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SEALS XIII
Volume 1
Papers from the 14th annual meeting of the Southeast Asian Linguistics Society 2004

edited by
Wilaiwan Khanittanan
and Paul Sidwell

Pacific Linguistics
Research School of Pacific and Asian Studies
The Australian National University
Pacific Linguistics E-5

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First published 2008

National Library of Australia Cataloguing-in-Publication entry:

Southeast Asian Linguistics Society Meeting (14th : 2004 : Bangkok, Thailand)

ISBN: 9780858835856 (pdf)

Bibliography.

Southeast Asia--Languages--Congresses.


495

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

http://www.pacling.com
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Preface

The Southeast Asian Linguistics Society

History and Goals
The Southeast Asian Linguistics Society (SEALS) was conceived by Martha Ratliff and Eric Schiller in 1990 as a needed forum for the linguists who have the languages of mainland and Pacific Southeast Asia as their primary research focus. It is our hope that the activities of the Society will lead to:

1. greater communication within this group of scholars, especially across the gap which has heretofore divided researchers of mainland Southeast Asian languages and the Austronesian languages of the Pacific;

2. needed publication of descriptive, theoretical and historical accounts of these languages, in the first instance in the form of these proceedings volumes; and

3. greater awareness of these languages by non-specialist linguists, many of whom attempt to make universal and typological generalizations about the human language faculty without the important corrective which knowledge of Southeast Asian languages provides.

To these ends the Society hosts an annual international meeting as the primary means to support these goals. Specific projects, publications, and services beyond those of an annual meeting and the publication of the meeting proceedings will be at the discretion of the members of the Society.

Scope
The Southeast Asian Linguistics Society was founded with the idea of giving language researchers with a ‘non-northern’ Asian focus a place to share their findings and ideas. In terms of genetic affiliation, investigation into any aspect of Austroasiatic, Austronesian, Hmong-Mien, Tai-Kadai, or Tibeto-Burman languages may be relevant to our members. Although the common thread we recognize in the first instance is geographical, the boundaries of the Southeast Asian area are not clear, and we would not like to be responsible for trying to draw them rigidly. For example, students of languages which have a historical connection to the languages of the area but which are geographically outside and/or typologically unlike those in the Southeast Asian group would be welcome to participate in our meetings and publications as would students of the typologically similar Chinese languages of southern China.
The Fourteenth Annual Meeting

The Fourteenth Annual Meeting of the Southeast Asian Linguistics Society was held in Bangkok, Thailand, May 19-21, 2004. The meeting was hosted by the Department of Linguistics (Faculty of Liberal Arts) of Thammasat University, with assistance from the Commission on Higher Education.

The meeting was large by the standards of previous SEALS, and it is to the great credit of the organizers that it was such a great success. The schedule included 105 presentations and seven plenary sessions, characterized under 21 sub-fields of linguistics. The challenge of organizing and executing the meeting fell to the organizing committee, whose membership composed: Deeyu Srinarawat (Chair), Boonruang Chuensuwimol, Chatchawadee Saralamba, Cholticha Bamroongraks, Chutamanee Onsuwan, Laddawan Permcharoen, Leah Bateman, Nantana Ronakiat, Pintip Tuaycharoen, Porntipa Thongsawang, Sirinee Chenvidkarn, Varisa Kamalanavin, and Wilaiwan Khanittanan. On the days of the meeting the committee was also ably assisted by various student helpers, whose efforts proved invaluable.

Befitting such a grand meeting, the proceedings were officially inaugurated by Her Royal Highness Princess Galyani Vadhana, whose support for and genuine heartfelt interest in language and culture are widely acknowledged and appreciated.

After the meeting the number of papers offered for the proceedings was unprecedented - enough to take up more than 500 pages - and we subsequently decided to split the production into two volumes. Understandably, the editing and typesetting of so many diverse papers presents many challenges, and we thank the contributors for their patience and cooperation in the course of the production process. Special thanks are due to Chutamanee Onsuwan for the first and most laborious round of typesetting, which avoided many errors and greatly contributed to the look and quality of the volume.

In 2004 Thammasat University published a 218 page volume of all the conference abstracts. The full texts of these abstracts can be viewed on-line via the SEALS archive site at: http://www.jseals.org/, where useful information from other SEALS meetings is also available.

Wilaiwan Khanittanan (Bangkok)
Paul Sidwell (Canberra)
April 2008
A PLACE WHERE TIME, ASPECT, AND MODALITY MEET: A CASE OF /tuʔ⁵/ (duqv) ‘TO GET’ IN IU-MIENH

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1. Introduction
This paper is about one aspect of the Iu-Mien grammar. The Iu-Mien language belongs to the Hmong-Mien (formally Miao-Yao) language family. The debate concerning whether the Hmong-Mien family belongs to Sino-Tibetan (mostly by Chinese scholars) or Benedict’s Austro-Thai stock (Benedict 1975) has not been settled yet. Subgroups of Mienic languages as suggested by Ratliff are shown in Figure 1 (Ratliff 1992:19).

The purpose of this paper is to discuss correlations of ‘tense’, aspect, and modality (TAM) in Iu-Mien. Particularly the study focuses on the verb duqv /tuʔ/ ‘to get/obtain/acquire’ as an example of a locus where ‘tense’, aspect, and modality are
interacting. Besides this primary meaning, duqv has two more: ‘can’ <ability> and ‘did’ <past time>. The paper will show how these three meanings and TAM interact.

![Figure 1: Subgroups of Mienic languages (adapted from Ratliff 1992:19)](image)

Iu-Mienh is an isolating language and ‘verbs, like all parts of speech, are unchanging, having no morphology in the sense of accidence, i.e., paradigms of change’ (Court 1986:221). Nevertheless, the Iu-Mienh speaker can express time reference not depending on verbal inflection but by employing the different uses of duqv in the combinations of aspectual and modal uses.

Our hypotheses are (i) that the prototypical meaning ‘to get’ in the Attainment Aspect refers to Past Time Reference (Past TR) when it takes an event expressed by a clause as its direct object, and that the derived meaning ‘to get affected’ in the Involvement Modality (in which a speaker gets affected emotionally or physically by the event) and the Accomplishment Modality also refer to Past TR, and (ii) that the Future TR is not directly associated with the verb but contingent on conditional clauses or temporal adverbs.

These hypotheses require a theoretical framework, such as the one suggested by Chung and Timberlake, who claim that ‘tense and aspect could be subsumed under a single category of tense-aspect which characterizes the relationship between an event and salient points on the temporal dimension’ and that ‘mood is a semantic operation analogous to tense-aspect, although it differs in that it deals with events and worlds rather than with events and time’ (Chung and Timberlake 1985:256). The theory entails the working assumption that ‘[t]he different temporal locations of an event—past, present, and future—are inherently correlated with differences in mood and aspect’ (Chung and Timberlake 1985:206).

As to terminology, we will use Time Reference (TR) as opposed to traditional ‘tense’, and Modality instead of mood since these terms are less grammaticalized than ‘tense’ and ‘mood’ as exhibited in Indo-European languages; thus they are appropriate for Iu-Mienh. The TR means temporal locations on the time-line shown in Figure 2.6

---

5 Thai exhibits a very similar phenomenon as Higbie and Thinsan writes, ‘Dai before the verb in the past affirmative emphasizes that you did the action (meaning “got” or “acquired”’) (Higbie and Thinsan 2002:93).

6 The diagram is borrowed from Whaley (1997). Comrie’s diagram (1985:2) has ‘PRESENT’, instead of FUTURE, to the left of 0 (zero = PRESENT), by mistake (?).
To adopt Palmer’s term, modality is ‘concerned with subjective characteristics of an utterance’ and defined as the ‘speaker’s (subjective) attitudes and opinions’ (Palmer 1986:16). Comrie’s well-known definition of aspects is that they ‘are different ways of viewing the internal temporal constituency of a situation’ (Comrie 1976:3).

While Iu-Mienh has a fuller system of temporal expressions, this paper is confined to the word duqv.

Though Langacker’s basic epistemic model is utilized to capture the relationship between time and modality, the following discussion is intended to be descriptive and not an instance of Cognitive Grammar.

2. Duqv as an Aspectual Verb

2.1 Duqv as An Attainment Aspectual Verb

The idea of an Attainment Aspectual Verb is taken from a similar structure of Green Hmong described by Li under the term ‘an Attainment Aspectual Marker’ (Li 1991:29). Example (1) is from Li (1991:32).

(1) tug txivneej tau dlha
CL man [get] run
‘The man got to run.’

According to Li, this aspect marker indicates ‘the attainment of the event signaled by the sentence’ (1991:29), and the event is conceptually bound (1991:34).

A parallel example in Iu-Mienh is given in (2).

(2) yie duqv nyanc biouv
I ASP_ATT eat fruit
‘I got to eat the fruit.’

---

7 Palmer writes (1986:16) that modality could ‘be defined as the grammaticalization of speakers’ (subjective) attitudes and opinions’ (underline is mine). Contrary to that, five pages later, he writes, ‘modality is not expressed in all languages within the verbal morphology. It may be expressed by modal verbs […] or by particles […]’ (21).

8 Jennings, through a personal communication, has suggested that there is a strong similarity between duqv in Iu-Mienh, /dai\ in Thai (‘มา’), and /duoc\ in Vietnamese (duốc). It is hoped that a comparative study of these words should include /tau\ in Green Hmong and White Hmong (tau) and /\ in Chinese (dé) in future research.

9 Abbreviations hereafter are: Acmpsh = accomplishment, Adv = adverb, AFFMTV-STATV = affirmative-stative aspect, ASP = aspect, ASPAtt = attainment aspect, ASPDIR = directional aspect, VACT = action verb, VASP = aspectual verb, VASPAtt = Attainment Aspectual Verb, VMOD = modal verb, VMODAcmpsh = Accomplishment Modal Verb, VMODActInv = Active Involvement Modal Verb, VMODAffInv = Affective Involvement Modal Verb, VSTV = stative verb (adjective), = interaction between.
It should be noted in (2) that *duqv* itself functions as a transitive verb\(^{10}\), which takes the whole event of ‘(my) eating the fruit’ as a conceptually bound unit.

In order to illustrate the notion of a conceptually bound event, the following proposal is made, re-citing (2) as (4). The dotted line indicates what comes after it is the direct object as a whole; the inner box signifies the conceptually bound event and the arrow an action of attaining or obtaining. The outer box symbolizes the whole event that can come into any location on the time-line according to the meaning of the predicate. Since *duqv* functions as a transitive verb, the label ‘attainment aspectual verb’ (*\(V_{asp,Att}\)*) is employed hereafter.

\[(4) \quad \text{‘I got to eat the fruit.’}\]

### 2.2 *Duqv* Not as ‘Pre/Post-Verb’

That the event expressed as the direct object of the Attainment Aspectual Verb *duqv* is conceptually bound has a significant implication to the traditional treatment of the verbs of this sort in other languages (Smyth 2002:220), that is, ‘pre-verb’ or ‘post-verb’. In fact, the nature of *duqv* in relation to TR should not be explained simply in terms of its position, even though (5) and (6) seemingly show a contrast in TR.

\[(5) \quad \text{Yie} \quad \text{duqv} \quad \text{mingh.}\]
I \(V_{asp,Att}\) go
‘I got to go/I went’

\[(6) \quad \text{Yie} \quad \text{mingh duqv} \quad \text{nyei.}\]
I \(\text{go can AFFMTV-STATV}\)
‘I can/am able to go’

On the contrary, sentence (7), where *duqv* attains a clause as a whole, rejects the word-order-based explanation as being insufficient.

\[(7) \quad \text{Yie} \quad \text{duqv} \quad \text{mingh tengx yie}\]
I \(V_{asp,Att}\)
‘I got him to help me’ or ‘I was helped by him.’

---

\(^{10}\) Li also observes a similar characteristic in Hmong ‘*tau* serving as both the Attainment aspect marker and a regular verb’ (1991:33).
Notice, in (7), that the subject of tengx ‘help’ is different from that of duqv, showing that duqv captures the discrete event that ‘he helps me’ as a whole. As such, it is inadequate to simply postulate that a sequence like duqv tengx or tengx duqv can explain anything.

In sum, duqv is an Attainment Aspectual Verb that captures the conceptually bound event. It is important to understand that the event can be expressed by a single verb\textsuperscript{11}, a clause, or a sentence because it is by this nature that analyses of duqv’s modality are possible as will be shown in section 3.

3. Duqv as a modal verb

3.1 Modality of Duqv

In the past, duqv has been considered as simply being an auxiliary ‘can’ and a content verb ‘get’, leaving some meaningful uses unexplained. Here, however, it will be presented that duqv has modality, endorsing Palmer’s broad definition; that is, modality is the ‘speaker’s (subjective) attitudes and opinions’ (Palmer 1986:16).

Let us observe the following compound verbs.

\begin{itemize}
  \item \textit{Yie hiuv\_duqv} ‘I know that…’
  \item \textit{Yie zieqv\_duqv} ‘I recognize that…’
  \item \textit{Yie laaic\_duqv} ‘I assume that…’ or ‘I predict that…’
  \item \textit{Yie jangx\_duqv} ‘I remember that…’
\end{itemize}

These cognitive verbs express the speaker’s perceptional involvement in or commitment to the event. Further, consider ungrammatical examples (8a-b), in which duqv is omitted.

\begin{itemize}
  \item (8a) *\textit{Yie hiuv ninh} I know him
  \item *‘I … him.’
  \item (8b) *\textit{Yie zieqv ninh} I recognize him
  \item *‘I … him.’
\end{itemize}

The fact that cognitive verbs obligatorily occur with duqv shows that duqv connects the speaker and the event epistemologically. Therefore, it can be said that duqv is a modal verb.

3.2 Modal Verb Types

Having proposed that duqv is a modal verb, our investigation goes on to suggest that there are two kinds of modal uses: an involvement modality, which can be subdivided into two, and an accomplishment modality.

3.2.1 Involvement Modality

By an involvement modality, it is meant that duqv indicates a stronger engagement in the event emotionally, subjectively, or physically than a mere epistemological perception stated in 3.1.

\textsuperscript{11} Hmong structure in (1) is also quite possible in Iu-Mienh.
Under an involvement modality, there are two kinds: what we propose to name as an Affective\textsuperscript{12} Involvement Modality and an Active Involvement Modality. Syntactically, they correspond to two different patterns of a particular construction in which \textit{duqv} occurs between two verbs, depending on different semantic characteristics of the second verb: ‘S + V + duqv + Stative Verb’ and ‘S + V + duqv + Action Verb’.

3.2.1.1 Affective Involvement Modality

Consider (9), in which the second verb is a stative verb\textsuperscript{13} in Clark’s sense (1989:179).

\begin{tabular}{|c|c|c|c|c|}
\hline
\textit{I} & \textit{nyiemv} & \textit{duqv} & \textit{kouv} & \textbf{be-affected} \\
\hline
1SG & V & V_{MODAffInv} & V_{STV} & \\
\hline
\end{tabular}

\begin{center}
\textbf{(9)}
\end{center}

‘I wept bitterly’.

