a response to a question. It has a laconic tone, and does not indicate the attitude of the speaker to the event in prospect, which is uncommon in Burmese speech patterns. Inserting လိမ့် *leṇ* into the utterance, as in (3) softens the unpleasant fact of the absence of the person who will come, and may be translated: 'He will come (and I want him to come).' The use of လိမ့် *leṇ* in the Soviet Russian translations about steel production above incorporates some personal attitude with regard to the action, with the effect of adding '...let it come to be so'. It becomes clear now why လိမ့် *leṇ* is rare with first person subjects: this is an observation made by Okell and Allott (2001:220). Speaking of oneself with additional emotional content might be impolite.

Besides expressing desire, the optative voice in Pali often imparts a degree of imperative, especially when used by seniors or persons of authority. A phrase using the Pali optative like 'May the monastery be built' clearly has different meaning depending on the originator of the utterance. Spoken by an ordinary man, it might mean 'I would like the monastery to be built' while spoken by a king it would carry the force of an order 'Build the monastery!' The breadth of meaning of the Pali optative echoes the many other

usages of လိမ့် *leṁ* in Burmese. For instance, parents shouting at a child climbing too high in a tree might say (5): clearly they do not want the child to fall, but are speaking in their capacity as the child's seniors whose words should be taken seriously.

- (5) အောက် ကျလိမ့်ယံ။  
       ʔau?   təḡ.leṁ.mè  
       down   fall.EUPH/IRR.IRR  
       'You'll fall down.'

The problem of how to define လိမ့် *leṁ* and its role in the morphology of Burmese remains, but it cannot be denied that the diachronic data shed some light on the semantics of လိမ့် *leṁ*. The analysis above accounts for the function of လိမ့် *leṁ* within the construction VERB-လိမ့်မယ် VERB-*leṁ.mè*.

## 2 Tense markers in Old Burmese

I proceed now to the main topic of the article: tense in Burmese in a diachronic perspective. Old Burmese is attested in the Pagan inscriptions of the twelfth–thirteenth centuries. During this period several phonological and grammatical changes took place in the language, and the language of the twelfth century can be distinguished from that of the thirteenth. In phonology, for instance, a contrast between the vowels *e* and *o* emerged in the thirteenth century, but no such contrast is attested in the inscriptions of the twelfth century. In syntax, the marker သည် *saññ* first appeared as a verbal marker in the texts dating from the thirteenth century. This marker is the most common past/present tense marker, pronounced *thì* in modern formal Burmese.

The tense markers in (6) are attested in twelfth-century inscriptions, and are still preserved in modern formal Burmese.

- |     |           |                                  |           |
|-----|-----------|----------------------------------|-----------|
| (6) | <i>OB</i> | <i>trsl</i>                      | <i>WB</i> |
|     | ၏ / အေ    | <i>e*</i> / <i>e<sup>a</sup></i> | ၇ိ        |
|     | သတည်း     | <i>sataññ<sup>a</sup></i>        | ဓာဝိ      |
|     | အံ        | <i>añ'</i>                       | ၇ာ၇       |

In modern formal Burmese, ၏ ၇ိ is a near-synonym of သည် *thì*. It is perhaps associated with a slightly higher register, and is preferred particularly in Nissaya-style texts. The marker သတည်း ဓာဝိ is archaic and strongly emphatic, expressing past/present tense. In the modern language, အံ ၇ာ၇ is used only to express future tense in Nissaya-style texts.

In inscriptions, ၏ *e\** functions in most cases in the same manner as ၏ ၇ိ in modern formal Burmese, but it is sometimes found in contexts where in modern Burmese the future tense marker would be used: consider the data in 0.

- (7) နောင် အခါ သော င မွယ်      တွင် လည်ကောင်။  
       *noñ' akhā so ṇa mliy'    tvañ' laññ' koñ'.*  
       future time    ATTR I    grandchild among also

ငါ ဆုယ် င မျှိုင် တွင် လည်ကောင် ဖျက်ဆီ အေ ဟူမှကာ  
*nā chuy' nā mlyiuv' tvañ' laññ'koñ' phyak'chī e' hū mu kā*  
 I relative I relative among also destroy e\* say if  
 'If in future my grandchildren or my relatives will destroy...'  
 (Aung Thaw 1972: 116)

In (7), the verb ဖျက်ဆီ *phyak'chī* 'destroy' is followed by the past/present tense marker အေ *e'*. According to the rules of modern Burmese, however, if future time in the sentence is expressed lexically, the predicate must take a future/*irrealis* tense marker such as မယ် *mè*. Analysis shows that constructions as in (7) were used when future time was semantically overt in the sentences, but where the action was non-desiderative, for instance in utterances such as 'the world will be destroyed,' '...will infringe my donation,' '...will not care about my donation' and the like.

The inscriptions also contain examples of the marker အေ *e'* affixed to nouns and adverbs in sentence final position, as in (8) and (9). In contrast အိ *ī* is exclusively a verbal marker in modern Burmese usage.

(8) င မိထုယ် လျှင်တေ င မိ အေ  
*nā mi thuy' hlyan' te nga mi e'*  
 my aunt EMPH.EUPH my mother e\*  
 '(It was) my mother's younger sister (who was) my mother'

(9) ကုမ် တေ သာ လေ သာ နိုင် စွာ အေ  
*im' te sā le sā niun' cvā e'*  
 house EMPH pleasant also pleasant able ADV e\*  
 'As for the house, (I have made it) as pleasant as possible' (Ei Maung 1958:177)

(8) and (9) are important for determining the semantics of the marker အိ *e'*. I shall refer to them again, after first describing two other Old Burmese markers which have been described as tense markers.

The marker သတည်း *sataññi* (also spelled သတေး *sate*) seems to have been used in the same way as အိ *e'*. The construction VERB-သတည်း *sataññi* (or VERB-သတေး *sate*) seems to be equivalent to the construction VERB-အိ *e'*, and appears in similar contexts. Consider (10) and (11), from the same inscription as (8) and (9):

(10) ရတနာသုပါသောအာ မမိယ်မလျှင်သောကိုဝ် ဖွစ်လိုဝ်အေ  
*ratanā.suñ.pā.so.ā ma.miy'.ma.lyaw'.so.kiuv' phlac.liuv'.e'*  
 jewel.3.CLF.ATTR.OBJ NEG.forget.NEG.ignore.ATTR.OBJ be.want.REAL  
 '(I) want to be the one who does not forget the three Jewels' (Ei Maung 1958:13)

(11) သဗ္ဗညုတာညာဏ်အဖွစ် ငါရလိုဝ်သတေး။  
*sabbaññutā.ññāñ'.aphlac' nā.ra.liuv'.sate*  
 omniscience.wisdom.state I.get.want.REAL  
 '(I) want to achieve the state of Omniscience' (Ei Maung 1958:13)

No doubt the markers *၏ e\** and *သတေး sate*" could be transposed in (10) and (11). There are numerous contexts in the inscriptions where the two markers appear to be completely synonymous: the emphasis indicated by *သတည်း* *θadí* in modern formal Burmese can often not be traced in Old Burmese. In modern Burmese, *သတည်း* *θadí* is analysed as a reduced or weakened form *သည့်* *θi* combined with the emphatic particle *တည်း* *tí* (Okell and Allott 2001:88), but no such analysis is possible in Old Burmese: during the twelfth century, when *သတည်း sataññ*" was already common, the marker *သည့် saññ*" did not yet exist. In fact, *သတည်း sataññ*" is a combination of Pali third person pronoun *သ sa* and an emphatic particle *တည့် taññ*", associated with nouns, just as its variants *သောတည်း sotaññ*" and *သူတည်း sūtaññ*" are combinations with the Pali third person singular pronouns *သော so* and *သ sa*, equivalent to the modern Burmese third person pronoun *သူ sū*. These combinations in Old Burmese reflect Pali finite participles in sentences with no copula. While there are no participles in Burmese, in Pali they are common, used as main predicates in finite clauses and in independent sentences. The Pali sentence (12) is an illustration of Warder's (1999:57) statement that 'Since nouns include participles, we quite often find a participle in its verbal function (equivalent to a finite verb)' (Warder 1999:57).

- (12) *aham* ... *tassa yaññassa*      *yajeta*  
 I      ... that.GEN sacrifice.GEN perform.PARTICIPLE  
 'I was the performer of that sacrifice.'

In Burmese, the verb–pronoun construction VERB–သူ *sū*, corresponds to the Pali participle with the meaning 'the one who VERB-s' or 'the VERB-ing one'. Unlike Pali participles, which can function both as attributes to noun phrases and as the predicates of finite main clauses, the Burmese construction VERB–သူ *sū* cannot and could not be a noun phrase attribute, such that constructions of the type \*VERB–သူ *sū* + NP, corresponding to English phrases such as 'crying child', 'running man' and the like, were and are ungrammatical. Such constructions are common in Pali, however.

Burmese used the construction VERB–သော *so*, where *သော so* is a Pali word (the equivalent of Burmese သူ *sū*) governed by the rules of Pali grammar. It was used in contexts where Pali would have the construction 'participle + NP' (see Yanson 2002 for more details). Using a foreign word in the place of native သူ *sū* apparently enabled Burmese to overcome the constraints restricting the use of the native VERB–သူ *sū* construction. Originally, this new construction was inconsistent, and the 'participle + NP' construction appeared in three variants (13):

- (13) VERB–သော *so* + NP  
 VERB–သ *sa* + NP  
 VERB–သူ *sū* + NP

It is clear that by analogy with the other two variants, the VERB–သူ *sū* + NP construction started to appear in alternation with the other two.

Initially, the constructions VERB + သော *so* / သ *sa* / သူ *sū* were used to represent Pali participles in both attributive and predicative functions but in the course of time these two functions diverged, the construction VERB–သော *so* representing participles in attributive function and VERB–သ *sa* representing participles in finite function. The construction



VERB-သူ *sū* was gradually eliminated from the set of three in (13), apparently having become ungrammatical.

Essentially, the construction VERB-သ *sa* is a nominalised verb, and therefore the sentence containing it requires a copula. Burmese started to use the emphatic particle တည်/တေ *taññ̃'/te* instead of VERB-သ *sa*: this is how the combination သတည်း *sataññ̃'* came into existence. As shown in examples (14)–(16), the morpheme တည်/တေ *taññ̃'/te* did not have a clear emphatic meaning, and this fact supports the assumption that it functioned like copula and not with its original function of nominal emphatic particle.

Analysis shows that sentences in inscriptions consisting *solely* of NPs are always followed by တည်/တေ *taññ̃'/te*, as demonstrated by the following examples (14)–(16):

- (14) ၵု မှု သော ကာ။ က္လောင် သဃီ က ဝတ္ထု တေ။  
*i mhya so kā. klon' sañghi ka vatthu te.*  
 this much ATTR TOP monastery Sangha from property *te*  
 'All this [is] the property of the *sangha*' (Aung Thaw 1972:252)

- (15) အလှူ ကာ စင် သော ချစ် သော မွတ် သော ဦးစွာ နှင်နှင် တေ။  
*alhū kā. cañ' so khyac' so mlat' so uiccā nhañ' nhañ' te.*  
 donation TOP clean ATTR beloved ATTR noble ATTR things only *te*  
 'As for the donation, [it is] only clean, beloved and noble things'  
 (Aung Thaw 1972:266)

- (16) က္လောင် သစ် က္လံ သော ဥစ္စ တေ။  
*klon' sac' kla so ucca te.*  
 monastery new cost ATTR things *te*  
 '(These are) things spent for the new monastery.' (Ei Maung 1958:18)

Modern Burmese grammar allows sentences consisting solely of NPs with no copula. It may therefore seem unconvincing to argue that in Old Burmese the marker တည်/တေ *taññ̃'/te* was used as a copula. (17) is grammatical in modern Burmese, but in fact such sentences will normally end with an additional particle, such as polite ပါ *pà* or emphatic ဝဲ *pʰé*, as in (18)a and b.

- (17) သူ ကျောင်းသား။  
 ၀ံ ဇာ်သု.၀ာ်  
 he school.son  
 'He is a student.'

- (18) (a) သူ ကျောင်းသားပါ။ (b) သူ ကျောင်းသားဝဲ။  
 ၀ံ ဇာ်သု.၀ာ်.ပာ် ၀ံ ဇာ်သု.၀ာ်.ပဲ  
 he school.son.POL he school.son.EMPH  
 'He is a student.' 'He is a student.'

In modern Burmese, emphatic marker ဝဲ *pʰé* may be thought of as a colloquial equivalent for formal တည်း *tí*, but ဝဲ *pʰé* does not necessarily convey emphasis in final position in sentences consisting of NPs. The morpheme ပါ *pà* has very broad meaning, both as a

grammaticalised verbal particle indicating politeness and as a main verb, meaning ‘be included’. Both have a range of grammaticalised functions, and occupy more than a page in Okell and Allott’s dictionary (2001:113–115). Any vestige of the lexical content of ပါ ပါ in (18)a might perhaps be glossed as ‘be present’.

In (19), ပါ ပါ can no longer be used after the NP if it is followed by the copula ဖြစ် ပါ့နိ?:

- (19) \*သူ ကျောင်းသားပါ ဖြစ်တယ်။  
           \*θù tɕáun.ðá.bà pʰjiʔ.tɛ̃  
           he school.son.POL be.REAL

A sentence consisting of NP + ပဲ ပါ့နိ with an additional copula is grammatical, but then ပဲ ပါ့နိ clearly imparts emphasis or carries the meaning ‘only’, as in (20), which could be translated ‘He is just a student (and not yet a teacher)’ or ‘He is indeed a student (and not employed).’

- (20) သူ ကျောင်းသားပဲ ဖြစ်တယ်။  
           θù tɕáun.ðá.bɛ̃ pʰjiʔ.tɛ̃  
           he school.son.POL be.REAL  
           ‘He is just a student.’

The ungrammaticality of ပါ ပါ in (19) suggests that ပါ ပါ and the copula are mutually exclusive, and that they have a similar grammatical function.

This excursion into the modern language sheds light on our understanding of Old Burmese တည်း: *taññʰ* in the combination သတည်း: *sataññʰ* : we may infer that in Old Burmese sentences consisting of a string of NPs were ungrammatical if not followed by a copula. In contrast, such sentences were common in Pali, and Old Burmese တည်း: *taññʰ* appears to match the Pali pattern. On the one hand, sentences ending with တည်း: *taññʰ* contain no copula, which corresponds with Pali practice, but on the other hand, there is something in the end of the sentence which can be associated with a copula, which concurs with the rules of Old Burmese grammar. The sense of emphasis or confirmation conveyed by တည်း: *taññʰ* is semantically close to that of a true copula. It may be worth noting that is တည်း: *taññʰ* is shorter and simpler to carve on stone than the full-blown copula ဖြစ်၏ *phlacʰ eʰ* which it replaces.

Now it becomes clear that ။ *eʰ* and သတည်း: *taññʰ*, which seem to belong to one paradigm, in fact have completely different functions: the first as a grammatical marker and the second as a pronoun with a surrogate copula. Accordingly, the verbal syntagma from example (10) ဖြစ်လိုက်၏ *phlacʰ liuvʰ eʰ* ‘want to be’ has the structure VERB-၏ *eʰ*, but the syntagma from example (11) ရလိုက်သတည်း *ra liuvʰ sataññʰ* ‘want to get’ is just an NP with the internal structure VERB+NP ‘the one who VERBS’.

အံ့ *amʰ*

Let us proceed to the marker အံ့ *amʰ*. It is not easy to trace the semantics of this marker. In some cases အံ့ *amʰ* seems to express a straightforward future tense, as in (21) and (22):

- (21) အသက် ရှည် ဧအံ ဟု မကုာ ငါ ပျ လာ အံ သတေ။  
*asak' rhaññ' e<sup>a</sup> hū mukā ñā plu lā aṁ sate.*  
 life long e\* say if I do come aṁ' sate  
 'If I live long I will do (it).'
- lit.: 'If life is long, I am the one who will do it.' (Aung Thaw 1972:64)

- (22) ဩ နာ အဋ္ဌိ သော ပရိသတ် တကာ  
*tryā nā am<sup>a</sup> so parisat' takā<sup>2</sup>*  
 law listen aṁ' ATTR audience all  
 'All the audience that will listen to the prayer' (Aung Thaw 1972:153)

But often အံ *aṁ'* carries a clearly desiderative semantic load and its meaning is very close to the Pali optative. Consider (23) and (24):

- (23) ပျက် သော သူ ကာ အဝိစိ ငြယ် လာ အဋ္ဌိ သော တေ။[...]  
*phyak' so sū kā Avici ṇray' lā am<sup>a</sup> so te,[...]*  
 destroy ATTR person TOP Avici hell come aṁ' ATTR EUPH  
 'Let the one who destroys (my donation) go to the hell Avici'  
 lit.: '...be the one who will go to hell...' (Aung Thaw 1972:44)

- (24) ဘဏ္ဍာသည် ငါ့ညွှန်သင် ကိုဝ် အတိတ် မိယ် အဋ္ဌိ။  
*bhaṇḍa.saññ' ñā plaññ' sañ' kiuv' atīuv' miy' am<sup>a</sup>.*  
 treasurer (name) OBJ we ask aṁ'  
 'Let us ask the treasurer...' (Aung Thaw 1972:158)

အံ *aṁ'* in (23) and (24) could be glossed simply as future tense: 'The one who destroys *will* go to Avici' and 'We *shall* ask the treasurer'. What convinces me that it is correct to interpret အံ *aṁ'* here as conveying modality is not only the context, but also the fact that အံ *aṁ'* constructions often alternate with causal constructions. Consider examples (25)–(28):

- (25) ဤယ် ငြယ် ကြိ ၈ ပါ အ ကျက် စိယ် သတေ။  
*īy' ṇray' krī 8 pā ā krak' ciy' sate.*  
 this hell big 8 CLF in boil CAUS sate  
 'May (he) be boiled in eight big hells' (Aung Thaw 1972:142)

- (26) အရပ် ၃ ပါ သာသနာ တည် အံ။  
*arap' 3 pā sāsana tāññ' aṁ.*  
 place 3 CLF Sasana stable aṁ'  
 'May the Sasana be stable in three places.' (Pg. 134)

- (27) ငြယ်အဝိစိယ်ကာအထက်။ အယင်တိုင်ကာဩက်အထယ်လျင် ဖြစ်စိယ်ကုန်သတေ။  
*ṇray'.aviciy'.kā.athak'. ayañ'.tiuv'.kā.ok'.athay'.lyañ' phlac'.ciy'.kun'.sate.*  
 hell.Avici.TOP.above those.PL.TOP.below.inside.in be.CAUS.all.sate  
 'Let the hell *Avici* be above and they below.' (Aung Thaw 1972:44)

<sup>2</sup> In transliterations of inscriptions, subscript အ ( <sub>a</sub> ), the orthographic ancestor of အောက်မြစ် ( <sub>a</sub> ), is transcribed as elsewhere in this volume, e.g. အဋ္ဌိ *am<sup>a</sup>*.

- (28) အယင် တိုဝ် လိုဝ် သော မ္ဗတ် သော ဆု ကာ မလွဲ ရ အံ့ သော  
 ayañ' tiuv' luiv' so mlat' so chu kā malvai ra am' so  
 those PL want ATTR noble ATTR reward TOP surely get am' so  
 'Let them receive the noble reward they want.' (Ei Maung 1958:144)

The causative marker စိယ် *ciy'* and the marker အံ့ *am'* never co-occur and, as can be seen from (25)–(28), they occupy the same position in sentences. When reading inscriptions there is a strong feeling that the causative စိယ် *ciy'* and the marker အံ့ *am'* are interchangeable. These observations might suggest that the marker အံ့ *am'* is derived from the Pali optative inflectional suffix *-am*. Besides its semantics, the spelling using *anusvara* (ံ *m*) is further evidence of this, since this symbol is typically used for Pali loans in Burmese. Another convincing indication of the optative flavour of အံ့ *am'* is its function in the *Dhammathat*, as in (29):

- (29) အကြင် သူ သည် မှီတင်း ရှိ. သော်လည်း နေ ပါ အံ့။  
 akrañ' sū saññ' mhītañ' r\*<sup>1</sup> so' laññ' ne pā am'.  
 some person SUBJ rely SUBORD either live pā am'  
 'Suppose someone lives either relying (on patrons) ...

တည်းခို ရှိ. သော်လည်း နေ ပါ အံ့။  
 taññ' khū r\*<sup>1</sup> so' laññ' ne pā am'.  
 lodge SUBORD either live pā am'  
 ...or lodges (somewhere)...

ထို သူ တို့ သည် သေ ခဲ့ အံ့။  
 thū sū tiū' saññ' se khai' am'.  
 that person PL SUBJ die REM am'  
 ...and then these persons die.' (U Kyaw Dun 1950:37)

In (28) the marker အံ့ *am'* clearly has the meaning 'let it be that...', which is very close to the meaning of Pali optative. We may recategorise အံ့ *am'* as a marker of modality instead of tense. Consequently, the marker စိ *e\** cannot be treated as a tense marker either, since it is not opposed semantically or positionally to any other marker with temporal semantics except အံ့ *am'*. The unexpected occurrence of စိ *e\** with sentences consisting only of NPs and its occurrence in adverbial constructions, as demonstrated earlier, would justify categorising စိ *e\** in the same way as အံ့ *am'*.

The marker စိ *e\** could, according to its semantics, be treated as a marker of narrative sentences, in a three-way opposition between narratives, interrogatives and imperatives. But this opposition breaks down because စိ *e\** can combine with interrogative marker လော *lo*. In fact, စိ *e\** always precedes လော *lo* in interrogative sentences, and so cannot form part of the same paradigm. စိ *e\** cannot therefore be defined as a narrative sentence marker.

We may reasonably admit that in the Old Burmese dedicatory inscriptions, tense did not exist as a purely temporal category. There was instead a modal-temporal system expressed by the opposition between စိ *e\** and အံ့ *am'* which developed as part of the

language of dedications and which therefore functioned within a restricted domain of the language. The ambiguous occurrences of *၏* *e\** with NPs and adverbs should in this case be treated as anomalous mistakes.

As mentioned above, the inscriptions of the thirteenth century are distinguished by the introduction of the finite verb marker သည် *saññĩ*‘. At the same time, a homonymous subject marker သည် *saññĩ*‘ came into use. Both markers started to be used with the functions of သည် *thì* in the modern language (28). Modern formal Burmese သည် *thì* was described above as a past/present or *realis* verbal marker. It is the most common such marker, used with main predicates of independent sentences as in (28)a, to end embedded sentences as in (30)b and to introduce attributive clauses in compound sentences as in (30)c.

- (30) a. သူ သွားသည်။    b. သူ သွားသည်ကို ငါ သိ၏။  
            $\text{thù}$   $\text{thwá.ðì}$          $\text{thù}$   $\text{thwá.ðì.gò}$      $\eta\grave{a}$   $\text{thì.ʔì}$   
           he go.REAL        he go.REAL.OBJ I know.REAL  
           ‘He went.’        ‘I know that he went.’
- c. သူ သွားသည်ကို အိမ်ကို ငါ သိ၏။  
            $\text{thù}$   $\text{thwá.ðì}$          $\text{ʔèin.gò}$          $\eta\grave{a}$   $\text{thì.ʔì}$   
           he go.REAL<sup>CRK</sup> go.REAL.OBJ I know.REAL  
           ‘I know the house that he went to’

In modern formal Burmese, the marker *၏* *ʔì*, unlike သည် *thì*, is used only in predicates of independent sentences. When used with the predicate of an embedded sentence, သည် *thì* allows the sentence to function as a complex NP which may take nominal case-marking suffixes as in (30)b. သည် *thì* is also the most common subject marker in modern formal Burmese.

In the modern languages, there is also a morpheme သည် *thè* which appears in compounds of the type NOUN-သည် *thè* meaning: ‘a specialist in NOUN’, ‘a person in charge of NOUN’ as in (31).

- (31) ဘဏ္ဍသည်                    ထမင်းသည်                    ဘုန်းသည်  
            $\text{bànda.ðè}$                      $\text{tʰəmín.ðè}$                      $\text{pʰóun.ðè}$   
           treasure ‘specialist’        rice ‘specialist’        glory ‘specialist’  
           ‘treasurer’                    ‘cook’                    ‘the respected one’

A similar lexeme သည် *saññĩ*‘ appeared in similar compounds. It also occurred as an freestanding noun အသည် *asaññĩ*‘, with various meanings, as illustrated in (32)–(34).

- (32) အသည်    ကာ    ရွာ    သူကြီ  
            $\text{asaññĩ}$      $\text{kā}$      $\text{rvā}$      $\text{sūkrī}$   
            $\text{asaññĩ}$     EMPH    village    person.big  
           ‘the ?witness [was a] village headman....’  
           (University Textbook 1979:7)

- (33) ၵူ ၵသည့် သုံယောက် လျှင် နင်ရ သတေ။  
*i asaṇṇ' suṃ yok' lhyān' nañ' ra sate*  
 this asaṇṇ' three.CLF in entrust sate  
 '...(have) entrusted to these three ?officials.'  
 (University Textbook 1979:21)
- (34) ငါလည့် ၵသည့် ငီအကိုဝ် ၂ယောက်စုံကိုဝ် အဝတ်လည့် ဝတ်ပေ၏။  
*ñā lañṇ' asaṇṇ' ñī akiuv' 2 yok' cuṃ kiuv' avat' lañṇ' vat' pe e\**  
 I.also asaṇṇ' brothers 2.CLF.both.to clothes.also wear.give.e\*  
 'I also gave clothes to the ?specialist brothers.'  
 (University Textbook 1979:21)

In some cases, the lexeme (အ)သည့် (*a*)saṇṇ' has a meaning something like 'living being,' 'person', as in (35) and (36):

- (35) သတ္တဝါဖွစ်သောလေ အမွေယ်မယ် အရိယ်မယ် သည့် ဖွစ်စေယ  
*sattavā.phlac'so.le amvey'may' ariy'may' saṇṇ' phlac'sey'*  
 creature.be.ATTR.EUPH fur.without skin.without creature be.CAUS  
 'If (it) is a living being let it be without fur and skin.'  
 (Aung Thaw 1972:140)
- (36) တရားငါပါနင် ပလည့်သောသည့် ဖွစ်လိုဝ်သတေ။  
*taryā.ñā pā nhañ' palañṇijum.so.saṇṇ' phlac'.liuv'sate.*  
 law.five.CLF.with full.ATTR.being be.want.sate  
 '(I) want to be the person imbued with the Five Noble Truths.'  
 (Aung Thaw 1972:142)

In many cases သည့် *saṇṇ'* appears in the same contexts as the third person pronoun သူ *sū* 'he, she', in the constructions of the type 'the one who VERBS', as in (36). In modern Burmese, we would find only သူ *thū* in this context. In Old Burmese, the referent of the pronoun သူ *sū* is restricted to persons, and not simply to animate nouns like (အ)သည့် (*a*)saṇṇ'. If in (35) the inscriber had used သူ *sū* rather than သည့် *saṇṇ'*, the implication would have been that only humans were being referred to. In contrast, သည့် *saṇṇ'* embraces all living things including animals, as denoted by the term သတ္တဝါ *sattavā*.

Given the broad semantic scope of သည့် *saṇṇ'*, it is not surprising that it started to be used with verbs to represent Pali participles as an alternative to Burmese သူ *sū* and Pali သ *sa*.

The modern Burmese construction VERB-သည့် *thi* is the finite form of the verb with a *realis* marker expressing past/present tense. Originally, this was simply a nominalised NP. (37) may thus be analysed differently in Old Burmese and in the modern language. The Old Burmese reading (37)a has a tenseless topic-comment structure 'I the going one,' while the same sentence may be analysed differently in modern formal Burmese (37)b as having a subject-predicate structure: 'I go/went'.

- (37) a. OB ငါ သွားသည်      b. FB ငါ သွားသည်  
            $n\bar{a}$   $sv\bar{a}'saññ'$                        $\eta\bar{a}$   $\theta w\acute{a}.\bar{\theta}i$   
           I go.NOM                                      I go.REAL  
           'I, the going one.'                              'I go.' ~ 'I went.'

Old Burmese utterances ending in သည်  $saññ'$  can function like NPs, which utterances ending with  $\bar{a} e^*$  cannot, and this supports our conclusion that the modern formal Burmese *realis* verb marker သည်  $\bar{\theta}i$  is derived from (အ)သည် (a) $saññ'$ .

Two more points remain to be clarified in the context of သည်  $saññ'$ . Firstly, it seems uncontroversial that in Old Burmese the Pali loan သ  $sa$  in the construction VERB-သ  $sa$  alternated with Burmese သည်  $saññ'$ . One might go on to predict that the construction VERB-သည်  $-saññ'$  would be followed by the emphatic particle တည်း  $taññ''$ , mirroring the situation with the construction VERB-သတည်း  $sataññ''$ , but in fact, VERB-သည်  $-saññ'$  is never followed by တည်း  $taññ''$ .

Secondly, it remains to be explained why သည်  $saññ'$  started to be used with agents and gradually became the subject marker. The answer may have to do with formal agreement between agent and action. In Burmese, agent and action do not have to agree, while in Pali agent and action must agree in person and number. In modern formal Burmese, there is a possessive noun marker  $\bar{a} \eta i$  which is identical in form to the verb marker  $\bar{a} \eta i$ . Unlike the two homonymous markers သည်  $\bar{\theta}i$  which we have shown to be historically related, the two markers  $\bar{a} \eta i$  seem not to be related in any way. In Old Burmese, the use of the two  $\bar{a} e^*$  markers suggests some sort of agreement between agent and action, as in (38), where the first marker  $\bar{a} e^*$  is used within the NP 'Maung Ba's house' and the second with the verb, which enables us to analyse the use of  $\bar{a} e^*$  as a formal expression of concordance between agent and action.

- (38) မောင်ဘ၏      အိမ်      ဖျက်နေ      ၏။  
            $mon'bha.e^*$        $im'$        $phyak' ne$        $e^*$ .  
           Maung Ba.POSS house destroyed.CONT REAL  
           'Maung Ba destroyed his (own) house.'

Taking into consideration the propensity of Old Burmese to mimic the grammatical patterns of Pali, we may speculate that the lexeme သည်  $saññ'$  was first used to mark agreement of an agent with its action. It is also possible this was not the only reason why the function of သည်  $saññ'$  came to be extended: a further explanation may lie in the features of the Burmese equivalents of Pali participles. We are already familiar with the three forms, VERB-သော  $so$ , VERB-သ  $sa$  and VERB-သည်  $saññ'$ , all of which were Old Burmese constructions of the type 'the one who VERBs', 'he who VERBs,' all associating an action with a person. If Pali is to be mimicked, then if an action is marked to associate it with a person, then the agent would be marked in the same way.

It is interesting that the modern Burmese morpheme ဟာ  $h\bar{a}$ , unlike သည်  $\bar{\theta}i$ , cannot appear immediately after the verb. Rather, it follows the verb's tense markers, such as the colloquial marker တယ်  $t\bar{e}$ . Instead of \*VERB-ဟာ  $h\bar{a}$  we find the construction VERB-တာ  $t\bar{a}$ , a conflation of တယ်  $t\bar{e}$  and ဟာ  $h\bar{a}$ . By 'undoing' this conflation, we may say that the construction VERB-တာ  $t\bar{a}$  is underlyingly equivalent to \*VERB-တယ်ဟာ  $t\bar{e} h\bar{a}$ . I suggest that if ဟာ  $h\bar{a}$  were used with an action in the same way as သည်  $\bar{\theta}i$ , the action would

become depersonified, disassociated from its agent, since the morpheme ဟာ *hà* denotes 'thing'. Somehow Burmese did not associate the agent with a personal referent and we find subject marker ဟာ *hà* immediately after the subject.

In modern formal Burmese VERB-သည် *thì* construction is functionally parallel to active Pali participles, which show agreement with associated agents. Burmese uses သည် *thì* with agents to indicate the relationship between the agent and the action. Used in this way, the function of သည် *thì* is similar to agreement. However, ဟာ *hà* is not used to form participle-like constructions in this way, because we know that in an earlier form of the language participles in Burmese were marked as actions involving persons, and so a word for 'thing' could not replace သည် *thì*. In the colloquial language, therefore, ဟာ *hà* is found where သည် *thì* can be used in the formal language, without any participle-forming function: it is simply reflecting the pattern of the formal language.

Let us now return to the characteristics of the 'new' construction VERB-သည် *saññ'* in Old Burmese. Unlike the construction VERB-သ *sa*, the new construction could not be followed by emphatic particle တည်း *taññ'*. But if our speculation about the grammatical features of the construction VERB-သ *sa*, and the role of particle တည်း *taññ'* following it, are correct, we expect the construction VERB-သည် *saññ'* also to be followed by တည်း *taññ'*. In fact, VERB-သည် *saññ'* is never followed by တည်း *taññ'*. The explanation may be as follows: VERB-၏ *e\** cannot be followed by တည်း *taññ'*, because တည်း *taññ'* is a nominal particle, and the construction VERB-၏ *e\** is purely verbal and has no nominal features. We have supposed that the two functions of သည် *saññ'* resembled two functions of ၏ *e\**: agreement between agent and action.

The 'new' Old Burmese construction VERB-သည် *saññ'* behaved in two ways. On the one hand, it was used like the construction VERB-၏ *e\**, but on the other — being a nominalised verb equivalent to the construction VERB-သ *sa\** — it had to permit the particle တည်း *taññ'* after itself. The first behaviour appeared to dominate, and this is why in modern formal Burmese ၏ *?i* and သည် *thì* have become synonymous in that both are analysed as purely functional and syntactically equivalent.

Now we can make some final conclusions regarding tense in Old Burmese. Of the four markers which are treated as tense markers in the modern language and which also appear in Old Burmese, only two, namely ၏ *e\** and အံ့ *am'*, are analysable as true tense markers, expressing temporal semantics. The other two, namely သတည်း *sataññ'* and သည် *saññ'* are lexical and as such uninvolved in expressing tense.

Furthermore, since there is plenty of evidence that the marker အံ့ *am'* is a Pali loan, it seems that at the time when Old Burmese was first written (by scribes who were apparently familiar with Pali), the only grammatical marker analysable as a tense marker was ၏ *e\**. But if ၏ *e\** was a tense marker, there must have been at least one additional tense marker to contrast with it, but none besides အံ့ *am'* can be found in the inscriptions. So we surmise that when Burmese was first written, there may have been some other 'original' marker in existence which was in opposition to ၏ *e\**, but which was not used in the inscriptions for stylistic reasons. The semantics of the Pali optative suffix အံ့ *am'* perfectly matched the style of the formal dedicatory inscriptions since it enabled the expression of both future and desiderative semantics and therefore would have been a natural choice over the putative 'original' marker, which may have been retained in ordinary speech and reappeared when the inscriptions became less canonical. Unfortunately, there are no traces of existence of such a marker. The marker မည် *mjì*, the



main future tense marker in modern formal Burmese from which all other future tense markers originate (see below), is definitely a later development. Therefore the most plausible conclusion concerning the grammatical expression of tense in the 'pre-Pali period' of Burmese might be as follows: temporal semantics could not be expressed by grammatical means at that time. The marker **၏** *e\** was used to express affirmative statements independent of tense. This characteristic of **၏** *e\** is confirmed by its appearance in sentences where future time is expressed lexically, as in (7) and also in sentences consisting only of NPs or with adverbial constructions, as in (8) and (9).