Sentence (9) shows that the event which \textit{duqv} captures is a state of being tired and that the subject/speaker is affected by the event/state. The arrow pointing backwards signifies that the speaker is affected by the state. Often, a great deal of emotion and feeling felt by the speaker is involved in situations expressed by this pattern.

Even in a case like (10) where the second verb is not as emotional as \textit{kouv} ‘be tired’ in (9), \textit{duqv} in such a construction conveys certain kinds of emotion.

\begin{center}
\textbf{(10) Meih leih duqv go biauv}
\end{center}

\begin{center}
\textit{You separate V_{MODAffInv} be-far house}
\end{center}

‘(I am sorry that) You left your home so far away’.

Depending on the situation, (10) can express a speaker’s feelings such as sympathy or regret (I am sorry you went out of your way in going so far away from your home), surprise or criticism (How could you have gone astray that far?), or admiration or gratitude (I admire/thank you that you have sacrificially left your home to come to see me), and so forth.

To sum up, in similar cases\textsuperscript{14}, \textit{duqv} in the Involvement Modality establishes a rapport between the speaker and the event. In particular, the Affective Involvement Modality is involved in a significant amount of emotion and subjectivity.

3.2.1.2 Active Involvement Modality

The second type of Involvement Modals use differs from the first one in that the event captured by \textit{duqv} is expressed in an action verb (V\textsubscript{ACT}). In (11) below, (\textit{yie} zaaic (V\textsubscript{ACT}) \textit{ninh} ‘(I) overtake him’ is an activity/active event, with a proposed term Active Involvement Modality (V\textsubscript{MODActInv}).

\textsuperscript{12} I am indebted to Dr. Tehan in helping us to arrive at the term ‘affective’.

\textsuperscript{13} Clark writes, ‘Adjectival/descriptive words in mainland South-East Asia are stative verbs which need no other verb to form a grammatical sentence’ (Clark 1989:179).

\textsuperscript{14} Other examples in this type are: \textit{dau duqv horpc} (literally, answer + duqv + be-right, ‘to answer appropriately’), \textit{zuqv duqv horpc} (lit., wear + duqv + be-right, ‘to wear a right size clothes’), \textit{dau duqv zuqc} (lit., answer + duqv + be-correct, ‘to answer correctly’), \textit{zoux duqv sung} (lit. do + duqv + be-in-order, ‘to do in order’, etc.)
(11) ‘I pursued and **actively got hold** of him’.

An approximate glossing for this kind of *duqv* may be ‘to get into’, meaning that ‘my pursuing gets into the action of overtaking him’. The arrow pointing rightward symbolizes that the speaker is actively involved in the event/action of overtaking him rather than being (passively) affected by it.

3.2.2 Accomplishment Modal Verb

The last kind of modal use of *duqv* is an accomplishment modality. We designate it to a particular construction ‘Clause1 + *duqv* + Clause2’, having different subjects in two clauses on both sides of *duqv*, which is different from any of those constructions mentioned above.

(13) ‘You **have taught** me that I understood.’

or ‘You **are able** to teach in such a way I understand.’

As the free translations suggest, concepts of accomplishment and ability are closely related since an accomplishment is a manifestation of ability, and ability is a potential for an accomplishment. Though Court interprets (13) as the ‘resultative complements’ (1986:36), the description ‘accomplishment’ in Burgess’s dictionary has more weight because of a rationale found in a counter example (14).

(14) *Yie a’hneiv duqv meih daaih lorz yie*

I be-happy V\_MOD\_DAcmpsh you come see me

‘I **became** glad that you **finally** came to see me’

Notice that ‘your coming to see me’ is not a result of ‘my happiness’ but a cause. An implied meaning of (14), depending on possible different situations, may be, ‘After all kinds of effort

---

15 There is a striking structural parallelism between *duqv* and its counter part *zuqc* ‘passive marker’ with a contrastive meaning but sharing a similar modal characteristic. A discussion on this aspect is not included in this paper due to limited space.

16 The term ‘accomplishment’ is used in a more general sense than a technical one of Dowty’s verb classification (stemmed from Vendler) or Aksionsart cited in Foley and Van Valin 1984 (Foley and Van Valin 1984: 36-47).
and management for your travel, I finally became happy in my accomplishment of making you to come to see me’, which is quite different from ‘my happiness resulted in your coming to see me’. A sense of accomplishment in (14) is clearer when contrasted to (15).

(15) Yie a’honei meth daaith lorz yie
    I be-happy you come see me
    ‘I am glad that you came to see me’

4. Interactions between TAM

4.1 Interaction between Past and Present

Langacker proposed a basic epistemic model to capture the world’s reality and irreality to the speaker in the time-line model (1991:242-44). In Figure 3, what is known (known reality) to the speaker lies behind him, hence in the past on the time-line. What is unknown (irreality) to the speaker lies ahead of him, hence in the future on the time-line. The area to which the speaker has direct perceptual access is the immediate reality to him, hence located in the present on the time-line.

Utilizing the basic epistemic model, the Attainment Aspect in (16) is explained to be located in Past TR since the speaker has already experienced or attained the event.

(16) Yie duqv nyanc biouv
    I VASPAtt eat fruit
    ‘I got to eat the fruit.’ Attainment Aspect δPast TR

Because the sentence refers to an attained experience, the Attainment Aspect is most naturally and strongly associated with the Past TR as a default (without other temporal adverbs).

Similarly, the Affective Involvement Modality in (17) interacts with Past TR, but as a result of the past involvement, it can be used to refer to Present TR as well.

(17) Meih leih duqv go biauv
    You separate VMODAffInv be-far house
    ‘You left your home so far away’.
    Affective Involvement ModalityδPast TRδPresent TR
If a directional aspect verb *daaih* ‘come’ is added to Affective Involvement Modality, the Past TR changes into a Present TR because *daaih* draws the event closer to an immediate reality of the speaker as in (19) (like English present perfect).

(19) *Meih leih duqv go biauv daaih*

You separate \(V_{\text{MODAffInv}}\) be-far house \(\text{ASPD} \text{R}\)

‘You have left your home so far away’.

Affective Involvement Modality \(\text{Present TR}\)

The Active Involvement Modality in (20) shows that the speaker has experienced the event in an involving way with a commitment; hence, the event has already passed. Naturally, as a result, the present reality of ‘my capturing him’ exists now.

(20) *Yie zunc duqv zaaic ninh*

I pursue \(V_{\text{MODActInv}}\) overtake him

‘I pursued and got hold of him’.

Active Involvement Modality \(\text{Past TR} \oplus \text{Present TR}\)

However, these TR’s are not rigid in terms of grammatical coding. Rather, they vary depending on temporal or other adverbs. Consider an example of alternation from (13) to (21).

(21) *Meih za’gengh njaaux duqv yie bieqc_hnyouv*

you really teach \(V_{\text{MODAcmpsh}}\) I understand

‘You are really able to teach in such a way I understand.’

Accomplishment Modality \(\text{Present TR}\)

Though the default TR of the Accomplishment Modality is past, an addition of *za’gengh* ‘really’ to sentence (13) emphasizes the present reality or a state of being able, locating itself in the Present TR as in (21). So a free translation would be ‘You **really have an ability** to teach, and I assure you that I have understood well’.

4.2 Interaction with Future

As mentioned in (19) under 4.1, another directional aspect verb *mingh* ‘go’ can alter the Affective Involvement Modality of (22) to Future TR.

(22) *Meih leih duqv go biauv mingh*

You separate \(V_{\text{MODAffInv}}\) be-far house \(\text{ASPD} \text{R}\)

‘You **will end up** leaving your home **so much** far away’.

Affective Involvement Modality \(\text{Future TR}\)

The most natural TR in (19) is Past since the modality is involvement. However, the aspectual verb *mingh* ‘go’ pushes an event stated by the sentence away from the immediate reality, placing it into a future. Though *mingh* ‘go’ and *daaih* ‘come’ situate the whole sentence in either Future or Past TR, both (19) and (22) express certain emotions such as regret, surprise, criticism, etc. since they are in the Affective Involvement Modality.
Finally, if a clause that expresses contingency is added to the Attainment Aspect or Active Involvement Modal, signifying a potential situation, a sentence like (11) can alter its meaning to Future TR, expressing an ability and potential at the same time as in (23).

(23) Si_ gornyv gaeh cie mingh nor, Yie zunc duqv zaaic ninh

If ride motorcycle go TOPIC I pursue V MODActInv overtake him

‘If I ride a motorcycle, I can pursue and get hold of him’.

Active Involvement Modality\ Future TR

This kind of alternation can be applied to all aspect and modalities, exhibiting that Future TR is most contingent.

A summary of 4.1 and 4.2 are presented in Table 1. Relative degrees of TR’s interaction with aspect and modality are indicated in numbers 1 to 3: 3 being the most natural or default TR, 2 an implied TR as a result of the default value, and 1 not substantial to the given aspect or modality but depending on situations expressed by adverbs or conditional clauses.

Table 1: Relative degree of TR interaction with aspect and modality

<table>
<thead>
<tr>
<th>Attainment Aspect</th>
<th>Past TR</th>
<th>Present TR</th>
<th>Future TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Involvement Modality</td>
<td>3</td>
<td>2 = Implied as a result of past involvement</td>
<td>1 = Contingent on adverbials</td>
</tr>
<tr>
<td>Active Involvement Modality</td>
<td>3</td>
<td>2 = Implied as a result of past involvement</td>
<td>1 = Contingent on adverbials</td>
</tr>
<tr>
<td>Accomplishment Modality</td>
<td>3</td>
<td>2 = Implied as a result of past accomplishment</td>
<td>1 = Contingent on adverbials</td>
</tr>
</tbody>
</table>

5. Conclusion

Duqv connects the speaker and the event. The different degrees of connection with, involvement in, or commitment to the event are expressed in different aspect and modalities. Furthermore, this different degree of involvement correlates with the time references. More specifically, the deeper the involvement is, the more inclined duqv is toward past time. The less the involvement is, the more duqv tends to incline toward future time. It has been shown that the Attainment Aspect use, the Active and Affective Involvement Modal uses, and the Accomplishment Modal use of duqv naturally belong to the Past TR as a default and only as a result of that can signify Present TR as well. The Future TR is contingent on adverbal clauses and a potential situation.

In other words, the aspectual and modal uses of duqv enable it to correlate with past, present, and future temporal references, showing that ‘tense’ is neither a primary concern nor is it grammaticalized in Iu-Mienh. To restate and to reaffirm the assumption by Chung and Timberlake (1985), the difference in the commitment degree inherently refers to the temporal dimension.
References
GENERATING THAI TRANSCRIPTIONS FOR ENGLISH WORDS

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Abstract
In a text-to-speech system, a transcription of each word can be either retrieved from the dictionary, or generated by rules or some statistical means. Though the dictionary-based approach can produce the most accurate result, a letter-to-sound conversion module is still necessary for unknown words. This study focuses on producing a module that can automatically transcribe English words into Thai sounds. To do this, 18,690 samples of English words are extracted from the CMU pronunciation dictionary. These samples are classified into different groups. Each group is used for extracting mapping rules for each Thai sound. A machine learning algorithm is implemented to extract conversion rules from these samples. These rules map English letter(s) into a corresponding Thai sound in a specified context. In other words, conversion rules are context sensitive rules, of which the maximum left and right contexts are two letters. Conversion rules are implemented as lookup tables like those of Bosch and Daelemans’ (1993). Rules extracted by the algorithm are manually examined and grouped together to make them more generalized. As a result, the number of rules is reduced from 4,120 to 440 rules.

In addition, since Thai syllable structures are different from that of English, phoneme sequences produced by the conversion rules have to be adjusted to comply with the Thai phonological system. Phoneme sequences that are not possible in Thai will be changed, deleted, or split into syllables with respect to the Thai syllable structures. Tones are also assigned to each syllable. Because this grapheme-to-phoneme module is going to be used for generating transcriptions of English words that are not in the dictionary, the module is tested on 1,475 English proper names. The results were judged in terms of degrees of acceptability, adopted from Coker et al.(1990), namely “good”, “fair”, and “poor”. “Good” means the transcription is what the judge would have said. “Fair” means the transcription sounds all right even the judge would not have said it that way. “Poor” means the transcription sounds bad; no one would have said it. The module can produce the output that is acceptable (fair or good) at the rate of 44%. Though the accuracy rate is not very high, the module is sufficient for generating transcriptions of unknown words.

Introduction
In a text-to-speech system, transcriptions of texts have to be produced by some means. The transcriptions can be generated by letter-to-sound conversion rules, which can be manually written (e.g. Chotimongkol and Black 2000) or automatically extracted from training data (e.g. Bosch and Daelemans 1993). Or they can be generated by using statistical models of
grapheme-to-phoneme conversion (e.g. Tarsaku et al. 2001). With this statistical method, the transcription is the phoneme sequence which has the highest probability. The transcriptions could also be retrieved from a dictionary, in which transcription of each word is manually stored in the dictionary (e.g. Luksaneeyanawin 1989). Though the dictionary-based approach takes longer time to be developed and uses more system resources, it is usually the most accurate one. Nevertheless, it still has to face with unknown word problems, especially for those proper names. Thus, even in a dictionary-based text-to-speech system, there must be a module to handle unknown words.

Since English words are often found within the Thai texts, e.g. “ความแตกต่างบริษัทรถยนต์ Chrysler และ General Motors โดยพื้นฐานแล้วมายาภาพ”, a Thai text-to-speech system has to produce not only transcriptions of Thai texts, but also transcriptions of English words. It is possible to use an existing English text-to-speech system to handle only those English words, while a Thai text-to-speech system is used for Thai words. But the speech produced by this method might sound unnatural because users would not expect to hear an English accent mixed within Thai speeches. A more natural solution is to produce transcriptions of English words on the basis of Thai phonological system. In this study, we aim to build a grapheme-to-phoneme conversion module that automatically transcribes English words into Thai sounds.

**Transcriptions of English and Thai**

Our Thai text-to-speech system, CU-TTS, is mainly a dictionary-based system. Transcriptions of Thai and English words are manually stored in the dictionary. Transcriptions of both English and Thai are based on the Thai phonological system. But some phonemes like /s/, /ʃ/, /l/, /ch/ are allowed as possible final consonants. Transcriptions of most words would be retrieved from the dictionary. Only transcriptions of words that are not included in the dictionary will be generated by rules. To handle unseen English words, an English grapheme-to-phoneme system is developed. The system here is different from other English grapheme-to-phoneme systems because the transcriptions produced by our system are Thai transcriptions, not English transcriptions. For example, the word “bird” will be pronounced /bɔɔt3/ rather than /'bɔːd/.