This assessment of the situation in Old Burmese becomes more plausible if we take into account the situation in present-day Arakanese, a major dialect of Burmese, in the context of the discussion further below of the Burmese future tense marker. The general conclusion is that in Old Burmese two grammars functioned alongside one another. One was restricted stylistically to dedications, and used a Pali-Burmese modal-temporal system with an opposition between **၏** *e\** and **အံ့** *am'*. In ordinary speech, however, temporal semantics could be expressed only lexically.

The next stage in the development of the category of tense in Burmese was the introduction into the texts of the marker **မည်** *maññ'*, the main future tense marker in modern formal Burmese. It is first met in the texts of the sixteenth century, where its function appears to be no different from that in modern formal Burmese. Examples (39) and (40) are from a sixteenth-century text:

- (39) မိုဝ်ညှင်မိုဝ်ကောင်သိုဝ်      ဒီတော်မူမှ      ဖြစ်သောကြောင့်  
*müv'ñhan' müv'koñ' siuv' khī.to mü.[maññ'] phrac'so k'ron'...*  
 Mohnyin.Mogaun.to      march.HON.IRR      be.because  
 'Because [he] will march to Mohnyin and Mogaun...'

- (40) နောင်အနာဂတ် လာလတ်မည်      မင်္ဂလာရစ်တိုင်သ်  
*noñ'anāgat' lā.lat'.maññ' mañ'.ekaraj'.tiuv'.[saññ']*  
 future      come.EUPH.IRR      King.Ekaraja.PL.SUBJ

ငါ သာသနာတော်ကို ခံပင်သကဲ့သို့      ခံပင်စေယံသော။  
*ñā sāsanā.to.kiuv' khīpañ'.sakai'siu khī pañ'sey'so.*  
 I sāsanā.HON.OBJ support.like      support.CAUS.ATTR  
 'Let the Kings who come in the future support *sāsanā* in the way I do.'  
 (Archaeological Survey of Burma 1955:22)

The marker **မည်** *maññ'* probably appeared somewhere in the fifteenth century, and was influenced by the form of the marker **သည်** *saññ'*. **မည်** *maññ'* **သည်** and **saññ'** form a pair with phonetic and functional similarities. They share a common rhyme and tone, nominal syntactical markers may be suffixed to both, and, unlike other markers, both may be affixed to the main predicate of independent sentences, to predicates of embedded sentences and to predicates of attributive clauses (in the latter case with induced creaky tone: **သည်** *saññ'* and **မည်** *maññ'*).

However, the origin of the marker **မည်** *maññ'* is unclear. Its origins may lie in the Old Burmese noun suffix **မဲ** *mai'* 'without NOUN, NOUN-less'. Conceiving of the future as something lacking or non-existent, as opposed to the past and present, which are existing

or actually experienced, is a plausible pathway for the grammaticalisation of မဲ *mai'* as a future tense marker. There is nothing else in Burmese texts to suggest that origin of the marker မည် *maññ'* is anything other than မဲ *mai'*.

As promised, I will now turn to Arakanese, in which future tense and intention are indicated with the same marker. Briefly stated, the facts in Arakanese are as follows: the marker ဖို့ *phiu'* regularly corresponds to the Burmese marker မည် *maññ'* (မယ် *may'*), as in (41).

(41) <i>Burmese</i>		<i>Arakanese</i>	
လာမယ်	ပေးမယ်	လာဖို့	ပေးဖို့
là.mè	pé.mè	là.bò	pé.bò
come.IRR	give.IRR	come.IRR	give.IRR
'Will come.'	'Will give.'	'Will come.'	'Will give.'

The marker ဖို့ *phiu'* is also used both in Burmese and in Arakanese to form constructions denoting purpose, as in (42):

(42)	ဆန်	ဝယ်ဖို့	ငွေ	လိုတယ်။
	shàn	wè.bò	ɲwè	lò.dè
	rice	buy.PURP	money	need.REAL
	'In order to buy rice, money is needed.'			

In Arakanese there is a marker ရယ် *rè* which corresponds to the markers သည် *thì* and တယ် *tè* modern formal and colloquial Burmese. The situation in Arakanese is rather ambiguous, allowing two different interpretations. On the one hand, we can treat the markers ရယ် *rè* and ဖို့ *phiu'* as *realis-irrealis* markers analogous to colloquial Burmese တယ် *tè* and မယ် *mè*. Such an analysis forces us to posit two homonymous morphemes ဖို့ *phiu'* in Arakanese with separate functions but identical form, one an *irrealis*/future marker and one a marker of purpose. On the other hand, however, can we be sure that there are utterances in Arakanese where a main predicate with the marker ဖို့ *phiu'* cannot be analysed other than as future time, thereby justifying an analysis with two homonyms? Can we prove that not all Arakanese constructions with ဖို့ *phiu'* are necessarily purpose clauses? The idea of the future as something to strive for seems quite logical, so it may be that Arakanese happens not to distinguish between the semantics of future and of purpose. If so, the marker ရယ် *rè*, the equivalent of the Burmese *realis* marker, should be treated as indicative of affirmative action and therefore distinct from the interrogative, imperative and negative sentence markers. The situation in Arakanese requires further research, but it certainly contributes to a clearer understanding of the possibilities for grammaticalisation in the development of tense categories. It is also relevant to the present discussion, because it allows us to speculate that the common ancestor of Burmese and Arakanese did not make use of tense categories, and that tense categories developed independently in the two languages, following different, though equally logical, conceptions of 'future'.

If the above hypothesis about the origin of the marker မည် *mji* is accepted, it now remains for us to account for the different written and phonological form of its colloquial equivalent မယ် *mè*. The reasons for the difference lie in the evolution of the common Burmese rhyme written -ည် *-aññ'*, pronounced in the modern language as [i], [e] or [ɛ].

Words in -ည် -aĩĩ' in modern formal Burmese are almost always pronounced with [i], even though the rhyme of the same word in colloquial Burmese may be read [ɛ]. The readings of this rhyme may be ranked, with [i] in formal, high register and [ɛ] in colloquial, low register, probably because the phonological inventory of early Pagan-period Burmese contained only one front vowel [i]; the vowels [e] and [ɛ] appeared later (see Yanson 1990 for details). We may argue that because of this, the vowel [i] retained stylistic 'seniority' over the later vowels, and continued to be associated with formal register. Otherwise, the progression of the sound change [i] > [ɛ] in words spelt with -ည် -aĩĩ' led to the respelling of many words, which is why many words in the modern language exist in two forms: one spelt -ည် -aĩĩ', pronounced [i] and used in the formal language and another spelt -ယိ ay' or -ai, pronounced [ɛ] and used in the colloquial language, as in (43):

(43) Colloquial and formal equivalents of the rhyme -ည် -aĩĩ'

Formal Burmese	Colloquial Burmese	pron	gloss
လည်း laĩĩ' [lí]	လဲ lai (or လည်း laĩĩ'*)	lé	'also'
အမည် amaĩĩ' [ʔəmji]	နာမည် nāmaĩĩ'	nànmè	'name'

These processes help us to understand how the lexeme မဲ mai' metamorphosed into မည် maĩĩ'. In formal Burmese မဲ mai' could not have retained its original form because it would obligatorily have been read as [mɛ] rather than with the [i] vowel preferred in high register language. Furthermore, the counterpart of the new marker was already spelt သည် saĩĩ', so it is not surprising that မဲ mai' was respelt by analogy as မည် maĩĩ' and pronounced [mji].

The change of the tone of the original lexeme does not seem to pose a problem. The modern markers သည် θì and မည် mjì function in two tones: when used as sentence-final verb markers they have low tone (44)a, but as the verb markers of attributive relative clauses they acquire creaky tone, as in (44)b.

(44) Induced creaky tone in attributive clause verb markers

a. သူ သွားသည်	b. သူ သွားသည့်အိမ်
θù θwá.ði	θù θwá.ðj.ʔèin
he go.REAL	he go.REAL <sup>ATTR</sup> .house
'He went.'	'The house he went to.'

Since tones were not marked in the Pagan inscriptions, and were marked only rarely in the texts of subsequent periods, it is impossible to detect when the marker သည် saĩĩ' first started to function in different tones. We might speculate that tonal alternations were used from the time the original lexeme သည် saĩĩ' was first grammaticalised as a verb marker. But since the orthographical conventions of the time did not require tones to be marked, a change of tone would not have prevented the new marker မည် maĩĩ' from assuming a role analogous to that of သည် saĩĩ'.

We can say that the grammatical system for expressing temporal semantics in Burmese had evolved by the beginning of the sixteenth century. There is no textual evidence to suggest that the function of the markers သည် saĩĩ' and မည် maĩĩ' in the sixteenth century was any different from in the modern formal language. Since the colloquial language was not represented in written form until the first short novels of the twentieth century, it is

impossible to say when the colloquial variants of သည် *saññ'* and မည် *maññ'* first appeared. However, it is possible to trace how they developed.

Colloquial Burmese has four markers with time-related function: two *realis* markers တယ် *tè* တာ *tà* and two *irrealis* markers မယ် *mè* မှာ *mà*, forming two pairs with shared phonological and distributional properties. The pair တယ် *tè* and မယ် *mè* are sentence-final verb markers and (with induced creaky tone) attributive clause verbal markers; the markers တာ *tà* and မှာ *mà* are used both with predicates of nominalised embedded clauses and as sentence-final verb markers. Clearly, တယ် *tè* and မယ် *mè* are products of the vowel hierarchy discussed above: they are the respelled counterparts of သည် *thì* and မည် *mji*, pronounced at the time of respelling with the vowel [ɛ]. Additionally, the *irrealis* markers တယ် *tè* and တာ *tà* were respelt with a different initial from သည် *saññ'*. The Old Burmese consonant သ *s* has changed in the modern language to an interdental fricative [θ], often realised as an affricated dental stop [t̪θ]. Although the new consonant is phonologically opposed to [t], their phonetic similarity doubtless accounts for their occasional merging, such that in texts sometimes we sometimes find တည် *taññ'* in place of သည် *saññ'*, as in (45) and (46):

- (45) ရွှေဖေါင်တော် ထက် စီတော်မူ လတ် တည်  
*rhve phoñ' to thak' cī.to mū lat' taññ'*  
 gold ferry.HON on float.HON EUPH *taññ'*  
 '[The king] went by golden ferry'  
 (Archaeological Survey of Burma 1955:21)

- (46) စစ်အင်္ကာ လေပါနှင့်အကွ ခီတော်မူ လတ် တည်  
*cac' aṅkā le pā nhañ' akva khī to mū lat' taññ'*  
 war.strength four.CLF.with.together march.HON EUPH *taññ'*  
 '...marched together with four kinds of military forces'  
 (Archaeological Survey of Burma 1955:21)

A similar relationship obtains in the modern language between the formal Burmese demonstrative သည် *thì* 'this' and its colloquial counterpart ဒီ *dì*. We can conclude that the marker တယ် *tay'* is indeed derived from the marker သည် *saññ'* (47).

- (47) သည် *thì* > တယ် *tè*  
 မည် *mji* > မယ် *mè*

It was mentioned above that the markers တာ *tà* and မှာ *mà* evolved as in (48), from the combinations of the tense markers and the subject marker in the colloquial language.

- (48) တယ် *tè* + ဟာ *hà* > တာ *tà*  
 မယ် *mè* + ဟာ *hà* > မှာ *mà*

This etymology is stated in various sources, but the mechanism of the process needs explanation. When the tense markers in Burmese are followed by some other marker, for example an interrogative particle, they are used in reduced, or weakened, form, written using the initial consonant of the marker with the rhyme removed, as in (49).

## (49) Reduction/weakening of tense marker in colloquial Burmese: မယ် မဲ &gt; မဲ má

- a. သူ သွားမယ်။    b. သူ သွားမလား။  
 0ù 0wá.mè        0ù 0wá.mə.lá  
 he go.IRR        he go.IRR.Q-?  
 'He will go.'      'Will he go?'

Accordingly, when the marker မယ် *mè* is followed by subject marker တာ *hà*, the combination can become မတာ *məhà*. Burmese is a monosyllabic language, and its grammatical markers are typically monosyllabic, so the reduction of မတာ *məhà* to မဲ *mə* is natural.

The marker တာ *tà* comes about by a similar process: the *realis* marker တယ် *tè* combined with တာ *hà* and was written တတာ *tahā* and was reduced phonologically to တာ *tahá*. In the modern language the appears in the form တာ *tā*, pronounced with an unaspirated initial consonant [t]. Significantly, however, following a glottal stop the marker is pronounced with an aspirated initial, as [tʰ], as if written တာ *thā* (Okell and Allott 2001:74). In all other cases, following a vowel, the initial တ *t* is subject to assimilatory voicing and the marker is pronounced ဒါ [dà]. Assimilatory voicing in Burmese changes both unaspirated and aspirated voiceless stops into voiced consonants — there are no voiced aspirates in Burmese — and therefore [dà] may be the result of both တာ *tā* and တာ *thā* under the influence of assimilatory voicing. It is not therefore anomalous to posit that the underlying marker is in fact တာ *thā* rather than တာ *tā*. While it remains unclear why is conventionally written တာ *tā*, Okell and Allott (2001:74) note that it is sometimes spelt တာ *thā*.

Now some final remarks concerning tense marking in Burmese. The salient characteristic of the tense markers is that they are bi-functional. On the one hand, they may nominalise the clause to whose verb they are attached, causing that clause to function as an NP, such that nominal markers may follow the tense markers. On the other hand, the markers have obvious temporal semantics: သည် *thì* and မည် *mji* are opposed not in their nominalising function — in which they are alike — but in their contrasting temporal semantics.

While the origin of the marker မည် *mji* is not certain, the provenance of သည် *thì* is as clearer. သည် *thì* was originally an ordinary NP with no temporal semantic implications. It subsequently grammaticalised into a tense marker while retaining its nominalising function. In light of this, we might expect the nominalising function of the tense markers to fade and their tense-marking properties to assume prominence. In fact, Burmese seems to demonstrate the opposite tendency: the nominalising function is preserved.

It was mentioned that the formal Burmese markers သည် *thì* and မည် *mji* have both nominalising and tense-marking functions, while the colloquial markers which developed from them have distributed functions: markers တယ် *tè* and မယ် *mè* cannot be used with embedded sentences, but can appear in attributive clauses with induced creaky tone, while တာ *tà* and မာ *mà* are not used in attributive clauses. This distribution may be accounted for as follows: တယ် *tè* and မယ် *mè* certainly originated earlier than တာ *tà* and မာ *mà*, being merely colloquial respellings of the formal Burmese markers သည် *thì* and မည် *mji*. The association of the colloquial markers with their formal counterparts has loosened, as their written forms — especially that of တယ် *tè*, where even the initial consonant differs from its literary counterpart — showed their divergence from their origins, and they would probably

have been destined to become pure tense markers with no nominalising function. It was at this stage that the noun တံ hà ‘thing’ (or subject marker တံ hà) was added to the markers reinforcing their nominalising function. Judging from the description of the function of တံ tà and မှာ mà in Okell and Allott (2001:74–75, 171–2), the nominalising functions of these two markers are more prominent than their other functions.

Lastly, it remains to be emphasised that the root of the ambiguity of the Burmese tense markers lies in interference from Pali. We remember that nominalised finite verbs were introduced into the language to represent Pali participles, and the authority and desirability of the Pali style remains current even today. The influence of Pali may have hampered the narrowing of the tense markers’ function to purely temporal markers.

# 13 *The structure of Pagan period Burmese*

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## 1 Introduction

The earliest attested forms of the Burmese language are the inscriptions of the Pagan period. The Pagan dynasty is thought to have been founded by King Anawrahta အနော်ရထာ in 1044CE, though the Burmese chronicles such as the *U Kala Chronicle* ဦးကုလား မဟာရာဇဝင်ကြီး ၊ ṹkəlā mähàjāzawīndā and the *Glass Palace Chronicle* မှန်နန်းရာဇဝင် ၊ ṹṇnānjāzawīn mention that Anawrahta was the forty-second king of the Pagan dynasty. No reliable source is available however to ascertain who the forty-one kings prior to Anawrahta were. King Anawrahta's name — in the form Aniruddha — is the earliest name found in contemporary records like votive tablets of Pagan period.

The Burmese inscriptions were collected together by King Bodawpaya ဘိုးတော်ဘုရား bódāphajá in the second half of the eighteenth century for the purpose of the settlement of his revenue. The successive kings of Burma depended mainly upon land revenue as their source of wealth. However, for a thousand years, from the Pagan period until the Konbaung ကုန်းဘောင် kóunbāun period, land in Burma had been divided into two categories, ecclesiastical and secular. The former category comprised lands which had been donated by successive kings and their families, nobles and wealthy people as testimony to their faith in Buddhism, and belonged to Buddhist temples, forming part of their assets. Such land was exempt from royal taxation, and was scattered here and there throughout the country. It was necessary for the later kings of Burma to try to distinguish the ecclesiastical land from the secular land. King Bodawpaya carried out this difficult task in the later half of the eighteenth century.

Charles Duroiselle, Director of the Archaeological Survey, reported that in total approximately three thousand Burmese inscriptions had been found in Burma. Ninety percent of these are in Burmese, and the rest are in Sanskrit, Pali, Tamil and Mon. Emil Forchhammer, Professor of Pāli at Rangoon College, collected inscriptions throughout the country by producing on paper rubbings of as much of the inscriptions as was on stone which was exposed and above ground. Taw Sein Ko, successor to Forchhammer, transliterated them into modern Burmese script and published them as *Epigraphia Birmanica* in four volumes, three of which are in two parts, including some English translations with notes and comments. Volume one of *Epigraphia Birmanica* is cited here as Taw Sein Ko and Duroiselle (1919). U Tun Nyein (1899) translated 171 inscriptions

produced by Forchhammer into English, and published them as *Inscriptions of Pagan, Pinya and Ava: translation, with notes*. U Pe Maung Tin and Gordon H. Luce (1934–1956) arranged the paper rubbings of the inscriptions in chronological order and published them under the title *Inscriptions of Burma*, in five portfolio editions containing about six hundred inscriptions. Another series of transliterations of *Old Burmese Inscriptions* has recently been carried out and published by the Archaeological Department of the Ministry of Culture (Aung Thaw 1972–1983). The five volumes in this series contain 225, 145, 227, 152 and 95 inscriptions, respectively. King Bodawpaya ordered the original inscriptions to be copied onto 719 stones, which are preserved in the precinct of the Mahamuni Pagoda မဟာမုနိဘုရား in Mandalay, and still in situ. Paper rubbings of forty-two *Inscriptions within the walls of the Mahamuni in Mandalay* were published with transliterations into modern Burmese script by the Yangon University History Department (1989).

The present study is concerned with the general structure of Burmese in the Pagan period, rather than with providing an exhaustive account of the language of this period. The focus is on phonology, syntax and morphology, all analysed mainly by deciphering Burmese inscriptions dating from the Pagan period. Except in a very few cases, the material on which the analysis is based is taken from U Pe Maung Tin and Professor Luce's *Inscriptions of Burma* (1934–1956).

*Abbreviations* (abbreviations referring to grammatical forms are listed at the end of the paper):

<i>OB</i>	Old Burmese, Pagan period Burmese
<i>WB</i>	Written Burmese, modern Burmese spelling
<i>trsl</i>	transliteration
<i>pron</i>	pronunciation in modern Burmese

NB Examples from Pe Maung Tin and Luce (1934–1956) are cited as *Inscr.*, followed by Portfolio number in Roman numerals I- II-... and inscription plate number Arabic numerals 1,2....

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## 2 Phonology

It is impossible to know exactly what Pagan period Burmese sounded like, because no phonetic material is available. It is, however, possible to reconstruct the phonology of the Burmese on the basis of the orthography found in the inscriptions and loan words from Pali and Sanskrit. It is important to point out at this stage that spelling in the inscriptions was highly variable. This will become immediately obvious from looking at the examples in this paper. Accommodating alternative spellings forms an important part of task of deciphering inscriptions.

### *Pali and Sanskrit loans*

Burmese inscriptions of the Pagan period contain large numbers of loan words, almost all from Pali and Sanskrit. Some examples are given in (1).

#### (1) OB Loans from Pali and Sanskrit

OB	translit.	Pali	translation
ကာမ	kāma	kāma	karma
ဂေါတမ	gotama	gotama	Gotama
စကြဝဠာ	cakravalā	cakkavāla	universe
စတုမဟာရဇ်	catūmahāraj'	catumahārājika	Catumaharajika
ဧမ္ဗုဒ္ဓိပုံ	jambudip'	jambūdipa	Jambudipa
ဌာပနာ	ṭhāpanā	ṭhapanā	enshrining
တာဝတိံသံ	tāvatin'sā	tāvatiṃsa	Tavatimsa
တိရိစ္ဆာန်	tirī't'chan'	tiracchāna	animal
တုသိတာ	tussitā	tusita	Tusita
ဒေဝဒတ်	devadat'	devadatta	Devadatta
နမော	namo	nama, namo	homage, veneration
နာဂါ	nāgā	nāga	mythical serpent demon
နိဗ္ဗန်	niy'rapan'	Skt nirvāṇa	nirvana
~နိဿရပန်	nibban'	Pāli nibbāna	nirvana

နိမာနရတိ	<i>nimānarati</i>	<i>nimmānaratī</i>	<i>Nimmanarati</i>
ပရနိမတသ္မတိ	<i>paranimatasvati</i>	<i>paranimmitavasavattī</i>	<i>Paranimmitavasavatti</i>
ပရိက္ခရာ	<i>parikkharā</i>	<i>parikkhāra</i>	items used by monks
ပါရမီ	<i>pāramī</i>	<i>pāramī</i>	perfection
ပိတကတ်	<i>pitakat'</i>	<i>piṭaka</i>	<i>pitaka</i>
ဗသုန္ဒရီ	<i>basundari</i>	<i>vasundhara</i>	bearer of wealth
ဗုဒ္ဓါ	<i>buddhā</i>	<i>buddha</i>	<i>Buddha</i>
ဗြဟ္မာ	<i>brahmā</i>	<i>brahmā</i>	superior being
မဟိန္ဒတ	<i>mahin'ta</i>	<i>mahinda</i>	<i>Mahinda</i>
ယာမာ	<i>yāmā</i>	<i>yāmā</i>	<i>Yama</i>
ရတနာ	<i>ratanā</i>	<i>ratana</i>	jewel
ရဟန္တာ	<i>rahanta</i>	<i>arahanta</i>	monk
ရူပ	<i>rūpa</i>	<i>rūpa</i>	appearance
ဝေတနာ	<i>vetanā</i>	<i>vedanā</i>	feeling
သရီရဓတ္တဝံ	<i>sarīradhattāv'</i>	<i>sarīradhātu</i>	relic
သာသနာ	<i>sāsanā</i>	<i>sāsanā</i>	teaching
သတ်ဒွါ	<i>sat'dvā</i>	<i>sattva, satta</i>	living being
သဗ္ဗညုသညာဏ်	<i>sabbaññusaññāṇ'</i>	<i>sabbaññūtā-ñāṇa</i>	omniscience
သမုတြာ	<i>samutrā</i>	<i>samudra, samudda</i>	ocean
အန္တရာယ်	<i>antarāy'</i>	<i>antarāya</i>	danger
အဘိသိက်	<i>abhisik'</i>	<i>abhiseka</i>	anointing, consecration
အရိမိတ္တိယ ~	<i>arimittiya~</i>	<i>ariya metteya ~</i>	<i>Maitreya</i>
အရိယမေတ္တည် ~	<i>ariyyamettaññ~</i>	<i>arimetteya</i>	
မိတ်တည်	<i>mit'taññ'</i>		
အရူပ	<i>arūpa</i>	<i>arūpa</i>	formless
အသူရာ	<i>asūrā</i>	<i>asura</i>	cowardly
ဥပါသကာ	<i>upāsakā</i>	<i>upāsaka</i>	lay devotee

### Consonants

The Pali and Sanskrit loans in Burmese are generally very close in form to the original Pali or Sanskrit words. The next step is to reconstruct from this evidence the values of the consonants in the orthography of the inscriptions (က = *k*, မ = *m*, ဓ = *c*, တ = *t*, ဟ = *h*, ရ = *r*, ဝ = *v* etc) to produce a table of Pagan period Burmese initial consonants and their values for writing Pali and Sanskrit words as in (2).

(2) Initial consonants

က	k	ခ	kh	ဂ	g	ဃ	gh	င	ñ
စ	c	ဆ	ch	ဇ	j	ဈ	jh	ည	ñ
တ	t	ထ	th	ဒ	d	ဓ	dh	န	n
ပ	p	ဖ	ph	ဗ	b	ဘ	bh	မ	m
ယ	y	ရ	r	လ	l	ဝ	v	သ	s
ဟ	h	ဠ	ḷ						

It is safe to assume that the Burmese of the Pagan period contained contrasting pairs of voiceless aspirated and unaspirated velar, dental and labial stops, and palatal affricates, as in (3).

(3)	OB	trsl	gloss	WB	trsl	pron
	ကိုဝ်	kuiv'	self	ကိုယ်	kuiy'	kò
	ခင်	khañ'	spread	ခင်း	khañ''	k'hín
	စာ	cā	eat	စား	cā''	sá
	ဆု	chu	reward	ဆု	chu	shu
	တောင်း	toñ'	request	တောင်း	toñ''	táun
	ထောင်	thon'	thousand	ထောင်	thon'	t'hàun
	ပယ်	pay'	bean	ပဲ	pai	pé
	ဖထွယ်	phathuy'	uncle	ဘထွေး	bhathve''	bədwe

Judging from the loan words derived from Pali and Sanskrit, there was also a contrast between voiced and voiceless velar, dental and labial stops and palatal affricates, as in (4).

(4)	OB	trsl	gloss
	ကာမ	kāma	sensual desire
	ဂေါတမ	gotama	Gotama
	စကြဝဠာ	cakravalā	Cakravalā
	ဓမ္မဒိပ	jambudip'	Jambudipa
	တာဝတိံသ	tāvatin'sā	Tavatimsa
	ဒါယကာ	dāyakā	supporter
	ပါရမီ	pāramī	principal virtues
	ဗုဒ္ဓါ	buddhā	Buddha

It is uncertain however whether there was any distinction between voiced aspirated and voiced unaspirated stops: (က-ဃ ဇ-ဈ ဒ-ဓ ဗ-ဘ g-gh j-jh d-dh b-bh). The five letters ငြ ငှ င့ င့ င့ were used to represent the 'cerebral' or 'retroflex' sounds of Pali and Sanskrit. There seems, however, to have been no distinction between cerebral and dental sounds in the Burmese of the Pagan period, since the same word may be found written using counterpart letters from both series, as in (5).

- |     |                 |                            |                    |
|-----|-----------------|----------------------------|--------------------|
| (5) | OB              | <i>trsl</i>                | <i>gloss</i>       |
|     | ဌာပနာ ~ ထာပနာ   | <i>ṭhāpanā ~ thāpanā</i>   | enshrine           |
|     | ပိဋကတ် ~ ပိတကတ် | <i>piṭakat' ~ pitakat'</i> | Buddhist scripture |

### Consonant clusters

In Pagan period Burmese, a syllable or word could combine with any vowel, any single consonant, or with a certain number of consonant clusters. The permitted consonant clusters can be divided into four groups. The first comprises velars or labials followed by liquids written in their subscript forms: င -*r*- and လ -*l*-. Some examples are given in (4).

- |     |         |                        |                 |         |                   |                      |
|-----|---------|------------------------|-----------------|---------|-------------------|----------------------|
| (6) | OB      | <i>trsl</i>            | <i>gloss</i>    | WB      | <i>trsl</i>       | <i>pron</i>          |
|     | ကြည်ညို | <i>kraññ'ññui</i>      | revere          | ကြည်ညို | <i>kraññ'ññui</i> | ṭeɪjɔ̀               |
|     | ကြ      | <i>krañ</i>            | plot, plan      | ကြ      | <i>krañ</i>       | ṭeàɴ                 |
|     | ကြွယ်   | <i>klva.y'</i>         | water buffalo   | ကျွဲ    | <i>kyvai'</i>     | ṭeəwé                |
|     | ခြယ်    | <i>khriy'</i>          | leg             | ခြေ     | <i>khre</i>       | ṭe <sup>h</sup> i    |
|     | ရွယ်မ   | <i>khruy'ma</i>        | daughter-in-law | ချွေးမ  | <i>khyve'ma</i>   | ṭe <sup>h</sup> wéma |
|     | လွတ်    | <i>khlvat'</i>         | liberate        | လွတ်    | <i>khyvat'</i>    | ṭe <sup>h</sup> u?   |
|     | ပြည်    | <i>praññ'</i>          | country         | ပြည်    | <i>praññ'</i>     | pji                  |
|     | လုပ်    | <i>plu<sup>a</sup></i> | make            | လုပ်    | <i>pru</i>        | pju                  |
|     | လစ်     | <i>phlac'</i>          | be              | လစ်     | <i>phrac'</i>     | p <sup>h</sup> ji?   |
|     | ဖြူ     | <i>phlū</i>            | white           | ဖြူ     | <i>phrū</i>       | p <sup>h</sup> jù    |
|     | မြက်    | <i>mrak'</i>           | grass           | မြက်    | <i>mrak'</i>      | mje?                 |
|     | မြေ     | <i>mliy'</i>           | soil            | မြေ     | <i>mre</i>        | mje                  |

The second group comprises velars or labial consonants followed by the semivowel ɹ y, the subscript form of the initial consonant letter ɹ y, as seen in the examples in (246).

- |     |        |              |              |        |               |                   |
|-----|--------|--------------|--------------|--------|---------------|-------------------|
| (7) | OB     | <i>trsl</i>  | <i>gloss</i> | WB     | <i>trsl</i>   | <i>pron</i>       |
|     | ကျောက် | <i>kyon'</i> | slave        | ကျောက် | <i>kyvan'</i> | ṭeun              |
|     | ကျက်   | <i>kyak'</i> | be cooked    | ကျက်   | <i>kyak'</i>  | ṭeɛ?              |
|     | ပျက်   | <i>pyak'</i> | be destroyed | ပျက်   | <i>pyak'</i>  | pje?              |
|     | ဖျာ    | <i>phyā</i>  | tip          | အဖျား  | <i>aphyā"</i> | p <sup>h</sup> já |
|     | များ   | <i>myā</i>   | many         | များ   | <i>myā"</i>   | mjá               |

Velar/labial + liquid clusters in Pagan Burmese correspond sometimes to velar/labial + semivowel cluster spellings in the modern language as in (246). Note that velar + semivowel cluster spellings are not pronounced as such in the modern language.

- |     |                       |                                     |              |                |
|-----|-----------------------|-------------------------------------|--------------|----------------|
| (8) | OB > WB               | <i>trsl</i>                         | <i>gloss</i> | WB <i>pron</i> |
|     | ကျွပ် > ကျပ်          | <i>klyap' &gt; kyap'</i>            | tical        | ṭeə?           |
|     | လွယ်ကျွန် > ကျေးကျွန် | <i>kliy'kyvan' &gt; kye" kyvan'</i> | slave        | ṭeun           |
|     | ညွှတ် > ကျေးဇူး       | <i>klaññ'jū &gt; kye"jū"</i>        | gratitude    | ṭeézú          |
|     | ကောက် > ကျောက်        | <i>klok' &gt; kyok'</i>             | stone        | ṭeəu?          |
|     | မွက် > မျက်           | <i>mlek' &gt; myak'</i>             | eye          | mje?           |

The third group comprises any initial consonant, with the exception of the consonant *o v*, combined with semivowel *o -v-*, as shown in the examples in (9).

(9)	<i>OB</i>	<i>trsl</i>	<i>gloss</i>	<i>WB</i>	<i>trsl</i>	<i>pron</i>
	ကလျာန်	<i>klvaññ'</i>	feed	ကျေး	<i>kyve''</i>	təwé
	ထွက်	<i>thvak'</i>	go out	ထွက်	<i>thvak'</i>	tʰwɛʔ
	နွာ	<i>nvā</i>	cow	နွာ	<i>nvā''</i>	nwá
	ပွင်	<i>pvañ'</i>	attain Buddhahood	ပွင်	<i>pvañ''</i>	pwɪn
	လွတ်	<i>lvat'</i>	be free	လွတ်	<i>lvat'</i>	luʔ

In the fourth and last group, clusters consist of nasals or liquids + *h*, the subscript *ဟတို*: *həthó* of modern Burmese. Examples are shown in (10).

(10)	<i>OB</i>	<i>trsl</i>	<i>gloss</i>	<i>WB</i>	<i>trsl</i>	<i>pron</i>
	ငှက်	<i>ñhak'</i>	bird	ငှက်	<i>ñhak'</i>	ŋɛʔ
	နှိုး	<i>nhui</i>	awaken	နှိုး	<i>nhui''</i>	ŋó
	နှစ်	<i>nhac'</i>	year	နှစ်	<i>nhac'</i>	ŋiʔ
	မှတ်	<i>mhat'</i>	mark	မှတ်	<i>mhat'</i>	maʔ
	ရှယ်	<i>rhay'</i>	front	ရှေ့	<i>rhe'</i>	ʃɛ
	ရွယ်	<i>rhuy'</i>	gold	ရွှေ	<i>rhve</i>	ʃwè
	လှူ	<i>lhū</i>	donate	လှူ	<i>lhū</i>	ʔù
	လျှောက်	<i>lhyok'</i>	address	လျှောက်	<i>lhyok'</i>	ʃauʔ

## Vowels

The vowels of Pagan Burmese were represented by the letters and symbols shown in (11).

(11)	a	အ ~ အအ်	<i>a ~ a''</i>
	i	အိ ~ အိအ်	<i>i ~ i''</i>
	u	အု ~ အုအ်	<i>u ~ u''</i>
	e	ဧအ် ~ အေ	<i>e</i>
	ɛ	အယ်အ်	<i>aɣ''</i>
	o	အောအ်	<i>o''</i>
	o	အို ~ အိုဝ်	<i>ui ~ ui''</i>

The letter *ဧ e* was interchangeable with the equivalent symbol *အေ e*. The actual sound of *ဧ e* seems to have been different from that of *ဧ e* /*e*/ in modern Burmese, because words with the vowel /*e*/ in modern Burmese are the descendants of words which in Pagan period Burmese were always represented using the combination of two vowel symbols, – *ဝ် -iy'*, as in the examples in (12).

(12)	OB > WB	trsl	gloss	pron
	နိယံ > နေ	niy' > ne	live	nè
	ပိယံ > ပေး	piy' > pe"	give	pé
	သိယံ > သေ	siy' > se	die	thè
	လိယံ > လေး	liy' > le"	four	lé

The spelling ဝိယံ -iy' seems to have been a diphthong, pronounced differently from -ယံ -ay' and ဟိယံ -uy'. Words spelt with -ယံ -ay' in the Pagan period are all pronounced with the vowel -e in modern Burmese, while Old Burmese words in ဟိယံ -uy' have become -we in the modern language as in (13).

(13)	OB > WB	trsl	gloss	pron
	ခြယ်မ > ချေးမ	khruy'ma > khyve"ma	daughter-in-law	te <sup>h</sup> wéma
	ခုယံ > ခွေး	khuy' > khve"	dog	k <sup>h</sup> wé
	ကယ်သိုဝ် > ကဲ့သို့	kay'suiv' > kai'sui'	like, as	kɛðo
	ပါယံ > ပဲ	pāy' > pai	legume	pé
	မယံ > မဲ့	may' > mai'	without	mɛ
	မုယံ > မွေး	muy' > mve"	feed	mwé
	ရှယ် > ရွှေ	rhuy' > rhve	gold	ʃwe

The method of writing the contrasting pairs of long and short vowels in Pali and Sanskrit seem to have been used to write a tonal contrast in Burmese. In Burmese, the symbols denoting Pali long vowels ( ဘိ ဝိ ဘိ ဝိ ) seem to have denoted low tone, as in the words in (14).

(14)	OB	trsl	gloss	WB	trsl	pron
	ငါ	nā	I	ငါ	nā	ŋà
	နာ	nā	sick	နာ	nā	nà
	ရာ	ryā	hundred	ရာ	rā	jà
	ငှိ	ñi	younger brother	ညိ	ñi	jì
	တူ	tū	nephew	တူ	tū	tù
	ယူ	yū	take	ယူ	yū	jù

The spelling အော o was probably pronounced /ɔ/. This is suggested by its appearance in Pali loans containing the vowel o such as ဂေါတမ gotama 'Gotama' and အနုမောတနာ anumotanā 'rejoicing together'. It may, however, have been pronounced as a diphthong /au/ since words containing the vowel ဝေ -o /ɔ/ in modern Burmese were in almost all cases derived from spellings in -ဝ် -av' in Pagan period Burmese, like the words in (15).

(15) Pagan period words in -ဝ် -av'

OB > WB	trsl	gloss	pron
ခဝ် > ခေါ်	khav' > kho	call	k <sup>h</sup> ò
တာဝ် > တော	tāv' > to	forest	tó
တဝ်လှန် > တော်လှန်	tav'lan' > tolhan'	revolt	tòtàn
ဟဝ် > ဟော	hav' > ho	preach	hó
ပူဇဝ် > ပူဇော်	pūjav' > pūjo	make devotional offering	pùzò

Similarly the sound spelled with the symbols -ဝ် -ay' may have been pronounced as a diphthong /ai/, as in the words in (16).

(16) OB words in -ဝ် -ay'

OB > WB	trsl	gloss	pron
ခဝ် > ခဲ	khay' > khai	hard	k <sup>h</sup> é
ငါဝ် > ငဝ်	nāy' > ñay'	small	ŋè
လာဝ် > လဝ်	lāy > lay'	paddy field	lè

The reflexes of Pagan period Burmese words written with -ဝ် āy' are pronounced in Modern Burmese as low tone /ɛ/ in the modern language (as လာဝ် lāy' > လဝ် lay' in (15) above), while those with short -ဝ် -ay' have high tone reflexes spelt with -<sup>h</sup> -ai, pronounced /ɛ/ in modern Burmese (as ခဝ် khay' > ခဲ khai in (16) above).

The combination ိဝ် -uy' is thought to have been another diphthong /ui/, as in the words in (17).

(17) OB words in ိဝ် -uy'

OB > WB	trsl	gloss	pron
ခူဝ် > ခွေး	khuy' > khvai	dog	k <sup>h</sup> wé
ခြွယ်မ > ချေးမ	khruy'ma > khyve'ma	daughter-in-law	tɕ <sup>h</sup> wéma
မူဝ် > မွေး	muy' > mve"	rear, bear	mwé
မြွယ် > မြွေ	mruiy' > myve	snake	mwé

Our attention now turns to the combination ိဝ် ui, pronounced /o/ in modern Burmese. Taken separately, ိဝ် i represents an /i/ sound front vowel and ိဝ် u a back vowel /u/, but what other sounds can these two symbols in combination have represented? The evidence is ambiguous. They appeared in variant forms, namely ိဝ် -i', ိဝ် -ei' and ိဝ် -ui', as in the words in (18).

(18) OB words in -ဝ် -ay'

OB > WB	trsl	gloss	pron
ကေဝ် > အကို	kei' > akui	to	kò
သေဝ် > သို့	sei' > sui'	like	θò
အတိဝ် ~ အတေဝ် > အတို့	ati' ~ atei' > atui'	they	ʔətò
အဖေဝ် > အဖို့	aphei' > aphui'	for	ʔəp <sup>h</sup> ò
စစ်ကေဝ် > အစ်ကို	ec'keiv' > ec'kui	older brother	ʔəkò

This may suggest that ိဝ် ui was a vowel in Pagan period Burmese which had no close equivalent in the Indian languages to which the script's fundamental design was more suited. It is worth noting that towards the end of the Pagan period, this vowel was systematically written with a final consonant -ဝ် -v' attached, as in (18). One possibility is that ိဝ် ui was pronounced as a diphthong /ou/, as in (19).

(19)	<i>OB</i>	<i>trsl</i>	<i>gloss</i>	<i>WB</i>	<i>trsl</i>	<i>pron</i>
	ကိုယ်	<i>kuiv'</i>	body	ကိုယ်	<i>kuiy'</i>	kò
	ခိုက်	<i>khuiv'</i>	steal	ခိုး	<i>khui"</i>	kʰó
	ဆိုက်	<i>chuiv'</i>	say	ဆို	<i>chui</i>	sʰò
	တိုက်	<i>tuiv'</i>	short	တို	<i>tui</i>	tò
	မိုက်	<i>muiv'</i>	sky	မိုး	<i>mui"</i>	mó
	လိုက်	<i>luiv'</i>	desire	လို	<i>lui</i>	lò

### Tones

Burmese of the Pagan period is thought to have been tonal, as is modern Burmese. Tones are sometimes represented during the earlier stage of the Pagan period by the addition of particular symbols: -အ် -<sup>a'</sup> corresponds to modern Burmese creaky tone. -ဝ် -<sup>v'</sup> and -ဟ် -<sup>h'</sup> correspond frequently, but not consistently, to low and high tones, respectively, as in the examples in (20). The symbol -အ် -<sup>a'</sup> often appears in subscript form under the letter which precedes it, instead of appearing to the right of the final consonant letter.

(20)	<i>OB</i>	<i>trsl</i>	<i>gloss</i>	<i>WB</i>	<i>trsl</i>	<i>pron</i>
-အ် - <sup>a'</sup>	စအ်	<i>sa<sup>a'</sup></i>	'begin'	စ	<i>sa</i>	sà
	ဟိအ်	<i>hi<sup>a'</sup></i>	'be'	ရှိ	<i>rhi</i>	ʃi
	နအ်	<i>nu<sup>a'</sup></i>	'soft, tender'	န	<i>nu</i>	nu
	ပျအ်	<i>plyu<sup>a'</sup></i>	'act'	ပြု	<i>pru</i>	pju
	အဖအ်	<i>apha<sup>a'</sup></i>	'father'	အဖ	<i>apha</i>	ʔəpʰa
	အမိအ်	<i>ami<sup>a'</sup></i>	'mother'	အမိ	<i>ami</i>	ʔəmi
	မယ်အ်	<i>may<sup>a'</sup></i>	'deficient'	မဲ့	<i>mai'</i>	mɛ
	ခြင်သိယ်အ်	<i>khraṇ'siy<sup>a'</sup></i>	'lion'	ခြင်သေ့	<i>khraṇ'se'</i>	ʔɛinðɛ
	ဆီအ်တောင်	<i>chi<sup>a'</sup>ton'</i>	'pray'	ဆုတောင်း	<i>chuton<sup>a'</sup></i>	sʰɹtáun
-ဝ် - <sup>v'</sup>	ထိုဝ်	<i>thuiv'</i>	'that'	ထို	<i>thui</i>	tʰò
	ခဝ်	<i>khav'</i>	'call'	ခေါ်	<i>kha</i>	kʰò
	လိုဝ်	<i>luiv'</i>	'desire'	လို	<i>lui</i>	lò
	ပုထိုဝ်	<i>puthuiv'</i>	'hollow stupa'	ပုထိုး	<i>puthui"</i>	pətʰó
-ဟ် - <sup>h'</sup>	သမိဟ်	<i>samih'</i>	'daughter'	သမီး	<i>samī"</i>	θəmi
	သဟ်	<i>sah'</i>	'son'	သား	<i>sā"</i>	θá
	မိယဟ်	<i>miyah'</i>	'wife'	မယား	<i>mayā"</i>	məjá
	နွဟ်	<i>nvah'</i>	'bull'	နွား	<i>nvā"</i>	nwá
	ဤဟ်	<i>ih'</i>	'this'	ဤ	<i>ī</i>	ʔi

Modern low tone words often appear in Pagan period Burmese with long vowels in open syllables and short vowels in closed syllables, as in the words in (21), though by no means consistently, as the exceptions in (15) and (19) show.



(21) OB low tone words

OB	trsl	gloss	WB	trsl	pron
ကူ	kū	'cave shrine'	ဂူ	gū	gù
ငါ	nā	'I'	ငါ	nā	ṇà
ငို	nī	'younger brother'	ညို	nī	ṇì
စုံ	cum	'full'	စုံ	cum	sòun
တောင်	ton'	'mountain'	တောင်	ton'	tàun
နာ	nā	'ill'	နာ	nā	nà
သိယ့်	siy'	'die'	သေ	se	thè
လာယ့်	lāy'	'paddy field'	လာယ့်	lāy'	lè

The practice of representing creaky tone with -အ် -a' written either to the right of or underneath the final consonant disappeared during the latter half of the Pagan period, as is seen from the spellings in (22).

(22) Early Pagan period -အ် -a' spelt without -အ် -a' in the late Pagan period.

early OB	trsl	gloss	later OB	trsl	gloss
အမိအ်	amī <sup>a'</sup>	'mother'	ငမိ	ṇami	'my mother'
အဖအ်	apha <sup>a'</sup>	'father'	ငဖ	ṇapha	'my father'
စအ်	sa <sup>a'</sup>	'begin'	ရ	ra	'get'
ဆုအ်တောင်	chu <sup>a'</sup> ton'	'pray'	လ	la	'moon'

It seems that the final consonant -ဟ် -h' had a function similar to the *visarga* -ḥ -" in modern Burmese (eg OB ကြိဟ် *krīh* > WB ကြိ *krī* 'big'; OB နွဟ် *nvah* > WB နွ *nvā* 'bull'). However, words in high tone were not systematically discriminated from low tone words, particularly in the latter half of the Pagan period, as illustrated in (23).

(23) Tone ambiguity in late Pagan period words

OB	trsl	> 1. WB low tone	> 2. WB high tone
ငါ	nā	ငါ nā 'I'	ငါး nā" 'fish'
စာ	cā	စာ cā 'writing'	စား cā" 'eat'
နာ	nā	နာ nā 'ill'	နား nā" 'ear'
(အ)ရောင်	(a)ron'	အရောင် aroṇ' 'colour'	(အ)ရောင်း (a)ron <sup>a'</sup> 'sell'
လေ	le	လေ le 'wind'	လေး le" 'four'

**Syllable-final consonants**

In Pagan period Burmese, a closed syllable rhyme could consist of various combinations of vowels with a final velar, palatal, dental or labial consonant, which was marked with the symbol အသတ် *asat'*. All the combinations observed in Pagan period Burmese are found in modern Burmese, in addition to several more besides, as in (24); cells in the table without asterisks indicate combinations which did not appear in Pagan period Burmese.

## (24) Permitted closed syllable rhymes in Pagan period Burmese

OB	trsl	- a	- i	- u	- e	- o	- ui	- v-
က	k'	*			*	*	*	*
န	n'	*			*	*	*	*
စ	c'	*			*			
ည	ññ'	*			*			
တ	t'	*	*	*	*			*
ပ	p'	*	*	*				*
မ (-)	m' (-m)	*	*	*				
ယ	y'	*	*	*				*
ဝ	v'	*						*

Examples of words with closed syllable rhymes in Pagan period Burmese are given in (25).

## (25)

		OB	trsl	gloss	WB	trsl	pron
က	k'	ငှက်	n̄hak'	'bird'	ငှက်	n̄hak'	ŋɛ?
		သောက်	sok'	'drink'	သောက်	sok'	θau?
		ယောက်	yok'	CLF for people	ယောက်	yok'	jau?
		မှိုက်	n̄huik'	'in'	မှိုက်	n̄huik'	ŋai?
		ထွက်	thvak'	'go out'	ထွက်	thvak'	tʰwɛ?
င	ñ'	လင်	lān'	'husband'	လင်း	lān''	lín
		ညောင်	ñon'	'banyan'	ညောင်	ñon'	ɲaun
		တန်တိုင်	tan'tuñ'	'brick wall'	တံတိုင်း	tan'tuñ''	tândàin
		တွင်	tvañ'	'inside'	တွင်း	tvañ''	twín
စ	c'	တစ်	tac'	'one'	တစ်	tac'	ti?
		နှစ်	nhac'	'two';	နှစ်	nhac'	ŋi?
		ယုစံ	y hac'	'eight'	ရှစ်	rhac'	ji?
ညံ	ññ'	ရည်	rāññ'	'liquid'	ရည်	raññ'	jè
		ကြည်	hraññ'	'long'	ရှည်	hraññ'	je
တ	t'	သတ်	sat'	'kill'	သတ်	sat'	θa?
		သပိတ်	sapit'	'almsbowl'	သပိတ်	sapit'	θəbei?
		လဆုတ်	lasut'	'waning moon'	လဆုတ်	lasut'	lazou?
		လွတ်	lvat'	'be free'	လွတ်	lvat'	lu?
နံ	n'	ကန်	kan'	'tank'	ကန်	kan'	kàn
		မိန့်အိ	mìn''	'decree';	မိန့်	mìn''	mein
		ဖုန်	phun'	'glory'	ဘုန်း	bhun''	pʰóun
ဝံ	p'	ခပ်သိမ်း	khap'sim'	'all'	ခပ်သိမ်း	khap'sim''	kʰa?θéin
		မွတ်သိပ်	mvat'sip'	'hungry'	မွတ်သိပ်	mvat'sip'	mu?θei?
		လုပ်	lup'	'do'	လုပ်	lup'	lou?
မ (-)	m' (-m)	ခံ	kharñ	'receive'	ခံ	kharñ	kʰàn
		ဤမိ	im'	'house'	အိမ်	im'	?èin
		သုံး	surñ	'three'	သုံး	surñ''	θóun
ယံ	y'	ဆယ်	chāy'	'ten'	ဆယ်	chay'	sʰɛ
		လီယံ	līy'	'four'	လေး	līy'	lé
		မှယ်	muy'	'feed'	မွေး	mve''	mwé

Attention is drawn to the combinations of vowel *ə* - *e* with final consonants, which do not appear in modern Burmese. These spellings appear to have been variants of other combinations, as in (26):

(26) Variant forms with *ə* - *e* - *ʼ*

OB	trsl	gloss	WB	trsl	pron
နှစ် ~ နှစ်	<i>nhec' ~ nhac'</i>	'two'	နှစ်	<i>nhac'</i>	ɲiʔ
မျက် ~ မျက်	<i>mlek' ~ myak'</i>	'eye'	မျက်	<i>myak'</i>	mjɛʔ
လှိုင် ~ လှိုင်	<i>lhen' ~ lhyān'</i>	EMPHATIC	လှိုင်	<i>lhyān'</i>	ʔajɪn
လည်း ~ လည်း	<i>leññ' ~ laññ'</i>	'also'	လည်း	<i>laññ'</i>	lé
ဟေတ် ~ ရှေ့ ~ ရှစ်	<i>het' ~ rhec' ~ rhac'</i>	'eight'	ရှစ်	<i>rhac'</i>	ʃiʔ
ဇစ် ~ အစ်	<i>ec' ~ ac'</i>	'older brother'	အစ်ကို	<i>ac'kui</i>	ʔəkò

The combinations *ə*-*ot'* and *ə*-*on'* were variants of *ə*-*vat'* and *ə*-*van'*, respectively, as in (27):

(27) Variation of *ə*-*ot'* ~ *ə*-*vat'* and *ə*-*on'* ~ *ə*-*van'*

OB	trsl	gloss	WB	trsl	pron
ကျောက် ~ ကျန်	<i>kyon' ~ kyvan'</i>	'slave'	ကျန်	<i>kyvan'</i>	tɕɪn
လှောက် ~ လွတ်	<i>lhot' ~ lhvat'</i>	'release'	လွတ်	<i>lhvat'</i>	ʔuʔ
သောက် ~ သွန်	<i>son' ~ svan'</i>	'pour out'	သွန်	<i>svan'</i>	θùn
အထောက် ~ အထွတ်	<i>athot' ~ athvat'</i>	'pinnacle'	အထွတ်	<i>athvat'</i>	ʔəth'uʔ

Lastly, in some rhymes, *u* - *u* and *o* - *o* were interchangeable during the earlier part of the Pagan period, as in (28).

(28) Variation of *u* ~ *o*

OB	trsl	gloss	WB	trsl	pron
ပြုအ် ~ ပြုအ်	<i>plu' ~ plu'</i>	'make'	ပြု	<i>pru</i>	pju
ရောဟ် ~ ရွာ	<i>roh' ~ rvā</i>	'village'	ရွာ	<i>rvā</i>	jwà
လောန် ~ လွန်	<i>lon' ~ lvan'</i>	'past'	လွန်	<i>lvan'</i>	lùn
အမောအ် ~ အမှု	<i>amho' ~ amhu</i>	'deed'	အမှု	<i>amhu</i>	ʔəm̥u

### 3 Sentence types and sentence syntax

This section looks at the formation of sentences in Pagan period Burmese. Single sentences were either simple, consisting of a single clause, or complex, consisting of a subordinate clause and a main clause. Four sentence types can be identified: affirmative, negative, imperative and interrogative, each treated separately below.

#### Topic-complement sentences

Sentences with a topic and a complement may be referred to as equational sentences. In such sentences, both the topic and the complement consisted of a noun phrase, as in (29)–

(31). Needless to say, the topic was not obligatorily present in Pagan period Burmese: it was often omitted.

- (29) *topic complement topic complement*  
 လဲတဆယ်ကာ ထေရစာတေ၊ ဂျဲပဲကာ အရ္ပာစာတေ။  
*lai.tachay'.kā thera.cā.te, 35.pai.kā aryā.cā.te*  
 field.ten.TOP monk.eat.REAL 35.'peh'.TOP holy.eat.REAL  
 'Ten *peh* of fields is to provide for the senior monk, and 35 for the other monks.'  
 (Inscr. I-383a)

- (30) *topic complement*  
 ဤလိယ်ယောက်သောကျန်သည်ကာ အဖကျန်။  
*īy'.liy'.yok'.so.kyvan'.saññ'.kā apha.kyvan'.*  
 this.four.CLF.ATTR.slave.SUBJ.TOP father.slave  
 'These four slaves are father's slaves.' (Inscr. II-204a)

- (31) *topic complement*  
 ဤပုရာကျန်ဖျက်ဆီသောသူကာ၊ ဩဝံအဝစိယံနစ်စိယံသူတေ။  
*īy'.purhā.kyvan'.phyak'chī'.so.sū.kā, nīrāy'.avacīy'.nac'.ciy'.sū.te.*  
 this.Buddha.slave.destroy.ATTR.person.TOP hell.Avici.sink.CAUS.REAL.EMPH  
 'Whoever destroys the Pagoda slave will be drowned in the infernal realm of Avici.'  
 (Inscr. I-22)

### Sentences with a verbal predicate

The sentences (32)–(40) consist of noun phrases in combination with a verbal predicate.

- (32) *topic predicate (subject + verb)*  
 ဇေယျပုတ်ကာ အသက်လေကြီးအံ။  
*jeyyapvat'.kā asak'.le.krī'.e'*  
 Zeyyaput.TOP age.also.big.REAL  
 'Zeyyaput is old.' (Inscr. I-90)
- (33) *subject predicate (object + verb)*  
 သကရစ်၅၇၃ ဥဓိနာမင် ရှယ်တောင်တက်၏။  
*sakkaraj'.572.khu ucinā.man' rhuy'.ton'.tak'.e\**  
 Sakkaraja.572.CLF Uzana.king gold.mountain.ascend.REAL  
 'King Uzana ascended the throne in Sakkaraja year 572.' (Inscr. I-90)
- (34) *subject predicate*  
 သကရစ်၆၀၉ အတိုင်သခင်မင်ကင်္ကသူ ပျံတာဝံမူအံ။  
*sakkaraj'.609.khu atuiv'.sakhiñ'.man'.kañkasū pyarñ.tāv' mū.e'*  
 Sakkaraja.609.CLF our.lord.king.Kingathu die.HON.REAL  
 'Lord King Kingathu passed away in Sakkaraja year 609.' (Inscr. II-143)

- (35) *subject object verb*  
 ငါကာ နိရဗန်ကိုလျှင် လိုဝ်သတေ။  
*nā.kā niraban'.kui.lhyan' luiv'.sate*  
 I.SUBJ nirvana.OBJ.EMPH want.REAL  
 'I desire nirvana.' (Inscr. III-232)

- (36) *topic indirect object*  
 ဤယံငါလှူသကာ ပုရှာတြာသဗ္ဗာရတနာသုံပါသောအာ  
*īy'.nā.lhū.sa.kā purhā.tryā.saṅghā.ratanā.suñ.pā.so.ā*  
 this.I.donate.REAL.TOP Buddha.Dhamma.Sangha.jewel.three.CLF.ATTR.to

*verb*  
 လှူသတေ။  
*lhū.sa.te*  
 donate.REAL

'My donation was for the three gems: Buddha, Dhamma and Sangha.' (Inscr. II-143)

In (36) the topic ဤယံငါလှူသကာ *īy'.nā.lhū.sa.kā* is a nominalised verb phrase 'that which I donated.'

- (37) *subject indirect object verb*  
 စည်သူမင် သခင်ကင်္ကသုကိုဝ် ပိယံတာဝ်မူသောလယ်။  
*caññ'sū.man' sakhan'.kaṅkasū.kuiv' piy'.tāv' mū.so.lay'*  
 Sithu.king lord.Kinggathu.to give.HON.ATTR.paddy  
 '(The paddy which...) King Sithu granted to Lord Kinggathu.' (Inscr. II- 143a)

- (38) *indirect object subject*  
 သကရစိဉ္စာဓု သခင်မင်ခုန်တိုင်ကိုဝ် မင်ကြီ ဤသိုအ်  
*sakarac'.531.khu sakhan'.man'khun'tuiñ'.kuiv' man'.krī ī.sui'*  
 Sakaraja.531.CLF lord.Mingondain.to king.big this.way

*verb*  
 မိန့်တင်မူ၏။  
*min'.tav' mū.e\**  
 decree.HON.REAL

'In the year of Sakaraja 531, the King gave orders to Lord Mingondain thus.' (Inscr. II- 143a)

- (39) *topic (indirect object) subject verb*  
 အတိုင်ကျွန်ကိုဝ်ကာ အတိုင်ကျွန်ဖ ပိယံတုံဒေ။  
*atuiv'kyvan'.kuiv'.kā atuiv'.kyvan'.pha piy'.tuñ.e'*  
 me.to.TOP my.father give.again.REAL  
 'My father gave it to me in turn.' (Inscr. II-174)

- (40) *direct object*                      *indirect object*                      *subject*    *predicate*  
 လယ်နှင့်အကျွန်      ရတနာသုံးပါးသောကိုဝ်      ငါ      လှူဒါနသော။  
*lay'.nhan'.kyvan'      ratanā.sum.pā.so.kuiv'      nā      lhū.kha.so*  
 field.and.slave                      gems.three.CLF.ATTR.to    I                      donate.PAST.REAL  
 'I dedicated the paddy fields and slaves to the Three Gems.' (*Inscr.* II-164)

### Negative sentences

Verbs were negated by prefixing the negative particle မ *ma*, as in sentences (41)–(53). The sentence-final negative verb particle ဘူး *bū* bú/p<sup>h</sup>ú of modern colloquial Burmese is found neither in Pagan period Burmese, nor in modern formal Burmese (WB).

- (41) ငါ သာလေ မဟိ၊      ငါ မုယံစာတန်သောသူလေ      မဟိ။  
*nā sa.le      ma.hi,      nā muy'sā.tan'.so.sū.le      ma.hi*  
 I    son.also    NEG.have    I    raise.ought.ATTR.person.also    NEG.have  
 'I have no son and no one else to raise.' (*Inscr.* I-51)
- (42) ဖုန် မကြီး အသက် မရှည်စေ။  
*phun'      ma.krī      asak'      ma.rhaññ'.ce*  
 glory    NEG.big    life                      NEG.long.CAUS  
 'May glory be not great, may life be not long.' (*Inscr.* I-88)
- (43) နိယံရောင်လရောင်      မမြင်သောဖွဲ့စိယံအေ။  
*niy'.roñ'.la.roñ'      ma.mrañ'.so.phlac'.ciy'.e'*  
 sun.light.moon.light    NEG.see.ATTR.be.CAUS.REAL  
 'May he be visible neither by sun light nor moonlight.' (*Inscr.* I-104)
- (44) စာရချင်လျက်လျှင်      မစာရတတ်သောကြိစ္စနံလျှင်      ဖွဲ့စိယံသတေ။  
*cā.ra.khlyan'.lyak'.lhyān'      ma.cā.tat'.so.trican'.lhyān'      phlac'.ciy'.sate*  
 eat.get.want.while.EMPH    NEG.eat.able.ATTR.animal.EMPH    be.CAUS.REAL  
 'May he be an animal that is unable to eat even if he wants to eat.' (*Inscr.* IV-389)
- (45) ငါကာ အဆုယ်အမျှိုင်      မဟိယံအံစွံတေ။  
*nā.kā      achuy'amyluiv'      ma.hiy'.svarñ.te*  
 I.TOP    relatives                      NEG.have.capable.REAL  
 'I am unable to have any family.' (*Inscr.* II-112)
- (46) စာသင်တိုက်ကာ      မပြီသိယံ။  
*cā.sañ'.tuik'.kā      ma.prī.siy'*  
 writing.learn.building.TOP    NEG.finish.yet  
 'The building for teaching the Scriptures is not finished yet.' (*Inscr.* III-271)
- (47) တယောက်တည်းလျှင်      မစာဖူး။  
*ta.yok'.taññ'.lhyān'      ma.cā.phū*  
 one.CLF.only.EMPH    NEG.eat.EXP  
 '(I) have not eaten alone.' (*Inscr.* II-193)

- (48) ဥစ္စာဟိယ်ဟိယ်                      မပိယ်လိုဝ်သော                      ဝန်တိုင်နှစ်လိုလေ  
*uccā.hiγ'.hiγ'*                      *ma.piγ'.luiv'.so*                      *van'tuiv'.nhac'.lui.le*  
 property.have.SUBJUNC<sup>REDUP</sup>                      NEG.give.want.ATTR                      uncharitable.enjoy.also

ငါ မဗွန်လိုဝ်။  
*nā ma.phlac'.luiv'*  
 I NEG.be.want

'I do not want to be a man who does not donate and who is stingy, even though he may own much property.' (*Inscr.* III-249)

- (49) အမိန် မဟိအာ။  
*amin' ma.hi.ā*  
 order NEG.have.EMPH  
 'There is no time to waste issuing an order.' (*Inscr.* I-79b)

- (50) မိယာ မဟုတ် ခြွယ်မ                      တေ။  
*miyā ma.hut' khluγ'ma te*  
 wife NEG.true daughter-in-law REAL  
 'She is not the wife, but the daughter-in-law.' (*Aung Thaw* 1972–1983, vol. i, p.24)

- (51) မပိုင်မခြာနိုင်သော                      အတိုင်မသိသော                      က္လောင်။  
*ma.puiñ'khrā.nuiñ'.so atuiñ'.ma.si.so kloñ'*  
 NEG.divide.can.ATTR                      measure.NEG.know.ATTR                      monastery  
 'The monastery beyond measure which could not be divided' (*Inscr.* III-243)

- (52) ရတနာသုံးပါသောဗွယ်ကာ                      ငါ့ဗွယ်သိုဝ်                      ဆံခြည်တတန်လျှင်  
*ratanā.suñ.pā.so.mliγ'.kā nā.mliγ'.suiv' chañ.khraññ'.ta.tan'.lhyañ*  
 gems.three.CLF.ATTR.earth.TOP                      my.earth.to                      hair.strand.1.CLF.EMPH

မဝင်စိယ်။  
*ma.vañ'.ciγ'.*

NEG.enter.CAUS

'Never let the religious land be confused with my own land, even if it be only by the size of a strand of hair.' (*Inscr.* III-296)

- (53) ဤယ်မျှသကျန်ကာ                      ဖုရှာတြာသင်ခါတိုင်ကိုဝ်လေ                      မလှူ။  
*iy'.mhyasa.kyvan'.kā phurhā.tryā.sañ'khā.tuiv'.kuiv'.le ma.lhū,*  
 this.much.slave.TOP                      Buddha.Law.Sangha.PL.to.also                      NEG.donate,

လင်သာအဆုယ်အမျှိုင်တိုင်ကိုဝ်လေ                      မပိယ်သော  
*lan'.sā.achuy'amlyuiv'.tuiv'.kuiv'.le ma.piγ'.so*  
 husband.son.relatives.PL.to.also                      NEG.give.REAL

'I donate these slaves to none of Buddha, Law or Sangha; nor do I give them o my husband, son or relatives.' (*Inscr.* II-201a)

## Orders and exhortations

Imperative and exhortative sentences in Pagan period Burmese contained either a verb phrase *without* any sentence-final particle (such as သတေ *sate* or အေ *e'*), or a verb phrase with one of the causative or imperative verb markers shown in (54).

(54) OB imperative markers

OB	trsl	gloss	WB	trsl	pron	e.g.
(omission of sentence-final verb particle)						
လေ/လိယံ	<i>le~liy'</i>	IMP	လေ	<i>le</i>	<i>lè</i>	(260)
လောအံ~လဝ်	<i>lo'~lav'</i>	IMP	လော့	<i>lo'</i>	<i>lɔ</i>	(261)
လင်	<i>lan'</i>	IMP	လင့်	<i>lan'</i>	<i>lɪn</i>	(266)(267)(268)
စိယံ	<i>ciy'</i>	CAUS	စေ	<i>ce</i>	<i>sè</i>	e.g. (270)(274)(275)(284)(285)(286)

## Questions

Yes-no questions in Pagan period Burmese used the sentence-final interrogative particle လော *lo*, while နေ *nhe* was used in WH-questions, with one of the WH-question words set out in (55) and found in the examples following it.

(55) WH-question words

OB	trsl	gloss	WB	trsl	pron	e.g.
အဖယ်	<i>aphay'</i>	'what/which?'	အဘယ်	<i>abhay'</i>	<i>ʔəbè</i>	
အသိုဝ်	<i>asuiv'</i>	'how?'	အသိုဝ်	<i>asui'</i>	<i>ʔəðɔ</i>	
အတိ	<i>atī</i>	'what/where?'	အတိ	<i>atī</i>	<i>ʔəti</i>	
အဖယ်ကြောင့်	<i>aphay'kron'</i>	'why?'	အဘယ်ကြောင့်	<i>abhay'kron'</i>	<i>ʔəbèdzaun</i>	

- လော *lo* (Stc~) → Q?: yes-no question particle [=WB လာ: *la'* lá]

- (56) မိန့်အံလိုက်သော မင်လော။  
*min<sup>a</sup>.luik'.so man'.lo*  
 decree.just.ATTR king.order.Q-?  
 'Was it the King who issued the order?' (*Inscr.* I-78b)
- (57) နှစ်နှစ်သုံးနှစ်ကြိုကာ မကြာဖူးသလော။  
*nhac'.nhac'.sum.nhac'krui.kā mā.krā.phū.sa.lo.*  
 two.year.three.year.before.TOP NEG.hear.EXP.REAL.Q-?  
 'Have (you) not heard this already in the past two or three years?' (*Inscr.* II-168)
- (58) စည်သူမင်ကြည်ကာ မိုင်တောက်သည်ကာ မိလောဟု မေတင်မူ၏။  
*caññ'sū.man'.krī.saññ'.kā muiv'.tok'.saññ'.kā mī.lo.hu me.tav' mū.e\**  
 Sithu.king.big.NOM.TOP sky.shine.NOM.TOP fire.Q-?.QUOT ask.HON.REAL  
 'King Sithu asked: Is that luminous matter a fire?' (Forchhammer 1892:145)



- (59) ပုထိုးထန်လော      ဗုဒ္ဓိထန်လော      မိယရကာ၊  
*puthuiv'.than'.lo      buddhi.than'.lo      miy'.rakā*  
 stupa.toddy palm.Q-?    Buddha.toddy palm.Q-?    ask.since  
 'Since he asked whether the toddy palm belonged to the stupa or to Buddha...'  
 (Aung Thaw 1972-1983, vol. i, p.24)

• နေ *nhe* (Stc~) → Q-WH: WH-question particle [=WB နည်း *naññ'* ní]

- (60) အသိုဝ် ငါ ခံမ်အံနေ။  
*asuiv' ñā khañ.vam'.am.nhe.*  
 how I endure.dare.IRR.Q-WH  
 'How shall I endure (it)?' (*Inscr.* I-79a)
- (61) အသိုဝ် သတ်ခြင်နေ။  
*asuiv' sat'.khañ'.nhe.*  
 how kill.NOM.Q-WH  
 'By what manner of execution?' (*Inscr.* II-68)
- (62) မနှင်ပိယ်သော ဖွစ်မုကာ အသိုဝ်အံမူအံနေ။  
*ma.nhañ'.piy'.so phlac'.kha.mukā asuiv'.mū.am.nhe.*  
 NEG.prior.give.ATTR be.REAL.if how.act.IRR.Q-WH  
 'If (he) fails to return it, what shall (we) do?' (*Inscr.* I-79b)
- (63) အဖယ်မိန်အံ ဩင်သနေ။  
*aphay'.min' on'.sa.nhe.*  
 what.decree succeed.REAL.Q-WH  
 'With what decree did you succeed (in the case)?' (*Inscr.* I-78b)
- (64) ကျာန်၂၀သကာ အဖယ်မည်သော ကျာန်နေ။  
*kyvāñ'.20.sa.kā aphay'.maññ'.so kyvāñ'.nhe.*  
 slave.20.ATTR.TOP what.name.ATTR slave.Q-WH  
 'What are the names of these twenty slaves?' (*Inscr.* I-38b)
- (65) ခိုဝ်စသောသူတိုဝ်ကာ အဖယ်ဟူ ခံလိမ်နေ။  
*khuiv'.ca.so.sū.tuiv'.kā aphay'.hū khañ'.līm'.nhe.*  
 steal.eat.ATTR.person.PL.TOP what.say endure.OPT.Q-WH  
 'How will those who steal to eat survive?' (*Inscr.* II-168)
- (66) ထိုဝ်ကျာန်ကာ အတီနေ။  
*thuiv'.kyvāñ'.kā atī.nhe.*  
 that.slave.TOP where.Q-WH  
 'Where are the slaves?' (*Inscr.* I-51)
- (67) အတီမှ လာသနေ။  
*atī.mha lā.sa.nhe.*  
 where.from come.REAL.Q-WH  
 'Where did (he) come from?' (*Inscr.* I-95a)

- (68) အရပ်၃ပါဟူသကာ      အတီတိုင်အံနေ။  
*arap'.3.pā.hū.sa.kā      atī.tuiv'.nhe.*  
 region.3.CLF.say.ATTR.TOP    where.PL.Q-WH  
 'Where are the so-called Three Regions?' (*Inscr.* II-143a)
- (69) အသိုဝ်မူရယ်      အခါရှည်ဖွစ်တတ်အံနေ။  
*asuiv'.mū.ruy'      akhā.rhāññ'.phlac'.tat'.arñ.nhe.*  
 how.act.SUBORD    time.long.be.can.IRR.Q-WH  
 'In what way can it last for a long time?' (*Inscr.* IV,392)

### Exclamations

Exclamations were expressed in Pagan period Burmese with a sentence-final particle တကာ *takā*, as in sentences (70)–(73).