Since the set of English phonemes are different from Thais, we have to map English phonemes to corresponding Thai phonemes. English transcriptions that already coded in the Carnegie Mellon University Pronouncing Dictionary are used as the basis of English phonemes in this study. (The CMU Dictionary is a machine-readable pronunciation dictionary for North American English that contains over 125,000 words and their transcriptions.) In CMU dictionary, 39 phonemes are used for coding the English transcription (not counting variation for lexical stress). Vowels may carry lexical stress, marked with the number 0-2. (0 = No stress, 1 = Primary stress, 2 = Secondary stress) For example, the word “homework” is transcribed as /HH OW1 M W ER2 K/, “coordinate” as /K OW0 AO1 D IH0 N EY2 T/. Table 1 shows the mapping of English phonemes to Thai phonemes. The second column represents the CMU code for English phonemes. The third column, “IPA”, is the IPA symbols of that English phoneme.

The next column, “Thai Pronunciation”, is the corresponding Thai phoneme. For some phonemes, a phoneme with or without stress may map to different phonemes in Thai. For example, AA0 (unstressed /ɔ/) maps to /ɔ/ in Thai, while AA1 (stressed /ɔ/) maps to
Some phonemes, such as B, D, T, map to two different Thai phonemes according to its position in the syllable structure (as an initial or final consonant).

**Table 1: Mapping between English and Thai phonemes**

<table>
<thead>
<tr>
<th>Phoneme #</th>
<th>CMU</th>
<th>IPA</th>
<th>Thai Pronunciation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AA0</td>
<td>ɔ</td>
<td>ɔ</td>
<td>Cod</td>
</tr>
<tr>
<td>2</td>
<td>AE</td>
<td>æ</td>
<td>ɛ</td>
<td>Bad</td>
</tr>
<tr>
<td>3</td>
<td>AH0</td>
<td>ə</td>
<td>ə</td>
<td>About</td>
</tr>
<tr>
<td>4</td>
<td>AO</td>
<td>ɔ*</td>
<td>ɔɔ</td>
<td>Cord</td>
</tr>
<tr>
<td>5</td>
<td>AW</td>
<td>au</td>
<td>aw</td>
<td>Cow</td>
</tr>
<tr>
<td>6</td>
<td>AY</td>
<td>ai</td>
<td>aj</td>
<td>Eye</td>
</tr>
<tr>
<td>7</td>
<td>EH</td>
<td>e</td>
<td>e</td>
<td>Bed</td>
</tr>
<tr>
<td></td>
<td>EH0 (R)</td>
<td>æ*</td>
<td>ɛɛ</td>
<td>Bare</td>
</tr>
<tr>
<td>8</td>
<td>ER</td>
<td>ə</td>
<td>əə</td>
<td>Bird</td>
</tr>
<tr>
<td>9</td>
<td>EY</td>
<td>e*</td>
<td>ee</td>
<td>Day</td>
</tr>
<tr>
<td>10</td>
<td>IH</td>
<td>i</td>
<td>i</td>
<td>Bid</td>
</tr>
<tr>
<td></td>
<td>IH0 (R)</td>
<td>ia</td>
<td>ia</td>
<td>Beer</td>
</tr>
<tr>
<td>11</td>
<td>IY</td>
<td>i*</td>
<td>ii</td>
<td>Bead</td>
</tr>
<tr>
<td>12</td>
<td>OW</td>
<td>o*</td>
<td>oo</td>
<td>Go</td>
</tr>
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<td>13</td>
<td>OY</td>
<td>ɔi</td>
<td>ɔj</td>
<td>Boy</td>
</tr>
<tr>
<td>14</td>
<td>UH</td>
<td>u</td>
<td>u</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>UH0</td>
<td>ua</td>
<td>uua</td>
<td>Tour</td>
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<td>15</td>
<td>UW</td>
<td>u</td>
<td>uu</td>
<td>Food</td>
</tr>
<tr>
<td>16</td>
<td>B</td>
<td>b</td>
<td>#b, p#</td>
<td>Be, Cab</td>
</tr>
<tr>
<td>17</td>
<td>CH</td>
<td>tf</td>
<td>ch</td>
<td>Etch</td>
</tr>
<tr>
<td>18</td>
<td>D</td>
<td>d</td>
<td>#d, t#</td>
<td>Dog, Mad</td>
</tr>
<tr>
<td>19</td>
<td>DH</td>
<td>ɔ̌</td>
<td>th</td>
<td>Then</td>
</tr>
<tr>
<td>20</td>
<td>F</td>
<td>f</td>
<td>f</td>
<td>Fee</td>
</tr>
<tr>
<td>21</td>
<td>G</td>
<td>g</td>
<td>k</td>
<td>Green</td>
</tr>
<tr>
<td>22</td>
<td>HH</td>
<td>h</td>
<td>h</td>
<td>He</td>
</tr>
<tr>
<td>23</td>
<td>JH</td>
<td>dʒ</td>
<td>c</td>
<td>Edge</td>
</tr>
<tr>
<td>24</td>
<td>K</td>
<td>kh</td>
<td>kh, k</td>
<td>Key, Wok</td>
</tr>
<tr>
<td>25</td>
<td>L</td>
<td>l</td>
<td>l</td>
<td>Lab</td>
</tr>
<tr>
<td>26</td>
<td>M</td>
<td>m</td>
<td>m</td>
<td>Me</td>
</tr>
</tbody>
</table>
A transcription of every word in the English dictionary then is manually coded using Thai phonemes. The transcription is syllable-segmented and tone-assigned. More than 100,000 words are stored in our English dictionary. Although the process of compiling this English dictionary is time-consuming, it would yield the most accurate transcriptions. When our Thai text-to-speech system processes English words, it will retrieve Thai transcriptions of those words from the dictionary. However, the dictionary cannot contain all possible words, especially for those proper names. A module to convert English words to Thai transcriptions is still necessary for the system.

**Grapheme-to-phoneme Conversion**

Grapheme-to-phoneme conversion is a necessary part of any text-to-speech systems. Various approaches have been proposed. It could be a dictionary-based, a rule-based, a statistical based, or a hybrid one. In a rule-based system, letter-to-sound conversion rules can be constructed by hand or derived by a machine. In a statistical based system, a corpus of word-transcription is used for training. Probability of mapping each character to its corresponding phoneme is estimated from this training corpus. The system will use this statistical information to select the transcription with the highest probability. Most of current systems are statistical basis because it is easier to construct and maintain the systems. In addition, the systems do not depend on a specific language as the rule-based systems do. They can be used for any languages as long as an appropriate training corpus is given. Nevertheless, the rule-based systems usually have an advantage in terms of processing speed.

In our Thai text-to-speech system, since most of the transcriptions are in the dictionary, we do not need the grapheme-to-phoneme conversion module to transcribe all words. The module we need will be used to generate transcriptions of a few unknown words. Thus, we do not want a module to be complicated and take much processing time. In this study, we adapted Bosch and Daelemans’ (1993) data-oriented rule based grapheme-to-phoneme conversion system. Bosch and Daelemans used a training corpus
Thai transcriptions for English words

which contains pairs of words and transcriptions. In each pair, each character is aligned with its corresponding sound. A learning algorithm will read this corpus and generate context-sensitive letter-to-sound conversion rules. Bosch and Daelemans set the maximum context to be five characters on the left and on the right. For example, in Dutch, when the pair “s|c|h|o|e|n”-/s|x|#|u|#|n#/ is found, rules like s|c|ho -> /x/, sc|h|oen -> #, etc., will be generated. (The symbol # is used for phonetic null. It means no sound is generated from the mapping.) The letter in between | | is the one that maps to the specified sound. Letters before and after | are those left and right contexts. Rules will cease to exist if it conflicts with new data. (The same character in the identical context maps to a different sound.) Thus, rules are not ambiguous. At the end, rules with different contexts sizes are stored in different lookup tables. For example, Table r:0-1-1 is the collection of mapping rules when considering only one character on the right; Table r:2-1-3 is the collection of mapping rules when considering two characters on the left and three characters on the right. Probabilistic rules are also generated from the training data, e.g. a +> /aa/. (The symbol +> is used for probabilistic mapping rules.) Probabilistic rules are chosen from the most frequent mapping of that character. These probabilistic rules will be used when no rules can map the input character. Bosch and Daelemans (1993) randomly selected 18,500 word-pronunciation pairs as the training data for Dutch, and for English. The lookup tables created from the training data contains 27,000 rules or patterns for Dutch, and 35,000 patterns for English.

In our system, since we already built a dictionary which contains pairs of English words and Thai transcriptions, we could use these data as a training set. But, we would need to do the alignment between letters and sounds first. Doing that would be very time-consuming. Since we only need a small module for processing unseen words, we build lookup tables in a much quicker way by using training data that is different from that of Bosch and Daelemans. Because we expect the difficulties of mapping from English characters to Thai sounds are mainly caused from vowels, we randomly selected pairs of words and transcriptions as representatives of each vowel. Table 2 shows the number of words selected for training each vowel pattern. There are totally 20 data sets. For each pair, we only mark characters that map to the selected vowel in that data set. For example, since the character “e” in “payment” is mapped to /e/, this word will be marked as “paym(e)nt”. Thus, training data for the sound /e/ will be like “paym(e)nt”, “pass(a)ge”, “overh(ea)d”, etc. Then, a learning algorithm will be used to create mapping rules of that vowel. The program will create mapping rules with different contexts, such as m|e|n -> /e/, ym|e|nt -> /e/, etc. In this study, we set the maximum contexts to be two characters. Only 7 lookup tables and 2 probabilistic mapping tables are used in this study, namely r:0-1-0, r:0-1-1, r:1-1-0, r:1-1-1, r:2-1-0, r:0-1-2, r:2-1-2, g:0-1-0, and g:1-1-1. Table r:x-1-y stands for lookup table in which x characters on the left and z characters on the right are taken into account, and g:x-1-y stands for probabilistic mapping when considering x characters on the left and y characters on the right.
To reduce the number of rules and ensure that rules are not accidental, we select only rules or patterns that occur more than once in the training data. There are 4,120 rules at this step (step-1). Next, we delete rules that could also be produced by the default mappings (probabilistic rules g:0-1-0). For example, since the default mapping of the letter “a” is /ɛ/, we can safely delete all rules that map “a” to /ɛ/ in all lookup tables. After deleting rules that have the same output as the default mapping of “a”, “e”, “i”, “o”, “u” (step-2), the number of rules reduces to 2,549 patterns. At this point, we only have mapping rules for vowels. Thus, we manually add 62 default mapping rules for consonant letters (not a,e,i,o,u) (step-3). Then, we delete rules that are redundant. These are mapping rules that produce the same sound as the probabilistic mapping rules g:1-1-1 (step-4). For example, if we have r|j|l -> /i/, we could delete rules like r|j|l|l -> /i/, er|j|l|l -> /i/, etc. At this step, the number of rules reduces to 1,548 patterns. After that, rules are manually deleted, or modified to reflect the generalization as much as possible (step-5). Special symbols, C, V, and X are used to represent groups of consonant letters, vowel letters, and

Table 2: Number of training words for each vowel.

<table>
<thead>
<tr>
<th>CMU</th>
<th>IPA</th>
<th>Thai Pronunciation</th>
<th>No. of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA0</td>
<td>ɔ</td>
<td>ɔ</td>
<td>485</td>
</tr>
<tr>
<td>AA1,AA2</td>
<td>ɑː</td>
<td>aa</td>
<td>902</td>
</tr>
<tr>
<td>AE</td>
<td>æ</td>
<td>ɛ</td>
<td>970</td>
</tr>
<tr>
<td>AH0</td>
<td>ə</td>
<td>ə</td>
<td>2082</td>
</tr>
<tr>
<td>AH1</td>
<td>ʌ</td>
<td>a</td>
<td>439</td>
</tr>
<tr>
<td>AO</td>
<td>ɔː</td>
<td>ɔɔ</td>
<td>1167</td>
</tr>
<tr>
<td>AW</td>
<td>au</td>
<td>aw</td>
<td>291</td>
</tr>
<tr>
<td>AY</td>
<td>ai</td>
<td>aj</td>
<td>285</td>
</tr>
<tr>
<td>EH</td>
<td>e</td>
<td>e</td>
<td>1567</td>
</tr>
<tr>
<td>EH0 (R)</td>
<td>æː</td>
<td>ɛɛ</td>
<td>82</td>
</tr>
<tr>
<td>ER</td>
<td>ə</td>
<td>əə</td>
<td>1915</td>
</tr>
<tr>
<td>EY</td>
<td>eː</td>
<td>ee</td>
<td>761</td>
</tr>
<tr>
<td>IH</td>
<td>i</td>
<td>i</td>
<td>1610</td>
</tr>
<tr>
<td>IH0 (R)</td>
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<td>ia</td>
<td>220</td>
</tr>
<tr>
<td>IY</td>
<td>iː</td>
<td>ii</td>
<td>1397</td>
</tr>
<tr>
<td>OW</td>
<td>oː</td>
<td>oo</td>
<td>4182</td>
</tr>
<tr>
<td>OY</td>
<td>oi</td>
<td>əj</td>
<td>46</td>
</tr>
<tr>
<td>UH</td>
<td>ʊ</td>
<td>u</td>
<td>76</td>
</tr>
<tr>
<td>UW</td>
<td>u</td>
<td>uu</td>
<td>196</td>
</tr>
</tbody>
</table>
any letters respectively. The final outcome contains 440 patterns for mapping (including probabilistic mapping).

These mapping rules will be used by a grapheme-to-phoneme module. The module will try rules in the mapping tables in the following order: r:2-1-2, r:2-1-0, r:1-1-1, r:1-1-0, r:0-1-1, r:0-1-0, g:1-1-1, and g:0-1-0. Each character in the unknown word will be mapped to a corresponding sound, with respect to the patterns. Since we did not create the mapping rules for consonants in the same way as we did with vowels (by learning from training data), it is possible that the output might have a cluster that is not possible for Thai, such as “st”, “bj”, “nj”, “mj”, etc. For example, the program will map the word “star” to /sthaa/ by using the following rules s+>/s/, t+>/th/, C|a|r+>/aa/, V|r|^ -> #. (The symbol “^” is used for indicating word boundary.) But this phoneme output is not Thai pronunciation. Thus, the program has to readjust sound sequence by means of deletion, insertion, or modification. In this example, /sthaa/ is changed to /sa taa/. Then, each syllable will be assigned tones. (The numbers 0-4 are used for mid, low, falling, high, and rising tones respectively.)

From the Thai transcriptions encoded in the English dictionary, we tried to extract tone patterns of words with different number of syllables, e.g. 2-syllable words, 3-syllable words, etc. But there seem to be no unique tone sequence for each word type. For example, for 2-syllable words, the tone sequence can be 00 (“begin”-/bii0 kin0/), 01 (“import”-/?im0 pɔɔt1/), 02 (“bonny”-/bɔɔn0 ni2/), 03 (“aircraft”-/?ɛɛraaf3/), 10 (“smile”-/sa1 maaj0/), 11 (“bishop”-/bi1 chɔɔp1/), 12 (“fader”-/feet1 daa2/). Tone patterns that occur most often are used as the default one. By doing this, though the program cannot assign correct tones to all words, the tone assigned should be acceptable for a large number of words. The following is the tone assignment rule for 2-syllable words.