- (70) ဩဤနွယ်အရပ်ကာ      မ္ဗတ်စွာတကာဟု      ဆိုဝ်တဝ်မူရယ်။  
*o.ī.mliy'.arap'.kā      mlat'.svā.takā.hu      chuiv'.tav'mū.ruy'.*  
 oh!.this.land.region.TOP    noble.very.EXCL.QUOT    say.HON.SUBORD  
 '[The king] uttered: "How glorious this land is!"' (*Inscr.* I-79b)
- (71) ဩဤယ်မင်ကြီကာ      မိမိပြညာဖွင်ကြရယ်      ဆိုင်သော မဟုတ်တကာ။  
*o.iy'.mañ'.krī.kā      mimi.praññā.phlañ'      chuiv'.so    ma.hut'.takā.*  
 oh!.this.king.big.TOP    REFL.knowledge.with    say.ATTR    NEG.true.EXCL  
 'Alas, the king's speech was not made from his own knowledge!' (*Inscr.* II-68)
- (72) ငါက      ဤယ်သိုဝ်အံ      မရိယ်ဖူတကာဟု      မိန့်အံစအံ။  
*ñā.kā      iy'.suiv'      ma.riy'.phū.tukā.hu      min'.e'.*  
 I.TOP    this.way    NEG.write.EXP.EXCL.QUOT    decree.REAL  
 '(He) said: "I have never written in such a way!"' (*Inscr.* I-78b)
- (73) အညွန့်      မဆိတ်တကာ။  
*añvan'    ma.chit'.takā.*  
 sprout    NEG.pick.EXCL.  
 'Do not pick sprouts!' (*Inscr.* III-271)

### Conditional assumptions

Conditional assumptions contain a subordinate clause followed by a main clause which is an assumed or desired consequence of the subordinate clause. The assumption is expressed using either of the particles အံ *arñ* or မူကာ *mūkā* attached to the verb of the subordinate clause.

- (74) အကြင်သူတဝ်      သာရဟန်းပုံဏာယောက်ယာမိယ်မ      ခီပင်ရအံ၊  
*akrañ'.sū.tav'      sā.raham'.pumñā.yok'yā.miy'ma      khīpañ'.ra.arñ,*  
 that.person.HON    being.monk.Brahmin.man.woman    exalt.can.IRR

ထိုသူတင်သာတိုင်လေ	ငါနှင့်ထပ်တူ	အလှူအကျွှိပ်ကိုဝံ
<i>thui.su. tav'.sātuiv'.le</i>	<i>nā.nhan'.thap'tū</i>	<i>alhū.akluiv'.kuiv'</i>
that.person.HON.person.also	I.with.equally	donation.benefit.OBJ

ရစိယံကုန်သတေ။

*ra.ciy'.kun'.sate.*

get.CAUS.all.REAL

'If any people, whether it a monk, Brahmin, man or woman, tend it, may they all receive merit in equal measure to the merit of my donation.'

(Inscr. II-126b)

- (75) ဤယံသူ      ငမိန်လျက်      ဖျက်စီမုကာ  
*īy'.sū      nā.min'.lhyak'      phyak'chī.mukā*  
 this.person    I.decreed.despite    destroy.if

လူအဖွဲ့စီဟူသောက

*lū.aphlac'.hū.so.ka*

person.existence.say.ATTR.TOP

ရှစ်ဖန်

*rhac'.phan'*

eight.times

မဖွဲ့စီရစိယံသောတေ။

*ma.phlac'.ra.ciy'.so.te.*

NEG.BE.can.CAUS.REAL.EMPH

'If this man destroys (this) despite my warning, may he not be (reincarnated as) a human being eight times.' (Inscr. II-134b)

- (76) ဤယံနိယံသောယောက်ယာမိယံမ      ဖျက်ဆီသော      သိမြင်၍      အရိယံအရမ်  
*īy'.niy'.so.yok'yā.miy'ma      phyak'chī.so      si.mran'.r\*      ariy'aram'*  
 here.live.ATTR.man.woman    destroy.ATTR    know.see.SUBORD    protection

မယူစိမ်မုကာ၊

*ma.yu.cim'.mūkā*

NEG.take.CAUS/IRR.try.if

ငါသခင်တကာ

*nā.sakin'.takā*

my.lord.all

ဤယံမျှသောကာ

*īy'.mhya.so.kā*

this.extent.ATTR.TOP

ငြိယံသင်စိမ်ကုန်သောတေ။

*īray.san'.cim'.kun'.so.te.*

hell.befall.CAUS/IRR.all.ATTR.REAL

'If on the other hand those men and women who live here, observing acts of destruction, should not take action [or: should not cause action to be taken], may they all, my numerous lords, be cast into hell.' (Inscr. I-28a)

- (77) အဆုယ်အဝါသူကြိုသူတပါ      ဖျက်ဆီတေဟူမုကာ      အာဝစိယံကာ  
*achuy'avā.su.krī.su.tapā      phyak'chī.te.hū.mukā      āvaciy'.kā*  
 relatives.person.big.person.other    destroy.EMPH.say.if    Avici.TOP

အထက်အယင်တိုင်အိကာအညွက် ကျက်စိယံသုတေ။  
 athak'.ayan'.tuiv<sup>ac</sup>.kã.aok' kyak'.ciy'.sute.  
 above.he.PL.TOP.beneath boil.CAUS.REAL

'If relatives, leaders or strangers destroy (this), may Avici be above and they below, and may they boil there.' (*Inscr.* I-28b)

- (78) နောင်အခါ ငသာငမ္မယ်တစ်လည်ကောင်၊ ငါဆုယ်မ္မိုင်တစ်လည်ကောင်  
 non'.akhã ña.sã.ña.mlay'.taç'.laññ'.kon', ñã.chuy'mluiv'.taç'.laññ'.kon'  
 later.time my.son.my.grandchild.one.also.good my.relative.one.also.good

ဖျက်ဆီး၏အဟူမူကာ အဖုန်မကြီ အသက်မရှည်စိယံသုတေ။  
 phyak'chĩe\*.hũ.mukã aphun'.ma.krĩ asak'.ma.rhaññ'.ciy'.sate.  
 destroy.REAL.QUOTE.if glory.NEG.big life.NEG.long.CAUS.REAL  
 'In future, if my son, my grandson or a relative destroy (this), may he never be glorious, nor endowed with long life.' (*Inscr.* I-44a)

- (79) သျှင်ဒိသာပြာမုက်တေ ပါမူကာ အမူ ဆောင်နိုင်အံ။  
 syaň'.disapramuk'.te pã.mũkã amũ choň'.nuin'.am.  
 Shin\_Dithapramok.EMPH include.if matter perform.can.IRR  
 'If Shin Dithapramok goes along, he will be able to carry out the matter.'  
 (*Inscr.* III-271)

## Complex sentences

Subordinate clauses Pagan period Burmese sentences made use of one the subordinating conjunctions suffixed to the verb of the subordinate clause, as in the examples in (80)–(95).

- ရှယ် *ruy'* (V~) → SUBORD: subordinate clause marker; V and / V and therefore [=WB  
 ရှ၍ *r\* jwe*]

- (80) ငါမိထွယ် မုယ်ရယ် ကြီး၏။  
 ñã.mithuy' muiy'.ruy' krĩ.e<sup>ac</sup>.  
 I.aunt raise.SUBORD grow up.REAL  
 'I grew up raised by my aunt.' (*Inscr.* II-181)

- (81) သုယ်ခဲ အန်ရယ် သိယ်စိမ်အံတေ။  
 suy'.khai an'.ruy' siy'.cim<sup>ac</sup>.te.  
 blood.clot vomit.SUBORD die.CAUS/IRR.REAL  
 'May he vomit clots of blood and die.' (*Inscr.* II-144)

- (82) ငါကိုဝ် ခပ်ရယ် မင်ကြီ ဤအမူ နှင်၏။  
 ñã.kuiv' khav'.ruy' man'.krĩ lamhu nhan'.e\*.  
 I.OBJ call.SUBORD king.big this.affair entrust.REAL  
 'The King summoned me and entrusted me with this affair.' (*Inscr.* III-271)

- (83) ကိုဝ်မိယာ သာနှစ်ယောက် အပေါင်ငှယောက် ပုတြာလှူရယ်အံ  
*kuiv'.mīyā sã.nhac'.yok' apon'.4.yok' puhra'.lhū.ruy'*  
 REFL.wife son.two.CLF total.4.CLF Buddha.donate.SUBORD

ကျောက်စာ ရိုယ်၏အံ။  
*klok'.cā ri'y'.e'*  
 stone.writing write.REAL

'(I) made this inscription after four of us, including my wife and two sons, made an offering to the Buddha' (*Inscr.* I-6)

- (84) အသျှင်မင်ကြီးလေ ရေစင်တဝ် သွန်ရှယ် အနုမောတနာခဝ်တဝ်မူ၏။  
*asyaṇ'.mañ'.krī.le re.cañ'.tav' svañ'.rhuy' anumotanā.khav'.tav' mū.e\**  
 noble.king.big.also water.clean.HON pour.SUBORD rejoicing.call.HON.REAL  
 'His majesty the King poured the holy water and celebrated his religious deed.'  
 (*Inscr.* I-24)

- အံသောငှာ *am'.so.nhā* (V~) → PURP: in order that it will V [=WB အံသောငှာ *am'.so.nhā* လဲဝံဝံရံ]

- (85) ရခဲစွာသော ရတနာသုံပါ ထာအံသောငါ  
*ra.khai.svā.so ratanā.sum.pā thā.amsonhā*  
 get.difficult.very.ATTR jewels.three.CLF place.PURPOSE

တင်စွာသော ဥတ်အတိသော တန်တိုင်ဝန်ကျင်လေ ပွါ၏ယ်။  
*tan'.svā.so ut'.atī.so tan'tuin'.van'kyan'.le plu.e\*y'*  
 splendid.very.ATTR brick.full.ATTR wall.surrounding.also make.REAL

'(I) constructed a splendid brick wall for the purpose of preserving the Three Gems, which had been obtained with difficulty.' (*Inscr.* I-69)

- လိုဝ်သောငှာ *luiv'.so.nhā* (V~) → PURP: in order that it might V [=WB လိုသောငှာ *lui.so.nhā* လဲဝံဝံရံ]

- (86) သင်သရာဆိုဝိဇ္ဇာယ်မှ ထွက်မွှောက်လိုဝ်သောငါ ကူပုရှာ ပွါအံ။  
*sañ'sarā.chuiv'ñrāy'.mha thvak'.mlok'.luiv'sonhā kū.purhā plu.e'*  
 Samsara.suffering.from leave.release.PURP cave.Buddha make.REAL  
 '(I) constructed a cave-temple so that I will be freed from the cycle of rebirth and suffering.' (*Inscr.* II-138)

- စိမ်အံသောငှာ *cim'.so.nhā* (V~) → PURP: in order that it may cause to V [=WB စိမ်သောငှာ *cim'.so.nhā* ခေါ်ဝံဝံရံ]

- (87) ရတနာသုံပါသောကိုဝ် ပစ္စည်းငှပါ အလိုဝ်ရစိမ်အံသောငါ လှူသော  
*ratanā.sum.pā.so.kuiv' paccaññ'.4.pā aluiv'.ra.cim'.so.nhā lhu.so*  
 jewels.three.CLF.ATTR.to property.4.CLF necessity.get.PURPOSE donate.ATTR

ကျွန်ငှါလယ်၁၆၆  
*kyvan'.4, lay'.166.*  
 slave.4, field.166

'Four slaves and 166 paddy fields which (I) dedicated to the Three Gems for the purpose of usage of the Four Necessities.' (*Inscr.* III-316)

- (88) က္လောန်နိက္ခိရတ္တနာဒပါသတိ၏ ပစ်စေည့်ဖွဲ့စိစိမ်သောငှါ လဲလှူ၏။  
*kloñ'.nhuik'.rattanā.3.pā.sa.tui.e\* pac'ceñ.phlac'.cim'.soñhā lai.lhū.e\*.*  
 monastery.in.jewels.3.CLF.ATTR.PL.GEN property.be.PURP field.donate.REAL.  
 'I dedicated fields so that they would become the property of the Three Gems in the monastery.' (*Inscr.* I-24)

- (89) သင်ပုတ်ဆမိ မပြတ်စိမ်သောငှါ  
*sañ'put'.cha.mi ma.prat'.cim'.soñhā*  
 food\_offering.oil.lamp NEG.run\_short.PURP

အိုမ်မွန်သင်သမိ စေတီကိုဝ် လှူသောလဲကာ စလင်လဲ၅၀။  
*uim'mvan'saṇ'.samī cedi.kuiv' lhū.so.lai.kā calañ'.lai.50.*  
 Ohn Mun Thin.daughter stupa.to donate.ATTR.field.TOP Salin.field.50  
 'The land which Ohn Mun Thin's daughter donated to the stupa, so that it would not run out of food and lamps, is 50 *pai* in Salin.' (*Inscr.* I-12)

- သောကြောင့် *so.kron'* (V~) → because V [=WB သောကြောင့် *so.kron'* ၀၁təuN]

- (90) နိဝဗ္ဗန်ပြည်ကိုဝ် လိုဝ်ချင်သောကြောင့်၊  
*nip'bban'.praññ'.kuiv' luiv'.khlañ'.sokron',*  
 Nirvana.country.OBJ desire.want.because

အာမနာမည်သော ကန်၏ယ် အဝံ့နှက် ဥတ္တိပ္ပသော  
*āmanā.maññ'.so kan'.e\*y' avhañ'.nhuk' utti.plu.so*  
 Amana.name.ATTR pond.GEN whole.in brick.make.ATTR

တန်တိုင်လေည့်ပျ၏အံ။  
*tan'tuin'.leññ'.plu.e\*<sup>a</sup>*  
 wall.also.make.REAL

'(I) constructed the brick walls around a pond named Amana because (I) want to attain the state of Nirvana.' (*Inscr.* I-12)

- (91) သဗ္ဗညုမည်သော ပုဂ္ဂဟအတ္ထစကိုဝ် လိုဝ်သောဟ်ကြောင့်အံအံ၊  
*sabbhāu.maññ'.so puhra.ā.phlac'.kuiv' luiv'.soh'kron'<sup>a</sup>.e',*  
 omniscience.name.ATTR Buddha.existence.OBJ want.because.REAL

သကရစ်၅၅၆ခု တန်ဆောင်မုန်းလဆန်း၂ရက် သောကြာနိယ်အံအာ  
*sakarac'.556.khu tan'choñ'mun'.la.chan'.2.rāyk' sokrā.niy<sup>a</sup>.ā*  
 Sakkaraja.556.CLF Tazaungmon.month.wax.2.CLF Friday.day.on

ကုထာပနာသောကြံဝ်။

*kū.thāpanā.so.hrav'.*

cave.enshrine\_relic.when

'when [I] enshrined a relic of the Buddha in the cave-shrine on Friday, the 2nd waxing day of Tazaungmon in Sakkaraja year 556, since I wanted to become an onmiscient Buddha.' (*Inscr.* I-10a)

- ရကာ *rakā* (V~) → since/because V [=WB ရကာ: *rakā*"] *jagá*

- (92) မွတ်သိပ်ဆိုဝ်ငြယ်သောကိုဝ်      မလိုဝ်ခွင်ရကာ      ပုရှာမဟာသခိင်နှင်အ်  
*mvat'sip'.chuiiv'iray'.so.kuiv'      mā.luiv'khlan'.rakā      purhā.mahā.sakhan'.nhan'*  
 hungry.unhappy.ATTR.OBJ      NEG.want.since      Buddha.great.lord.and

ဤယံကောဝ်      နိယံသောသဃာအာ      လှူသောကာ      စလယ်အပါယ်၂၀၀၀။  
*īy'.klon'      niy'.so.sanghā.ā      lhū.so.kā      calay'.apāy'.2000*  
 this.monastery      live.ATTR.monkhood.to      donate.ATTR.TOP      Salay.pay.2000

'(I) dedicated 2000 *pay* of Salay land to the Lord Buddha and to the monks who live in this monastery, in order to avoid the agony of hunger.' (*Inscr.* I-10a)

- (93) မဟာဓိဓမ္မရာဇဂုရုကိုဝ်      မင်ကြီနာဒေါင်မျာ      ငဲသော  
*mahādhi.dhamma.rāja.guru.kuiv'      man'.krī.nādon'myā      nai.so*  
 Mahadhi.Dhamma.Raja.Guru.to      king.big.Nadaungmya      young.since

စာသင်ရကာ၊      မင်ဖွစ်ပြီ      မဟာထိကောဝ်ပုရှာအာ  
*cā.san'.rakā      man'.phlac'.pri      mahāthi.kron'.purhā.ā*  
 writing.learn.since      king.become.SUBORD      Mahadhi.monastery.Buddha.to

မင်ကြီနာထောင်မျာ      လှူသောမစံသာလဲ၁၀၀။  
*man'.krī.nā.thon'myā      lhū.so.mac'sā.lai.100*  
 king.big.Nadaungmya      donate.ATTR.Myt-tha.field.100

'Since King Nadaunmya had learned as a pupil with Mahadhi Dhammaraja Guru when he was young, he, after his ascending to the throne, dedicated 100 paddy fields at Myittha to the Buddha in Mahadhi monastery.' (*Inscr.* I-63a)

- (94) ကု      ပြီရကာ      ဖုရှာလောင်ကိုဝ်      ငါကြာအေ။  
*kū      prī.rakā      phurhā.loñ'.kuiv'      nā.krā.e'*  
 cave      finish.since      Buddha.future.to      I.report.REAL

'When (the construction of) the cave-temple was finished, I reported it to the Buddha-to-be (the king).' (*Inscr.* II-181)

- (95) အဖိုင်      ငါလိုဝ်စ      ဟူရကာ      အဖိုင်      ငါ      ပိယံအေ။  
*aphuiv'      nā.luiv'.ca      hū.rakā      aphuiv'      nā      piy'.e'*  
 value      I.want.EXCL      say.because      value      I      give.REAL

'Since [he] said "I want money!" I paid it.' (*Inscr.* I-79a)

- လျက် *lyak'* (V~) → while V-ing [=WB လျက် *lyak' ṭəjɛʔ*]

- (96) စာချင်လျက် မစာ၊ ငါတ်၊ သောက်ချင်လျက် မသောက်၊ ငတ်။  
*cā.khyañ'.lyak' ma.cā, ṇāt', sok'.khyañ'.lyak' ma.sok', ṇāt'.*  
 eat.want.while NEG.eat, starve, drink.want.while NEG.drink, thirst.  
 'Though they want to eat, they starve; though they want to drink, they thirst.'  
 (*Inscr.* II-202)
- (97) မြတ်သောက္ခန္ဓာနှင့် ပြည့်စုံလျက် ဆိုင်ငြယ်အမှတ်မသိလိုဝ်။  
*mlat'.so.klaññ'cū.nhañ' plaññ'cūñ.lyak' chuiv'ṇray'.amhat'.ma.sī.luiv'.*  
 noble.ATTR.benefit.with full.while suffering.significance.NEG.know.want  
 'Being full of holy benefit, they are not aware of suffering.' (*Inscr.* III-235)

### Nominalised clauses

Embedded clauses within complex sentences are frequently nominalised, as in (98)–(100). In these sentences, the nominalised clause functions either as the topic (98)–(99) or as the grammatical object (100) of the sentence.

- (98) က္လောင်လှူသောကာ အပေါင် ကျောက်ကာ ၅ယောက်  
*kloñ'.lhū.so.kā apon' kyon' 5.yok'*  
 monastery.donate.ATTR.TOP total slave.NOM 5.CLF  
 'His donation to the monastery amounted to five slaves.' (*Inscr.* I-6)  
 [topic: 'that which he donated']
- (99) ပရိတ်ရွတ်သောကာ သခင်မဟာထေရ် (—) ဤယံစယောက် ဟုတ္တာ  
*parit'.rvat'.so.kā sakhiñ'.mahāther' (...) i'y.8.yok' huttā*  
 prayer.recite.ATTR.TOP lord.MahaThera (...) this.8.CLF true.EXCL  
 'It is true that those who recited the *paritta* were eight persons including Maha Thera.' (*Inscr.* I-10)  
 [topic: 'those who recited the *paritta*']
- (100) မွတ်သိပ်ဆိုဝ်ငြယ်သောကိုဝ် မလိုဝ်ခွင်ရကာ  
*mvat'sip'.chuiv'ṇray'.so.kuiv' chañ'khrañ'.rakā*  
 starve.suffer.ATTR.OBJ NEG.desire.since  
 'Since I do not desire starving and suffering...'  
 [object: '(my) starving and suffering...']

### Relative clauses

Relative clauses preceded the noun, ending with the attributive clause marker *သော so*, still found in modern formal Burmese. The relative clauses are underlined in sentences (101)–(108). In sentences (105)–(108), the intensifier *စွာ cvā* is added to the verb in the attributive relative clause.



- (101) သာမိယံတေဝိဇ္ဇကာစာသော ထမင်ဟင်။  
 sã'mliy'.teiv<sup>ac</sup>.kã.cã.so thaman'han'  
 son.grandson.PL.TOP.eat.ATTR rice.curry  
 'Rice and curry which sons and grandsons [will] eat.' (Inscr. I-5)
- (102) ငါပွသော ကူ ငါပွသော ပုရဟာ  
 ñã'.plu.so kũ ñã'.plu.so purahã  
 I.make.ATTR cave I.make.ATTR Buddha  
 'The cave-temple and Buddha that I constructed.' (Inscr. I-21)
- (103) ဥခေါင်ဆင်သောတန်ဆာ၊ လည်ဆင်သောတန်ဆာ၊  
 ukhoñ'.chan'.so.tan'chã, laññ'.chan'.so.tan'chã,  
 head.adorn.ATTR.ornaments neck.adorn.ATTR.ornaments  
  
 ကိုယ်ဆင်သောတန်ဆာ၊ ခါဆင်သောတန်ဆာ၊  
 kuiv'.chan'.so.tan'chã, khã.chan'.so.tan'chã,  
 body.adorn.ATTR.ornaments waist.adorn.ATTR.ornaments  
  
 ခြယ်ဆင်သောတန်ဆာ  
 khriy'.chan'.so.tan'chã  
 leg.adorn.ATTR.ornaments  
 'Ornaments to adorn the head, neck, body, waist and leg.' (Inscr. III-274)
- (104) ဖွစ်သဆိုငြယ်၊ အိုဝ်မင်သဆိုငြယ်၊ သိယ်သဆိုငြယ်  
 phlac'.sa.chuiv'ñray' uiv'mañ'.sa.chuiv'ñray' siy'.sa.chuiv'ñray'  
 exist.ATTR.suffering aged.ATTR.suffering die.ATTR.suffering  
 'Suffering in birth, suffering in growing old, suffering in death.' (Inscr. II-216)
- (105) ရခဲစွာသော ရတနာသုံပါ  
 ra.khai.cvã.so ratanã.sum.pã  
 obtain.difficult.very.ATTR jewel.three.CLF  
 'The Three Gems which are very difficult to obtain.' (Inscr. I-69)
- (106) တင်တယ်စွာသောကူ  
 tañ'tay'.cvã.so.kũ  
 splendid.very.ATTR.cave  
 'A cave temple which is most splendid.' (Inscr. II-194)
- (107) သာယာစွာသောက္လောင်  
 sã'yã.cvã.so.klon'  
 pleasant.very.ATTR.monastery  
 'A very pleasant monastery.' (Inscr. II-194)
- (108) တင်တယ်စွာသောဥတ်  
 tañ'tay'.cvã.so.ut'  
 splendid.very.ATTR.brick  
 'Very splendid brick' (Inscr. III-247)

Such clauses could also appear as the final main predicate of a sentence, as in (109) and (110), containing stative verbs in which the attributive clause marker သော *so* was equivalent to the sentence-final verb marker အေ *e'*.

- (109) အနာများသော၊ ဆင်ငြယ်ဝေတနာကြီးသော၊ ကုန်ကွသော  
*anā.myā.so, chañ'ñray'.vetanā.krī.so, kun'.kva.so*  
 disease.many.ATTR poor.pain.big.ATTR back.hunched.ATTR

နူးဝဲသော။

*nūvai.so*

leprous.mangy.ATTR

‘[He will be] riddled with disease, poor and greatly suffering, hunchbacked and mangy with leprosy.’ (*Inscr.* I-12)

- (110) အသက်ရှည်အေ။  
*asak'.rhaññ'.e'*  
 life.long.REAL  
 ‘Life is long.’ (*Inscr.* I-38a)

#### 4 Word classes and phrase syntax

This section looks at the characteristics of nouns, verbs, adjectives and the function of various noun and verb particles.

##### Nouns

The great majority of nouns and verbs in Pagan period Burmese were monosyllabic, as in (111):

##### (111) Monosyllabic nouns and verbs

OB	trsl	gloss	WB	trsl	pron
ချစ်	<i>khyac'</i>	love	ချစ်	<i>khyac'</i>	<i>tɕʰiʔ</i>
ဆာင်	<i>chāñ'</i>	elephant	ဆာင်	<i>chan'</i>	<i>ʃhìn</i>
ထီး	<i>thī</i>	finial on stupa	ထီး	<i>thī'</i>	<i>tʰí</i>
တူ	<i>tū</i>	dig	တူး	<i>tū</i>	<i>tú</i>
တက်	<i>tak'</i>	ascend	တက်	<i>tak'</i>	<i>tɛʔ</i>
ထန်	<i>than'</i>	toddy palm	ထန်း	<i>than'</i>	<i>tʰán</i>
နှစ်	<i>nhec'</i>	year	နှစ်	<i>nhac'</i>	<i>niʔ</i>
နီယံ	<i>niy'</i>	live	နေ	<i>ne</i>	<i>nè</i>
မိန့်အံ	<i>min<sup>a</sup></i>	command	မိန့်	<i>min<sup>a</sup></i>	<i>mɛin</i>
လာ	<i>lā</i>	proceed	လာ	<i>lā</i>	<i>là</i>
သတ်	<i>sat'</i>	kill	သတ်	<i>sat'</i>	<i>θaʔ</i>
အိမ်	<i>im'</i>	house	အိမ်	<i>im'</i>	<i>ʔèin</i>

Most bisyllabic or polysyllabic words in the inscriptions can be analysed as polymorphemic compounds, with the first and second components both carrying independent meanings, as in (112):

(112) Bimorphemic compounds in Pagan period Burmese

OB	trsl	gloss	WB	trsl	pron
ချံသာ	<i>khyam'sā</i>	rich (< cool + pleasant)	ချမ်းသာ	<i>khyam<sup>a</sup>'sā</i>	te <sup>h</sup> ánθà
သူခိုင်	<i>sūkhuiv'</i>	thief (< person + steal)	သူခိုး	<i>sūkhuī'</i>	θak <sup>h</sup> ó
ဖထွယ်	<i>phathuy'</i>	uncle (< father + little)	ဘထွေး	<i>bhathve'</i>	bədwe
မျက်နှာ	<i>myak'nhā</i>	face (< eye + nose)	မျက်နှာ	<i>myak'nhā</i>	mjeʔnà
ဝံသာ	<i>varisā</i>	happy (< belly + pleasant)	ဝမ်းသာ	<i>vam<sup>a</sup>'sā</i>	wúnθà

Complex noun phrases could be formed from nouns with postpositioned adjectives, as in (113) a. and b.

- (113) a. လန်ပန်ကြီး      b. ဆည်လည်ငယ်  
           *lan'pan'.krī*        *chaññ'laññ'.ñay'*  
           tray.big            pagoda bell.small  
           'big tray'        'small pagoda bell'

Noun–noun compounds, as in (114), the first noun modifies the second noun. Examples of object–verb compounds are shown in (115), and of subject–verb compounds in (116).

(114) noun–noun compounds

OB	trsl	gloss	translation
ကျောက်စာ	<i>kyok'.sā</i>	stone.writing	> inscription
ငယ်ထိ	<i>ñuy'.thī</i>	silver.umbrella	> silver <i>hti</i>
ဆင်စွယ်	<i>chañ'.cvay'</i>	elephant.tusk	> ivory
ရွယ်ထိ	<i>rhvuy'.thī</i>	gold.umbrella	> golden <i>hti</i>
ရွာသူကြီး	<i>rvā.sū.krī</i>	village.person.big	> village chief

(115)

OB	trsl	gloss	translation
ဆင်ထိန်	<i>chañ'.thin'</i>	elephant.keep	> elephant keeper
နို့ဝိုစိစ်	<i>nuiv'.cuic'</i>	milk.suckle	> suckling

(116)

OB	trsl	gloss	translation
ကောက်လျင်	<i>kok'.lyañ'</i>	paddy.fast	> fast-maturing paddy
ကြွယ်ဖြူ	<i>krvay'.phlū</i>	copper.white	> white copper
ကျောင်းကြီး	<i>kloñ'.krī</i>	monastery.big	> large monastery
ငြယ်ငယ်	<i>ñray'.ñay'</i>	hell.little	> little hell
မျှငယ်	<i>myā.ñay'</i>	wife.small	> concubine
သူကြီး	<i>sū.krī</i>	person.big	> chief
သူကြွယ်	<i>sū.krvay'</i>	person.rich	> rich person
သူဆင်းရဲ	<i>sū.chañ'rai</i>	person.poor	> poor person

## Noun formation

Derivational morphology in Pagan period Burmese included the formation of nouns from verbs using the prefix အ *a*, as in (117). Examples of nouns derived from bisyllabic verbs are given in (118).

(117) noun → verb derivation by အ *a* prefixation

<i>OB</i>	<i>trsl</i>	<i>gloss</i>
ကိန် > အကိန်	<i>kin</i> > <i>akin'</i>	curse (v.) > curse (n.)
ကျင် > အကျင်	<i>kyan'</i> > <i>akyan'</i>	practise > behaviour
လွတ် > အလွတ်	<i>lvat'</i> > <i>alvat'</i>	set free > liberation
စ > အစ	<i>sa</i> > <i>asa</i>	begin > beginning
ဆင်ရဲ > အဆင်ရဲ	<i>chan'yai</i> > <i>achan'yai</i>	be poor > poverty
နာ > အနာ	<i>nā</i> > <i>anā</i>	be ill > disease
ဖွစ် > အဖွစ်	<i>phlac'</i> > <i>aphlac'</i>	be, become > being, state
မိန်အ် > အမိန်အ်	<i>min<sup>a</sup></i> > <i>amin<sup>a</sup></i>	order (v.) > instruction
လှူ > အလှူ	<i>lhū</i> > <i>alhū</i>	donate > donation
ဟိအ် > အဟိအ်	<i>hi<sup>a</sup></i> > <i>ahi<sup>a</sup></i>	live > life
သိယ် > အသိယ်	<i>siy'</i> > <i>asiy'</i>	die > death

The prefix အ *a* is added to both parts of the following disyllabic verbs, as in (118):

(118)

<i>OB</i>	<i>trsl</i>	<i>gloss</i>
လာ+လာ > အလာအလာ	<i>lā + lā</i> > <i>alālālā</i>	go + come > movement
ငိုညွတ် > အငိုအညွတ်	<i>nīññvat'</i> > <i>aññāññvat'</i>	conform > in conformity with
စိပွါ > အစိအပွါ	<i>cīpvā</i> > <i>aciāpvā</i>	prosper > progress
ညှန်ဆယ် > အညှန်အဆယ်	<i>ñhan'chay'</i> > <i>añhan'achay'</i>	hurt, injure > oppression
တင်တယ် > အတင်အတယ်	<i>tiñ'tay'</i> > <i>atiñ'atay'</i>	be fitting > appropriateness
နိုင်ထက် > အနိုင်အထက်	<i>nuiñ'tak'</i> > <i>anuiñ'atak'</i>	splendid > splendour
နှိပ်စက် > အနှိပ်အစက်	<i>nhip'cak'</i> > <i>anhip'acak'</i>	persecute > persecution
ပိယ်ကမ် > အပိယ်အကမ်	<i>piy'kam'</i> > <i>apiy'akam'</i>	hand over, transfer > giving
ပျက်စီး > အပျက်အစီး	<i>pyak'sī</i> > <i>apyak'asī</i>	destroy > destruction
သိမြင် > အသိအမြင်	<i>simrañ'</i> > <i>asiamrañ'</i>	know by seeing > eye-witness

In (117)–(118) the prefix အ *a* has the function of forming a verbal noun from a verb.

It seems that in kinship terms the prefix အ *a* may have had the function of third-person pronominal prefix. Words illustrating this, and the first-person prefix was *c* *ñā*, are given in (119).

## (119) Pronominal prefixation

မိဖု	<i>mīpha</i>	parents
အမိအဖအဖအ	<i>ami<sup>a</sup>apha<sup>a</sup></i>	his/her parents
ငမိငဖ	<i>ṇamiṇapha</i>	my parents
အမိ	<i>ami</i>	his/her mother
ငမိ	<i>ṇami</i>	my mother
တကာကြီးမ	<i>takākṛīma</i>	mother of a layman
အဖအ	<i>apha<sup>a</sup></i>	his/her father
ငဖ	<i>ṇapha</i>	my father
သခင်	<i>sakhiṇ<sup>a</sup></i>	lord
အသခင်	<i>asakhiṇ<sup>a</sup></i>	his/her lord
ငသခင်	<i>ṇasakhiṇ<sup>a</sup></i>	my lord
မိပုဂ္ဂ	<i>mipurhā</i>	consort
အမိပုဂ္ဂ	<i>amipurhā</i>	his consort
သ	<i>sā</i>	son
အသ	<i>asā</i>	his/her son
ငသ	<i>ṇasā</i>	my son
မိယာ	<i>miyā</i>	wife
အမိယာ	<i>amiyā</i>	his/her wife
ငမိယာ	<i>ṇamiyā</i>	his/her wife
ငမ	<i>ṇīma</i>	younger sister
အငမ	<i>aṇīma</i>	his younger sister
သမိတ် ~ သမိ	<i>samiḥ<sup>a</sup> ~ samī</i>	daughter
အသမိ	<i>asamī</i>	his/her daughter
ဆုယ်မျှိုင်	<i>chuy<sup>a</sup>mluiv<sup>a</sup></i>	family
အဆုယ်အမျှိုင်	<i>achuy<sup>a</sup>amluiv<sup>a</sup></i>	his/her family
ငဆုယ်ငမျှိုင်	<i>ṇachuy<sup>a</sup>ṇamluiv<sup>a</sup></i>	my family

## Pronouns

Certain pronouns developed from nouns with pronominal prefixes. These pronouns were also found in conjunction with kinship nouns, as in (120)

## (120) Pronouns

အတိုင်	<i>atuiv<sup>a</sup></i>	they (later 'we', and see (126))
အတိုင်သခင်	<i>atuiv<sup>a</sup>sakhiṇ<sup>a</sup></i>	their lord
အတိုင်ကျွန်	<i>atuiv<sup>a</sup>kryan<sup>a</sup></i>	their slave (later 'I')
အတိုင်ကျွန်ဖု	<i>atuiv<sup>a</sup>kyvan<sup>a</sup>pha</i>	my father
အတိုင်ကျွန်ကြီး	<i>atuiv<sup>a</sup>kyvan<sup>a</sup>phakṛī</i>	my uncle
အတိုင်အကျွန်လင်	<i>atuiv<sup>a</sup>kryan<sup>a</sup>lan<sup>a</sup></i>	my husband
ငတိုင်ကျွန်	<i>ṇatuiv<sup>a</sup>kryan<sup>a</sup></i>	our slave (later 'I')
အတိုင်မိုင်မိုင်	<i>atuiv<sup>a</sup>muiv<sup>a</sup>mliy<sup>a</sup></i>	our sky and land
အတိုင်မင်မင်	<i>atuiv<sup>a</sup>man<sup>a</sup>mliy<sup>a</sup></i>	land of our king

Further examples of pronominal prefixation are found in (121)–(122).

- (121) ရိယံဗ္ဗိယံ ခပ်သိမ်သော အသခိင် ဖွစ်သော မင်ကြီ  
*riy'mliy' khap'sim'so asakhiñ' phlac'so mañ'krī*  
 water.land all.ATTR [its]lord be.ATTR king.great  
 'Great king who reigns as lord over the water and the earth.' *Inscr.* II-194

- (122) ရတနာ အပေါင်အဖပ် အသခင် ဖွစ်ထသော မင်ကြီ  
*ratanā apōñ'apav' asakhiñ' phlac'thaso mañ'*  
 jewel companion [its]lord be.EUPH.ATTR king.great  
 'King, Lord of treasure and of retinue.' *Inscr.* III-247

The prefix အ *a* seems to have been optional in ဩက် ~ အဩက် *ok' ~ aok'* 'bottom', the opposite of အထက် *athak'* 'top'. Analogously, မွေ့က် ~ မြောက် *mlok' ~ myok'* 'north' was freely interchangeable with မလ္လိဩက် ~ မြစ်ဩက် *mlac'ok' ~ myac'ok'* 'downstream/downriver'. However, တောင် *ton'* 'south' was also the word for 'mountain'. It is tempting to speculate that these words for 'north' and 'south' reflected the geographical environment from which the early Burmans migrated towards the Irrawaddy river basin. The 'river' which forms the first component of 'north' clearly cannot refer to the Irrawaddy, since that river flows not from တောင် *ton'* 'mountain/south' to မလ္လိဩက် *mlac'ok'* 'downstream/north', but from north to south, so the river in question must be some other river. The forms မလ္လိဩက် ~ မြစ်ဩက် *mlac'ok' ~ myac'ok'* are found denoting 'north' in Pe Maung Tin and G. H. Luce's *Inscriptions of Burma* Porfolios I–IV, plates 123, 174, 177b, 224, 244, 250, 380 and 474.

Two suffixes yielded nouns from verbs: ခြင် *khran'* (> WB ခြင်း *khran''* *tshin*) and မူ *mhu*, as in (123) and (124):

- (123)
- |                |                         |              |   |                |                   |              |
|----------------|-------------------------|--------------|---|----------------|-------------------|--------------|
| <i>OB noun</i> | <i>trsl</i>             | <i>gloss</i> |   | <i>OB verb</i> | <i>trsl</i>       | <i>gloss</i> |
| ကျင်ခြင်       | <i>kyan'khran'</i>      | practice     | < | ကျင်           | <i>kyan'</i>      | practise     |
| တင်တယ်ခြင်     | <i>tan'tay'khran'</i>   | fitness      | < | တင်တယ်         | <i>tan'tay'</i>   | be fitting   |
| ညှန်ဆဲခြင်     | <i>ññhan'chaikhrañ'</i> | oppression   | < | ညှန်ဆဲ         | <i>ññhan'chai</i> | oppress      |
| သတ်ခြင်        | <i>sat'khran'</i>       | execution    | < | သတ်            | <i>sat'</i>       | kill         |

- (124) ကောင်မူ *koñ'mhu* act of merit < ကောင် *koñ'* good ကောင်း  
 ခိုင်မူ *khuiv'mhu* theft < ခိုင် *khuiv'* steal ခိုး

Pagan period Burmese made use of the pronouns in (125), which could be made plural by adding the suffix တိုင်အံ *tuiv'* or တိုင် *tuiv'*, as in (126), as in modern Burmese.

- (125)
- |               |                       |                               |
|---------------|-----------------------|-------------------------------|
| ငါ            | <i>ñā</i>             | I                             |
| အကျောန် အကျန် | <i>akyon'~akyvan'</i> | I (polite, lit. 'your slave') |
| အတိုင်အံကျန်  | <i>atuiv'kyvan'</i>   | I                             |
| ငတိုင်ကျန်    | <i>ñatuiv'kyvan'</i>  | I                             |
| သင်           | <i>sañ'</i>           | you                           |
| နင်           | <i>nañ'</i>           | you                           |

- |      |               |                              |
|------|---------------|------------------------------|
| ချင် | <i>khyañ'</i> | he                           |
| သူ   | <i>sū</i>     | he                           |
| အယင် | <i>ayañ'</i>  | he (polite, lit. 'that one') |
- (126) ငါတို့ *nā'tuiv'* we  
 သင်တို့ *sañ'tuiv'* you  
 ချင်တို့ *khyañ'tuiv'* they  
 သူတို့ *sū'tuiv'* they  
 အယင်တို့ *ayañ'tuiv'* they (polite)

The same plural suffix တို့ *tuiv'* was applied to nouns referring to human beings, as in (127).

- (127) ငါ က္လောင်တွင် နိယသော သခင်တိုင်အံ  
*nā klon'tvañ' niy'so sakhañ'tuiv'*  
 my monastery.in live.ATTR lord.PL  
 'The senior monks living in my monastery.' (*Inscr.* III-275)
- (128) အဝဇိယံကအထက် အယင်တိုင် ဩက် ကျစိယံသတေ။  
*avaci'kaathak' ayañ'tuiv' ok' kyasiv'sate*  
*Avici.of.above he.PL beneath fall.CAUS.REAL*  
 'May they fall so that they are beneath and Avici is above' (*Inscr.* I-11)
- (129) သင်တို့ သုယောက်လိယံ အနာယူပစေ လသိယံ ဟု မှာခဇေ  
*sañ'.tui surñ.yok'.liy' ana.yū.pa.ce lasiy' hu mhākha.e'*  
 you.PL three.CLF.also rest.take.POL.CAUS still QUOT order.REAL  
 'He ordered the three of them to rest.' (*Inscr.* II-139)

The same plural suffix တို့ *tuiv'* is also found with the inanimate nouns in (130):

- (130) မြို့ယံတို့ *mliy'tuiv'* lands  
 တောင်တို့ *ton'tuiv'* mountains  
 ငွယ်တန်ဆောင်တို့ *nuy'tan'choñ'tuiv'* silver appendages

## Demonstrative Pronouns

Pagan period Burmese used the demonstrative pronouns in (131). Examples of these in combination with nouns are given in (132) and (133).

- (131) *OB trsl gloss WB trsl*  
 ထို *thui'* that ထို *thui*  
 ဤ *īy'* this ဤ *ī*

- (132) *OB* *trsl* *gloss* *WB* *trsl*  
 ဤယ် *īy'* this ဤ *īy'*  
 ဤယ်ကျောင်း *īy'kloŋ'* this monastery ဤကျောင်း *īy'kloŋ'*  
 ဤယ်နိက် *īy'nhuik'* here ဤနိ *ī'n\**  
 ဤယ်သိုဝ် *īy'suiv'* in this way ဤသို *īy'sui'*  
 ထိုဝ် *thuiv'* that ထိုဝ် *thuiv'*  
 ထိုဝ်ကူ *thuiv'kū* that cave ထိုဝ်ကူ *thuiv'kū*  
 ထိုဝ်တွင် *thuiv'tvaŋ'* there ထိုဝ်တွင် *thuiv'tvaŋ'*  
 ထိုဝ်သိုဝ် *thuiv'suiv'* in that way ထိုဝ်သို *thuiv'suiv'*
- (133) ဤယ်သူ သံယောက်  
*īy'.sū* *sum yok'*  
 this.person three.CLF  
 'These three people.'

## Verbs

### (a) Transitive and intransitive verbs

Pagan period Burmese had transitive-intransitive verb pairs distinguished by aspirated and unaspirated initial consonants, as in modern Burmese. Examples are shown in (134).

### (134) Transitive-intransitive verb pairs

<i>intransitive</i>	<i>trsl</i>	<i>gloss</i>	<i>transitive</i>	<i>trsl</i>	<i>gloss</i>
ကျ	<i>kla</i>	fall	ချ	<i>khyā</i>	drop
ကျက်	<i>kyak'</i>	be cooked	ချက်	<i>khyak'</i>	cook
ကွဲ	<i>kvai</i>	be broken	ခွဲ	<i>khvai</i>	break
ကွတ်	<i>klvat'</i>	be liberated	ဆွတ်	<i>khlvat'</i>	emancipate
လွတ်	<i>lvat</i>	be free	လွတ်	<i>lhvat</i>	set free

### (b) Verb reduplication

Verb reduplication was used to express excessiveness or continuation of an action, as in (135)–(138). This was sometimes written using the numeral ၂ 'two'.

- (135) ကြံ့စွာသော အမတ်  
*krī.2.svā.so* *amat'*  
 big.REDUP.very.ATTR nobleman  
 'A nobleman of exceedingly high rank' (*Inscr.* I-69)
- (136) အထူထူသော သတ်ခြင်အာ ရောက်ကုန်အေ။  
*athūthū.so* *sat'.khraŋ'.ā* *rok'.kun'.e'*  
 special.REDUP.ATTR kill.NOM.to arrive.all.REAL  
 'They were all killed by diverse methods of execution.' (*Inscr.* II-168)



- (137) ချံသာလေ      မျက်မှောက်      ထင်၂      ရောက်စိယ်။  
*khyar̥sā.le      myak'mhok'      thañ'.2      yok'.ciy'*  
 wealthy.also      now      clearly.REDUP      arrive.CAUS  
 'May wealth now definitely come to pass.' (*Inscr.* III-250)
- (138) က္လောင်      နိယံနိယံသော      သဃာ  
*klor̥'      niy'.niy'.so      saṅghā*  
 monastery      live.REDUP.ATTR      monkhood  
 'Monks who are living in the monastery.' (*Inscr.* II-132a)

## Adverbs

Adverbs in the inscriptions were formed in one of three ways. The first is with the adverbial suffix *စွာ* *cvā* seen above in attributive relative clauses forms adverbs which modify verbs, as in the underlined phrases in (139) and (140). Adverbial phrases formed from verbs are the second type of adverb, such as those underlined in sentences (141)–(147). A third type of adverbs are derived from nouns, such as the underlined phrase in sentence (148).

- (139) အသက်      ရှည်စွာ      နိယံရစိယ်အေ။  
*asak'      rhaññ'.cvā      niy'.ra.ciy'.e'*  
 life      long.ADV      live.can.CAUS.REAL  
 'May [he] enjoy a long life.' (*Inscr.* I-82b)
- (140) မြတ်မြဲစွာ      ငါပြုသော      ကောင်မှုကို      ထိပါသော  
*mray'mrañ.cvā      ṇā.plu.so      koñ'mhu.kuiv'      thipā.so*  
 steadfast.ADV      I.make.ATTR      act of merit.OBJ      violate.ATTR
- မျက်ဆီသောသူကာ။  
*phyak'chī.so.sū.kā*  
 destroy.ATTR.person.TOP  
 'The person who encroaches and destroys my meritorious deeds, carried out steadfastly.' (*Inscr.* II-153a)
- (141) မိတ်တည်ဖုရသခင်      ဖြစ်သရှင်ခါနိုက်      မချွတ်  
*mit'taññ.phurhā.sakhiñ'      phlac'.sarhav'.khā.nhuik'      makhvyat'*  
 Maitreya.Buddha.Lord      be.when.time.in      without fail
- ဖူချင်သောကြောင့်  
*phū.khalyañ'.so.kroñ'*  
 worship.want.because  
 'Because I wish to pay obeisance to Maitreya without fail when he appears in this world.' (*Inscr.* III-293)

- (142) ဖျက်ဆီးသသူကာ      မွယ်ပုံလုံမျှမကလျှင်      အဝစိတ်အထိ  
*phyak'chī.sa.sū.kā*      *mliy'pur̥lur̥.mhya.maka.lhyan'*      *avacy'.athay'*  
destroy.ATTR.person.TOP      soil.EMPH.not only.EMPH      Avici.inside  
'innumera-ly, incalculably'

ငရယ်နှစ်စိယ်သတေ။

*nray'.nac'.ciy'.sate*

hell.drown.CAUS.REAL

**‘May those who destroy [this] be drowned endlessly in the hell of Avici.’**

(*Inscr.* III-290)

- (143) 

ဤယံၤယောက်သကာ	ကုလၤဇ္ဈောင်နင်အံ	ပုရှာသခင်ကိုဝ်	<u>အခါမ့ၤငမ္မဲယံ</u>
<i>iŋ.4.yok.sakā</i>	<i>kula.klon̄.nhaŋ<sup>ac</sup></i>	<i>purhā.sakhiŋ.kuiv</i>	<i>akhā.mlaŋ.mlay</i>
this.4.CLF.TOP	brick.monastery.and	Buddha.Lord.to	always

ဣန္ဒြေစုံစိမ်အသောငှါလှူသတေ။

khvaññ'rac'.cim<sup>4</sup>sonā.lhū.sate

**feed.PURP.donate.REAL**

‘These four persons whom I dedicated are to serve Buddha and the monastery always.’ (*Inscr.* II-197).

- (144) လူနတ်သတ္တဝါခပ်သိမ်းသတိုဝ်အံ      အကြင်မယ်သဖွင့်အံ      နိဗ္ဗာန်ချံသာအာ  
*lū.nat̃.sattavā.khap̃sim̃.sa.tuiṽ<sup>ac</sup>*      *akvaṇ̃'maỹ.saphlaṇ̃<sup>ac</sup>*      *nibbāṇ̃.khyaṇ̃.ā*  
human.nat.creature.all.REAL.PL      exception.without.ADV      nirvana.wealth.to

ရောက်စေလျှင်တော။

rok'.ce.lhyañ'te.

arrive.CAUS.EMPH.REAL

‘I pray that all human beings, *nats* and living creatures, without exception, may reach the happy state of *nirvana*.’ (*Inscr.* I-69)

- |       |                        |                                 |                          |       |
|-------|------------------------|---------------------------------|--------------------------|-------|
| (145) | ငါလေနိဗ္ဗာန်အ          | <u>မာချွတ်မလွယ်လျှင်</u>        | ရောက်ခွင့်ရကာ            | [...] |
|       | <i>nā.le.nibbān'.ā</i> | <i>makhvyat'ma.lvay'.lhyān'</i> | <i>rok'.khlañ'.ra.kā</i> | [...] |
|       | I.also.nirvana.to      | without fail.EMPH               | arrive.want.since        | [...] |

ရတနာသုံပါသောအာ အကုန်ငါလှ။ဇအ်။

*ratanā.sum.pā.ā*      *akun'.nā.lhū.e<sup>a</sup>.*

gems.three.CLF.to      all.I.donate.REAL

‘[I donated all my property] to the Three Gems because I also wish to reach Nirvana without fail.’ (*Inscr.* I-90)

- (146) ဓာတ်၅၅၀လေ      အတင်အတယ်      ရိုယ်ဒ်အံ။  
*jāt.550.le      atañ'atay'      riye'*  
*jataka.550.also      fittingly      write.REAL*  
 'I also painted 550 *jataka* stories properly.' (*Inscr.* II-194)

- (147) ရွာသူကြိုတိုင်အံ      အနိုင်အထက်      အခွန်တောင်း၏။  
*rvā.sūkṛī.tuiv<sup>ac</sup>*      *anuiñ'.athak<sup>c</sup>*      *akhvan'.ton'.e\**.  
 village.headman.PL      forcibly      tax.request.REAL  
 'The village headmen forcibly demanded tax.' (Inscr. II-196)
- (148) မြွယ်ကြီးတောင်တိုင်ခပင်      မုန့်ညက်      ပျက်စီးသိုဝ်      ပျက်စီးမိသတေ။  
*mliy'.krī.ton'.tuiv'.khapan<sup>c</sup>*      *mun'.2.ññak'.2*      *pyak'ci.suiv<sup>c</sup>*      *pyak'ci.sim'.sate.*  
 land.big.mountain.PL.all      flour.2.crush.2      destroy.as      destroy.CAUS.REAL  
 'May they be destroyed just as earth and mountains are crushed to fine particles.'  
 (Inscr. I-63a)

## Numerals

All the numerals of modern Burmese are found in the inscriptions, as in (149).

### (149) Numerals in OB

OB	trsl	gloss	WB	trsl
တစ်	<i>tac<sup>c</sup></i>	one	တစ်	<i>tac<sup>c</sup></i>
နှစ် ~ နှေ့စ်	<i>nhac<sup>c</sup></i>	two	နှစ်	<i>nhac<sup>c</sup></i>
သုံး	<i>surñ</i>	three	သုံး	<i>surñ<sup>n</sup></i>
လိယံ	<i>liy<sup>c</sup></i>	four	လေး	<i>liy<sup>a</sup></i>
ငါး	<i>ñā<sup>c</sup></i>	five	ငါး	<i>ñā<sup>a</sup></i>
ခြောက်	<i>khrok<sup>c</sup></i>	six	ခြောက်	<i>khrok<sup>c</sup></i>
ခုနစ်	<i>khunhac<sup>c</sup></i>	seven	ခုနစ်	<i>khunhac<sup>c</sup></i>
ယှစ် / ရှေ့စ် / ဟေတ်	<i>yhaç'~rhec<sup>c</sup> ~het<sup>c</sup></i>	eight	ရှစ်	<i>rhac<sup>c</sup></i>
ကိုင်း	<i>kuiv<sup>c</sup></i>	nine	ကိုး	<i>kuī<sup>n</sup></i>
ဆယ်	<i>chay<sup>c</sup></i>	ten	ဆယ်	<i>chay<sup>c</sup></i>
ရာ	<i>ryā<sup>c</sup></i>	hundred	ရာ	<i>yā<sup>c</sup></i>
ထောင်	<i>thon<sup>c</sup></i>	thousand	ထောင်	<i>thon<sup>c</sup></i>
သောင်း	<i>soñ<sup>c</sup></i>	10,000	သောင်း	<i>soñ<sup>a</sup></i>
သိန်း	<i>sin<sup>c</sup></i>	100,000	သိန်း	<i>sin<sup>a</sup></i>

## Classifiers

Numerals were used in conjunction with classifiers, the most common of which are listed in the examples in (150):

### (150) Classifiers

OB	trsl	gloss (with translation if unclear)
ကန်ခကန်	<i>kan'.1.kan<sup>c</sup></i>	lake.1.lake
ရွယ်၆၅အုပ်	<i>rhvuy'.65.klyap<sup>c</sup></i>	gold.65.ticals
ငယ်၅အုပ်	<i>ñuy'.5.klyap<sup>c</sup></i>	silver.5.ticals
ပြတေ၃အုပ်	<i>pyatā.92.klyap<sup>c</sup></i>	mercury.92.tical

ပုရာဇာရ  
ဆီမိတိုင်၍ရ  
စာသင်ကြောင်းငါရ

ဣယံ၍ရ  
နွာဂုရ  
နွာပိုက်ငှာ  
လင်ပန်၂ခွပ်  
နောင်နင်ဥခွပ်

ခွက်၃ခွပ်  
ရှာသုံခင်  
ဆင်တစ်စီ

မြင်ဘစီ  
လှယ်၇စီ

ပုရာငှာ  
သင်ကန်၃ဆူ  
ခွက်ခွင်သုံဆူ  
ချူ၃ဆူ  
သန်လျင်ဆူ  
စာရပ်စဆောင်

စပါ၃ငှတင်  
အဝတ်ဖျင်၂ထည်  
ပုဆိပ်ငှထည်  
အထက်သက်ခံ၃ထည်  
အဩက်သက်ခံထည်  
အရပ်သုံပါ  
ရတနာသုံပါ

နိကာယငါပါ

နိယံသုံပဟိုအံ

လယ်၅ပယ်  
ပွိုဝ်ခင်၃ပယ်

သိရက်ဥပင်  
ညောင်နှစ်ပါင်  
သိယံဖိုဝ်သာဖိုဝ်၅ဝ်သာ

ဆန်သုံပြည်

*purhā. 1.khu*  
*chīmītuirī'. 5.khu*  
*cāsañ'kloñ'. ñā.khu*  
*klvay'. 5.khu*  
*nvā. 7.khu*  
*nvāpuik'. 4.khu*  
*lañ'pan'. 2.khlap'*  
*noñ'nañ'. 9.khlap'*  
*khvak'. 3.khlap'*  
*rhā.suñ.khañ'*  
*chañ'. tac'. cī*  
*mrañ'. 1.cī*  
*luy'. 7.cī*  
*purhā. 4.chū*  
*sañkan'. 3.chū*  
*khvak'khvañ'. suñ.chū*  
*khū. 3.chū*  
*san'lyañ'. 1.chū*  
*cārap'. 8.choñ'*  
*capā. 34.tañ'*  
*avat'phyañ'. 2.thaññ'*  
*puchui'. 45.thaññ'*  
*athak'sak'khañ'. 3.thaññ'*  
*aok'sak'khañ'. 1.thaññ'*  
*arap'. suñ.pā*  
*ratanā.suñ.pā*

*nikāy'. ñā.pā*

*niy'. suñ.pahui'*

*lay'. 5.pay'*  
*plui'v'khañ'. 3.pay'*

*sirak'. 9.pañ'*  
*ññoñ'. nhac'. pāñ'*  
*siy'phuiv'sāphuiv'. 5.pisā*

*chan'. suñ.praññ'*

Buddha. 1.thing  
oil.lamp.pole.5.things  
school.five.things  
buffalo.five.things  
cow.7.things  
bullock.4.things  
tray.2.flat things  
bell.2.flat things  
cup.3.flat things  
farmland.three.areas  
elephant.one.ride  
horse.1.ride  
cart.7.ride  
statue.4.holy objects  
robe.3.holy objects  
cymbal.three.holy objects  
bell.3.holy objects  
palanquin.1.holy object  
shelter.8.houses  
rice.34.bushels  
tunic.2.garments  
waistcloth.45.garments  
upper garment.3.garments  
lower garment.1.garment  
region.three.abstract objects  
jewel.three.abstract objects  
'the Three Gems'  
*nikaya*.five.sacred objects  
'five sections of the Sutta Pitaka'  
day.three.drumstrokes  
'three drumstrokes of daytime'  
paddy.5.*pay*  
plant.plot.3.*pay*  
'three *pay* of planting land'  
mango.9.plants  
banyan.two.plants  
liquor.value.meat.value.5.*viss*  
'five *viss* of liquor and meat'  
rice.three.*pyi*  
'three *pyi* of husked rice'

ကွံသုံယာ	<i>kvañ.suñ.yā</i>	betel.three.quids
ကျန်၁၇၈ယောက်	<i>kyvan'.178.yok'</i>	slave.178.persons
သင်ကြံပန်စင်၅ယောက်	<i>sañ'krīpan'cañ'.5.yok'</i>	priest.5.persons
ကုလာ၃၆၆ယောက်	<i>kulā.366.yok'</i>	Indian.366.persons
ပုရှာ၅ယောက်	<i>purhā.5.yok'</i>	statue.5.persons
		'five Buddha statues'
အမတ်ကြံ၃ယောက်	<i>amat'krī.3.yok'</i>	minister.3.persons
နွာတယုန်	<i>nvā.ta.yhan'</i>	bull.one.pair
သေချနစ်လုံ	<i>sekhū.nhac'.lun</i>	liquor.two.round things (bottles)
စေတီ၂လုံ	<i>ceṭī.2.lun</i>	stupa.2.round things

Interestingly, one classifier which is not found anywhere in the inscriptions is the classifier ကောင် *koñ'* used for animals in modern Burmese. Instead of ကောင် *koñ'* we find *ခု khu* for counting animals, as in ကလွယ်၁ခု *klvay'.1.khu* 'buffalo.one.thing' နွာ၁ခု *nvā.1.khu* 'cow.one.thing'. Animals used for transport, however, were counted with စီ *cī* 'ride', thus ဆင်တစ်စီ *chan'.tac'.cī* 'elephant.one.ride' and မြင်၁စီ *mrañ'.1.cī* 'horse.one.ride'.

Another point worthy of note is that in the inscriptions monks and holy beings are counted with ယောက် *yok'*, which counts lay humans in modern Burmese, and not with the classifier ပါ *pā* (= WB ပါ: *pā*) which is used for holy beings in modern Burmese, thus OB ပန်စင်နှစ်ယောက် *pan'cañ'.nhac'.yok'* 'priests.two.people'.

Similarly, in the inscriptions holy objects are counted, as in (151), with *ခု khu*, which counts ordinary secular objects in modern Burmese, rather than with *ချူ chū* (= mod Bur *ဆ chū*), the modern Burmese classifier for holy objects.

- (151) ရွယ်ပုရှာ၁ခု      ငွယ်ပုရှာ၁ခု  
*rhuy'.purhā.1.khu    ṇuy'.purhā.1.khu*  
 gold.Buddha.1.thing    silver.Buddha.1.thing  
 'one golden Buddha image and one silver Buddha image'.

### Noun markers: postpositions and case-marking particles

A range of post-positional particles and noun markers, many with a case-marking function, which express the relation of nouns to other words in the sentence.

- ကာ *kā* (PHRASE~) → TOP/SUBJ: topic/subject marker [=WB ကာ: *kā*" *ká*]
- ကိုဝ် *kuiv'* (N~) → OBJ: object/ accusative marker [=WB ကို *kui* *kò*]
- ကိုဝ် *kuiv'* (N~) → to N: indirect object / dative marker [=WB ကို *kui* *kò*]
- အာ *ā* (N~) → to N: indirect object / dative marker [=WB အာ: *ā*" *ʔá*]
- ဖွဲ့အ် *phlañ<sup>a</sup>* (N~) → with N: instrumental marker [=WB ဖွဲ့ *phrañ<sup>a</sup>* *pʰjɪN*]
- နှင်အ် *nhañ<sup>a</sup>* (N~) → with N: instrumental marker [=WB နှင် *nhañ<sup>a</sup>* *ṇjɪN*]
- မှ *mha* (N~) → from N: source / ablative marker [=WB မှ *mha* *m̥a*]
- ဧအ် *e<sup>a</sup>* (N~) → GEN: from N: genitive / possessive marker [=WB ဧ *e\** *ʔi*]

- သိုဝ်အ် *suiv<sup>a</sup>* (N~) → to N: direction to or towards [=WB သို<sup>a</sup>*sui'* ၵဝ]
- နိုက် *nhuik<sup>a</sup>* (N~) → in N: location [=WB နို<sup>a</sup> *n\** နှါ?
- တွင် *tvañ<sup>a</sup>* (N~) → in N: location [=WB တွင် *tvañ<sup>a</sup>* twiN]
- အာ *ā* (N~) → in N: location [no WB equivalent]
- လျှင် *lyhañ<sup>a</sup>* (N~) → in N: location [no WB equivalent]
- ထက် *thak<sup>a</sup>* (N~) → more than N: comparative marker [=WB ထက် *thak<sup>a</sup>* t<sup>h</sup>ε?]
- လေ~လည် *le~laññ* also (N~) → also, and, both...and [=WB လေ~လည်: *lai~laññ*" lÉ]

- ကာ *kā* (PHRASE~) → TOP/SUBJ: topic/subject marker [=WB ကာ: *kā*" ká]

- (152) လင်ကာ သိယ်အ်၊ မျာကာ ဟိအ်။  
*lañ<sup>a</sup>.kā siy<sup>a</sup>.e<sup>a</sup>, myā.kā hi.e<sup>a</sup>.*  
 husband.SUBJ die.REAL, wife.SUBJ live.REAL.  
 'The husband has passed away [but] the wife is living.' (Inscr. I-79a)

- (153) ဤယ်ငါကာ အဆုယ်အမွိုင် မဟိအ်စွဲတေ။  
*īy<sup>a</sup>.ñā.kā achuy<sup>a</sup>amluiv<sup>a</sup> ma.hi<sup>a</sup>.cvañ.te.*  
 this.I.SUBJ relations NEG.exist.can.REAL.  
 'I have no family with me.' (Inscr. II-112)

- ကိုဝ် *kuiv<sup>a</sup>* (N~) → OBJ: object/ accusative marker [=WB ကို *kui* kò]

- (154) သမိမိယာကိုဝ်လေလှူအ်၊ သမိကြိကိုဝ်လေလှူအ်၊  
*samī.mīyā.kuiv<sup>a</sup>.lē.lhū.e<sup>a</sup>, samī.krī.kuiv<sup>a</sup>.lē.lhū.e<sup>a</sup>,*  
 daughter.wife.OBJ.also.donate.REAL daughter.big.OBJ.also.donate.REAL

သမိငါယ်မောင်မကိုဝ်လေ လှူအ်  
*samī.ñāy<sup>a</sup>.moñ<sup>a</sup>ma.kuiv<sup>a</sup>.lē lhū.e<sup>a</sup>*  
 daughter.young.attendant.female.OBJ.also donate.REAL  
 'I donated my daughter, my wife, my older daughter, and my younger daughter.'  
 (Inscr. I-6)

- (155) ငါလှူသောဗ္ဗိယံကိုဝ် အစိုရသတေ  
*ñā.lhū.so.mliy<sup>a</sup>.kuiv<sup>a</sup> acuirā.sate*  
 I.donate.ATTR.land.OBJ possess.REAL  
 '[He] possesses the land that I dedicated.' (Inscr. I-31)

- (156) သိစပ်မြင်စပ်သော သဗ္ဗညုညနိပုဏ္ဏဆုကိုဝ်လျှင် လိုဝ်သတေ။  
*si.cap<sup>a</sup>.mrañ<sup>a</sup>.cap<sup>a</sup>.so sabbaññāññan<sup>a</sup>.purhā.chu.kuiv<sup>a</sup>.lyvañ<sup>a</sup> luiv<sup>a</sup>.sa.te.*  
 know.all.see.all.ATTR omniscience.Buddha.reward.OBJ.EMPH desire.REAL.EUPH  
 'I desire the Buddha's reward of omniscience by which I will understand all matters.' (Inscr. II-140)

- ကိုဝ် *kuiv* (N~) → to: indirect object / dative marker [=WB ကို *kui* kò]

- (157) ငါ့ညီသင်တိုင်      သခင်မဟာကသပကိုဝ်      မွှိယ်ရောင်လှာရကာ  
*ñāplaññ'saṇ'.tuiv'      sakhiṇ'.mahā.kassapa.kuiv'      mliy'.roṇ'.lhā.rakā*  
 NgaPyiThin.PL      Lord.Maha.Kassapa.to      land.sell.since  
 'Nga Pyi Thin and other sold their land to Lord Maha Kassapa.'

- အာ *ā* (N~) → to: indirect object / dative marker [=WB အား *ā* 'ါ]

- (158) ဤယံငါလ္လသောတဝ်ဏ္ဍောင်      ပုရှာတြာသဃာရတနာသုံပါသောအာ  
*īy'.ñā.plu.so.tāv'.kloṇ'      purhā.trā.saṅghā.ratanā.suṇ.pā.so.ā*  
 this.I.make.ATTR.forest.monastery      Buddha.law.monkhood.jewel.three.CLF.ATTR.to

အကုန်ငါလှူဒါနအံ။  
*akun'.ñā.lhū.e<sup>a</sup>.*  
 all.I.donate.REAL.