- Live + Live & Short vowel => 0 2
- Live + Live & Long vowel => 0 0
- Live + Dead & Short vowel => 0 1
- Live + Dead & Long vowel => 0 2
- Dead + Live => 3 2
- Dead + Dead & Short vowel => 3 1
- Dead + Dead & Long vowel => 3 2

There are seven tone patterns for 2-syllable words. Tones are assigned on the basis of live/dead syllables and short/long vowels. A syllable is a live syllable if it ends with one of the following sounds, /p/, /t/, /k/, /f/, /s/, /ch/; or it ends with a short vowel. A syllable is a dead syllable if it ends with the following sound /m/, /n/, /ŋ/, /w/, /j/, /l/; or it ends with a long vowel. For example, if the first syllable is a live syllable, its tone will be 0. If the next syllable is also a live one with short vowel, the tone will be 2. Tone assignment rules for 3 or 4 syllable words are also created in the similar way.
Experiments

Since the English grapheme-to-phoneme module is designed to generate Thai transcriptions of any unknown words, which are usually proper names, the module is tested on 1,475 English proper names. The transcription output is expected to be fairly acceptable rather than perfect. Therefore, we evaluate the performance of the module by judging the results in terms of degrees of acceptability, adapted from Coker et al. (1990), namely “good”, “fair”, and “poor”. The label “good” means the transcription is what the judge would have said. “Fair” means the transcription sounds all right even the judge would not have said it that way. “Poor” means the transcription sounds bad; no one would have said it. A graduate student in the Linguistics program is asked to judge the result using this scale. For example, the transcription /ʔɛɛ ʔɛk1 ʔɛk1 dɛn0 dɛn0 dɛn0 dɛi2/ generated for the word “Alexandria” was judged as “poor”; /khris3 thii2/ generated for “Christie” was judged as “fair”; /baa0 baa0 raa2/ generated for “Barbara” was judged as “good”. Table 3 shows the number of items judged.

Table 3: The result of judgment

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>417</td>
<td>28.27%</td>
</tr>
<tr>
<td>Fair</td>
<td>237</td>
<td>16.07%</td>
</tr>
<tr>
<td>Poor</td>
<td>821</td>
<td>55.66%</td>
</tr>
<tr>
<td>Total</td>
<td>1475</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

It can be seen from Table 3 that 44% of the outputs are acceptable (fair or good). But 56% are not acceptable. Since generating appropriate tones is a difficult task and we want to evaluate the letter-to-sound conversion rules, the judge was asked to re-evaluate the result again by ignoring tones. The result from this judgment would better reflect the performance of the English grapheme-to-phoneme module. The result is shown in Table 4.

Table 4 shows that the result is a bit better. The number of acceptable phoneme sequences is up to 55%, while the number of unacceptable is 45%. Though the accuracy is not up to the level of 80% as reported in other systems, the module is sufficient to the task in this study, given that pronunciations of 44% of unseen words are acceptable, and the rests are at least Thai pronunciations.

Table 4: The result of judgment when ignoring tones

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>537</td>
<td>36.41%</td>
</tr>
<tr>
<td>Fair</td>
<td>278</td>
<td>18.85%</td>
</tr>
<tr>
<td>Poor</td>
<td>660</td>
<td>44.75%</td>
</tr>
<tr>
<td>Total</td>
<td>1475</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Discussion

This study has demonstrated a quick and easy way to create a grapheme-to-phoneme conversion system. Instead of using a corpus which is fully aligned between characters and sounds, we prepared training data only on the difficult mappings, which are vowels in this study. Alignment is marked only for characters that produce those vowel sounds. Letter-to-sound conversion rules then are automatically generated by a machine. Rule patterns
Thai transcriptions for English words

Generated from the machine can immediately be used by the conversion program. However, we chose to manually collapse rules by hand since we want the module to be very small. Compared to previous research on English grapheme-to-phoneme conversion, which has the number of rules up to 35,000 patterns (Bosch and Daelemans 1993), the number of rules in this study is only 440 patterns. Though the accuracy of the module is not high, it is sufficient to the task. Because most of English words’ transcriptions are already stored in the dictionary, we only want the module to generate Thai transcriptions for a few unknown words. These words are expected to be at least pronounceable in Thai. And if the pronunciation really sounds bad, users can add the correct pronunciation in the user dictionary.

Acknowledgments
This research is only a small part of the project “Text to Speech and Automatic Speech Recognition for Wireless and Wire Line Value Added Services”, which is developed by the Centre for Research in Speech and Language Processing, Chulalongkorn University, for the Sun System Co.Ltd. in 2003.

References


Appendix : Examples of the result

<table>
<thead>
<tr>
<th>Word</th>
<th>Transcription</th>
<th>Judgment1</th>
<th>Judgment2 (ignore tone)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abraham</td>
<td>?ɛɛ0^breɛ0^heɛm2^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Ackworth</td>
<td>?ɛk3^khwɔɔt1^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Adam</td>
<td>?aa0^daam0^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Alan</td>
<td>?aa0^leɛn0^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Alexander</td>
<td>?aa0^leek1^seɛn0^dɔɔ2^</td>
<td>fair</td>
<td>good</td>
</tr>
<tr>
<td>Alfred</td>
<td>?eɛl0^freet1^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Baker</td>
<td>bee0^khɔɔ0^</td>
<td>fair</td>
<td>good</td>
</tr>
<tr>
<td>Baldwin</td>
<td>bɔɔl0^wiin0^</td>
<td>fair</td>
<td>good</td>
</tr>
<tr>
<td>Blackwell</td>
<td>blek3^khweel2^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Buckingham</td>
<td>bak3^khip0^heɛm2^</td>
<td>fair</td>
<td>good</td>
</tr>
<tr>
<td>Cameron</td>
<td>khee0^maa0^roon2^</td>
<td>fair</td>
<td>fair</td>
</tr>
<tr>
<td>Campbell</td>
<td>kheɛm0^beel0^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Christie</td>
<td>khris3^thii2^</td>
<td>fair</td>
<td>fair</td>
</tr>
<tr>
<td>Christina</td>
<td>khris3^thii0^naa2^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Dennis</td>
<td>deen0^nis1^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Duncan</td>
<td>duun0^kheɛn0^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Edmund</td>
<td>?eɛt3^muun2^</td>
<td>fair</td>
<td>fair</td>
</tr>
<tr>
<td>Edward</td>
<td>?eɛt3^wɔɔt1^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Fabian</td>
<td>fee0^biian0^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Fleetwood</td>
<td>fliit3^wuut1^</td>
<td>fair</td>
<td>good</td>
</tr>
<tr>
<td>Fleming</td>
<td>fleɛ0^mij2^</td>
<td>fair</td>
<td>fair</td>
</tr>
<tr>
<td>Fortune</td>
<td>fɔɔ0^thuun0^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Geoffrey</td>
<td>cii0^?aas0^ioof3^free2^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Gifford</td>
<td>kif3^fɔɔt1^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Gilbert</td>
<td>kiil0^boaat1^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Harris</td>
<td>haa0^ris1^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Harte</td>
<td>haa0^thee0^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Harvard</td>
<td>haa0^waat1^</td>
<td>good</td>
<td>good</td>
</tr>
<tr>
<td>Mary</td>
<td>maa0^rii0^</td>
<td>poor</td>
<td>poor</td>
</tr>
<tr>
<td>Obson</td>
<td>?oop3^saan2^</td>
<td>poor</td>
<td>poor</td>
</tr>
</tbody>
</table>
THE RHETORIC OF PRIME MINISTER KOIZUMI
AND PUBLIC INVOLVEMENT IN JAPAN

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Miyako Tsuji
Ritsumeikan University

1. Introduction
An important finding in sociolinguistics is that speakers do not use language in the way they do simply because of their social identities or because of other situational factors. For example, Gumperz (1982) argues that an individual’s choice of speech style has symbolic value and interpretive consequences that cannot be explained simply by correlating the incidence of linguistic variants with independently determined social or contextual categories. In other words, speakers exploit the possibility of linguistic choices in order to convey intentional meaning of a socio-pragmatic nature. Linguistic choice is a dynamic event and it is no longer seen as influenced only by situational factors. Scotton (1983) extends this view of linguistic choice to the concept of negotiation between a speaker and a hearer. According to her, the negotiation principle guides speakers to ‘choose the form of your conversational contribution such that it symbolizes the set of rights and obligations which you wish to be in force between speaker and addressee for the current exchange’ (Scotton 1983: 116).

The present study takes this view of language use as a dynamic interpersonal negotiation and examines politicians’ speech in Japan. How do politicians use language in order to gain social approval from the audience? What are their linguistic strategies to improve their public image as desirable politicians? In order to answer these questions, the present study focuses on Prime Minister Junichiro Koizumi and his speech style. The main hypothesis of the present study is that a Western style of speech is emerging in Japan based on the concept of solidarity (Brown and Gileman 1960). The solidarity semantic encourages equal and affective relationships between speakers and listeners. This new style of speech improves the public images of politicians and encourages listeners/viewers to feel closer to politicians and get more involved in politics.

2. Koizumi and his popularity
Junichiro Koizumi was inaugurated as the 88th Prime Minister of Japan on April 26, 2001. In mass media, Koizumi has been described as Nagatachoo no henjin (‘a strange man in the town of Nagata’), which means that he is a very different politician from the rest in the town of Nagata, the center of Japanese political circles. For example, he does not form his own faction, thus he is not a leader of any faction. He openly claims that he will smash the outdated rigid structure and traditions of the Liberal Democratic Party (hereafter LDP) which has been dominating the politics of post-war Japan. Even though he is an untraditional, out-
spoken, non-leader of any fraction, public opinion has shown that he is the most popular Prime Minister in post-war Japan. The following graph illustrates the approval and disapproval rates for the last eight Prime Ministers in the month they took office.

Figure 1: Graph compiled from data taken from the Yomiuri Newspaper (4/18/04) and Asahi Newspaper (5/29/01)

As the graph shows, Koizumi enjoyed an approval rate of 87% in his first month in office, a rate he has since not been. In addition, the disapproval rate for Koizumi was also the lowest, which was merely 6%. Generally, it is difficult for any Prime Minister to maintain such a high approval rate for a substantial amount of time because freshness will disappear over time. Koizumi is not an exception to this general tendency. He has lost support due to controversial domestic as well as foreign issues. They include overseas deployment of the Self-Defense Forces; visits to Yasukuni Shrine, which is dedicated to the millions of Japan’s war dead, including convicted Class-A war criminals of World War II; North Korea’s abduction of Japanese; the slow economic recovery; and the government pension reform. However, he has been successful in maintaining a consistently high level of approval even though it is not at the same level as his first few months in office. The overall average approval rate for Koizumi is 50.7%, which is second only to Hosokawa’s 59%. When we consider the fact that Hosokawa’s cabinet was composed of 8 coalition parties, called fragile “glass work,” and lasted only 8 months in 1993-1994, Koizumi’s popularity is significant. Koizumi is in his fourth year as Prime Minister. He has been in office for more than 1300 days so far, and this makes Koizumi the Prime Minister enjoying the longest term in office among all of his predecessors in the last forty years. The remarkably high approval rate of Koizumi can be partially accounted for by the fact that he has been popular among non-LDP supporters, in addition to regular LDP supporters. Koizumi has the consistent support of a wide range of people with various political orientations. According to a poll conducted by Jiji News Agency (Hirama 2004), people consistently list the following two reasons for supporting Koizumi: good impression and strong leadership.

It is true that Koizumi has been experiencing difficulty in fighting anti-reform forces, including the old guard in his own party, and the continuing economic slump. Despite these challenges, Koizumi has consistently pursued his reform agenda, and the average high approval rate shows that he has been a popular Prime Minister compared to his predecessors. Where does his popularity come from? According to Yamazaki (2001),
Koizumi’s popularity is partially accounted for by the people’s disappointment and distrust toward sustained partisan politics and by their high expectations for a new leader. However, more importantly, people consider Koizumi a person who speaks honestly (honne ‘real intention’), taking the ordinary people’s viewpoint. Yamazaki (2001) states that “Prime Minister Koizumi is cheerful, high-spirited and his way of speaking is appealing and a little fast. These are also the reasons for him to be popular among people.” In the same line, Fujita (2003) claims that Koizumi’s high approval rate is due to his appealing language use, which most politicians do not possess. If Koizumi’s language is related to his popularity, what then are these features of his language use? What are the characteristics of his language that may contribute to his high approval rate? In what follows, we will discuss several characteristics of his use of language and relate them to the concept of speech as interpersonal negotiation.

3. Two types of nominalizer and involvement
In Japanese, there are several nominalizers whose primary function is to transform a verb into a noun like the gerundive ing or infinitive to in English. Two representative nominalizers are \( n(o) \) and \( koto \). Observe the following examples.

\begin{itemize}
\item (1) Nihon ni iku no wa hajimete da.
\hspace{1cm} \text{Japan to go NOM T first time BE}
\hspace{1cm} ‘It is the first time to go to Japan.’
\item (2) Nihon ni iku koto wa muzukashii.
\hspace{1cm} \text{Japan to go NOM T difficult}
\hspace{1cm} ‘It is difficult to go to Japan.’
\end{itemize}

In the above examples, both koto and \( n(o) \) nominalize the preceding verb \( iku \) (‘go’). Although the two nominalizers appear to be the same in function and do not differ from each other in meaning, Maynard (1997) argues that they have different sociolinguistic effects based on her careful examination of Japanese television news programs. According to Maynard (1997), in the context of TV Talk, where the audience watches interactions among participants (e.g., anchor, commentator, and reporter), the frequency of \( n(o) \) was significantly higher than that of \( koto \). On the other hand, in the context of TV Announcements where anchors and reporters typically read from prepared manuscripts, the frequency of \( koto \) was significantly higher than that of \( n(o) \). Maynard (1997: 391) calls \( n(o) \) nominalization PROXIMAL framing where immediacy is involved, and \( koto \) nominalization DISTAL framing where speakers place themselves apart from the scene of the profiled event. Maynard (1997) argues that the distributional tendency is not surprising given the functional difference between \( n(o) \) and \( koto \). For example, the PROXIMAL framing (\( n(o) \) nominalization) is more suited in TV Talk where participants interact and are involved in conversations.