'This forest monastery I have erected to the Three Gems: the Buddha, the Law and the monkhood.' (Inscr. I-90)

- (159) အထူထူသောသတ်ခြင်အာ      ရောက်ကုန်ဒေ။  
*athūthū.so.sat'.khrañ'.ā      rok'.kun'.e<sup>a</sup>.*  
 special.ATTR.execution.to      arrive.all.REAL  
 'They were all killed by diverse means of execution.' (Inscr. II-168)

- ဖွဲ့အ် *phlañ* (N~) → with N: instrumental marker [=WB ဖွင့် *phrañ* 'phj̥N]

- (160) ရွယ်တန်ဆောင်ငယ်တန်ဆောင်တိုင်ဖွဲ့အ်      ပူဇော်ရယ်အ်  
*rhuy'.tan'choṇ'.ñuy'.tan'choṇ'.tuiv'.phlañ<sup>a</sup>      pūjāv'.ruy<sup>a</sup>*  
 gold.ornament.silver.lamps.PL.with      worship.SUBORD  
 'Making devotional offering with golden and silver lamps.' (Inscr. I-73)

- (161) ချတ်သမျက်စိယံဖွဲ့အ်      ရှုကြရစိယံအ်  
*khyat'.sa.myak'ciy'.phlañ<sup>a</sup>      rhu.kra.ciy'.e<sup>a</sup>*  
 love.ATTR.eye.with      look.PL.CAUS.REAL  
 'May they look on with loving eyes.' (Inscr. II-216)

- နှင်အ် *nhañ* (N~) → with N: instrumental marker [=WB နှင့် *nhañ* 'n̥N]

- (162) မိမိအသက်နှင်တူသော၊      မျက်စိယံမျက်ဆန်နှင်တူသော  
*mimi.asak'.nhañ'.tū.so,      myak'ciy'.myak'chan'.nhañ'.tū.so*  
 self.life.with.same.ATTR      eye.eyeball.with.same.ATTR

မိမိချတ်စွာသောလင်၊  
*mimi.khyat'.cvā.so.lañ',*  
 self.love.very.ATTR.husband

'My husband whom I love, who to me is [as precious] as my life, as precious as my eyes.' (Inscr. II-145)

- (163) ထင်ရှာစွာသော ဖြစ်ညာနှင့်အံ ပြည်အံစုံသောရဟန်းအဖွဲ့စစ်  
*than'rhā.cvā.so phrac'ññā.nhañ' praññ'cūm.so.rahan'.aphlac'*  
 visible.very.ATTR wisdom.with full.ATTR.arahan.being  
 'With the status of an *arahan* endowed with conspicuous wisdom.' (Inscr. II-145)

• မှ *mha* (N~) → from N: source / ablative marker [=WB မှ *mha* မှာ]

- (164) ငါဖမှ လာသောကျွန်  
*ñā.pha.mha lā.so.kyvan'*  
 my.father.from come.ATTR.slave  
 'Slaves inherited from my father' (Inscr. II-150)

- (165) လိယံမျက်နှာမှ လာလာသောပုဂ္ဂိုလ်သခင်  
*liy'.myak'nhā.mha lālā.so.purhā.sakhiñ'*  
 four.directions.from come.ATTR.Buddha.Lord  
 'Buddhist priests who came from the four points of the compass.' (Inscr. III-249)

• အေ *e'* (N~) → GEN: from N: genitive / possessive marker [=WB အေ *e'* ခါ]

- (166) လူဇယ်စည်ဇိမ် နတ်ဇေယျစည်ဇိမ် ခံစပြီသော  
*lū.ey'.caññ'jīm' nat'.e'.caññ'jīm' khañca.prī.so*  
 human.GEN.luxury nat.GEN.luxury enjoy.finish.REAL  
 'After enjoying the luxurious life of humans and *nats*.' (Inscr. I-69)

- (167) သခင်အေအမိန်အဟူကိုဝံ ခံပိယံတတ်သောသူ  
*sakhiñ'.e'.amin'ahū.kuiv' khañ.piy'.tat'.so.sū*  
 Lord.GEN.command.OBJ receive.give.usually.ATTR.person  
 'One who is accustomed to receiving Royal Orders.' (Inscr. II-143a)

• သိုဝ်အံ *suiv'* (N~) → to N: direction to or towards [=WB သို့ *sui'* ဝဲဝဲ]

- (168) နိယံရဗ္ဗနံပြည်သိုဝ်အံ ရောက်စိယံချင်သောကြောင့်အံ  
*niy'rabbān'.praññ'.suiv' rok'.ciy'.khlyan'.sokrañ'*  
 Nirvana.land.to arrive.CAUS.want.because  
 'because I want them to reach Nirvana.' (Inscr. II-194)

- (169) မြို့ယံကြွေမြိုဝ်သအလ္လစသိုဝ် ရောက်စေသတေ။  
*mliy'.krīmluiv'.sa.aphlac'.suiv' rok'.ce.sate.*  
 earth.big.swallow.ATTR.state.to arrive.CAUS.REAL  
 'May they be swallowed up into the earth.' (Inscr. II-194)

• နှိုက် *nhuik'* (N~) → in N: location [=WB နှိုက် *n'* နှိုက်]

- (170) မွတ်စွာသောပုဂ္ဂိုလ်သခင်အေ အာနုဖဝ်နှိုက် အသက်ရှည်အေ။  
*mlat'.cvā.so.purhā.sakhañ'.e' ānuphav'.nhuik' asak'.rhaññ'.e'*  
 exalt.ADV.ATTR.Buddha.Lord.GEN power.in life.long.REAL  
 'He enjoyed long life under the influence of the power of the exalted Buddha.' (Inscr. I-18)



- (171) ကုဆုန်လပြည့်ဗုဒ္ဓဟုနိယံအနိဂ် လွတ်အေ။  
*kuchun'.la.plaññ'.buddhahu.niy'.nhuik' lvhat'.e'.*  
 Kason.moon.full.Wednesday.day.on release.REAL  
 '[I] liberated [the slaves] on the full-moon Wednesday of the month of Kason.'  
*(Inscr. II-138)*

- တွင် *tvañ'* (N~) → in N: location [=WB တွင် *tvañ'* *twìñ*]

- (172) လူတွင် ဖုန်မကြီစိယံ။  
*lū.tvañ' phun'.ma.krī.ciy'.*  
 human.in glory.NEG.big.CAUS  
 'May he not be glorious in the human world' *(Inscr. II-144)*

- (173) ဤဟ်သူၣ်ယောက်သောကာ တြာကွန်သာယာတွင် မိယ်ပိယ်သတေ  
*ih'.sū.4.yok'.so.kā trā.kvan'.sāyā.tvañ' miy'.piy'.sate*  
 this.person.4.CLF.ATTR.TOP Taya Kun Thaya.in ask.BEN.REAL  
 '[The Judge] inquired about these four people in the Taya Kun Thaya court.'  
*(Inscr. II-143)*

- အာ *ā* (N~) → in N: location [no WB equivalent]

- (174) ဤယံငါမူသောအလှူကိုဝ် အနိုင်အထက်ဖျက်ဆီသောသူကာ [-]  
*iy'.nā.mū.so.alhū.kuiv' anuiñ'athak'.phyak'chī.so.sū.kā [-]*  
 this.I.do.ATTR.donation.OBJ by force.destroy.ATTR.person.TOP [-]

ဤယံငါကြီးစပါသောအာ ကျက်စိယံကုန်သတေ  
*iy'.nāy'.krī'.8.pā.so.ā kyak'.ciy'.kun'.sate*  
 this.hell.big.8.CLF.ATTR.in cook.CAUS.all.REAL  
 'May those who destroy my donation with force all be boiled in the  
 Eight Tiers of Hell.' *(Inscr. II-143)*

- လျှင် *lyhañ'* (N~) → in N: location [no WB equivalent]

- (175) အဝစိယံအထယ်ငြယ်လျှင် ကျက်စိယံသတေ  
*avacy'.athay'.nray'.lyhañ' kyak'.ciy'.sate*  
 Avici.inside.hell.in cook.CAUS.REAL  
 'May [he] be boiled the hell of Avici.' *(Inscr. I-68)*

- (176) သကြာနိယံလျှင် တန်တိုင်တည်အေ  
*sakrā.niy'.lyhañ' tan'tuiñ'.taññ'.e'*  
 Friday.day.on wall.erect.REAL  
 'This wall was built on Friday.' *(Inscr. I-105a)*

- ထက် *thak'* (N~) → more than N: comparative marker [=WB ထက် *thak'* tʰɛʔ]

- (177) လူဖြစ်က လူတကာထက် မြတ်သောချ်သာ  
*lū.phlac'.ka lū.takā.thak' mlat'.so.khyam.sā*  
 human.be.if person.all.more-than excellent.ATTR.happiness  
 'If I be human, [may I have] happiness more excellent than other humans.'  
 (Inscr. II-181)
- (178) အတိုင်ကျန်တိုင်နိယံသောထက်ကာ သင်္ခါနိယံသောမ္မတ်အေ။  
*atuiv'kyvan'tuiv'.niy'.so.thak'.kā saṅkhā.niy'.so.mlat'.e<sup>a</sup>.*  
 we.live.NOM.more-than.SUBJ monkhood.live.NOM.honourable.REAL  
 'The place the *sangha* live in is more exalted than the place we live in.' (Inscr. I-6)

- လေ~လည် *le~laññ* also (N~) → also, and, both...and [=WB လဲ~လည်: *lai~laññ*" lɛ]

- (179) ရှယ်ထီလေဆောင်အေ၊ ရှယ်ပန်လင်လေပွဲအေ။  
*rhuy'.thī.le.chon'.e<sup>a</sup>, rhuy'.pan'lañ'.le.plu.e<sup>a</sup>.*  
 gold.umbrella.also.hold.REAL, gold.throne.also.make.REAL  
 '[I] brought a both golden umbrella and made a golden throne.' (Inscr. I-6)
- (180) နွလေလှူအေ၊ ဆိတ်လေလှူအေ။  
*nvā.le.lhū.e<sup>a</sup>, chit'.le.lhū.e<sup>a</sup>.*  
 ox.also.donate.REAL, goat.also.donate.REAL  
 '[I] donated both an ox and a goat.' (Inscr. III-235)
- (181) ကန်လေတစ်ခုအေတူ၏။  
*kan'.le.tac'.khu<sup>a</sup>.tū.e<sup>\*</sup>.*  
 pond.also.one.CLF.dig.REAL.  
 '[I] also dug a pond.' (Inscr. III-303)

## 5 Sentence-final verb particles

Sentence-final verbs in affirmative sentences in the Pagan inscriptions could be marked with a range of particles showing tense and aspect, shown in the examples sentences that follow. While assigning glosses to အေ *e<sup>a</sup>* and အံ *am* is relatively straightforward, glossing သော *so*, သောတေ *sote* and သတေ *sate* when they occur as sentence-final verbal markers is more problematic. As mentioned above, attributive clause marker သော *so* could be used to complete finite sentence-final verb clauses, which were identical in form to relative clauses. It could be reduced in form to သ *sa*, and was frequently combined with the euphonic particle တေ *te*. The grammaticalisation and diachronic development of these markers is discussed further by Yanson (this volume).

- သတေ *sate* (V~) → REAL.EUPH: *realis* and euphonic marker V-s, V-ed [=WB သတည်း: *sataññ<sup>a</sup>* θədi].

- (182) ဤယံလေ သဃံကိုဝံ လှူသတေ။  
*īy'.le saṅghā.kuiv' lhu.sate*  
 this.also monkhood.to donate.REAL.EUPH  
 'I donated that also to the monkhood.' (*Inscr.* II-162)

- (183) ဖျက်ဆီရစ်သော သူကာ အပယ်၄ပါလျှင် ကျက်စိယံသတေ  
*phyak'chī.rac'.so sū.kā apay'.4.pā.lhyān' kyak'.ciy'.sate*  
 destroy.remain.ATTR people.TOP punishment.4.CLF.in cook.CAUS.REAL.EUPH  
 'May they who destroy be cooked in the Four States of Hell.' (*Inscr.* I-99)

• သော *so* (V~) → REALIS: V-s, V-ed [=WB သည် *saññ'* ၏] – see (40), (109), (110)

• သောတေ *sote* (V~) → REAL.EUPH: *realis* and euphonic marker V-s, V-ed [=WB သတည်း: *sataññ'* ၏ ၏သိ].

- (184) မြက်နုအရိယံကြည် ဟိယံအရာ လာစိယံသောတေ။  
*myak'.nu'.riy'.kraññ' hiy'.rā lā.ciy'.sote*  
 grass.tender.water.clear exist.place go.CAUS.REAL.EUPH  
 'May they go to where there is tender grass and clear water.' (*Inscr.* III-261a)

• လတ်အံ *lat'arñ* (V~) → EUPH/IRR: euphonic + future/*irrealis* [=WB လတ္တံ *lattam'* လာ?တံ]

- (185) လာလတ်အံသောပုရ  
*lā.lat'arñ.so.purhā*  
 come.EUPH/IRR.ATTR.Buddha  
 'The Buddha who will appear.' (*Inscr.* I-68)

- (186) နောင်လာလတ်အံသော မင်ခပ်သိမ်  
*noñ'.lā.lat'arñ.so. mañ'.khap'sim'*  
 future.come.IRR.ATTR king.all  
 'All the kings who will come in the future.' (*Inscr.* I-21)

• အံ *arñ* (V~) → IRR: *irrealis* marker; will/would V [=WB အံ *arñ'* လာ?]

- (187) သခင်ဗ္ဗုသောပိတကတ် ငါရှိယံခိုင်အံ  
*sakhin'.plu.so.pitakat' nā.rhay'khuiv'.arñ*  
 Lord.make.ATTR.pitaka I.pay obeisance.IRR  
 'I shall pay obeisance to the *pitaka* that the Lord created.' (*Inscr.* I-98)

- (188) ဤယံငါလှူသောလယ်ကိုဝံ ဖျက်ဆီသူ ဟူသမျှကာ  
*īy'.nā.hlū.so.lay'.kuiv' phyak'chī.sū hū.samhya.kā*  
 this.I.donate.ATTR.field.OBJ derstroy.person call.all.TOP

အဝိစိယံဋြယ်လျှင် လာအံသတေ။

aviciy'.iray'.lhyañ' lā.arñ.sa.te

Avici.hell.to go.IRR.ATTR.EMPH

'Whoever destroys the field I have donated shall go to the hell of Avici.'

(Inscr. II-132a)

(189) အရပ်၃ပါ သာသနာ တည်အံ

arap'.3.pā sāsana tāññ'.arñ

place.3.CLF teaching establish.IRR

'[I] shall establish the teaching of the Buddha at three locations.' (Inscr. II-147)

(190) သျှင်ဒိသာပြာမုက်တေ ပါမူကာ အမှုဆောင်နိုင်အံ။

shyan'.disāprāmuk'.te pā.mūkā amhu.chon'.nuññ'.arñ

Shin Disapramok.EMPH include.if task.carry out.can.IRR

'If you assign Shin Disapramok, he will carry out the task successfully.'

(Inscr. III-271)

(191) ပုရှာသခင် နိယရဗန်မမူမိ၊ သကြာမင်ကိုဝ် ခပ်ရယ်၊  
 purhā.sakhañ' niy'raban'.ma.mū.mī, sakrāmañ'.kuiv khav'ruy',  
 Buddha.lord nirvana.NEG.act.before Thagyamin.OBJ call.SUBORD

သိန်ခိုင်ကွန်နီကံ၊

sin'khuiv'.klvan'.nhuik',

Sri Lanka.island.in

သိရိဓမ္မသုကမင်ကြိသာ၊

sirīdhammasuka.mañ'.krī.sā,

Sri Dhamma Asoka.king.son

မဟိန်တထေရ

mahin'ta.thera

Mahinda.monk

သာသနာတည်ရစ်အံ၊

sāsana tāññ'.rac'.arñ,

doctrine.build.remain.IRR,

နင်စောင်မရစ်ဟု

nañ'.con'ma.rac'.hu

you.guard.remain.QUOT

နှင်ခဲရကာ။

nhañ'.khai.rakā.

entrust.REM.because

'Before his entering the state of *nirvana*, the holy Buddha summoned Thagyamin and commanded him, saying that the monk Mahinda, the son of King Sri Dhamma, would remain and propagate the doctrine in Sri Lanka. Entrusting him with the task, he said "You must take care of it" ...' (Inscr. III-250)

- အေ e<sup>a</sup> (V~) → REALIS: V-s, V-ed [=WB ၏ e\* ?]

(192) ညောင်ပင် စိုက်အေ။

ññon'.4.pan' cuik'.e<sup>a</sup>

banyan.4.CLF plant.REAL

'I planted four banyan trees.' (Inscr. I-105)

- (193) စာသင်ကျောင်း၅ခု ပွဲဇာန်  
*cāsañ'.kloñ'.5.khu plu.e'*  
 study.school.5.CLF plant.REAL  
 'I built five schools [for Buddhist study].' (*Inscr.* III-254b)
- (194) ကျောက်စာ ရယ်ဇာန်  
*klok'cā riy'.e'*  
 stone.writing write.REAL  
 'I wrote an inscription.' (*Inscr.* I-6)
- (195) ဦးစိနာမင်ကြီး ဟရယ်တောင် တက်ဇာန်  
*ucinā.mañ'.krī haruy'.toñ' tak'.e'*  
 Uzana.king.big gold.mountain ascend.REAL  
 'King Uzana ascended the throne.' (*Inscr.* I-36)

## 6 Other verb particles

Below, more examples from the inscriptions illustrate grammatical forms associated with verbs presented in this paper. Further example sentences and a list of all the grammatical forms discussed in this paper are given at the end.

- omission of sentence-final verb particle → indicates an order; imperative [= WB]

- (196) ကောက်ပယ် ပြီးသောကာ ဝင်။  
*kok'.pay' prī.pī.so.kā van'*  
 paddy.beans finish.PERF.ATTR.TOP enter  
 'Go in after the harvest is finished.' (*Inscr.* III-271)
- (197) ဤသူ့ယောက်သောကိုဝ် အစိတ်အစိယ် မိယ်ပိယ်။  
*ī.sū.3.yok'.so.kuiv' acit'aciy' miy'.piy'*  
 this.person.3.CLF.ATTR.OBJ detail ask.BEN  
 'Make inquiries for me in detail about these three people.' (*Inscr.* I-74)

- ကုန် *kun'* (V~) → all V, each V [=WB ကုန် *kun'* kòun]

- (198) မင်သာအမတ်သတ္တေသူကြွယ်တိုင်သည်လည် အနုမေတာနုခါဝ်ပါကုန်ဇာန်။  
*mañ'sā.amat'.satthe.sūkrvay'.tuiv'.saññ'.laññ'* *anumetana.khav'.kun'.e'*  
 prince.minister.rich rejoicing.call.all.REAL  
 person.person.wealthy.PL.NOM.also  
 'Princes, ministers and wealthy people all celebrated the glory [of my donation].'  
 (*Inscr.* I-31)
- (199) အယင်တိုင်ကာ သြက်အထယ်လျှင် ဖွစ်စိယ်ကုန်သတေ။  
*ayan'tuiv'.kā ok'.athay'.lyhan' phlac'.ciy'.kun'.sate.*  
 they.TOP beneath.inside.in be.CAUS.eventually.REAL  
 'May they end up beneath [and hell above].' (Aung Thaw 1972–1983, vol. i, p.44)

- (200) လူပြိတ္တာလျှင် ဖွစ်စိယံကုန်သတေ။  
 lū.prittā.lyvañ' phlac'.ciy'.kun'.sate.  
 human.ghoul.EMPH be.CAUS.eventually.REAL  
 'May they turn into human ghouls.' (Aung Thaw 1972–1983, vol. i, p.44)

• ကြ kra (V~) → PL: plural; V has plural subject [=WB ကြ kra tēa]

- (201) အပေါင်ကျာန်၃၀ မုယ်ကြပြီသောတေ။  
 apoñ'.kyvāñ'.30 muy'.kra.prī.so.te  
 total.slave.30 keep.PL.PERF.ATTR.EUPH  
 'They look after a total of thirty slaves.' (Inscr. I-77)

• ခ ~ ခါ ~ ခယ် kha ~ khā ~ khay' (V~) → REM: remote past, remote place [=WB ခဲ  
 khai' kʰɛ]

- (202) က္လောကံစာရိယံခါသော။  
 kloka'.cā.riy'.khā.so  
 stone.writing.write.REM.ATTR  
 '[I] wrote an inscription.' (Inscr. I-21)

- (203) အတိုင်အံကျန် ပျက်စီးဆင်ငြယ်ခဇေ  
 atuiv'kā'kyvāñ' pyak'cī.chañ'iray'.kha.e'  
 I ruined.poor.REM.REAL  
 'I was bankrupted and became poor.' (Inscr. I-79a)

- (204) ဤကျန်၂ယောက်သာကာ ငါသခိင် ငါလှူခဇေ။  
 ī.kyvāñ'.2.yok'.sā.kā nā.sakhañ' nā.lhū.kha.e'  
 this.slave.2.CLF.only.TOP my.lord I.donate.REM.REAL  
 'I donated these two slaves to my Lord.' (Inscr. IV-378a)

- (205) အမုယ်ဥတ်စာတိုင်ကိုင် ဇွန်ခဤယ် သွာခသွာဇေ။  
 amuy'ut'cā.tuiv'.kuiv' cvan'.kha.r'y' svā.kha.svā.e'  
 parents.possessions.PL.OBJ abandon.REM.SUBORD go.REM.go.REAL  
 'My parents abandoned their legacy and passed away.' (Inscr. III-272)

- (206) သာမ္ဗိယံချစ်ကိုင် ပိယ်ခယ်  
 sām.liy'.khyac'.kuiv' piy'.khay'  
 son.grandson.love.OBJ give.REM  
 'Give your beloved son and grandson.' (Inscr. IV-381)

- (207) ရခဲစွာသောရတနာသုံပါ  
 ra.khai.cvā.so.ratanā.sum.pā  
 obtain.difficult.very.ATTR.jewel.three.CLF  
 'The Three Gems which are very hard to obtain.' (Inscr. I-69)

- ချင် *khlan'* (V~) → desire, want to V [=WB ချင် *khyan'* tɕʰin]

- (208) စချင်ဝတ်ချင်လျက်သော လူပြိတ္တာလျှင် ဖွစ်စိမိသတေ။  
*sa.khlan'.vat'.khlan'.lyak'.so lū.prittā.lyhan' phlac'.cim'.sate.*  
 eat.want.wear.want.while.ATTR human.ghoul.EMPH be.CAUS/IRR.REAL  
 'May they be human ghouls who perpetually want to eat and drink.' (*Inscr.* IV-416a)
- (209) သံသရာငြိယ်ကလွတ်ရာ ဖွစ်သောနိယံရပ်နံ ဆုကိုဝံလိုဝံချင်သည်။  
*samsara.rā.nray'.ka.lvāt'.rā phlac'.so.niy'rapan' chu.kuiv'.luiv'.khlan'.saññ'*  
*samsara.hell.from.release.place be.ATTR.nirvana reward.OBJ.want.want.REAL*  
 '[I] desire the reward of *nirvana*, which is the state of release from the cycle of rebirth.' (*Inscr.* IV-413)

- စိယ် *ciy'* (V~) → CAUS: cause to V; may V happen; causative/exhortative marker often used in orders and commands [=WB စေ *ce* sè]

- (210) ဤငြိယ်ကြီးပါအာ ကျက်စိယ်ကုန်သတေ။  
*īy'.nray'.krī.8.pā.ā kyak'.ciy'.kun'.sate.*  
 this.hell.big.8.CLF.in cook.CAUS.all.REAL  
 'May they all be boiled in the Eight Tiers of Hell.' (*Inscr.* I-51)
- (211) လျှာတလံထွက်လျက် ခံစေသတေ။  
*lyvan'.ta.lan.thvak'.lyak' kharñ.ce.sate.*  
 tongue.one.lan.protrude.while suffer.CAUS.REAL  
 'May [they] suffer [the punishment of] their tongues protruding one *lan* (six feet).' (*Inscr.* I-69)
- (212) ကျွန်၇၃ယောက်သကာ [-] ဤပုရာ၄ဆူသော ကိုင် လုပ်ကူညီစိယ်  
*kyvan'.73.yok'.sakā [-] ī.purhā.4.chū.so.kuiv' lup'.klvaññ'.ciy'*  
 slave.73.CLF.ATTR.TOP [-] this.Buddha.4.CLF.ATTR.OBJ make.feed.CAUS  
 'May 73 slaves take care of these four Buddhas.' (*Inscr.* II-130)
- (213) ဤပုရာ၄ဆူသောကိုင် လုပ်ကူညီစိယ်ဟု လှူသတေ။  
*ī.purhā.4.chū.so.kuiv' lup'.klvaññ'.ciy'.hu lhū.sate*  
 this.pagoda.4.CLF.ATTR.OBJ look after.CAUS.QUOT donate.REAL  
 '(I) donated (servants) to look after these four pagodas.' (*Inscr.* II-130)
- (214) ပိတကတ် ရွယ်ကူတွင် ထာလစိယ်ဟု မိန့်ရက။  
*pitakat' rhuy'.kū.tvan' thā.la.siy'.hu min'.rakā*  
 Pitaka gold.cave-temple.in place.EUPH.CAUS.QUOT decree.because  
 '(The King) issued a decree to preserve the Buddhist scriptures in the golden cave-temple.' (*Inscr.* I-98)

- (215) သျာသုဗ္ဗိယံ သိကြည်ဗ္ဗိယံကိုဝ်ကာ အခွန် မတောင်စိယံ။  
*syāsu.mliy', sikaññ'mliy'.kuiv'.kā akhvan' ma.ton'.ciy'.*  
 Shathu.land, Thikyi.land.OBJ.TOP tax NEG.request.CAUS  
 'Do not levy tax on the lands owned by Shathu and Thikyi.' (*Inscr.* II-96)
- (216) နိဗ္ဗန်မည်သော မသိယံပြည် ဝင်စိယံသတေ။  
*nibban'.maññ'.so ma.siy'.praññi van'.ciy'.sate.*  
 Nirvana.named.ATTR NEG.die.country enter.CAUS.REAL  
 'May they be able to enter the immortal world called Nirvana.' (*Inscr.* II-202)
- (217) ငါပုသော ကောင်မှုကိုဝ် ထိပါသော ဖျက်ဆီသော သူကာ  
*ñā.plu.so koñ'mhu.kuiv' thipā.so phyak'chī.so sū.kā*  
 I.do.ATTR good deed.OBJ violate.ATTR destroy.ATTR person.TOP  
 မြို့ယံကြိုကအထက် အယင်တိုင်ကာ အဝိစိဋ္ဌာယံခံစိယံသတေ။  
*mliy'.krī.ka.athak' ayañ'tuiv'.kā avici.ñray'.khañ.ciy'.sate.*  
 earth.big.SUB.above they.TOP Avici.hell.suffer.CAUS.REAL  
 'May they suffer underground in the hell of Avici if they trespass upon and destroy my meritorious deeds.' (*Inscr.* II-153a)
- (218) ချတ်သောမျာ ချတ်သောသာနှင့်အံ ကွဲကင်စိယံ။  
*khyat'.so.myā khyat'.so.sā.nhañ' kvi.kvañ'.ciy'*  
 love.ATTR.wife love.ATTR.son.with divide.separate.CAUS  
 'May he be separated from his beloved wife and beloved son.' (*Inscr.* II-153a)
- (219) ပိယံခါသောကိုဝ် ဖျက်သောက သာဗ္ဗစလေ အာမ္ဗယ်မယ်သောသာ  
*piy'.khā.so.kuiv' phyak'.so.ka sā.phlac'.le āmvay'.may'.so.sā*  
 give.REM.ATTR.OBJ destroy.ATTR.TOP animal.be.also fur.without.ATTR.animal  
 ဖြစ်စိယံသတေ။ ငါဗ္ဗစလေ အကြိယံမယ်သောငါ ဖြစ်စိယံ။  
*phlac'.ciy'.sā.te. ñā.phlac'.le ākriy'.may'.so.ñā phlac'.ciy'*  
 be.CAUS.animal.REAL. fish.be.also scales.without.ATTR.fish be.CAUS  
 'Whoever would destroy my donation, may he be without fur if an animal and without scales if a fish.' (Aung Thaw 1972-1983: vol. ii, p.46)
- စံ *caṃ* (V~) → enjoy V-ing
- (220) ငါအလှူကောင်မှုအိအက္ခိဝ်သည် ငါရစံသော အက္ခိဝ်နှင့်ထပ်တူလျှင်  
*ñā.alhū.koñ'mhu.e'.akluiv'.saññi' ñā.ra.caṃ.so.akluiv'.nhañ'.thap'tū.lyvañ'*  
 my.donation.merit.GEN.benefit.NOM I.obtain.enjoy.ATTR.benefit.with.equal.EMPH  
 ရစံစိယံသတေ။  
*ra.caṃ.ciy'.sate*  
 obtain.enjoy.CAUS.REAL  
 'May [they] enjoy benefits comparable to those I enjoyed from my meritorious act of donation.' (*Inscr.* I-144)



- $\text{cvarṇ (V~)} \rightarrow \text{can V [? = WB စွမ်း cvam' swán]}$

- (221) ငါက အဆုယ်အမွှိဝ် မဟိယ်အံစွံတေ။  
*nā.kā achuy'amluiv' mā.hiy'.cvarṇ.te.*  
 I.TOP relatives NEG.exist.can.REAL  
 'I have no possibility of having any family.' (*Inscr.* II-111)
- (222) ထင်မှိဝ်လျာမှိဝ် မကြာင်ကြစိယ်စွမ်တေ။  
*than'.phuiv'.lyvā.phuiv' mā.kron'kra.ciy'.cvam'.te.*  
 fuel.price.tongue.price NEG.worry.CAUS.can.REAL  
 'They have no need to worry about the price of fuel or food.' (*Inscr.* III-275)
- (223) ဤယံပုရာကျွန်ကိုဝ် မစိုဝ်ပါစွံတေ။  
*iy'.purhā.kyvan'.kuiv' mā.cuiv'.pā.cvarṇ.te.*  
 this.Buddha.slave.OBJ NEG.own.POL.can.REAL  
 '[They] will be unable to own this pagoda slave.' (*Inscr.* II-182a)
- (224) ငသာ၊ ငမွှိယံ၊ ငဆုယ်တိုင်ကာ မဝင်ပါစိယ်စွံတေ။  
*nā.sā, nā.mliy', nā.chuiv'.tuiv'.kā mā.van'.pā.cvarṇ.te.*  
 my.son, my.grandson, my relative.PL.TOP NEG.enter.POL.CAUS.can.REAL  
 'May none of my sons, grandsons or relatives be permitted to enter.' (*Inscr.* II-132a)
- (225) ဖုရာအဗ္ဗစံဗ္ဗစံလေ မဖူစိယ်စွံတေ။  
*phurhā.aphlac'phlac'.le mā.phū.cvarṇ.te*  
 Buddha.state.be.also NEG.worship.CAUS.can.REAL  
 'Buddha after Buddha, may he be unable to worship them.' (*Inscr.* I-101)

- $\text{တတ် tat' (V~)} \rightarrow \text{can V; usually V-s [=WB တတ် tat' ta?]}$

- (226) ဤယံရတနာဒုပါသောကိုဝ် လုပ်က္ကည်တတ်သောသူ  
*iy'.ratanā.3.pā.so.kuiv' lup'.klvaññ'.tat'.so.sū*  
 this.jewel.3.CLF.ATTR.OBJ do.feed.can.ATTR.person  
 'He who can take care of the Three Gems.' (*Inscr.* II-143a)
- (227) သူတစ်ထူကိုဝ်ညွန်ဆယ်တတ်သော၊ မလွတ်တတ်သပြိတ္တာ။  
*sū.tathū.kuiv'.ññhan'.chay'.tat'.so, mā.lvat'.tat'.sa.prittā.*  
 person.other.OBJ.torture.can.ATTR, NEG.release.can.ATTR.ghoul  
 'A ghoul who (habitually) tortures others and cannot be released.' (*Inscr.* II-216)

- $\text{တော် မူ to' mū (V~)} \rightarrow \text{HON: honorific construction; lit: '[honoured-V] do-'} [=WB တော် မူ to' mū tò mù]$

- (228) မင်ကြိလေလာတတ်မုပါရယ် တြာလေနာတတ်မုပါဒေ  
*mañ'.krī.le.lā.tāv' mu.pā.ruy' tyrā.le.nā.tāv' mū.pā.e'*  
 king.big.also.come.HON.POL.SUBORD doctrine.also.listen.HON.POL.REAL  
 'The King came and listened to the doctrine.' (*Inscr.* IV-390)

- (229) ပြည်အနောက်ဖက်လှည့်ကွန်ကံ မင်ကြိန်ယံတပ်မူအေ။  
*praññ'.anok'.phak'.lhaññ'kla.nhuik' mañ'.krī.niy'.tav' mū.e<sup>a</sup>.*  
 Pyay.west.Hlegya.in king.big.live.HON.REAL  
 'The King resides in Hlegya, west of Pyay.' (*Inscr.* III-271)

- (230) အတိုင်သခင်မင်ကင်္ဂာသူ ပျံတာဝ်မူအေ။  
*atuv'.sakhin'.mañ'.kañkāsū pyaṃ.tāv' mū.e<sup>a</sup>.*  
 our.lord.king.Kingathu die.HON.REAL  
 'Our Lord, King Kingathu, has passed away.' (*Inscr.* II-143a)

- တန် *tan'* (V~) → suitable to V, ought to V [=WB တန် *tan' tən*]

- (231) ငါမုယ်စာတန်သောသူလေမဟိ။  
*ñā.muy.cā.tan'.so.sū.le.ma.hi.*  
 I.care for.ought.ATTR.person.also.NEG.exist  
 'There is no-one I should take care of.' (*Inscr.* I-51)

- (232) ရိယံမသွန်တန်ဟုရယ်။  
*ruy'.ma.svan'.tan'.hu.ruy'.*  
 water.NEG.pour.ought.QUOT.SUBORD  
 '[He said] that [one] should not pour water.' (*Inscr.* III-264)

- တုံ *tum* (V~) → 'V again' [=WB တုံ *tum toun*]

- (233) မိန်တာဝ်မူတုံအေ။  
*min'.tāv' mū.tum.e<sup>a</sup>.*  
 order.HON.again.REAL  
 '[The King] again issued an order.' (*Inscr.* I-3)

- (234) တန်တိုင်ဗွတုံအေ၊ ကူတည်တုံအေ။  
*tan'tuiñ'.plu.e<sup>a</sup> kū.taññ'.tum.e<sup>a</sup>.*  
 wall.make.REITER.REAL, cave.build.again.REAL  
 '[He] both made the wall and constructed cave temple as well.' (*Inscr.* I-17)

- (235) လယ်မ္ဗိယံသုရ၊ ဥယန်တရ လှူတာဝ်မူတုံအေ။  
*lay'.mliy'.sum.ryā, uyan'.ta.khu lū.tāv' mū.tum'.e<sup>a</sup>.*  
 field.land.three.hundred, garden.one.CLF donate.HON.also.REAL  
 '[The King] again donated three hundred *pay* of fields and a garden.' (*Inscr.* III-235)

- ∞ *tha* (V~) → EUPH: euphonic; used in expressions of wonder and admiration [=WB ∞ *tha*]

- (236) အထူးဆန်ကြယ်ထသော သရီရတတ်တာဝါ  
*athū.2.chan'kray'.tha.so sarīratat'.tāv'*  
 special.REDUP.wonderful.EUPH.ATTR relic.HON  
 'Especially wonderful relics [of the Buddha].' (*Inscr.* IV-390)
- (237) သူတကာအေကိုဝ်ကွယ်ရာ ဖွစ်ထသောမင်။  
*sū.takā.e'.kuiv'kvay'rā phlac'.tha.so.mañ'*  
 people.all.GEN.revere.NOM be.EUPH.ATTR.king  
 'The King who is revered by all the people.' (*Inscr.* III-247)
- (238) ယောက်ကျတကာထက် ဖွတ်စွာထသော ကြာမင်ကြံ၊  
*yok'kyā.takā.thak' mlat'.cvā.tha.so trā.mañ.krī,*  
 man.all.more-than noble.very.EUPH.ATTR doctrine.king.big  
 'The King of the doctrine who is more noble than all other men.' (*Inscr.* IV-398)
- နိုင် *nuiñ'* (V~) → can V [=WB နိုင် *nuiñ'* *nàin*]
- (239) မဏ္ဍတနိုင်သောလူပြိတ္တာလျှင် ဖွစ်စိယံကုန်သတေ။  
*ma.kvat'.nuiñ'.so.lū.prittā.lyhañ' phlac'.ciy'.kun'.sate.*  
 NEG.liberate.can.ATTR.human.ghoul.EMPH be.CAUS.all.REAL  
 'May [they] all be human ghouls who cannot be set free.' (*Inscr.* I-64)
- ဝါ *pā* (V~) → POL: polite [=WB ဝါ *pā* *pà*]
- (240) ဤယ်မျှသောသူတိုင်အံကာ သိပါကြပါသတေ။  
*īy'.myha.so.sū.tuiv'.kā si.pā.krā.pā.sa.te.*  
 this.extent.ATTR.person.PL.TOP know.POL.hear.POL.REAL.EUPH  
 'All these people knew and looked on [as witnesses].' (*Inscr.* II-130)
- ဖူး *phū~pū* (V~) → EXP: experiential; has (ever) V-ed [=WB ဖူး *phū* *pʰú*]
- (241) စရပ်လေပွဲခဖူ၏  
*carap'.le.plu.phū.e\**  
 shelter.also.make.EXP.REAL  
 'I have also built a resthouse.' (*Inscr.* IV-372)
- (242) ထိလေ ဆောင်ခဖူ၏  
*thī.le choñ'.kha.pū.e\**  
 finial.also hold.REM.EXP.REAL  
 '[I] have also placed a stupa finial.' (*Inscr.* IV-372)
- (243) ပုရဟာလေ သံရအံ ပွဲအံခဖူ၏  
*purhā.le sur̃.khu' plu'.kha.phū.e\**  
 Buddha.also three.CLF make.REM.EXP.REAL  
 '[I] have also made three Buddha images.' (*Archaeological* 1972 I-19)

- (244) ငါက ဤသို့သိဝံအံ မရိယဖူတကာဟု မိန့်အံအံ  
 ṇā.kā ṭy'.suiv<sup>ae</sup> ma.rīy'.phū.takā.hu min<sup>ae</sup>.e<sup>ae</sup>  
 I.TOP this.way NEG.write.EXP.EXCL.QUOT state.REAL  
 '[He] stated that he had never written thus.' (Inscr. I-78b)

• ပိယံ *piy'* (V~) → EUPH: euphonic [=WB ပေ *pe* pè]

- (245) တိုင်ဆောက်ပိယံအံ။  
 tuiñ'.chok'.piy'.e<sup>ae</sup>.  
 pillar.build.EUPH.REAL  
 '[He] built a stone pillar.' (Forchhammer 1892:282)
- (246) အဖိုင်ငယ်တင်တထောင် ပိယံရယ် ဝယ်ပိယံအံ။  
 aphuiiv'.ñuy'.tāv'.ta.thon' piy'.ruy' vay'.piy'.e<sup>ae</sup>.  
 value.silver.HON.one.thousand give.SUBORD buy.EUPH.REAL  
 '[He] bought it for a price of one thousand in silver.' (Forchhammer 1892:281)
- (247) ဆပ်ရာသောခြည်ကိုလေ ငါဆပ်ပိယံအံ။  
 chap'.ryā.so.khyiññ'.kuiv'.le ṇā.chap'.piy'.e<sup>ae</sup>.  
 repay.should.ATTR.debt.OBJ.also I.repay.EUPH.REAL  
 '[I] also repaid the debt which I owed.' (Inscr. I-79a)
- (248) လူနတ်ခပ်သိမ်သောကိုဝ် သင်သရာဆိုင်ငြယ်မှ ကယ်ပိယံလျက်၊  
 lū.nat'.khap'sim'.so.kuiv' sañ'sarā.chuiv'ñray'.mha kay'.piy'.lyak',  
 human.nat.all.ATTR.OBJ samsara.suffering.from rescue.EUPH.while  
 '[He] relieves all the humans and *nats* from the suffering of the cycle of rebirth...'  
 (Inscr. I-79a)

• ပြီ *prī* (V~) → PERF: perfective aspect; completed verb action [=WB ပြီ *prī* pì]

- (249) ပျံတင်မူပြီအံ။  
 pyarñ.tāv'mū.prī.e<sup>ae</sup>.  
 die.HON.PERF.REAL.  
 '[The King] has passed away.' (Inscr. II-143a)

- (250) တန်ဆောင်ကြီးကာ ပြီပီ  
 tan'chon'.krī.kā prīpī  
 shrine.big.TOP finish.PERF

ကူတည်ပြီသောလေ ဖုရုပ္ပုအံ။  
 kū.taññ'.prīso.le phurhā.plu.e<sup>ae</sup>.  
 cave.construct.finish.when.also Buddha.make.real  
 'When I had completed the temple I made a Buddha image' (Inscr. I-17)

• ခိ *bhi* (V~) → EMPH: emphatic [= WB ခိ *phi* p<sup>h</sup>i]

- (251) ပုထိုဝ်တဝ်ကိုဝ်      လှူဘိလိယံအေ။  
*put huiv'.tav'.kuiv'      lhu'.bhi.liy'.e'.*  
 stupa.HON.OBJ      donate.EMPH.EUPH.REAL  
 '[I] also donated a pagoda.' (*Inscr.* II-163)

• ရာ (V~) → compulsion, opportunity; must V, can V [=WB ရာ ja]

- (252) ငြိအလုံရောင်ရယ်      ဝယ်ရသောမ္ဘိယံ၊  
*ñr'ialum.roñ'.ruy'      vay'.ra.so.mliy',*  
 younger brother.all.sell.SUBORD      buy.can.ATTR.land  
 'The land which I was able to buy, having sold everything to my brother.'  
 (*Inscr.* III-229)

- (253) မိန့်တဝ်မူပိယံရကာ      ပုကံနိယံရအေ။  
*min'.tav' mū.piy'.rakā      pukam'.niy'.ra.e'.*  
 order.HON.give.since      Pagan.live.can.REAL  
 'Since [the King] had sanctioned it, he was permitted to reside in Pagan.'  
 (*Inscr.* III-234)

• ရစ် rac' (V~) → remain and V [=WB ရစ် rac' ji?]