This line of analysis provides us with the following prediction among others. Speakers may opt for \( n(o) \) nominalization or PROXIMAL framing when the need for conveying the sense of involvement or intimacy. In other words, the manipulation of the nominalization can be viewed as an instance of conversational negotiation. For example, a politician may shift to a more frequent use of \( n(o) \) when he/she realizes a need to align himself/herself with the audience. On the other hand, the politician may shift to a more
frequent use of *koto* when he/she realizes a need to be distanced from the audience. In order to find out whether such a shift occurs, two types of speech event are examined. The first set of data is taken from the budget committee meeting of the House of Representatives on November 25, 2003. In the budget committee meeting, Koizumi was challenged by questions from members of the opposing parties. There was a high level of formality due to the fact that it was a highly institutionalized official meeting in the Diet. Politicians often read their questions and answers from prepared manuscripts. The second set of data is taken from Koizumi’s election campaign for the House of Representatives on November 6, 2003. This was an event held outdoors with the general public as an audience. In this type of event, politicians speak to the audience with the goal of getting votes for the election. With respect to the frequency of *koto* and *no*, it was found that a different kind of nominalization is associated with each types of speech.

### Table 1: Frequency of koto and no in a committee meeting and a political campaign event

<table>
<thead>
<tr>
<th></th>
<th>Committee</th>
<th>Campaign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (%)</td>
<td>84 (40)</td>
<td>40 (77)</td>
<td>124</td>
</tr>
<tr>
<td>Koto (%)</td>
<td>126 (60)</td>
<td>12 (23)</td>
<td>138</td>
</tr>
<tr>
<td>Total</td>
<td>210</td>
<td>52</td>
<td>262</td>
</tr>
</tbody>
</table>

In the committee meeting, *koto* was used more often than *no*. On the other hand, in the political campaign, *no* was used more often than *koto*. In the committee meeting where opponents ask questions in a rather formal setting, Koizumi frequently used the DISTAL framing of *koto* in order to indicate distance between himself and the addressee. However, in the political campaign where Koizumi saw the need to be close to the audience and get involved with them, the PROXIMAL framing of *no* was employed more frequently than *koto*. The rhetorical effect of *no* is to bring out the speaker’s personal attitude toward what is said, thus making the statement less abstract and involving the audience. The no framing is a means to let Koizumi descend from the highest position of the Prime Minister to the level of the general public. Observe the following examples.

(3) Hito mo gijutsu mo suteta mon ja nai n desu.  
people too technology too useless not NOM BE  
‘We should not give up our technology and people.’

(4) Kokusai kyoochoo tsaisi o tsukuru koto ga hitsuyoo da shi . . .  
international cooperation system O make NOM S need and  
‘It is important to build a system of international cooperation, and . . . ’

In (3), which is taken from the campaign speech, *n* (a phonologically reduced form of *no*) nominalization is used. Koizumi is trying to connect to the audience by sharing the fact that Japan can still be number 1 in the world. Here, his speech is spontaneous, and Koizumi expresses his personal belief with confidence and excitement. The no nominalization helps Koizumi to present his perspective as if it was commonly shared by the audience: i.e., the PROXIMAL framing of no signals a shared togetherness. In (4), which is taken from the committee meeting, *koto* nominalization is used. Koizumi is responding to questions from members of opposing parties. The content of the reply is rather abstract (e.g., policy,
international cooperation), formal and emotionally detached. Koizumi acts as a mere information provider. He speaks as if he was reading from a prepared manuscript, and as such there is no need for involvement as was in the case with no. The contrastive frequency distribution suggests that Koizumi is skillfully switching from DISTAL koto framing to PROXIMAL no framing in his campaign speech so that he can negotiate for involvement and the sense of sharedness from the audience. This style shifting helps Koizumi to project himself as a politician who is accessible, close, involving, engaging, and desirable for the public.

Obviously, the high approval rate of Koizumi cannot be explained solely by his use of language. However, it is safe to suggest that his high approval rate may be partially related to his language use. That said, it would be interesting to examine the nominalization of another politician whose approval rate was not as high as Koizumi’s. The 87th Prime Minister, immediately preceding Koizumi, was Yoshiro Mori. When Mori took office, his approval rate was about 42%, which is not bad, but not nearly as good as Koizumi’s. However, toward the end of his tenure, the approval rate for Mori dropped to a record low 9%, making him one of the most unpopular Prime Ministers in postwar Japan. He was criticized for his lack of leadership on various occasions. For example, Mori continued to play golf even after learning of the collision of the fishery vessel Ehime Maru with the U.S. nuclear submarine USS Greeneville. On another occasion, Mori told pro-Shinto Diet members that “Japan is a divine nation with the emperor at its center. We have been working for 30 years to get people to firmly acknowledge this.” The remarks were viewed as a revival of Japan’s wartime ideology and harshly criticized by the media, the general public, and members of political parties, including his own LDP. It appears that Mori was rather insensitive to possible interpretations of what he said.

Turning to Mori’s use of language, in particular, the linguistic devices of nominalization, let us examine how he used koto and no. For this purpose, his last press conference, in which Mori announced his resignation, will be examined. The conference took place on April 18, 2001. Although it was a formal occasion, there were no questions from members of opposing parties as in the case of a committee meeting. Instead, the speech was addressed to the general public with the goal of winning support and understanding from them for the last time. Thus, this speech may be placed somewhere between the formal committee meeting and the more informal campaign speech. The following table shows the results of the frequency of no and koto nominalization.

<table>
<thead>
<tr>
<th></th>
<th>Press conference</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>11 (14%)</td>
</tr>
<tr>
<td>Koto</td>
<td>66 (86%)</td>
</tr>
</tbody>
</table>

The frequency of koto (86%) is higher than not only Koizumi’s election campaign speech but also his more formal speech in the committee meeting. Given the semantic function of koto, the high use of koto nominalization sets Mori as a formal, distant, detached, traditional, and conservative politician who fails to connect to the audience on a personal level.
4. Embedded sentence
This stiff, formal and emotionally distant tone of Mori’s speech was also seen in his use of the super polite form in an embedded sentence. In Japanese, the appropriate level of formality and politeness is marked by the sentence final verb form, which is either the plain da form or polite masu form. Generally, an embedded sentence is marked by the da form and the masu form is reserved for a matrix sentence final verb. For example, it is redundant and often ungrammatical for a sentence with a relative clause to have two masu: one in the relative clause and the other one in the matrix clause. One of the characteristics of Mori’s speech is that he overuses the masu polite form even in his embedded sentences, which results in the super polite form. Given that political discourse is expected to show a relatively high degree of formality, the over polite and formal use of masu may be acceptable to politicians. However, it makes utterances appear to be too stiff, formal, bureaucratic, and emotionally detached. The following example involves a relative clause as an embedded sentence.

(5) Wagakuni keizai shaka no hatten o sayuu
Our country economy society development to influence
itashimasu  IT kakumei no taio ni tsukimasite wa IT kihonhoo o
do revolution LK plan about T basic law O
seiritsu saseru koto ga dekimasita.
approve make NOM S could

‘As for the plan for the IT revolution which influences our country’s economy, (we) were able to have the IT basic law approved.’

The following table shows the frequency distribution of da and masu in embedded clauses of complex sentences in Mori’s speech.

**Table 3:** Frequency of da and masu forms in embedded clauses in Mori’s speech

<table>
<thead>
<tr>
<th>Verb form in embedded clause (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>da 13 (34%)</td>
</tr>
<tr>
<td>masu 22 (66%)</td>
</tr>
</tbody>
</table>

This use of masu form in embedded sentence was not observed in Koizumi’s speech. Observe the following Koizumi’s utterances taken from the committee meeting.

(6) Jieitai ga katsuyaku dekiru bun-ya ga are ba
Self defense forces S participate can area S exist if
jieitaio haken shitai to omotte orimasu
Self defense forces O deploy want that think
‘If there is an area in which the Japan Self Defense Forces can actively participate, I would like to send them.’

The relative clause jieitai ga katsuyaku dekiru (‘self defense force can actively participate’) is embedded in the main clause. Note that the verb form dekiru in the embedded clause is the
plain form. Mori would have said the same utterance in the formal masu form as in dekimasu. In fact, all of the embedded clauses in Koizumi’s utterances in both speech occasions were indeed in the plain form. There was no instance of the formal masu form in embedded clauses. This finding is in sharp contrast with Mori’s utterances.

5. Accessibility and participation
Politicians’ language is often characterized as unclear and difficult to understand due to the level of formality, types of vocabulary/expressions, and the general tendency of avoiding explicit statements. For example, Prime Minister Takeshita was ridiculed as gengo meiryoo imi fumei (‘clear in language, obscure in meaning’) because of his evasive way of speaking. Although this imprecise use of language or equivocation is a highly skilled form of political discourse (e.g., Bull 2000), the overuse of such a strategy is likely to cost a politician his/her credibility and support from the public due to its inaccessibility. Plain, straightforward language is easy to understand; therefore, it is more accessible to the public than an indirect, evasive way of speaking. In this section, we will discuss several strategies Koizumi uses in speaking to negotiate for his positive self-image.

5.1. Emblematic expressions (sound-bites)
News reporter Seiichi Kanise analyzes Koizumi’s popularity as follows:

Koizumi is a rare kind of Japanese politician in that a lot of his great popularity was because of his way of speaking, using short and catchy words. The style is often called “one-phrase politics,” and it is very easy for the public to understand. (Hani 2004)

Emblematic or symbolic use of language such as striking short phrases is an effective mode of communication. Politicians can create, use, and reuse such short phrases in order to convey a positive self-image to the public. Short phrases are welcomed by the media as well because they can easily be used as attention grabbing headlines. Particularly, for those who are busy and have neither time nor intention to read extensive materials, concise short phrases are readily accessible and easy to remember. The following short phrases and expressions are repeatedly used by Koizumi and frequently cited by the mass media.

(7) Kan kara min e
government from private to
‘From government control to the private sector’

(8) Jimintoo o kaeru nihon o kaeru
LDP O change Japan O change
‘(I will) change the LDP, (I will) change Japan.’

(9) Jimintoo o bukkowasu
LDP O demolish
‘(I will) demolish the LDP.’

(10) Seiiki naki koozoo kaikaku
sanctuary not structure reform
‘structural reforms without sanctuary.’
‘No reform, no growth.’

“If you do it, it will happen” is a magic phrase.’

All of the examples are used in such a way as to maximize the public’s accessibility to Koizumi’s stance on various political issues. The short phrase in (7) describes the government policy of deregulation and privatization. The straightforward statements in (8) and (9) were Koizumi’s slogans when he ran for the president of the LDP, which was suffering from old closed-door politics. Note the rather radical tone of bukkowasu ‘demolish’ in (9). It is a dramatic departure from the “classical” role of a political leader in Japan, which is to seek harmonious collaboration, conciliation, and party unity (Feldman and Kawakami 1989). The statements in (10) and (11) describe the absolute necessity of structural reform. They express Koizumi’s strong commitment to reform even though he anticipates strong opposition from the bureaucracy, special interest groups, opposing parties and even his own LDP. The expression in (12) appears in Koizumi’s General Policy Speech to the 161st Session of the Diet (October 12, 2004). Later, in a radio interview (Nippon Hoosoo 2004), he explains that he quoted the phrase from a school song of a high school that played extremely well in the All-Japan Senior High School Baseball Championship Tournament in order to convey the message that Japanese should continue making efforts without becoming downcast.

5.2. Unplanned speaking

Generally, politicians try to avoid the risks of making face-damaging remarks by reading prepared manuscripts when they speak. Although this accomplishes the task of presenting information as accurately as possible without being misunderstood, it fails to personalize the conveyed message to the addressee. From the perspective of the three functions of communication, namely, information dispensation, persuasion and solidarity-building, the reading of manuscripts or planned speeches is not suited particularly to the solidarity-building function. Planned speech gives the discourse a feeling of being objective and distant, giving the audience a passive role as the receiver of information without any interactional role. On the other hand, unplanned, spontaneous speech makes solidarity-building possible. Unlike planned speech that is often prepared and coached by aides in advance, unplanned speech is spontaneous and helps a speaker personalize the message, directly speaking his/her own words and conveying the real intention. Unplanned speech can be lively and elicit emotions. Observe the following utterance, which was made by Koizumi when he was handing the Prime Minister’s Cup to the winning yokozuna (Sumo Grand Champion) Takanohana. Takanohana was badly injured on the previous day, and no one was expecting him to win the tournament.

‘(You) didn’t let your injury stop you. (I) am moved. Thank you.’
Koizumi uttered these uncustomary words of praise as an adlib with a hint of excitement in his voice. It was completely unplanned, and Koizumi’s spontaneous remarks were accepted by the audience with cheers (NHK 2001). According to the Japan Times, Koizumi’s poignant praise of the yokozuna captured the nation. Koizumi’s spontaneous words of praise and excitement reinforced the moment as a commonly experienced moment by creating, sharing, and confirming the sense of solidarity among all Japanese.

Aside from this almost historical event, the strategy of solidarity-building is commonly observed in Koizumi’s political speech. The following example is taken from an election campaign speech given on July 1, 2004. Koizumi realizes that there is a group of high school students who are waving. He instantly acknowledges them in the middle of his speech.

(14) Aa arigatoo aa ureshiinee yaa arigatoo (applause)
oh thank you oh well thank you

senkyoken aru, arigatoo
the vote have thank you

‘Oh, thank you, I am delighted. Thank you. Are you of voting age?’

The sudden interruption may be viewed as disruptive in a planned speech. However, Koizumi’s spontaneous remarks in a joking manner were met with warm applause. He is successful in conveying the image of himself as a politician who is willing to interact with the audience and not as a traditional politician who is just interested in putting his message out. Koizumi overtly acknowledges the positive face (i.e., desire to be recognized, valued and respected) of teen-agers who are not the social elite by any means and who probably do not have the right to vote. This gives the impression of Koizumi being an in-group member of the audience, rather than the Prime Minister someone far beyond the public in social rank and as such an outside member for the audience.

5. 3. Colloquial Japanese

The Japanese lexicon includes the two types of words, namely, native Japanese words (wago or Yamato kotoba) and Sino-Japanese words (kango). From the semantic point of view, Sino-Japanese words tend to express abstract concepts and are often found in literary or academic vocabulary. On the other hand, native Japanese words are relatively informal and found in everyday conversation. The relational status of Sino-Japanese words and native Japanese words is similar to that of Latinate words and Germanic words in English. For example, Shibatani (1990) gives the following comparison:

(15)

<table>
<thead>
<tr>
<th>Japanese:</th>
<th>Native</th>
<th>Sino-Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>kinoo ‘yesterday’</td>
<td>sakujitsu ‘yesterday’</td>
<td></td>
</tr>
<tr>
<td>kotoba ‘language’</td>
<td>gengo ‘language’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English:</th>
<th>Germanic</th>
<th>Latinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>help</td>
<td>aid</td>
<td></td>
</tr>
<tr>
<td>begin</td>
<td>commence</td>
<td></td>
</tr>
</tbody>
</table>
Generally, Japanese politicians tend to use Sino-Japanese words in their speech so that they conform to the socially prescribed image of traditional, educated and intellectual statesmen. However, the excessive use of Sino-Japanese words has the effect of creating a psychological distance between politicians and the public. For example, the speech of Mori, as previously mentioned one of the most unpopular Prime Ministers in postwar Japan, is characterized by the frequent use of Sino-Japanese words. Observe the following examples taken from a press conference with Mori.

(16) seikin o yoosuru
\[ \text{conscientious work O need} \]
\[ \text{‘need diligent work’} \]

(17) ookiku shian ga aru
\[ \text{big meditation S exist} \]
\[ \text{‘meditate carefully’} \]

(18) haichoo shite
\[ \text{humbly listen do} \]
\[ \text{‘(I) humbly listen’} \]

All of the examples may be observed in written texts such as official documents prepared by bureaucrats, but never in everyday conversation. Unlike Mori, Koizumi often chooses native Japanese words (wago) or everyday conversational Japanese instead of Sino-Japanese words. Speaking lively to the public in “their” language is a strategy, which creates a sense of closeness and shared togetherness with the public. Observe the following example taken from the committee meeting. Koizumi switches from formal the desu form in the first line to the colloquial form in the second line.

(19) Kakushoo no tantoo daijin ga iru n desu
\[ \text{each department LK charge minister S exist NOM BE} \]
\[ \text{‘there is a minister in each department.’} \]

\[ \text{Tantoo daijin nimo ude o furutte morawanakya ikenai} \]
\[ \text{Chargeminister too arm O exercise receive must} \]
\[ \text{‘(we) need each minister to perform to his/her abilities.’} \]

Here, there are no Sino-Japanese words such as seikin (‘conscientious work’) as in Mori’s speech in (16). Instead, Koizumi uses ude o furuu (‘perform to his abilities’), an everyday Japanese expression. He often switches to colloquial Japanese even in the formal committee meeting. By doing so, Koizumi reduces the distance between him and the audience and creates the sense of closeness or commonality.

6. Conclusion
In a country like Japan, socially prescribed norms and traditions often dictate the way people speak (Ide 1989). Speech behavior is confined to the socially prescribed norms or wakimae (‘discernment’) and there is relatively little room for volition left to an individual speaker.
However, the present study suggests that even in the most traditional political circles, rather
dynamic use of language is evolving. Politicians may actively use language to negotiate for
public support. In the past, politicians were interested mostly in conveying information to
their audiences. There was a lack of interest in how the information was conveyed. However,
some politicians are now realizing that “packaging” the information in an attractive and
accessible manner is equally or perhaps more important than the information itself.

In this paper, we have examined the language use of Prime Minister Koizumi, one
of the most popular Prime Ministers in postwar Japan. It was argued that he uses various
linguistic devices to achieve the goal of creating, sharing, and confirming a sense of
solidarity with the public. In particular, his speech style is characterized as a strategy of
convergence with citizens by employing plain conversational Japanese, which streamlines
complex political information into easily comprehensible and accessible expressions and at
the same time evokes emotional involvement.

Finally, we wonder if the linguistic shift of solidarity-building is contributing to the
democratization of Japan. Indeed, it appears that the public is now more interested and
involved in politics than before Koizumi took office. For example, according to the cabinet
public relations office, more than two million people instantly signed up when Koizumi’s
government launched a weekly Koizumi email magazine which carries his own column
“Lion Heart” (a reference to his lion-like hairstyle!). However, we have to note that such
linguistic strategies have the potential to simplify and even distort the democratic process.
Plain simple language transforms a more complex social and political reality into easy
manageable sound-bites. Such simple language may satisfy the public’s demand for
cognitive reduction, but it may also inhibit the public’s full understanding. At this time, it
is not clear how historians and political scientists will evaluate the final outcome of
Koizumi’s administration. However, it is fair to conclude that Koizumi’s language use has
offered us an opportunity to reflect on the dynamic linguistic strategies used in politics as a
means of social negotiation between politicians and the public.

* For presentation of Japanese data, the following abbreviations were used: BE (be verb),
NOM (nominalizer), LK (linker which links nouns), S (subject marker), T (topic marker),
O (object marker)
* We are grateful to Koji Maekawa for his assistance in data collection.

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PRONOUNS AND AGREEMENT IN CHAMORU

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In his *Chamorro Reference Grammar* (1973), Donald Topping lists four sets of pronouns in Chamoru (section 3.4.1, pages 106-11).

(i) *hu*-type pronouns

<table>
<thead>
<tr>
<th><strong>hu</strong> (I)</th>
<th><strong>in</strong> (we, excl)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ta</strong> (we, incl)</td>
<td></td>
</tr>
<tr>
<td><strong>un</strong> (you, sing)</td>
<td><strong>en</strong> (you, pl)</td>
</tr>
<tr>
<td><strong>ha</strong> (he/she/it)</td>
<td><strong>ma</strong> (they)</td>
</tr>
</tbody>
</table>

(ii) *yo’*-type pronouns

<table>
<thead>
<tr>
<th><strong>yo’</strong></th>
<th><strong>ham</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>hit</strong></td>
<td></td>
</tr>
<tr>
<td><strong>hao</strong></td>
<td><strong>hamyo</strong></td>
</tr>
<tr>
<td><strong>gue’</strong></td>
<td><strong>siha</strong></td>
</tr>
</tbody>
</table>

(iii) possessive pronouns

<table>
<thead>
<tr>
<th><strong>-hu</strong></th>
<th><strong>-mami</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>-ta</strong></td>
<td></td>
</tr>
<tr>
<td><strong>-mu</strong></td>
<td><strong>-miyu</strong></td>
</tr>
<tr>
<td><strong>-ña</strong></td>
<td><strong>-ñiha</strong></td>
</tr>
</tbody>
</table>

(iv) emphatic pronouns

<table>
<thead>
<tr>
<th><strong>guahu</strong></th>
<th><strong>hami</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>hita</strong></td>
<td></td>
</tr>
<tr>
<td><strong>hagu</strong></td>
<td><strong>hamyo</strong></td>
</tr>
<tr>
<td><strong>guiya</strong></td>
<td><strong>siha</strong></td>
</tr>
</tbody>
</table>

We will argue that of these four sets, only two (the *yo’*-type pronouns and the ‘emphatic’ pronouns) are in fact pronouns, while the other two (the *hu*-type pronouns and the ‘possessive’ pronouns) are not pronouns at all, but rather morphological markers of agreement between subjects and verbs, or between possessors and nouns. As such, this is not an original analysis; it is found (for example) in Sandra Chung’s *The Design of Agreement* (1998). However, it is simply assumed there without argument as a basis for further analysis. There is both room for, and value in, considering in some detail why this perspective is correct, and what it implies about Chamoru syntax.

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The examples to be offered here are taken from a Chamoru translation of the first book of the New Testament, entitled *Santos na Ebanhelion Jesukristo tinig San Mateo*. This translation was printed without identifying translator, date or place of publication. It does bear the imprimatur of F. M. A. de Olano y Urteaga, titular bishop and Vicar Apostolic to Guam from 1936 to 1945. Examples are cited in the orthography used in this translation, which differs in several respects from that used in Topping 1973, particularly as regards vowels and the glottal stop. Since phonology and orthography are not crucial here, this should not cause problems.

It may be useful to begin by observing that the confusion which lies behind the issue of pronouns versus agreement markers is a confusion between form and meaning. All of the words in (i) to (iv) provide information about the person and number of a noun phrase in the sentence where they appear: in that sense, there is no difficulty in regarding them as belonging to a single semantic category. But (*pace* many traditional grammars) notions like ‘pronoun’ and ‘agreement’ belong to linguistic form rather than meaning: they are not semantic, but syntactic or morphological categories. More specifically, pronouns are noun phrases, and in principle may appear in every position which other noun phrases occupy. Agreement markers, by contrast, are closely associated with whatever type of word agrees with a noun phrase (in Chamoru, for purposes of this discussion, verbs and nouns). They constitute either affixes or particles which are positioned with respect to a verb or a noun. As we shall see in Chamoru, distinguishing pronouns from agreement markers in practice may not be as easy as these criteria suggest, but the basic idea is clear.

The forms in (iv), the ‘emphatic’ pronouns, show the greatest variety of distribution. They appear as preverbal subjects, as in (1) through (3), or as subjects of nominal predicates as in (4) to (6). In these and subsequent examples, the word or affix under consideration is underlined.

(1)  *Lao guaho husañgane hamyo*: (5:32)
    ‘but I tell you’

(2)  *Hago umalog*: (26:25)
    ‘you say so’

(3)  *Guiva ilegña nu siha*: (19:11)
    ‘he said to them’

(4)  *Guaho i Kristo*: (24: 5)
    ‘I am the Messiah’

(5)  *Hago i Kristo*: (16:16)
    ‘you are the Messiah’

(6)  *guiva i Lahen Yuus*: (13:37)
    ‘he is the son of God’

They also appear as objects of a variety of prepositions, such as *nu* in (7) to (9), *giya* in (10) to (12), *ke* in (13) to (16) and *yan* in (17) to (19).
(7) *Gaiase nu guaho, Asaena.* (15:22)  
‘have mercy on me, Lord’

(8) *Muña enao nu hago, Asaena;* (16:22)  
‘that must not happen to you, Lord’

(9) *Sa ilegña nu guiva si Juan:* (14: 4)  
‘because John said to him’

(10) *Suha giya guaho, Satanás;* (16:23)  
‘get away from me, Satan’

(11) *utut ya unyuteñaihon giya hago;* (18: 8)  
‘cut it off and throw it away from you’

(12) *Ya manmato giya guiva i Fariseo,* (19: 3)  
‘the Pharisees came to him’

(13) *metgotña ke guaho:* (3:11)  
‘stronger than me’

(14) *udaŋkuloña ke guiva.* (11:11)  
‘will be greater than him’

(15) *infa-lahen sasalaguan gue dos biahe megaiña ke hamyo.* (23:15)  
‘you make him twice the child of hell as yourselves’

(16) *Ada ti hamyo manfonaña ke siha?* (6:26)  
‘aren’t you better than them?’

(17) *lao i korasonña umáchago yan guaho.* (15: 8)  
‘but its heart is far from me’

(18) *chule nae, ya unnaive yo yan hago.* (17:26)  
‘take it, and pay for me and yourself’

(19) *manmalago manádiñaŋan yan guiva.* (12:46)  
‘they wanted to speak with him’

They appear when focussed by quantifiers like *lokue* ‘too’, as in (20) to (22), and as noun phrase predicates as in (23) and (24).

(20) *Guaho lokue hufaisen hamyo nu uno-ha na sinañgan.* (21:24)  
‘I too will ask you one question’
None of the other sets of forms may occur in any of the positions illustrated in (1) through (24), but all of these positions may be filled by various types of noun phrases. Thus there is no difficulty in recognizing the set of forms in (iv) as noun phrases and Chamoru pronouns.

By contrast, the forms in (i), the *hu*-type ‘pronouns’, have a maximally restricted distribution, illustrated in (25) to (32). They appear only prefixed to transitive verbs and represent the subject of the transitive verb.

Unlike the positions illustrated previously, which may or may not be occupied by a pronoun, every transitive verb in Chamoru must have a prefix taken from the set in (i). This is true whether the subject of the transitive verb is present as a noun phrase (including the pronouns in (iv)) or not. Thus in (25), (27), (29) and (32), the subject is identified only
by the prefix on the verb, but in (26), (28) and (31), it is also present as the pronoun in preverbal position. Example (1) above is a similar case, and should be compared with (25). When the subject is an ordinary noun phrase, it always co-occurs with the prefix (as in (30) for example), but when it is a pronoun, it only appears if some contrast affects the subject, and in the preverbal position. Thus in (31) the implication is perhaps that others do cast them out, but in (32) no such contrast is implied. Thus it is clear that the prefixes in set (i) do not occupy noun phrase positions, but rather are positioned with respect to the verb they are prefixed to. They are not pronouns at all but markers of agreement between the subject and the verb whose subject it is. Thus examples like (25), (27), (29) and (31) should be analyzed as containing a subject position which is empty, and whose meaning is identified by the agreement prefix, rather than by considering the prefix as the subject.

The forms in (iii), the possessive ‘pronouns’, are illustrated in (33) to (38). They also have a restricted distribution, as suffixes on nouns.

(33)  *Haye nae i nanaho*, (12:48)
‘who is my mother?’

(34)  *Sa mames i yugoho*, (11:30)
‘because my yoke is sweet’

(35)  *i kachetma lokue póluye gue*. (5:40)
‘let him have your coat also’

(36)  *Apase i dibimo*. (18:28)
‘pay your debt’

(37)  *ya ti hafasaenaña i tataña pat i nanaña;* (15: 6)
‘and he does not honor his father and his mother’

(38)  *Sa i pachot hasasañgan ayo i ginen i chinidaña i korason.* (12:34)
‘for the mouth speaks from the overflow of the heart’

These suffixes are agreement markers rather than pronouns for the same reasons as those in (iv); but there are some differences which make the case not quite so strong. Unlike transitive verbs, which invariably have a subject to agree with (though it need not be overtly present as a noun phrase), the majority of nouns do not have any agreement suffix. They have one only if a genitive noun phrase is understood to be present. And even if one is overtly present, there is another genitive construction which does not use the agreement markers in (iii). Examples in which an overt genitive noun phrase co-occurs with an agreement marker are not common, but (38) is one example.

In addition to marking agreement of a noun with a genitive noun phrase as illustrated in (33) to (38), the suffixes in (ii) are also used with a class of words which (at least from a semantic point of view) are verbs rather than nouns. Some examples appear in (39) to (44).

(39)  *Minaase malagoho*, (12: 7)
‘I want mercy’
Regardless of how these examples are to be analyzed, the suffixes which appear to be the same as the genitive agreement suffixes here mark agreement with the (semantic) subject, and are obligatory in the same ways as the subject agreement prefixes in (iv). Examples like (44), in which an explicit such subject co-occurs with agreement are common.

The forms in (ii), the yo’-type pronouns, constitute the most problematic case. These have a very limited distribution, always being found directly following a verb. If that verb is intransitive, they represent its subject, as in examples (45) to (50).

(45) Malago yo. (8: 3)  
‘I want to’

(46) Ti matagò yo. (15:24)  
‘I have not been sent’

(47) Yagin Lahen Yuus hao. (4: 3)  
‘if you are the son of God’

(48) yagin malago hao. (8: 2)  
‘if you want to’

(49) Yagin rai Israel gue. (27:42)  
‘if he is the king of Israel’

(50) Inanite gue. (11:18)  
‘he is possessed’

These include noun phrases predicates seen in (47) and (49), and passive sentences seen in (46) and (50).

If the verb is transitive, they represent its direct object, as in examples (51) to (56).
Transitive verbs will have a subject agreement prefix from (i) as in (53) to (56). Example (51) is an imperative which has no subject agreement prefix, and (52) contains a verb whose subject agreement marker is of the suffixed type in (iii).