- (254) ဤယံငါလှူသောလဲကာ      သာသနာ၅၀၀၀လျှင်      တည်ရစ်စိမ်သတေ  
*iy'.ñā.lhū.so.lai.kā      sāsanā.5000.lyhan'      taññ'.rac'.cim'.sate*  
 this.I.donate.ATTR.field.TOP      sāsanā.5000.EMPH      establish.remain.CAUS/IRR.REAL  
 'May the field which I donated cause the teachings of the Buddha to be preserved  
 for five thousand years.' (*Inscr.* I-90)

- (255) ဤယံမျှသောသူတိုဝ်အံ      ရိယံရစ်သော။  
*iy'.myha.so.sū.tuiv'      riy'.rac'.so.*  
 this.extent.ATTR.person.PL      write.remain.ATTR  
 'This number of them left their writings.' (*Inscr.* I-4)

• ရာ ryā (V~) → ought to V; must V [=WB ရာ rā jā; see Okell and Allott (2001:182 'ရာ 6') ]

- (256) သမာ      ကုရယ်      မတတ်ရှာသော      အနာဖိုယ်  
*samā      ku.ruy'      ma.tat'.ryā.so.      anā.phuiy'*  
 physician      cure.SUBORD      NEG.can.can.ATTR      disease.danger  
 'A disease which physicians cannot cure.' (*Inscr.* II-144)

- (257) တိုင်ကာတန်မန်ကို      မချုပ်ရှာ။  
*tuiñ'kā.tan'man'.kui      ma.khyup'.ryā.*  
 country.envoy.OBJ      NEG detain.should  
 'The envoy sent from another country should not be detained.' (*Inscr.* III-271)

- လိယ် *liy'* (V~) → EUPH: euphonic [=WB လေ *le* lè]

(258) ရှယ်ကုတွင်ထာလိယ်အေ။  
*rhuy'.kū.tvan'.thā.liy'.e'*  
 gold.cave.in.place.EUPH.REAL  
 '(He) placed it in a golden cave-shrine.' (*Inscr.* I-98)

(259) မြင်မူ၍မလာ၍ ငါမိန့်အံလိယ်အေ။  
*mran'mū.im'.lā.r\** *nā.min'.liy'.e'*  
 Myinmu.house.come.SUBORD me.order.EUPH.REAL  
 '[He] came to my house in Myinmu and gave me orders.' (*Inscr.* I-78b)

- လေ ~ လိယ် *le* ~ *liy'* (V~) with no sentence-final verb marker → IMP: imperative marker [=WB လေ *le* lè]

(260) ကောက်ပယ်လေ ခိုက်လိယ်။  
*kok'.pay'.le cuik'.liy'*  
 paddy.beans.also grow.IMP  
 'Plant rice and other things.' (*Inscr.* III-271)

- လောအံ ~ လဝ် *lo'* ~ *lav'* (V~) → IMP: imperative marker [=WB လော့ *lo'* lə]

(261) ကွဗ္ဗမင် စတ်လဝ် ဟူ၍။  
*klacvā.man' cat'.lav' hū.r\**  
 Kyaswa.king divide.IMP say.SUBORD  
 'King Kyaswa said: 'Divide (it), and...' (*Inscr.* III-231)

- လိုင် *luiv'* (V~) → want to V [=WB လို *lui* lə]

(262) နိယံရဗန်ဆုရလိုဝ်သတေ။  
*niy'raban'.chu.ra.luiv'.sate.*  
 nirvana.reward.obtain.want.REAL  
 '[I] want to obtain the reward of nirvana.' (*Inscr.* II-130)

(263) ဆိုင်ငြယ်သောအဖွစ်လည် မဖွစ်လိုဝ်။  
*chuiiv'iray'.so.aphlac'.lāññ' mā.phlac'.luiv'.*  
 poverty.ATTR.state.also NEG.be.want  
 '[I] do not desire to be in a state of poverty.' (*Inscr.* II-130)

(264) ငါမူသောအကျိဝ်က ငါလိုဝ်သဆု ပွည့်စုံလိုသတေ။  
*nā.mū.so.akluiv'.ka nā.luiv'.sa.chu pūññ'.lui.sate.*  
 I.do.ATTR.benefit.TOP I.want.ATTR.reward fulfil.want.REAL  
 'Concerning the benefit of my donation, I want the reward I long for to be fulfilled.' (*Inscr.* I-182a)

- လိုက် *luik'* (V~) → 'just V', 'V thoroughly, decisively' [=WB လိုက် *luik'* lai?]

- (265) ရွယ်တန်ဆောင်ငယ်တန်ဆောင်တိုင်အံ့ဖွင်အံ့      ပုဇောပ်ရယ်အံ့      ထည်အံ့လိုက်အံ့  
*rhuy'.tan'choñ'.ñuy'.tan'choñ'.tuiv'.phlan'*      *pujāv'.ruy'*      *thaññ'.luik'.e'*  
 gold.ornament.silver.ornament.PL.with      devote.SUBORD      insert.just.REAL  
 'I worshipped with gold and silver ornaments, and enshrined them.' (Inscr. II-80)

• လင် *lan'* (V~) → IMP: imperative marker [=WB လင် *lan'* lɪN]

- (266) အပိုင်အခြာတိုင်      ဆောက်ပိယ်လင်။  
*apuiv'akhrā.tuiv'      chok'.piy'.lan'.*  
 boundary.pillar      build.BEN.IMP  
 'Erect a boundary pillar.' (Inscr. III-296)

- (267) သခင် တိုင်      အလိုပ်ရလင်ဟု      လှူတော်မူတုံရကာ  
*sakhin'.tuiv'      aluiv'.ra.lan'.hu      lhū.to' mū.tuñ.rakā*  
 Lord.PL      desire.obtain.IMP.QUOT      donate.HON.again.because  
 'Because the King again made offerings, saying "Masters, take what you need..."'  
 (Inscr. II-203)

- (268) သင်္ခါတာလင်ဟု      မိန့်တော်မူအံ့။  
*sañkhā.thā.lan'.hu      min'.tāv' mū.e'*  
 monkhood.place.order.QUOT      order.HON.REAL  
 '[The King] gave orders, saying "Place the monks here."' (Inscr. IV-401)

• လွယ် *lvay'* (V~) → easy to V [=WB လွယ် *lvay'* lwè]

- (269) ရောင်ရယ်လွယ်သော။  
*roñ'ray'.lvay'.so.*  
 contented.easy.ATTR  
 '[It is] easy to be contented.' (Inscr. II-216)

• လျင် *lyhan'* (PHRASE~) → EMPH: emphatic [=WB လျင် *lyhan'* tɔjɪN]

- (270) နိဗ္ဗန်ရံသာအာ      ရောက်စေလျင်တော။  
*nibban'.khyamsā.ā      rok'.ce.lyhan'.te.*  
 nirvana.happiness.to      arrive.CAUS.EMPH.REAL  
 'May [they] reach the happy state of *nirvana*.' (Inscr. II-162)

- (271) တိုင်ဆောက်ပလိယ်ဟူသော      ထုယ်တောင်ရလျင်သတော။  
*tuiv'.chok'.paliy'.hū.so      thuy'tāv'.ra.lyhan'.sate.*  
 pillar.erect.command.QUOT.ATTR      royal order.obtain.EMPH.REAL  
 '[I] received a royal order to erect a pillar.' (Inscr. III-268)

• ဝမ်အံ *vam'* (V~) → dare to V [=WB ဝံ *vam'* wɪN]

- (272) အတိုင်ကျွန်ငြယ်အဝစိယ် ခံဝမ်အံသော။  
*atuiv'kyvan'.iray'.avacy' khar̃.vam<sup>u</sup>.ar̃.so.*  
 I.hell.Avici suffer.dare.IRR.ATTR.  
 'I will dare to suffer the hell of Avici.' (*Inscr.* III-231b)

• သာ *sā* (V~) → be feasible to V [=WB သာ *sā* ၀à]

- (273) ဖိလုသတ်ရယ် မလွတ်တတ်သာ။  
*philu.sat'.ruy' ma.lvāt'.tat'.sā*  
 ogre.kill.SUBORD NEG.release.can.feasible  
 '[He] was killed by an ogre and cannot possibly be liberated.'  
 (Pe Maung Tin 1928:7)

• သိယ် *siy'* (V~) → yet/still V [=WB သေး *se'* ၀é]

- (274) မြွယ်ကြံအထယ်ငြယ် [-] ကျက်စိယ်သိယ်သတေ။  
*mliy'.kr̃.athay'.iray' [-] kyak'.ciy'.siy'.sa.te*  
 earth.big.inside.hell [-] cook.CAUS.still.REALEUPH  
 'May he still be boiled in the hell inside the earth.' (*Inscr.* II-202)

- (275) အတိုင်ကျွန်လင် ပုကံသာ နိယရစိယ်လသိယ်  
*atuiv'kyvan'.lan' pukar̃.sā niy'.ra.ciy'.la.siy'*  
 my.husband Pagan.only live.can.CAUS.EXCL.still  
 'My husband was allowed to live only in Pagan.' (*Inscr.* III-234)

- (276) ငါမစာရသိယ်ဟု မိန့်ခရကာ၊  
*ñā.ma.cā.ra.siy'.hu min'.kha.rakā*  
 I.NEG.eat.can.still.QUOT order.REM.because  
 'Since [the King] stated "I have not yet eaten"...' (*Inscr.* III-268)

• သင်အံ *sañ<sup>u</sup>* (V~) → should V, ought to V [=WB သင့် *sañ<sup>o</sup>* ၀iN]

- (277) ဤယံကျွန်တိုင်အံကိုဝ် ဓနပတိယံအံ မယူသင်အံဟုရယ်အံ၊  
*iy'.kyvan'.tuiv<sup>u</sup>.kuiv' dhanapatiy<sup>u</sup> ma.yū.sañ<sup>u</sup>.hu.ruy<sup>u</sup>,*  
 this.slave.PL.OBJ Dhanapati NEG.take.should.QUOT.SUBORD  
 'Saying that Dhanapati should not take these slaves...' (*Inscr.* I-77)

• အား *ā* (V~) → be free to V [=WB အား *ā'* ၇á]

- (278) အမိန့်မဟိအာဟု မိန့်ဇအံ။  
*amin'.ma.hi.ā.hu min'.e<sup>u</sup>.*  
 order.NEG.issue.EXCL.QUOT state.REAL  
 '[The King] said that he did not issue an order.' (*Inscr.* I-79b)



- ဦး (V~) → V further, more; go on and V [=WB ဦး: ၵ်" ၵ်]

(279) ငါကာ ကောကံပဲ ခိုက်လိယံဦးအံ။  
 nā.kā kok'pai cuik'.liy'.uai.arñ.  
 I.TOP crops plant.EUPH.yet.IRR  
 'I will plant crops and paddy henceforth.' (Inscr. II-168)

(280) ငှပဲ လှူဦးအံ။  
 4.pai lhū.uai.arñ.  
 four.pai donate.yet.IRR  
 '[I] will donate four pay [of land] henceforth.' (Inscr. V-591b)

- အပ် ap' (V~) → ought to V [=WB အပ် ap' ၵာ?]

(281) နာထောင်ရယ် နာအပ်အံ။  
 nāthoñ'.ruy' nā.ap'.e'.  
 listen.SUBORD obey.should.REAL  
 '[You] ought to listen and obey.' (Inscr. II-168)

(282) မိယံအပ်အံဟူ စိယံအံ  
 miy'.ap'.e'.hū ciy'.e'.  
 ask.should.REAL.QUOT send.REAL  
 '[He] enquired, saying that he ought to send [a messenger].' (Inscr. II-168)

## 7 Additional examples

(283) အတိုင်ကျွန်ဖကြိကာ အတိုင်ကျွန်ဖကိုဝံ ပိယံအံ။  
 atuiv'kyvan'.phakrī.kā atuiv'kyvan'.pha.kuiv' piy'.e'.  
 my.uncle.SUBJ my.father.to give.REAL.  
 'My uncle gave [it] to my father.' (Inscr. II-174)

(284) လုစရစ်သောသူကာ အဝိစိယံအထယ်လျှင် ကွဲစိယံသတေ။  
 lucarac'.so.sū.kā aviciy'.athay'.lhyañ' kla.ciy'.sate.  
 plunder.ATTR.person.SUBJ Avici.inside.in fall.CAUS.REAL  
 'May the person who plunders fall into the hell of Avici.' (Inscr. II-174)

(285) ကောင်မှုကိုဝံ မူလိုဝံသောသကာ ကောင်မှုကိုဝံ မူရစိယံအံ။  
 koñ'mhu.kuiv' mū.luiv'.so.sa.kā koñ'mhu.kuiv' mū.ra.ciy'.e'.  
 act of merit.OBJ do.want.ATTR.NOM.TOP act of merit.OBJ do.can.CAUS.REAL  
 'May those who wish to perform acts of merit be able to do so.' (Inscr. II-216)

(286) ဤပုရုဏ္ဏသောကိုဝံ လုပ်ကွည့်စိယံဟု လှူသတေ။  
 ī.purhā.4.chū.so.kuiv' lup'kvaññ'.ciy'.hu lhū.sate.  
 this.Buddha.4.CLF.ATTR.OBJ care for.CAUS.PURP donate.REAL  
 'I made this donation so that they may look after these four Buddha statues.'  
 (Inscr. II-130)

- (287) အတည်မယ်အသောတရာကိုဝ် ထိတ်လန့်လတ်ရယ်အ်  
*ataññī.maỹ̃.so.taryā.kuiṽ̃ thit̃̃lañ̃.lat̃̃.ruỹ̃̃.*  
 stability.lack.ATTR.law.OBJ terrify.EUPH.SUBORD  
 'He is terrified with the doctrine to the effect that nothing is stable.' (*Inscr.* I-143)
- (288) မိမိလင်နတ်ရွာလာသောမင်ကိုဝ်လေ မ္ဗတ်နိဝ်စွာ မ္ဗစ်၍  
*mimi.lañ̃nat̃̃rvāḷā.so.mañ̃.kuiṽ̃.le mlat̃̃nuiṽ̃.cvā phlac̃̃.r̃̃.*  
 self.husband.heaven.go.ATTR.king.OBJ.also revere.ADV be.SUBORD  
 'In reverence for my husband the king who passed away...' (*Inscr.* I-143)
- (289) အတိုင်သခင်မင်ကင်္ကာသူကိုဝ် ပုရာလောင်က္ခစွာမင် ပိယံတဝ်မူသော  
*atuiṽ̃.sakhiñ̃̃.mañ̃.kiñkā.sū.kuiṽ̃ purhā.loñ̃̃.klacvā.mañ̃ piỹ̃.taṽ̃mī.so*  
 stability.lack.ATTR.law.OBJ Buddha.future.KyaSwa.king give.HON.REAL  
 'The future Buddha, King Kyaswa, gave [it] to my Lord, Kingathu.' (*Inscr.* I-143)
- (290) အမိမှ လာသောကျွန်၂၆  
*ami.mha lā.so.kyvañ̃.26*  
 mother.from come.ATTR.slave.26  
 'Twenty-six slaves inherited from my mother' (*Inscr.* II-212)
- (291) အမိပုရာစာဝ်သည် သင်သရာဆိုဝ်ငြာယ်မှ မ္ဗောက်လိုဝ်သောငါ  
*amipurhā.cāṽ̃.saññī̃̃ sañ̃̃sarā.chuiṽ̃rīrāỹ̃.mha mlōk̃̃.luiṽ̃.sōñhā*  
 Queen.Saw.NOM samsara.suffering.from free.want.since  
 'Since Queen Saw wants to be free from the cycle of rebirth.' (*Inscr.* II-138)
- (292) တစ်ဖန် မ္ဗိယံ ရောင်လှာတုံရကာ၊  
*tac̃̃phañ̃ mliỹ̃ roñ̃̃.lhā.tuñ̃̃.rakā,*  
 again land sell.come.again.because  
 'Since he again came and sold land...' (*Inscr.* II-162)
- (293) မိတေညံမည်သောဖုရာ ဖ္ဍိလစ်သောခါ ဖ္ဍိပါဇ္ဇင်သတေ။  
*miteññī̃̃.mañ̃ññī̃̃.so.phurā phlac̃̃.lac.so.khā phlac̃̃.pā.khlañ̃̃.sate.*  
 Maitreya.name.ATTR.Buddha be.?EUPH.ATTR.time be.include.want.REAL  
 '[I] want to be alive when the Buddha Maitreya reaches enlightenment.'  
 (*Inscr.* IV-401)
- (294) ငါ့ဤမိနိက်လာလတ်ရယ် မိန့်အ်လှာအ်။  
*ñā.īm̃̃.nhuik̃̃.lā.lat̃̃.ruỹ̃̃ mīñ̃̃̃.lhā.ẽ̃̃.*  
 my.house.in.come.EUPH.SUBORD order.come.REAL  
 '[He] came to my house and gave orders.' (*Inscr.* I-74)
- (295) အတည်မယ်သောတရာကိုဝ် ထိတ်လန့်အ်လတ်ရယ်၊  
*ataññī̃̃.maỹ̃̃.so.taryā.kuiṽ̃̃ thit̃̃lañ̃̃.lat̃̃̃.ruỹ̃̃̃,*  
 stability.without.ATTR.nature.OBJ fear.EUPH.SUBORD  
 'Being terrified by the instability of nature...' (*Inscr.* II-143a)

## 8 Conclusion

It seems reasonable to assert that the general structure of Burmese in the Pagan period was not fundamentally different from that of contemporary Burmese. Apart the difficulty of deciphering the script, it is not difficult to access the content of Burmese inscriptions. They provide us a great deal of material concerning the phonology and grammar of Burmese at that time.

Phonologically, it is argued that Pagan period Burmese contrasted voiceless unaspirated and voiceless aspirated series of obstruents: labial, dental, and velar stops and palatal affricates. Judging from the orthography, it is apparent that Pagan period Burmese had a series of consonant clusters comprising velar and labial stops combined with liquids: က *kr*, ခ *khr*, ပ *pr*, ဖ *phr*, မ *mr* and က္လ *kl*, ခ္လ *khl*, ပ္လ *pl*, ဖ္လ *phl*, မ္လ *ml*. The vowels were *a i u e o*; the diphthongs seem to have been *ai* and *ui*. It is uncertain what the sound the spelling ဝိ *iy* represented. It is generally agreed that three tones were distinguished.

Affirmative sentences were composed of four types: subject–complement, subject–predicate, subject–object–predicate and object–subject–predicate. Negative sentences were formed by prefixing a negative particle မ *ma* to the Verb. Imperative sentences contained a verb with no particle attached. Several particles could however be suffixed to verbs: နှေ *nhe* in interrogative sentences with question words, and လော *lo* in interrogative sentences expecting the answer yes or no. Besides these, verbs were modified by a number of other verb particles. Pagan period Burmese made use of postpositions, some with case-marking functions.

## 9 Index of grammatical forms

က ခ ဝ ဃ င

က *kā* (N~) → TOP/SUBJ: topic / subject / nominative [=WB ကး *kā* ká]. (29)(30)(32)(35)(36)(39)(45)(46)(52)(53)(57)(58)(64)(65)(66)(68)(70)(71)(76)(77)(89)(92)(98)(99)(101)(140)(142)(143)(152)(153)(173)(174)(178)(183)(188)(196)(199)(204)(215)(217)(221)(224)(240)(244)(250)(254)(279)(283)(284)(285)

ကုန် *kun'* (V~) → all V, each V [=WB ကုန် *kun'* kòun]. (74)(76)(136)(159)(174)(198)(199)(200)(210)(239)(249)

ကိုဝ် *kuiv'* (N~) → OBJ: object / accusative [=WB ကို *kui* kò]. (74)(82)(90)(91)(92)(100)(140)(154)(155)(156)(167)(174)(188)(191)(197)(205)(206)(209)(212)(213)(215)(217)(219)(223)(226)(227)(247)(248)(251)(295)(277)(285)(286)(287)(288)(289)

ကိုဝ် *kuiv'* (N~) → dative: 'to' [=WB ကို *kui* kò]. (37)(38)(39)(40)(53)(87)(89)(93)(94)(143)(157)(182)(283)

ကြာ *kr'a* (V~) → PL: plural; V has plural subject [=WB ကြာ *kr'a* t̃a]. (161)(201)

ခ/ခါ/ခဝ် *kha/khā/khay'* (V~) → REM: remote; V action is remote in space or time [=WB ခဲ *khai'* k'h̃]. (191)(202)(203)(204)(205)(206)(219)(242)(243)(276)

ခဲ *khai* (V~) → difficult to V [=WB ခဲ *khai* k'h̃]. (85)(105)(207)

ခွင် *khlan'* (V~) → desire, want to V [=WB ချင် *khyan'* t̃h̃in]. (44)(90)(92)(100)(141)(145)(168)(208)(209)(293)

## စခဇေဗျည

စံ *carñ* (V~) → enjoy Ving [=WB စမ်း *cam'* "sán]. See (220)

စိမ်အံ *cim'* (V~) → CAUS/IRR: conflation of causative စေ *ce* sè + *irrealis* အံ *arñ* 'will cause to V' [=WB စိမ် *cim'* sēin]. e.g. (76)(81)(208)(254)

စိမ်အံသောရာ *cim'.so.nhā* (V~) → PURP: in order that it may cause to V [=WB စိမ်အံသောရာ *cim'.so.nhā* sēin.ဝံ့.ရံ]. e.g. (87)(88)(89)(143)

စိယံ *ciy'* (V~) → CAUS: cause to V; may V happen; causative/exhortative marker often used in orders and commands [=WB စေ *ce* sè]. e.g.

(31)(42)(43)(44)(52)(74)(77)(78)(128)(129)(137)(139)(142)(144)(148)(161)(168)(169)  
(172)(174)(175)(183)(184)(199)(200)(210)(211)(212)(213)(214)(215)(216)(217)(218)  
(219)(220)(222)(224)(225)(239)(270)(274)(275)(284)(285)(286)

စွာ *cvā* (V~) → ADV: adverb-forming suffix; V-ly [=WB စွာ *cvā* swà]. e.g.  
(139)(140)(170)(288)

စွာ *cvā* (V~) → intensifier: very V [=WB စွာ *cvā* swà]. (70)(85)(105)(106)  
(107)(108)(135)(162)(163)(207)(238)

စွံ *cvarñ* (V~) → can V [=WB စွမ်း *cvam'* swán]. (221)(222)(223)(224)

## တထဒဇန

တကာ *takā* (PHRASE ~) → EXCL: exclamation [=WB တကာ: *takā* tagá] (70)(71)(72)(73)

တဝံ *tav'* (N~) → HON: honorific; 'honoured N' [=WB တော် *to'* tò].  
(74)(84)(236)(246)(251)

တဝံမူ *tav' mū* (V~) → HON: honorific construction; lit: 'perform an honoured V' [=WB တော်မူ *to' mū* tò mù].  
(34)(37)(38)(58)(70)(84)(228)(229)(230)(233)(235)(249)(253)(267)(268)(289)

တေ *te* (SENTENCE ~) → EUPH: euphonic [=WB တည်း *taññ'* tí].  
(144)(156)(182)(184)(240)(274)

တတ် *tat'* (V~) → can V; usually V-s [=WB တတ် *tat'* ta?].  
(44)(69)(167)(226)(227)(236)(256)(273)

တန် *tan'* (V~) → suitable to V, ought to V [=WB တန် *tan'* tàn]. (41)(231)(232)

တိုဝံ *tuiv'* (N~) → PL: noun plural marker [=WB တို *tu'* tō].  
(53)(65)(68)(77)(88)(101)(127)(128)(129)(144)(147)(148)(157)(160)(198)(205)(224)  
(240)(255)(265)(267)(277)

တုံ *turn* (V~) → V again [=WB တုံ *turn* tòun]. (39)(233)(234)(235)(267)(292)

တွင် *tvañ'* (N~) → locative: 'in' [=WB တွင် *tvañ'* twìn]. (127)(172)(173)(214)(258)

ထာ *tha* (V~) → EUPH: euphonic; used in expressions of wonder and admiration [=WB ထာ *tha* thā]. (122)(236)(237)(238)

ထက် *thak'* (N~) → more-than: used in comparative constructions [=WB ထက် *thak'* thē?].  
(177)(178)(238)

ထိုဝံ *thuiv'* (~N) → that N [=WB ထို *thui* thò]. (66)(74)(132)

နိုင် *nuiñ'* (V~) → can V [=WB နိုင် *nuiñ' nàin*]. e.g. (51)(79)(190)(239)

န *nhe* (Stce~) → Q-WH: WH-question particle [=WB နည်း *nhe* ].  
(60)(61)(62)(63)(64)(65)(66)(67)(68)(69)

နိင် *nhuik'* (N~) → locative: 'in' [=WB နိင်/၌ *nhuik'/n\** ].  
(88)(141)(170)(171)(191)(229)(294)

နင်အ် *nhan'* (N~) → instrumental: 'with'; 'and' [=WB နင် *nhan'* ]. (40)(74)(92)(97)  
(143)(162)(163)(218)(220)

ဝ ဖ ဗ ဘ မ

ဝါ *pā* (V~) → POL: polite [=WB ဝါ *pā pà*]. (129)(223)(224)(228)(240)

ဝိယံ *piy'* (V~) → EUPH: euphonic [=WB ဝေ *pe pè*]. (245)(246)(247)(248)

ဝိယံ *piy'* (V~) → BEN: benefactive; V for somebody [=WB ဝေ *pe pè*].  
(245)(246)(246)(247)(248)

ပြီ *pri* (V~) → SUBORD: subordinate clause marker; V and...; V and therefore... [=WB ပြီ *pri* ]. (93)

ပြီ~ဝိ *pri~pī* (V~) → PERF: perfective aspect; completed verb action [=WB ပြီ *pri* ].  
(196)(201)(249)(250)

ဖူ~ပူ *phū~pū* (V~) → EXP: experiential; has (ever) V-ed [=WB ဖူး *phū'* ].  
(47)(57)(72)(241)(242)(243)(244)

ဖွင်အ် *phlan'* (N~) → instrumental: 'with' [=WB ဖွင် *phran'* 'pʰjɪn].  
(71)(144)(160)(161)(265)

ဘိ *bhi* (V~) → EMPH: emphatic [=WB ဖိ *phi* ]. (251)

မာ (V~) → NEG: negative verb marker [=WB မာ *mā*].  
(41)(42)(43)(44)(45)(46)(47)(48)(49)(50)(51)(52)(53)(57)(62)(71)(72)(73)(75)(76)(78)  
(90)(92)(96)(97)(100)(153)(172)(191)(215)(216)(221)(222)(223)(224)(225)(227)(231)  
(232)(239)(244)(256)(257)(263)(273)(276)(277)(278)

မှ *mha* (N~) → source / ablative 'from' [=WB မှ *mha* ].  
(86)(164)(165)(248)(290)(291)

မုကာ *mukā* (PHRASE~) → 'if' [=WB မူကာ *mūkā* ]. (62)(75)(76)(77)(78)(79)(190)

ယ ရ လ ဝ

ရ *ra* (V~) → compulsion, opportunity; must V, can V, get to V [=WB ရ *ra* ]. e.g.  
(74)(139)(252)(253)(275)(285)

ရကာ *rakā* (V~) → since/because V [=WB ရကာ *rakā* ].  
(59)(92)(92)(93)(94)(95)(100)(145)(157)(191)(214)(253)(267)(276)(292)

ရစ် *rac'* (V~) → remain and V [=WB ရစ် *rac'* ]. e.g. (254)(255)

ရယ်~ရယ်အ်~ရ်~ရ်ယံ *ruy'~ruy'~r\*~r\*y'* (V~) → SUBORD: subordinate clause marker; V and... / V and therefore... [=WB ရ် *r\* jwe* ]. (69)(70)(76)(80)(81)  
(82)(83)(84)(160)(191)(205)(228)(232)(246)(252)(256)(259)(261)(265)(273)(277)(281)  
(287)(288)(294)(295)

ရာ *ryā* (V~) → ought to V; must V [=WB ရာ *rā jā*; see Okell and Allott (2001:182 ‘ရာ 6’)].  
e.g. (256)(257)

လေ /လည် *le / laññ* (N~) → also [=WB လည်: *laññ* ‘lɛ̃’]. e.g. (179)–(180)

လေ ~လိယံ *le ~ liy’* (V~) with no verb-final sentence marker → IMP: imperative marker  
[=WB လေ *le lè*]. e.g. (260)

လော *lo* (Stce~) → Q-?: yes-no question particle [=WB လော *lo lɔ̃*]. e.g. (56)–(59)

လောအံ ~လဝ် *lo’ ~lav’* (V~) → IMP: imperative marker [=WB လော *lo’ lɔ̃*]. e.g. (261)

လိုက် *luik’* (V~) → ‘just V’, ‘V thoroughly, decisively’ [=WB လိုက် *luik’ lai?*]. e.g. (265)

လင် *lan’* (V~) → IMP: imperative marker [=WB လင် *lan’ ‘lɪ̃n*] (266)(267)(268)

လတ် *lat’* (V~) → EUPH: euphonic [=WB လတ် *lat’ la?*]. (294)(295)(287)

လတ်အံ *lat’arh* (V~) → EUPH/IRR: euphonic + future/*irrealis* [=WB လတ် *lattam’ la?tɔ̃n*].  
e.g. (185)(186)

လိယံ *liy’* (V~) → EUPH: euphonic [=WB လေ *le lè*]. e.g. (251)(258)(259)(279)

လိုဝ် *luiv’* (V~) → want to V [=WB လို *lui lò*]. e.g. (262)(263)(264)

လိုဝ်သော *luiv’.so.nhā* (V~) → PURP: purpose; in order that it might V [=WB  
လိုသော *lui.so.nhā lò.ðɔ̃.ŋà*]. e.g. (86)

လျက် *lyak’* (V~) → while V-ing [=WB လျက် *lyak’ tɔ̃jɛ?*]. e.g.

လွယ် *lva’y’* (V~) → easy to V [=WB လွယ် *lva’y’ lwɛ̃*]. e.g. (269)

လျှင် *lhyarh’* (N~) → locative: ‘in’ [no WB equivalent]. e.g. (175)–(176)

လျှင် *lyhan’* (PHRASE~) → EMPH: emphatic [=WB လျှင်း *lyhan’ ‘tɔ̃jɪ̃n*]. e.g. (270),(271)

လင် *lan’* (V~) → order, imperative [=WB လင် *lan’ ‘lɪ̃n*]. e.g. (266)(267)(268)

ဝမ်အံ *vam<sup>ac</sup>* (V~) → dare to V [=WB ဝံ *vam<sup>a</sup> wɔ̃n*]. e.g. (272)

### သ တ ဌ အ

သတေ *sate* (V~) → REAL.EUPH: *realis* and euphonic marker V-s, V-ed [=WB သတည်း  
*sataññ<sup>a</sup>* ‘θadɪ̃’].

သာ *sā* (V~) → be feasible to V [=WB သာ *sā θà*]

သင်အံ *sañ<sup>ac</sup>* (V~) → should V, ought to V [=WB သင် *sañ<sup>a</sup> θɪ̃n*]

သိယံ *siy’* (V~) → yet/still V [=WB သေး *se’ θé*]

သော *so* (V~) → REALIS: V-s, V-ed [=WB သည် *saññ’ θĩ*] – see (40), (109), (110)

သောတေ *sote* (V~) → REAL.EUPH: *realis* and euphonic marker V-s, V-ed [=WB သတည်း  
*sataññ<sup>a</sup>* ‘θadɪ̃’].

သိုဝ်အံ *suiv<sup>ac</sup>* (N~) → like, as if N [=WB သို့ *sui’ ðɔ̃*]

သိုဝ်အံ *suiv<sup>ac</sup>* (N~) → to, towards N [=WB သို့ *sui’ ðɔ̃*]

ဟု *hu* (PHRASE~) → QUOT: quotation marker [=WB ဟု *hu hu*]

အာ *ā* (V~) → be free to V [=WB အာ: *ā’ ?á*]

အံ *arh* (V~) → IRR: *irrealis* marker; will/would V [=WB အံ *arh’ ?ɔ̃n*]

သာ *sā* (V~) → be feasible to V [=WB သာ *sā* ၏]. e.g. (273)

သော *so* (V~) → ATTR: attributive clause marker [=WB သော *so* ၏]. e.g.

သောကြောင့် *so.kron* (V~) → because V [=WB သောကြောင့် *so.kron* ၏ဝံ့သွင်]. e.g. (90), (91)

သင့်အံ *san* (V~) → should V, ought to V [=WB သင့်အံ *san* ၏]. e.g. (277)

သိယံ *siy* (V~) → yet/still V [=WB သိယံ *siy* ၏]. e.g. (274)(275)(276)

သိုဝ်အံ *suiv* (N~) → direction: 'to' [=WB သိုဝ်အံ *suiv* ၏]. e.g. (168)–(169)

အာ *ā* (N~) → locative: 'in' [no WB alternative]. e.g. (174)

အာ *ā* (N~) → dative: 'to' [=WB အာ: *ā* ၏]. e.g. (158)–(159)

အာ *ā* (V~) → be free to V [=WB အာ: *ā* ၏]. e.g. (278)

ဦ *ū* (V~) → V further, more; go on and V [=WB ဦ: *ū* ၏ဝံ့သွင်]. e.g. (279)(280)

အံ *arh* (V~) → IRR: *irrealis* marker; will/would V [=WB အံ *arh* ၏]. See (187)(182)(190)(203)(203)(205)(189)

အံသောရာ *am.so.nhā* (V~) → PURP: in order that it will V [=WB အံသောရာ *am.so.nhā* ၏ဝံ့သွင်]. e.g. (85)

အပ် *ap* (V~) → ought to V [=WB အပ် *ap* ၏]. e.g. (281)(282)

အေ *e* (N~) → possessive/genitive [=WB အေ *e* ၏]. e.g. (166)(167)

အေ *e* (V~) → REAL: *realis* marker V-s, V-ed [=WB အေ *e* ၏]. e.g. (192)(193)(194)(195)

ဤယံ~ဤ *īy'~ī* (~N) → this [=WB ဤ *ī* ၏].





# 14 *The experience of writing the first German–Myanmar Dictionary*<sup>1</sup>

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## *Abbreviations*

DAAD	<i>Deutscher Akademischer Austauschdienst</i> ‘translate’?
EMD	English–Myanmar Dictionary
<i>f</i>	<i>Femininum</i> ‘feminine’
<i>geh</i>	<i>gehoben</i> ‘elevated style’
GMD	German–Myanmar Dictionary
<i>hb</i>	<i>haben</i> ‘have’
<i>I</i>	Italian word
<i>lit</i>	<i>vorwiegend geschrieben</i> ‘written language’
<i>m</i>	<i>Maskulinum</i> ‘masculine’
MED	Myanmar–English Dictionary
<i>od</i>	<i>oder</i> ‘or’
<i>P</i>	Pāli
<i>Pl</i>	Plural
<i>Sg</i>	Singular
<i>sn</i>	<i>sein</i> ‘be’
RHD	Random House College Dictionary
<i>Skr</i>	Sanskrit
<i>umg</i>	<i>umgangssprachlich</i> ‘colloquial’

## 1 Introduction

Writing the first German–Myanmar Dictionary (GMD) has been an arduous enterprise. My thanks still go to the late Professor Schubert of Leipzig, who originally advised me to write a Dictionary in which the target language was my mother tongue. I followed his recommendation, and that Dictionary was published in 1976. Some years later I started with the GMD. The Myanmar language has changed greatly since the beginning of the 20th century, particularly since 1948: over the years, different ideologies come into being. This change in themes has resulted in a change of words: the vocabulary has developed

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<sup>1</sup> In this article, I use the term ‘Myanmar’ for the name of the country, its people and their language.

rapidly and modern Myanmar literature is rather different from older literature. However I decided to limit the Dictionary to only words from modern Myanmar and did not include words that I have collected while translating 19th century literature. Despite this, some words still used in the 20th century have had to be marked as *veraltet* 'obsolete' or *veraltend* 'obsolescent'.

Despite my continuous efforts, to this day I am tormented with one principal question: Is a German–Myanmar Dictionary really necessary, and has it been worth investing so many years' of time and such an amount of money?

Academic interest in the Myanmar language in Europe is restricted to a few scholars with small groups of students around them, working in universities in Berlin, London, Paris and St. Petersburg. The European economy has a limited interest in Myanmar and the tourism industry is content with practical glossaries or phrase books. At universities in the Union of Myanmar — with the exception of the Myanmar language departments မြန်မာစာပြောရေး: mjànnmàzàt'ànəmjà themselves — many subjects, if not all, are taught in English. Years ago I was asked by a German speaker whether it would not be better for the Myanmar authorities to introduce English as an second official language for the Union of Myanmar. I offered him two main counter-arguments. Firstly, the introduction of English as an official language would not only separate the people from their literary heritage but also from their cultural heritage as a whole. Secondly, if writers, the intelligentsia, economists, and officials were to converse and correspond in English, the remaining majority of the people would be excluded, simply by virtue of speaking in their mother tongue. It would be a divide and rule policy within their own population. I don't know whether I was successful in convincing him but I maintain my opinion.

Many sources have acted to spur on my determination, particularly the repeated questions from German students and friends as to whether, after more than fifteen years of work, the Dictionary was finished yet. Thanks are also due to the grants of German organizations like the DAAD (*Deutscher Akademischer Austausch Dienst* — the German Academic Exchange Service) for Myanmar students and lecturers to study or carry out research at a German host university within their program. Finally, I was also persuaded to continue simply by the urge not to give up after so many years of work and the pleasure I had in the work itself: finding lexicographical equivalents and compiling the Dictionary.

## 2 Help from other dictionaries

Where could I turn for help? Good, reliable, German bilingual dictionaries were beyond the scale of the task in hand. Whilst sources like *Duden* — the best monolingual German Dictionary — were important reference books for the GMD, their comprehensiveness gained from long traditions of Dictionary-making meant that there could be no question of the GMD being comparable with them. A Dictionary of that scale would have required extensive linguistic preparatory work. So it was necessary instead to consult reference books which included the Myanmar language in some capacity or other, and to plague Myanmar scholars and friends with endless questions.

The modern-day Burmese lexicographer is perfectly aware of the tremendous achievement of Adoniram Judson in producing his Burmese–English Dictionary (Judson 1853), especially given the conditions of his day. However, as all those familiar with it will know, it is now outdated and useful only for special research. *The Student's English–Burmese Dictionary* by U Tun Nyein (1959), *The University English–Burmese Dictionary* by U Ba Han (1951) and *The Universal English–Burmese Dictionary* by U Tun Aung Lin

(1960) were all compiled with a high degree of expertise and can be regarded as a major advances in Myanmar lexicography. They were, however, mainly written for native speakers of Myanmar language. Moreover, U Ba Han especially, offers long English phrases without translation into Myanmar, thus making the practical use of his dictionary time-consuming and therefore difficult. This criticism can not be made of the *English–Burmese Dictionary* by Saya Tet Toe (1975), who included translated examples and avoided superfluous explanations.

The establishment of the Burmese Language Commission, now the Myanmar Language Commission — hereafter MLC — by the U Ne Win government on 15 September 1971 was an important step forward in lexicography. The MLC's *Myanmar Dictionary* မြန်မာအဘိဓာန် (MLC 1991) and their *Myanmar–English Dictionary* (MLC 1993) — hereafter MED — were the main sources for compiling the GMD, both because they used orthography which could be regarded as standardised, and because both books had been compiled by a group of scholars, rather than individuals with preferences for particular orthographic conventions. The advantages of the MED are several. Firstly, the examples given in Myanmar are short and precise, though not translated, placing foreign users at a disadvantage. Secondly, the pronunciation is given for each entry. Thirdly, space is saved by omitting particles which do not need to be included next to verbs and adjectives in a Dictionary: the MED has headwords consisting of single verbal morphemes like သွား θwá 'go', rather than verb+suffix သွားသည့် θwá.θì 'go.REALIS', or ကောင်း káun 'good' rather than ကောင်းသော káun.θó 'good.ATTR'.

The binary nomenclature provided for most of the botanical and zoological names in the MED is to be appreciated, although in practice it sometimes no longer corresponds with current research usage. In any case the information about genus and species is certainly more useful than the explanations found in other dictionaries, where *cocker*, *cocker spaniel* is described as ခွေးတမျိုး [k'hwé.tə.mjó 'dog.one.kind'] 'a kind of dog' (Tet Toe 1975: 338) and *merle* as ငှက်နက်တမျိုး [ŋɛʔ.nɛʔ.tə.mjó 'bird.black.one.kind'] 'a kind of black bird' (Tet Toe 1975: 1188). One can, of course, argue that an explanation such as that given in the MED for ချုံ² [p'hjàn] 'kind of edible plant with bulbous root' (MLC 1993:305) is better than nothing, but in my opinion one should clearly distinguish description and circumlocution from lexical equivalents, even though the boundary between the two is not always easy to draw.

Help for the GMD was also available from *The modern simplified English–Myanmar Dictionary for students and schools* by Soe Thwe (1994), the French–Burmese Dictionary written by Denise Bernot (1978–92), the Russian–Burmese Dictionary (Novikov and Kolobkov 1966) and the Burmese–Russian Dictionary (Minina and Kyaw Zaw 1976). As I cannot read Chinese or Japanese I did not consult the dictionaries compiled for those languages. For specialised dictionaries, I had at my disposal the two-volume *English–Myanmar Word Bank* with technical terms organised by subject (Sarpay Beikman 1963) and the eight fascicles of a specialised technical Dictionary *Vocabularies by Subject* (Ministry of Education 1971–1974), organised alphabetically by topic. However, times change quickly. In the thirty-odd years since the latter was published, some terms have fallen out of use, and many new terms have come into use. Therefore these books cannot be relied on without supplementary evidence. More recent publications were a great help, for example *The English–Burmese Dictionary of Western Medicine* by Kaung Nyunt (1992), with its equivalents, explanations, and pictures, and San Lwin's (2003) *Dictionary of Military Terms*, which offers translated examples aimed in particular users writing in

Myanmar language. Further compilation of specialised dictionaries like these is the task of the universities in Myanmar, and this is, to the best of my knowledge, already underway for some subjects.

The most recently published general Dictionary is the *English–Myanmar Dictionary* (EMD) (San Lwin 2001). It offers approximately 22,000 headwords, 1,500 compounds, and 11,000 idioms, on 1,622 pages bound in one unwieldy and heavy volume. This Dictionary also contains many English examples without translation, ostensibly to help users who are learners of English, though obviously this reduces its value for other users. It does offer a number of useful modern words which do not appear in earlier dictionaries, and supports the user with helpful illustrations. Even so, there is a question of whether Myanmar learners of English really need so many untranslated examples. I do not think that this practice has been successful elsewhere. It is worth noting that in the EMD, unlike the MED, unnecessary particles are attached to the Myanmar equivalents of verbs and adjectives.

### 3 Equivalents

Even in bilingual dictionaries of European languages we do not always find true equivalents of source language words in target language translations. In cultures where the environmental fundamentals of plants, animals, climate, etc. are so different from those in Europe, the problem of equivalency is even more complex. In this respect I was confronted with two main problems. The first was the fine gradation from circumlocution to equivalency in the case of unfamiliar Myanmar words; the second was finding equivalents for those foreign words which might refer to concepts unknown to the Dictionary user. As one is able to trace the meaning of nearly every morpheme in Myanmar language, the string of morphemes selected to translate a particular new word, for instance a compound noun, may vary considerably between individual speakers and writers, and the sequence of syllables may vary. Only after a certain time and often through appearance in newspapers, radio, and television may the new word become established as an accepted sequence of morphemes.

I offer here one of many possible examples, the word *Machtpolitik* ‘power politics’. Tet Toe (1975: 1505) whose Dictionary contains a considerable number of political words, provides the periphrastic translation in (1), while the *Universal English–Burmese Dictionary* (Tun Aung Lin 1960:777) gives the translation in (2).

- |                       |                         |                 |
|-----------------------|-------------------------|-----------------|
| (1) နိုင်ငံချင်းချင်း | အင်အားပြိုင်လျက်        | အရေးဆိုသော      |
| nàinṅàɴ.ṭáinṭáin      | ʔinʔá.pjain.ʔajeʔ       | ʔaje.sʰò.θó     |
| country.RECIP         | strength.compete.SUBORD | affair.say.ATTR |

နိုင်ငံလုပ်ငန်း

nàinṅàɴ.louʔṅán

country.project

? ‘national affairs where nations compete with one another for strength’

- |                              |                      |                       |
|------------------------------|----------------------|-----------------------|
| (2) ကမ္ဘာ့ထိပ်သီးနိုင်ငံများ | တစ်ဦးနှင့်တစ်ဦးတို့  | အင်အားပြိုင်သော       |
| kəbà.tʰeiʔθí.nàinṅàɴ.mjá     | tə.ʔú.ŋi.tə.ʔú.də    | ʔinʔá.pjain.θó        |
| world.top-level.country.PL   | one.CLF.with.one.CLF | strength.compete.ATTR |

နိုင်ငံရေး  
nàinṇànjé  
politics

‘the politics where advanced nations compete with one another for power’

Neither Tun Nyein (1959) nor Soe Thwe’s *Modern Simplified English–Myanmar Dictionary* include the phrase ‘power politics’. In the EMD, the editors insert the Myanmar phrase နိုင်ငံရေးအာဏာ nàinṇànjé.ṇàṇà ‘politics.power’ under the headword power (San Lwin 2001:1057). We might deduce from this that power in the sense of *Machtpolitik* should not be အင်အား ṇinṇá ‘strength/power’, but အာဏာ ṇàṇà ‘power’ in the English sense of ‘to take, seize, or lose power’ or ‘to come to power’. Similarly the *Myanmar–Russian dictionary* gives for နိုင်ငံရေးအာဏာ the phrase политическая власть ‘political power’ (Minina and Kyaw Zaw 1976: 673). Basing my decision on the above information, I decided that အာဏာနိုင်ငံရေး ṇàṇà.nàinṇànjé ‘politics.power’ was a suitable equivalent for *Machtpolitik* in the GMD.

A number of problems arose from headwords with a narrow, specific meaning. For instance, for the Myanmar equivalent of the German word *Autobahn* I chose not to adopt the UK English term ‘motorway’ or the US English ‘freeway’ — neither of which would be likely to be understood in Germany — opting instead to write the German word *Autobahn* in Myanmar script as in (3), adding the explanation in (4):

- (3) အောက်တိုဘန်းလမ်းမကြီး  
ṇauṇtòbáṇ.lán.mā.ḍáí  
‘Autobahn.road.main.big’

adding the explanation

- (4) ဖြတ်လမ်းမ                      မော်တော်ယာဉ်                      အမြန်မောင်းလမ်း  
phjaṇlán.mē                      mètòjìn                      ṇəmjàṇ.máun.lán  
crossroad.without                      motor.vehicle                      fast.drive.road  
‘high speed motorway without crossroads’

Rendering *Autobahn* in Myanmar in this way is similar to the inclusion in the monolingual English *Random House College Dictionary* of *coffee klatsch*, *coffee klatch* and *kaffee klatsch*, listed as variants of the German word *Kaffeeklatsch* (Stein 1984:216).

For word specific to particular cultures, anticipating that the Dictionary user who has not spent much time in the culture of the source language may have some difficulty, I provide a transcription of the word in the source language followed by an explanation in brackets in the relevant languages. Thus the Myanmar word ခေါင်းပေါင် gáunbàun appears in the GMD under the German headword *Gaungbaung*, followed by the German explanation ‘Kopfbedeckung für Männer der Bamaren und der Mon bei besonderen Gelegenheiten’ [headcovering worn at special occasions by Bamar and Mon men], and the headword *Polka* is rendered in Myanmar as ပေါလကာ pólakà with the addition explanation, this time in Myanmar: ဘိုဟီးမီးယားနယ်မှ ရိုးရာအကတစ်မျိုး ‘a kind of folk dance from Bohemia.’ Of course, if the reader has never seen people dancing a polka, they cannot understand the concept in depth. For such explanations, sometimes I had to resort to တစ်မျိုး tāmjó ‘a kind of ...’.

In some cases I decided only to give a circumlocution in Myanmar, marked out with a star, for instance *Weißnäherin* \* အတွင်းခံအဝတ်ချုပ်လုပ်သူ ‘underwear seamstress’ or *Sektkühler* \* ရှပ်ပိန် ပုလင်းရေခဲစိမ်ရန်ဘူး ‘container for immersing champagne bottles in ice’. Terms for delicacies like *Kaffeefahrt* or *Nugat* were, however, simply dropped. A Dictionary is, after all, neither a specialist lexicon nor a cookery book, and the circumlocution would be too long-winded and still barely comprehensible for the respective users.

Some years ago I was criticised by some German scholars for the insertion of Myanmar words as headwords. I was told that words like *Gaungbaung* [ခေါင်းပေါင် gáunbàun], *Khauswe* [ခေါက်ဆွဲ kʰauʔshwé ‘Shan noodles’], or *Zayat* [ဧရိတ် zəjaʔ ‘shelter’] should not be headwords in a German–Myanmar Dictionary. I replied by inquiring why in the *Duden* (*Deutsches Universal Wörterbuch A-Z* ‘A-Z German Universal Dictionary’), which contains, according to the foreword - ‘den Wortschatz der deutschen Gegenwartssprache’ (‘vocabulary of the present-day German language’), we can find many non-German head words, for example *Iglu* (Inuit), *Kolchese* (Russian) or *Haiku* (Japanese).

Cultural differences often prevent bilingual dictionaries for Myanmar and European languages from providing exact lexical equivalents. Should I have translated ခေါင်းပေါင်း gáunbàun, the headwear worn by Bamar and Mon men on special occasions, as *turban*? Or should I have left out the word တိုက်ခံအိမ် (taiʔkʰàn ‘a taikkhan house, with a brickwork or masonry structure downstairs and a wooden structure upstairs’)? Architects from three European countries were unable to give accurate equivalents in their own language for a building of this kind. My own experience of Myanmar words combined with data from Myanmar newspapers and periodicals published in the English language enabled me to select a number of headwords to treat in this way.

Allow me to present an important example illustrating the difficulty of equivalency: ကံကောင်း kàn.káun ‘be lucky’ is a common phrase in Myanmar. In the Myanmar–English Dictionary ကံ kàn is translated as ‘one’s deed, word or thought which predetermines one’s future’ (MLC 1993:12), but the meaning of ကံ kàn in kàn.káun ‘be lucky’ is simply ‘luck’ – *Glück* in German. Translating from English, Saya U Tet Toe and Saya U Soe Thwe translate the word ‘fate’ with ကံကြမ္မာ kàn.Cəmà (Tet Toe 1975:675; Soe Thwe 1994:455), in keeping with the MLC translation of ကံ kàn. However, ကံကြမ္မာ kàn.Cəmà is a Pāli–Sanskrit hybrid which can never mean ‘fate’. This word ကံကြမ္မာ kàn.Cəmà is dominated by Buddhist philosophy, whereas the term ‘fate’, derived from the Latin word *fatum*, means something that is predetermined and must be accepted. It is not necessary to elaborate here on the difference between fatalism and Buddhism. We find a second sense of ကံ kàn defined in the MED (MLC 1993:12) given as ‘luck, fortune, lot’. ‘Luck’ in German is *Glück*, a word which also has two meanings. The first is *Glücksfall* ‘a case of luck’ and secondly is *Glücksgefühl* ‘a feeling of luck’. I translated the first meaning as ကံကောင်းခြင်း kàn.káun.Dín ‘luck.good.NOM’ — an instance of good luck — even though this is rarely used in speech, and the second one as ပျော်ရွှင်ရေး pjəjwìn.jé ‘happy.affair’. I am still unable to offer a better solution but I don’t like to sacrifice the term ကံကြမ္မာ kàn.Cəmà to the word ‘fate’ and its misleading implications.

#### 4 Transcription and pronunciation

As in the Burmese–German Dictionary (Esche 1976), I followed the phonemic transcription developed by Eberhardt Richter (as set out in Richter and Than Zaw 1969:11–15). With the help of some speakers from Myanmar and a sonograph, my

colleague Richter transcribed the aspirated sounds *ခ* *ဆ* *ဇ* *တ* as *kh sh th ph*, respectively. Zargara (1978) transcribes in the same way, except for *S* which he transcribes as *hs*. In the MED, however, the same consonants are transcribed thus: *K* as *kh* but *S T P* as *hs ht hp*. The motivation for this reversal is easily understood/grasped: since people using a Dictionary like this have at least some knowledge of English, they might pronounce *sh, th* and *ph* as [ʃ θ f], as in the English words ‘she’, ‘thorn’ and ‘phase’. In my opinion, however, such a consideration is unnecessary and such transcription should be avoided. The determining factor should surely be the scholarly analysis, namely that the transcription should follow the actual phonemic or phonetic pronunciation consistently.

In the GMD the vowel of the stressed syllable of the German headwords is underlined (Hegel, klammern). Only in difficult cases, especially for foreign words used in German, is the pronunciation added, for instance *Lobby* [ˈlɒbi]. In giving Myanmar equivalents, users are alerted to the pronunciation of words only when it is not predictable from the Myanmar spelling, as in *တံခါး*: ‘door’, which is spelt *tànkʰá* but in fact pronounced *dəgá*, with voicing throughout and the first syllable reduced.

I find it hard to understand two conventions in the transcription system of the MED. Firstly the underlined *a* used to represent the reduced vowel *ə*, known in German as the *Tonschatten* or ‘tone shadow’. The second is the pronunciation of proper names from languages other than English, of which there are a considerable number in Myanmar. The examples in (5) from the MED with their respective transcriptions illustrate my point:

- (5) a. မနိုင်မကန် /*mānainmakan*/ ... for *mənàinmækʰàn* ‘abundantly’ (p.332);  
 b. မသမာ /*māthama*/ ... for *məθəmà* ‘evil’ (p.333);  
 c. အဖွဲ့ /*ahpwe*/ ... ‘*ʔəpʰwɛ* ‘organisation’ (p.557).

Underlining to add emphasis to a particular item in writing is an internationally adopted convention, and in many dictionaries, it is used to indicate which syllable or vowel is to be stressed. However, the MED uses underlining to indicate the unstressed vowel – a convention I find counter-intuitive. In the GMD this problem was settled by using a symbol ‘ə’ for the reduced vowel /ə/ in the transcription, so that the examples in (5) above are transcribed in the GMD as /*mənaiŋməkən*/, /*məθəmə*/, and /*əhpwɛ*/. The diacritics ‘ and ` are used for the ‘creaky’ and ‘high’ tones, for instance, as in (6):

- (6) *Zaum* ... ကြိုးတန်ဆာ /*ka`gyoudəza*/ [kədzódəzà ‘bridle’]

Another issue is the transcription and pronunciation of non-English foreign words, in particular geographical names. It is understandable that foreign geographical names are adapted to the phonology of the speaker’s mother tongue. The English pronounce Berlin /bɜːlm/ in an English way, just as Germans might say London in a German way /ˈlɒndən/. In Myanmar language Berlin becomes ဘာလင် *bàlìn* because with a Myanmar accent it is hard to pronounce the German sequence /ber/ or to pronounce a syllable-final /n/.

However, it is incomprehensible to me why English rules of pronunciation are still applied to the *spelling* of geographical and proper names of countries whose national language is not English. Of course, this tendency may be partially explained by the historical influence of English on Myanmar through British colonisation. But this historical experience should become increasingly weaker, a process one can already see. I read for instance that the spelling of the French capital Paris has changed from ပဲရီ *péri*? to ပါရီ *pàrì*. Nonetheless I still baulk when I see Ukraine rendered in Myanmar as the



English-sounding ယူကရိန် *jùkərèin*. I prefer အူကရာယိနာ *?ùkəràjìnà* which more closely reflects the Ukrainian spelling Україна */ukra'jina/*. In some cases I attempted to promote this change: I have spelt German proper names ending in *...burg* with *...ဘွင်* */buʔ/* (or */bug/*) and those ending in *...berg* as *...ဘတ်* */baʔ/* (or */bag/*). Thus *Brandenburg* becomes ဘရန်ဒင်းဘွင် *bəràndínbuʔ* and *Württemberg* ဝူဒင်ဘတ် *wùdínbaʔ*. In my opinion the rendition of geographical and proper names should be as close as possible to the pronunciation those names have in their original language, as exemplified by the case of Paris. Adaptation to phonological constraints of the language into which the name is being rendered means we have to ‘Myanmarise’ names if necessary.

## 5 Grammatical information and sense indicators

For an inflected language like German, it is essential to provide grammatical information about nouns and verbs. For nouns I thought the most space-saving way would be to add gender notation following the noun: *m*, *f* and *n* for *masculine*, *feminine* and *neuter*, respectively. Following this is a number which refers to a table where the user can find how to decline this noun, following the patterns described in the dictionaries of *Verlag Enzyklopädie*, Leipzig. Lastly, if the noun is used only in singular (*Sg*) or plural (*Pl*), this is also indicated. The examples for ‘sea’, ‘flour’ and ‘crow’s feet’ in (7) illustrate this:

- (7) a. **Meer** *n* 20 *Geogr* ဝင်္ကေ (↑ Gelbe ~, ↑ Rote ~, ↑ Schwarze ~, ↑ Tote ~, ↑ Weiße ~)  
 b. **Mehl** *n* 20 *Sg* မှုန့် (↑ Erbs~M-, ↑ Reis~M, ↑ Roggen~M, ↑ Weizen~M)  
 c. **Krähenfüße** *Pl* (*umg für* Runzeln in den Augenwinkeln) မျက်ထောင့်တွန့်;  
 (*umg für* schlechte, krakelige Schrift) ကြောင်ခြစ်ရာ

For verbs, it is important to know whether the compound past tense is formed with *haben* ‘to have’ or *sein* ‘to be’. Since all transitive verbs <*vt*>, reflexive verbs and most intransitive verbs <*vi*> take *haben*, I marked with the abbreviation <*sn*> only those intransitive verbs which take *sein*. Some examples illustrate this notation: (8)a and b and (9)a take *haben*; (9)b takes *sein*; (8)c takes either *haben* or *sein*.

### (8) WEAK VERBS

- a. **schmücken** *vt* မွမ်း (ich habe geschmückt) [mú:n ‘decorate’]  
 b. **zittern** *vi* တုန် (ich habe gezittert) [tò:un ‘tremble, shake’]  
 c. **pendeln** *vi* <*hb*, *sn*> (hin- und herschwingen) ယိမ်းခါ (es hat, es ist gependelt) [jéinkʰà ‘swing’]

### (9) STRONG OR IRREGULAR VERBS

- a. **werben** *vt* <16a> (Mitglieder u. ä.) စည်းရုံး (ich habe geworben) [sijò:un ‘enlist’]  
 b. **laufen** *vi* <9/*sn*> သွား (ich bin gelaufen) [θwá ‘go’]

To prefixed verbs I added ‘a’ to verbs in which the prefix may be separated from the stem and ‘b’ and ‘c’ when it is not, as in (10):



(10) PREFIXED VERBS

- a. **durchtrennen** vt <a> ခွဲ (ich trenne durch, ich habe durchgetrennt) [kʰwé ‘split’]
- b. **durchtrennen** vt <c> ခွဲ (ich durchtrenne, ich habe durchtrennt) [kʰwé ‘split’]
- c. **erhalten** vt <3b> (bewahren) ထိန်းသိမ်း[စောင့်ရှောက်] (ich erhalte, ich habe erhalten) [tʰéinθéin.səunʃau? ‘conserve’]

A number added in brackets <3b>, refers again to another table that shows how the verb is conjugated. The user will find under number 3 only *a – ie – a*, enabling them to conjugate the word *erhalten* in the forms: *ich erhalte*, *ich erhielt*, *ich habe erhalten*. It is noted that examples like *erhalten* are exceptional in containing the bracketed German translations.

Productive users of the Dictionary are disadvantaged if Dictionary makers fail to provide exact sense indicators and context-sensitive information. There must be some brief information about the semantic field (*Fachgebietsangabe*) to which a word belongs, for instance *Mus* for music, *Geogr* for geography, *Ling* for linguistics and so on. Very often supporting words (*Stützwörter*) were added to show the different meaning of a word, as with the *Krähensfüße* above.

## 6 Orthography

As the Myanmar Language Commission has largely standardised Myanmar orthography, I kept strictly to the orthography given in the MED. So, for instance, I write တစ်မျိုး rather than တမျိုး for *təmjó* ‘one kind’; ဖား rather than ဖါး for *pʰá* ‘frog’ and ဓာတ် rather than ဓါတ် *da?* *ḍl-mə-nə-tə*, မိန့်ရောလ. Of course, the non-standard spellings may still be encountered, but the standardised orthography is largely accepted both in the press and in other publications.

However, the writing of Myanmar geographical names in Roman letters remains problematic. Geographical names were not included in the MED, and so had to be collected from other sources. Given the lack of official romanised forms, it is unsurprising that one can find various spellings in publications. For example, ဧရာဝတီ appears as *Ayeyarwady* or *Ayeyawady*; အင်းလေး as *Innlay*, *Inlay* or *Inle*; ပြည် as *Pyay* or *Pyi*. I included a number of such names in the Dictionary, but sometimes doubted which spelling I should follow.

## 7 Stylistic Register

Generally dictionaries translating between European languages and Myanmar provide little information relating to stylistic register. In my first dictionary I provided only limited information: *lit* for written style, *umg* for colloquial style, and *vulg* for vulgar words. In the GMD I have again included some indication of register, though rather reluctantly. After all some Myanmar authors, especially in Upper Myanmar, write their stories in colloquial style; newspapers and journals sometimes contain a mixture of styles; and spoken language may contain phrases normally found only in written language. One might doubt whether it is possible to give useful information regarding style.

In spite of these misgivings I did include information indicating register, based on my experience, though not without initially qualifying this in the Explanatory Notes as being no more than suggestions. In most cases I added the same indications of written style (*lit*),

colloquial style (*umg*) and vulgarity (*vulg*). Within lexical entries, I placed words used in both speaking and writing first, followed by colloquial words and then written/literary words at the end of the group, as in (11):

- (11) a. **Ausflüchte gebrauchen** ကေတိကာတိလုပ် *umg* [kètɪkàtɪ.lou? ‘quibble’]  
 b. **fragen** *vi* မေး၊မေးမြန်း *geh* [mé, memjǎn ‘ask’]  
 c. **lachen** *vi* ရယ်၊ရယ်မော *lit* [jì, jìmó ‘laugh’]  
 d. **studienhalber** *Adv* လေ့လာဖို့အတွက် *umg*, လေ့လာရန်အတွက် *lit*,

## 8 Etymology

Before the Myanmar language was established in written form, the Mon language was widely used in Bagan, and the Indo-European languages Sanskrit and Pāli also enjoyed high esteem. Monk-scholars and members of the high society at court acquired Sanskrit and Pāli along with Buddhist teaching and used these languages as a model for own work by connecting Pāli and Sanskrit terms with words in their mother tongue. As a predominantly Buddhist country, Pāli words are often found in Myanmar today, not only in Buddhist contexts like စေတနာ <P: *cetanā*> [sèdənà ‘goodwill’] but also in every-day usage like ဓါတ်ဆီ <P: *dhātu*> [daʔ.shì ‘petrol’]. As German users may not be familiar with Pāli and Sanskrit, particular attention was paid to the decoding of Pāli and Sanskrit words.

In Myanmar texts these items can often stand alone, written in their original form only with Myanmar letters, for example ကရုဏာ <P: *karuṇā*>. However there have also been changes, sometimes following established rules, or sometimes not. Very often, words have changed not only in form but in meaning, are may be difficult to recognise. The word အာလူး ʔālú now means ‘potato’. This word has its roots in Pāli and Sanskrit as ālū, where it does not mean ‘potato’ but rather *Amorphophallus paeoniifolius*, a tuber. These Pāli or Sanskrit words are sometimes combined with Myanmar words, or with other Pāli and Sanskrit words, or with English words or terms coming from Hindi, Mon and other languages. The problem for my Dictionary was considering how to provide proper etymological information without being excessive, a challenge evident in the compounds in (12):

(12)

source lang.	ယခင် နေရာရယ	pron. and gloss
Pāli	ပုဂ္ဂလိကပစ္စည်း <P: <i>puggalika</i> + <i>paccaya</i> >	pouʔgəlɪkə.pjiʔsí ‘private property’
Sanskrit + Pāli	မိန့်ရာသီ <Skr: <i>mīna</i> + P: <i>rāsi</i> >	mèin.jǎðì ‘Pisces’
Pāli + Sanskrit	ဂုဏ်သဓရ <P: <i>guṇa</i> + Skr: <i>śrī</i> >	gòun.θajè ‘characteristics’

Where English words were recognisable from their rendition in Myanmar, I omitted the English words, so the entry for ဘော့ပင် bópìn ‘ball(point) pen’ is simply **Kugelschreiber** *m* 4 ဘော့ပင် <E>.

These hybrids are the product of centuries of use by Myanmar scholars. The problem was not so much a lack of etymological research but rather the amount of space that would be occupied if all relevant etymological information were to be included. Therefore, I decided to transcribe words derived from Pāli, Sanskrit, Mon and Chinese, but to include only abbreviated source information for words from other languages such as Hindi, Malay

and Thai. Myanmar words behind or before a Pāli, Sanskrit, Mon or Chinese word are not marked, as in (13).

(13)

**Kabeljau** *m* ၁၀၆ *Ichth ကော့ဒ်ငါး*: <E→ (*Gadus morrhua*) [kə.ŋá ‘cod.fish’]

**Laterit** *m* <[e]s, \_e> *Geol ဂဝ်မြေ* <Mon: ကတမ်> [gəwùN.mjè ‘laterite’, lit: ‘cod.earth’]

**Kali** *Eig Hind ကာလီ* <Skr: kālī>, ကာလီနတ်သမီး: [kàlì.naʔ.θəmí ‘Kali.spirit.daughter’ *Kali*]

## 9 Final remarks

There are, of course, many problems involved in Dictionary compilation, and many things to consider in order to benefit the students learning these languages. In this paper only some of these issues have been discussed. Although the GMD contains more than 60,000 headwords, approximately 2,000 collocations and some whole sentences where necessary, it is still possible to find new words and word-combinations every day in newspapers and books. Myanmar is a language with a long, interesting history and a rich literature. Moreover, like many languages in the world, Myanmar has changed rapidly in recent decades and continues to change apace. There will surely be gaps in the coverage of the GMD and perhaps some users will not find the word or phrase they are looking for. Allow me to quote a word of consolation from the great poet Johann Wolfgang von Goethe who made the following confession:

‘Such a work ... is really never finished.

We have to accept it as such,

when we have done our best to it,

as far as time and circumstances would allow us.’

(Klatt et al. 1910:vii)



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