Though pronouns of this type have an extremely restricted distribution, it is not the same as the agreement markers in (iii). The agreement markers are suffixed to the noun or verb they mark the agreement of. This is clear because regular stress in Chamoru is placed on the penultimate syllable of a word. When a suffix from (iii) is attached, the stress shifts. By the same criterion, the pronouns in (ii) are not suffixes, but independent words with relatively weak stress: the stress in this situation does not shift. The distinct distribution is particularly clear in example (52) which has both an agreement suffix and a post-verbal pronoun. Since a noun phrase may follow all these verbs, it is reasonable to assume that pronouns from (ii) occupy a noun phrase position. If so, this is a position in which pronouns from (iv), which have otherwise a very free distribution (in noun phrase positions), cannot appear. Thus if the forms in (ii) are regarded as pronouns, they will be in complementary distribution with the other pronouns. They do not appear when the subject or object they represent is present as a full noun phrase, and it is not possible to contrast such a pronoun by adding a pronoun from (iv) at the beginning of the sentence. Both these are possible with the agreement markers from (i). We conclude that the forms in (ii) are pronouns rather than agreement markers. A recent paper by Sandra Chung (2003) argues that these pronouns are positioned not syntactically, but are ‘clitics’ positioned according to prosodic structure. This approach may resolve some of the difficulty.

According to the analysis above of the Chamoru forms in (i) through (iv), the situation is not unlike that in familiar languages with agreement, such as Spanish shown in (v) and (vi). (v) shows the present tense conjugation of the verb ir ‘go’.

(v)  

<table>
<thead>
<tr>
<th>Subject</th>
<th>Present Tense</th>
</tr>
</thead>
<tbody>
<tr>
<td>(yo) v</td>
<td>(vosotros) vais</td>
</tr>
<tr>
<td>(tu) v</td>
<td>(vosotros) vais</td>
</tr>
<tr>
<td>(él/ella) v</td>
<td>(ellos/ellas) van</td>
</tr>
</tbody>
</table>
The boldface suffixes show agreement of the verb with its subject in person and number. If that subject is known in context, it need not be explicitly mentioned, but identified solely by the agreement. A full pronoun (in parentheses) may be used in situations of explicit contrast. This is the same pattern seen with the Chamoru agreement prefixes in (i) and the full pronouns in (iv).

(vi) shows the present tense conjugation of the transitive verb ver ‘see’.

(vi)  
(yo) te veo  (nosotros) te vemos  
(yo) lo/la veo  (nosotros) lo/la vemos
(tu) me ves  (vosotros) me veis  
(tu) lo/la ves  (vosotros) lo/la veis
(él/ella) me ve  (ellos/ellas) me ven  
(él/ella) te ve  (ellos/ellas) te ven  
(él/ella) lo/la ve  (ellos/ellas) lo/la ven
(yo) os veo  (nosotros) os vemos  
(yo) los/las veo  (nosotros) los/las vemos
(tu) nos ves  (vosotros) nos veis  
(tu) los/las ves  (vosotros) los/las veis
(él/ella) nos ve  (ellos/ellas) nos ven  
(él/ella) os ve  (ellos/ellas) os ven  
(él/ella) los/las ve  (ellos/ellas) los/las ven

Here the agreement pattern of subjects is the same as in (v) for intransitive verbs, but objects can be represented by a special set of pronouns different in form from the full pronouns which may occur in the subject noun phrase position. These object pronouns (a paradigm case of ‘clitics’) appear before the verb, but overt objects usually follow it. They are not optional, and (in standard Spanish, at least) do not co-occur with overt objects. These are the same properties shown by the Chamoru pronouns in (ii). There are several differences between agreement in Chamoru and Spanish, including the restriction on subject agreement to transitive verbs in Chamoru, but not Spanish. Perhaps more noteworthy is the greater disparity between pronouns and agreement markers in Spanish as compared with Chamoru.

References
MONOSYLLABICIZATION IN EASTERN CHAM

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The sesquisyllabication of Proto-Chamic, i.e. the phonological reduction of its non-final syllables, and the monosyllabication of Modern Eastern Cham have often been claimed to be a consequence of language contact with Mon-Khmer languages and Vietnamese respectively. While the structural changes leading to monosyllabication are well-attested (section 2), previous work has not paid much attention to the sociolinguistic factors that underlie it (section 1). A study was therefore carried out to describe the various types of monosyllabication found in the language and the sociolinguistic factors affecting this change (section 3). The ultimate goal of this study is to determine if monosyllabication is a change in progress and if language contact with Vietnamese plays a role in it as proposed by Thurgood: “the subsequent reduction to monosyllables seems to be due in large part to subsequent Phan Rang Cham contact with the monosyllabic Vietnamese…” (Thurgood, 1999: p. 66).

1. Diglossia and monosyllabization

Previous researchers have noted that Eastern Cham sesquisyllables tend to be realized as monosyllables (Aymonier 1889; Blood 1962; Lee 1966; Alieva 1991; Bùi 1996; Thurgood 1999). More specifically, Blood and Alieva have observed that scholars and speakers who know the written language use a lower proportion of monosyllabicized forms. These observations can be framed in the more general context of diglossia (Ferguson 1959). The Eastern Cham speech community makes use of two complementary language varieties, with different social functions: a conservative variety which is used for religious and very formal situations (High) and a colloquial, less codified variety which is used in everyday life. I cannot describe the situation in detail in this short paper (Brunelle in progress), but I will briefly discuss the interaction between diglossia and monosyllabization.

The High variety closely mirrors the written language and, for this reason, largely preserves its polysyllables. On the other hand, in colloquial Low speech, polysyllables are rare, to the exception of learned and religious vocabulary and of polysyllables preserved because of an avoidance of homophony. When working with linguists, Cham subjects often try to speak what they consider proper language, namely the High variety. However, since very few speakers master the High variety, what is typically produced is a hybrid variety that I will call Formal Low. It is basically a form of Low with a more or less important admixture of High features (one of them being the use of polysyllables). Not surprisingly, the actual proportion of polysyllables used in Formal Low varies from speaker to speaker, depending on factors like the knowledge of High, the formality of the situation and the speaker’s desire to speak “proper” Cham.

The analysis developed here is based on the observation that there is little variation in the two “pure” language varieties. By definition, the High variety contains sesquisyllables, while the Low variety is almost completely monosyllabic. The locus of

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variation is the hybrid Formal Low. This model is admittedly a simplification of the actual sociolinguistic situation, in which varieties might be organized along a continuum with more or less well-defined cut-off points (Paolillo 1997). However, since all the quantitative work presented in section 3 is based on interviews during which all subjects can safely be assumed to have used a variant of Formal Low, this approach poses no methodological problems.

2 Diachrony

The canonical word-shape of Proto-Malayo-Chamic was the disyllable (Blood 1962; Thurgood 1996; Thurgood 1999). Possibly because of the influence of Mon-Khmer languages with which it was in early contact, Proto-Chamic adopted iambic stress (Thurgood 1996; Thurgood 1999). This new stress pattern was accompanied by a general neutralization of phonological contrast in the unstressed non-final syllables, resulting in what is called a sesquisyllabic canonical word-shape. This means that the consonant and vowel inventory found in presyllables (i.e. unstressed syllables) is a subset of the inventory found in main, stressed syllables (Blood 1967; Bùi 1996; Thurgood 1996; Thurgood 1999). The phonological reduction or, at least, the instability of presyllable vowels is attested in 19th century texts:

“…il faut tenir compte de l’état flottant de l’écriture, surtout en ce qui concerne la première syllabe des mots bisyllabiques. On peut écrire : akan ou ikan, poisson, akak ou ikak, lier, kamẽi ou kamẽi, fille…” (Aymonier 1889)

“…the floating state of the script must be taken into account, especially the first syllable of disyllabic words. One can write: akan or ikan, fish, akak or ikak, tie, kumẽ or kamẽ, girl…”

This process goes even further by the reduction to schwa of presyllable vowels (Blood 1967; Alieva 1991; Bùi 1996; Thurgood 1999).

<table>
<thead>
<tr>
<th>Written</th>
<th>Cham Gloss</th>
<th>Formal Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>kubaw</td>
<td>‘water buffalo’</td>
<td>[kapəw]</td>
</tr>
<tr>
<td>jalan</td>
<td>‘road’</td>
<td>[cəlan]</td>
</tr>
<tr>
<td>bataw</td>
<td>‘stone’</td>
<td>[pətaw]</td>
</tr>
</tbody>
</table>

Moreover, in the Low register, the presyllable vowel is often dropped if this results in a well-formed onset cluster:

<table>
<thead>
<tr>
<th>Written</th>
<th>Cham</th>
<th>Gloss</th>
<th>Formal Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>palāj</td>
<td>‘village’</td>
<td>[pləj]</td>
<td></td>
</tr>
<tr>
<td>karāj</td>
<td>‘other’</td>
<td>[krəj]</td>
<td></td>
</tr>
<tr>
<td>bani</td>
<td>‘native Islam’</td>
<td>[pni]</td>
<td></td>
</tr>
</tbody>
</table>
However, in colloquial Low, the most common monosyllabification process is the complete deletion of the presyllable (Bùi 1996). This is not a recent change as it was already described in Aymonier (1889):

“Même lorsqu’il n’y a pas à craindre la confusion, non seulement la première syllabe varie, mais encore elle est supprimée. On peut lire dans certains cas, par exemple: kok pour akok, tête, rau pour arau, laver le linge, nêî pour moenêî, se baigner, vêî pour havêî, rotin, etc., etc.” (p.39)

“Even when there is no possible confusion, not only does the first syllable vary, but it is also deleted. Thus we can read in some cases, for example, kok for akok, head, rau for arau, wash clothes, nêî for moenêî, bathe, vêî for havêî, rattan, etc.”

As a result of these changes, the colloquial Low variety is now almost entirely monosyllabic. However, because of diglossia, a certain amount of variation is found in the community. This variation is dealt with in the next section.

3. Experiment

In order to explore the social and structural variation in the realization of monosyllabification, I carried out interviews with Eastern Cham speakers. I used the corpus thus obtained to investigate the types of monosyllabification found in Formal Low and the sociolinguistic factors that determine their respective frequencies.

3.1 Methods

Interviews on language use, language attitudes and life stories were conducted in and around Phan Rang, Ninh Thuận with 42 native speakers of Eastern Cham (22 males, 20 females). Out of these, 41 were originally from Ninh Thuận province and one from Bình Thuận, although the latter subject has actually lived most of her life in Phan Rang. The subjects included in the sample are from socio-economically diverse backgrounds, but they are not representative of the community as a whole. Interviews ranged from 15 to 30 minutes per subject and in two occasions, two subjects were interviewed simultaneously. Spectators were discouraged as much as possible, but family members and neighbors were sometimes present during interviews, especially those carried out with younger women. Questions were mostly asked in Vietnamese, but subjects were instructed to answer in Cham. This, and the fact that speakers were aware that my language skills are better in Vietnamese than in Cham, might have caused the proportion of Vietnamese words used by subjects to be higher than in daily interactions. Finally, most subjects perceived the interviews as a very formal situation. Even subjects who knew me before the interview modified their speech perceptibly. It is therefore safe to assume that the language used in the interviews is not Colloquial Low, but rather the ‘best’ language variety the subjects could speak, namely Formal Low.

The interviews were transcribed in both IPA and a romanization of the High variety based on Moussay’s transcription. After completing fieldwork, I corrected all the transcriptions with Phú Văn Hân, a Cham linguist working in Hồ Chí Minh City. I then compared the sesquisyllables of the High variety with their realization in Formal Low and to count the proportion of monosyllabified items used by each subject.
3.2 Results
The first type of information that can be extracted from the interviews is the array of phonological strategies through which sesquisyllables are reduced to monosyllables (section 3.2.1). Ideally, it would be interesting to see how frequent each strategy is and what the exact restrictions on their occurrence are, but as the interviews are rather short, a quantitative investigation of this type would not yield reliable results. On the other hand, it is possible to consider the prevalence of monosyllables without getting into a more fine-grained analysis and to see how the variation found between subjects correlates with sociolinguistic factors (section 3.2.2).

3.2.1 Diachronic monosyllabicization strategies
Three main types of phonological strategies have led to the monosyllabicization of Ancient Cham sesquisyllables. The first type, which is the most common, is the deletion of the entire presyllable. This strategy is almost always available, except in words in which the presyllable onset is a stop and the main syllable onset is a liquid. In these words, the formation of an onset cluster is often the only observed result.

<table>
<thead>
<tr>
<th>High variety</th>
<th>Gloss</th>
<th>Colloquial Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>/akhār/</td>
<td>‘word, script’</td>
<td>/khān/</td>
</tr>
<tr>
<td>/tapa/</td>
<td>‘to cross’</td>
<td>/pa/</td>
</tr>
<tr>
<td>/rilo/</td>
<td>‘many, a lot’</td>
<td>/lo/</td>
</tr>
</tbody>
</table>

But:
| palāj/       | ‘village’     | /plēj/        |
| çalan/       | ‘road’         | /klan/        |

Table 1: Types of complex clusters found in the interviews

<table>
<thead>
<tr>
<th>Presyllable onset</th>
<th>Sonority</th>
<th>Stops</th>
<th>Fricatives</th>
<th>Nasals</th>
<th>Liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>kate</td>
<td>[kte]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘New year’</td>
<td>‘festival’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>taha</td>
<td>[tha]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘old’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>pani</td>
<td>[pni]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘native’</td>
<td>‘Islam’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>sanij</td>
<td>[snij]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘think’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>manuc</td>
<td>[mnuc]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘person’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>palāj</td>
<td>[plēj]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘village’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>harij</td>
<td>[hrēj]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘day’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>milām</td>
<td>[mlām]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td></td>
<td>‘night’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
However, the formation of complex onsets is not restricted to stop + liquid clusters. Complex clusters are a possible outcome most of the time, provided that they do not violate the sonority sequencing, i.e. as long as the sonority of their individual segments increases towards the nucleus (Clements 1990). In Table 1, shaded boxes represent the logical possibilities that were not found in the interviews. They would all be cases of clusters with a decreasing or equal sonority.

There is one type of cluster that systematically violates sonority sequencing. Its first member is a /m/ while its second member is the onset of the original main syllable. The possibility of this /m/ being vocalic and constituting a presyllable has to be considered. However, since there is no phonological evidence in favor of this analysis, I will consider that these clusters are entirely consonantal, but do not violate the language-specific sonority hierarchy.

<table>
<thead>
<tr>
<th>High variety</th>
<th>Gloss</th>
<th>Colloquial Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>/mɪta/</td>
<td>‘eye’</td>
<td>/mta/</td>
</tr>
<tr>
<td>/mɪʔɪn/</td>
<td>‘to play’</td>
<td>/mʔɪn/</td>
</tr>
</tbody>
</table>

The purpose of this violation of sonority sequencing is not only to preserve an original /m/-onset in the presyllable. Occasionally, the entire presyllable is changed to a nasal, which assimilates to the following consonant.

<table>
<thead>
<tr>
<th>High variety</th>
<th>Gloss</th>
<th>Colloquial Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ripɔw/</td>
<td>‘thousand’</td>
<td>/mpɔw/</td>
</tr>
<tr>
<td>/lɪkāj/</td>
<td>‘man, male’</td>
<td>/ŋkɛj/</td>
</tr>
<tr>
<td>/palāj/</td>
<td>‘village’</td>
<td>/mlɛj/</td>
</tr>
</tbody>
</table>

Another presyllable reduction strategy is the partial or total assimilation of onset clusters. This arguably facilitates their production by minimizing articulatory effort.

<table>
<thead>
<tr>
<th>High variety</th>
<th>Gloss</th>
<th>Colloquial Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>/pɪnaj/</td>
<td>‘female animal’</td>
<td>/ηnaj/</td>
</tr>
<tr>
<td>/take/</td>
<td>‘horn’</td>
<td>/kke/</td>
</tr>
<tr>
<td>/kamāj/</td>
<td>‘woman, female’</td>
<td>/mmɛj/</td>
</tr>
</tbody>
</table>

Finally, function words and high-frequency words are often monosyllabicized following their own idiosyncratic patterns.

<table>
<thead>
<tr>
<th>High variety</th>
<th>Gloss</th>
<th>Colloquial Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>/rilo/</td>
<td>‘much, a lot’</td>
<td>/klo/</td>
</tr>
<tr>
<td>/harāj/</td>
<td>‘day’</td>
<td>/sɛj/</td>
</tr>
</tbody>
</table>

Interestingly, a word can have several forms corresponding to different monosyllabicization strategies. For example, the adjective used to designate the native
form of Islam, /pəni/ can be realized as [pni], [ŋni] or [ni]. Generally, a speaker tends to use only one of these forms, but there are also reasons to believe that the use of clusters is a marker of formality (especially if we exclude stop + liquid clusters that are used systematically even in very colloquial Low). In other words, there would be a formality scale going from sesquisyllables to monosyllables with complex onsets to monosyllables with simple onsets. A systematic variationist study of these phenomena is necessary to fully grasp the social factors that underlie the diachronic processes of monosyllabicization and cluster simplification. However, it would require an enormous corpus a considerable amount of time. For these reasons I have focused my efforts on a more categorical approach.

3.2.2 Sociolinguistic variation

As just mentioned, a sociolinguistic study of the variation in monosyllabicization has two possible levels. The first level of analysis is to consider words as either monosyllables or sesquisyllables, regardless of the type of onset they have. This level is categorical and requires a relatively small corpus. At this level of analysis, the various possible realizations of the word /pəni/ ‘native Islam’ are counted as disyllabic if their presyllable contains a vowel (/pəni/, /pəni/, /pəni/), but monosyllabic if it does not (/pəni/, /ŋni/, /ni/). The second level of analysis goes deeper, by distinguishing the various types of onsets found in monosyllables. Forms like /pəni/, /ŋni/, /ni/ would be categorized differently and possibly regarded as gradient variants along a continuum. While the second level would allow us to capture a probable hierarchy in formality between the various types of onsets, it would require a very large corpus. The reason is that some onset clusters seem to have undergone simplification more readily than others because of structural constraints and that these different types of clusters would have to be tallied independently. For example, /kate/ ‘new year’ is less likely to be reduced to /kte/ than /te/ but /pəni/ is more likely to be realized as /pəni/ with a cluster, then as /ni/, without it. Therefore, to achieve statistically significant results, our corpus would have to include a relatively high number of tokens in each onset category for each subject. Since the corpus at our disposal is composed of short interviews, the more categorical first option was chosen, even if it leaves out interesting facts.

The proportion of sesquisyllables in the interviews was determined for every subject by comparing the realization of every word with its corresponding written form. (However,Written Cham is not identical to the High variety, because vowel contrast is neutralized in presyllables). Obviously, words that are monosyllabic in Written Cham were excluded. Subjects were then grouped according to the following factors.

Age: All subjects were born between 1924 and 1980.

Sex: Interviews were conducted with 20 women and 22 men.

Religion: The sample includes 15 followers of native Hinduism (bàlamon), 26 followers of native Islam (pəni), and 1 Sunni Muslim. This is not representative distribution. Although there are no reliable statistics on religion among the Eastern Cham, pəni are probably overrepresented and Sunni Muslims slightly underrepresented.

Place of Birth: Most subjects were born in the villages of Phước Nhơn (26) and Hưu Đức (11), but five subjects were born in other villages.

Knowledge of the Cham script: Subjects were asked if they have any knowledge of the Cham script. A positive answer does not actually mean that they are literate in Cham, but rather that they have studied the script at some point of their lives, regardless of their ability to use it (nobody is fully literate).

Culturally-related occupation: All employees of the Cham Cultural Center and of the Committee for the Standardization of the Cham Script were considered culture-specialists, except support personnel (technicians, secretaries and accountants).

Frequency of use of Vietnamese (VN): Determined through the answers given by subjects but corrected according to my own personal observations. The scale is the following: 0 = almost never uses VN, 1 = speaks VN with a few VN acquaintances, occasionally uses VN at work, 2 = speaks VN with VN friends and often uses VN at work, 3 = works in VN only, many VN friends.

Highest level of schooling: Subjects were asked what the highest level of schooling they attended was. This variable raises two problems: 1) Due to changes in political regimes, answers can either reflect the colonial school system or the pre-1975 and post-1975 Vietnamese systems. The quality of the education provided in these school systems is not comparable. 2) The number of years of schooling does not necessarily reflect attendance (especially problematic among farmers). The scale is the following: 0 = no formal schooling, 1 = primary school, 2 = middle school, 3 = high school, technical high school, French primary, 4 = college and university.

Occupation: Subjects were asked about the various positions they held in their life. They were ranked according to the best position they ever occupied on the following scale: 1 = housework, farming, 2 = manual work, petty trade, priests, 3 = technicians, white collars, 4 = researchers, intellectuals. Time spent outside Cham-speaking areas: The following scale was used: 0 = never left the area, 1 = short trips for travel or trade, 2 = 0-5 years, and so forth with 5-year increments.

Proportion of Vietnamese words used in the interview: Although this variable is objective, it does not necessarily reflect the proportion of Vietnamese words used by subjects in other contexts. It is as likely to reflect a desire to accommodate the interviewer (I speak Vietnamese better than Cham) than the fact that Cham is rarely used with outsiders.

Of all these variables, only age, sex and occupation explain some of the variation in the proportion of monosyllables used with any statistical significance. Obviously, the small size of the corpus might blur the role of some factors. It is nevertheless significant that the variables that reflect familiarity with or frequent use of Vietnamese (frequency of use of Vietnamese, highest level of schooling, time spent outside Cham-speaking areas, proportion of Vietnamese words used in the interview) do not allow us to capture any of the variation, which we would expect if language contact with Vietnamese had a direct effect on monosyllabicization.
However, before jumping to conclusions, let us look at the variables that do account for some of the variability. First, I have divided the subjects into culture-specialists and others. This is shown in Figure 1, where we see no clear tendency among culture-specialists. Among other subjects, however, there seems to be a positive correlation between age and the proportion of written disyllables realized as monosyllables. This is illustrated by the fit line, which is dotted because it has a limited statistical significance (ANOVA: $p = 0.005$, T-test on age groups $<36$ and $50>$: $p = 0.106$). In order, to have a more fine-grained idea of the distribution, non-specialists were subdivided by sex. Since there is only one female culture specialist in the sample (and probably in the entire community), no attempt at dividing up the specialist sample by sex was made.
Figure 2: Proportion of written disyllables realized as monosyllables (non-specialists).

Breaking down the non-specialist sample yields disappointing results. Age does not quite account for the variation found among women (ANOVA: $p = 0.479$, T-test on age groups <36 and 50>: $p = 0.140$) and is far from being significant for men. However, if we look at the distribution of male subjects, we notice that two of them have more than 20% of disyllables. These two men are an accountant and a computer technician who work in a language institute, where all their colleagues are language specialists. We could therefore suppose that their high use of disyllables reflects an attempt at speaking as “well” as their colleagues rather than spontaneous speech. This issue will be addressed in detail in section 3.3. For the moment, these two speakers have been excluded from Figure 3, which is an alternative representation of the data shown in Figure 2.
Figure 3: Average proportion of written disyllables realized as monosyllables (non-specialists, two technicians excluded).

In Figure 3, differences between age groups are not significant for women (T-test: <36, 36-50: p = 0.122; 36-50, 51+: p = 0.685; <36, 51+: p = 0.140). By contrast, the difference between younger and older men is significant (T-test: <36, 36-50: p = 0.369; 36-50, 51+: p = 0.167; <36, 51+: p = 0.1). The differences between genders are not significant for any age group (T-test: <36: p = 0.931; 36-50: p = 0.846; 51+: p = 0.104). Overall, the only significant difference is between older male subjects and the other groups.

However, before claiming that a high proportion of disyllabic forms in older men’s speech is evidence of change in progress, another issue has to be addressed: hypercorrection (Labov 1966). It became clear to me while I was making the recordings that some subjects coin forms that they deem formal, but that do not correspond to real High words. Two types of coinage could be considered hypercorrection. The first one consists in the use of the wrong presyllable for a word that is usually realized as a monosyllable. For example, the word /kaməʃ/ ‘women’, normally pronounced /mɛʃ/ in Colloquial Low, is sometimes realized as [lɛʃ] in Formal Low. The second type, which is rare in interviews, but common in wordlists, is the addition of a presyllable to a word that is monosyllabic even in High or the addition of a syllable to an already polysyllabic word. For example, in one interview, the word /riçəʃ/ ‘festival’ is produced as [riçəʃa].

The proportion of hypercorrect words (hypercorrect words / total number of Cham words) is plotted for every speaker in Figure 4. Once again, age does not capture the variation found among culture-specialists, but it does seem to account for the variation.
found among non-specialists, as shown by the fit line corresponds to a statistically significant ANOVA (p = 0.095).

Figure 4: Proportion of hypercorrect forms

However, does this mean that age correlate with the proportion of hypercorrect forms among both men and women? We see in Figure 5 that it does among men only. We also see that the great majority of subjects do not hypercorrect at all (25 out of 35). Once again, older men sharply contrast with other groups. The differences between women are not significant (T-test: <36, 36-50: p = 0.395; 36-50, 51+: p = 0.578; <36, 51+: p = 0.742). The only significant difference among men is between younger and older subjects (T-test: <36, 36-50: p = 0.347; 36-50, 51+: p = 0.113; <36, 51+: p = 0.075). Finally, the differences between genders are significant among older subjects only (T-test: <36: p = 0.453; 36-50: p = 0.471; 51+: p = 0.091). All significant contrasts involve older men.
To summarize, the sociolinguistic study raises only two crucial observations: 1) old non-specialist men use a high proportion of sesquisyllables and 2) old non-specialists men are subject to hypercorrection. In the next section, I will show that these two issues are probably related.

3.3 Discussion

Looking exclusively at the proportion of written disyllables realized as sesquisyllables in the interviews, monosyllabicization seems to be a diachronic change in its final stage. If we assumed the apparent time hypothesis (Labov 1963; Labov 1966), the difference in proportion of sesquisyllables between older subjects and all other groups would reflect a change in progress. However, the data on hypercorrection shows us that there is probably another, more adequate explanation. Older men who are not language specialists do not only use a relatively high proportion of disyllables, they also use a conspicuously high proportion of hypercorrect forms. In other words, they try to speak “properly” by using many sesquisyllables, which is a characteristic of the High variety, but since they do not actually master this language variety, they turn a few monosyllabic words into sesquisyllables in the process. Interestingly, this contrasts with the linguistic behavior of older language specialists, who have an actual knowledge of the High variety and therefore show very little hypercorrection. The difference between older subjects who are not language specialists and other groups would thus be due to language attitudes and not to an actual change in progress. This is an intuitive hypothesis, but it raises a serious question: why do older men (non-
specialists) try to use more High features than other speakers? The answer lies in the Cham’s own conception of their ethnic identity. The Eastern Cham ethnic identity is essentially constructed around glorious past of the kingdom of Champa (Nakamura 1999). What is left of this past includes religion and ritual, historical monuments and inscriptions, tales and manuscripts and, even more importantly, the Cham language and its script, which are not dissociated in the Cham cultural ideology (Blood 1980). Within the community, even a sketchy knowledge of these cultural elements brings considerable prestige, and conversations and arguments about the details of a ritual or of a myth are commonplace (although probably more so in the presence of a foreign researcher). Besides this culture-internal prestige, there is another type of prestige associated with the outside world. It is typically related to the Vietnamese polity and derives from such things as education in Vietnamese schools and universities, high income, prestigious jobs and political positions (such as communist party membership). Ties with foreign countries, such as knowledge of French or English, time spent abroad and relatives in western countries, are even more prestigious, but much less common.

Another essential feature of Cham society is that different age and gender groups do not have the same access to these two types of prestige. The first central divide is between genders. There is very strong gender segregation in Cham society and women have little access to social prestige or recognition, although this is slowly changing among intellectuals and Muslims. Traditionally, the best positions women could hope for were schoolteacher and nurse, but even then, they were expected to become housewives after marriage. They had almost no public role in society (no community-internal prestige) and because of a limited access to Vietnamese education, they rarely had any way of gaining community-external prestige. My personal impression is that even nowadays, the few women who manage to achieve some professional success do not have the same consideration as their male counterparts. Therefore, since linguistic prestige is out of reach regardless of the efforts made, women make little attempt to use High features in their Formal Low, i.e. in the interviews.

While women are not encouraged to take part in the “prestige race”, it is a very important male activity. This is attested by the fact that myths and stories about a vaguely-defined past (be it to 16th century or the French colonial period), rare words, long forgotten infixes and knowledge of religious symbols and rituals are highly valued. Since the conception of the past is relatively shallow and distorted, elders are assumed and expected to have a good knowledge of these cultural elements. Many stories and words are actually made up, but these spurious elements seem to be readily validated as long as the forgers are old enough and have enough accumulated prestige to back up their claims. In my interviews, when I asked about the speech differences between old and young people, I was systematically answered that older speakers use more disyllables, distinguish more codas and pronounce their onsets more accurately. These differences are in fact largely imaginary, but they are a part of a discourse about language according to which elders preserve a less degraded form of the language. The actual situation is a little more complicated: on the one hand, some older speakers use this discourse to pose as language experts, but on the other hand, a few old men are ridiculed by their peers for not knowing enough or for using too many Vietnamese loanwords. For older men, linguistic prestige and linguistic insecurity are therefore the two sides of the same coin.
As age confers an almost inherent prestige to the speech of older men, the speech of young men is worthless by definition, an opinion that is paradoxically shared by young speakers. It is also assumed that they have a deficient knowledge of traditional culture, regardless of what they actually know. However, contrary to women, young men have a relatively good access to Vietnamese education and, through it, to other forms of community-external prestige. This might explain why they use a relatively low number of prestigious High features in their Formal Low speech (in interviews at least). Since efforts to gain community-internal prestige are not recognized by the community, they choose to look for prestige outside it.

The claim that the use of disyllables and hypercorrection are manifestations of linguistic attitudes is further supported by the individual characteristics of the subjects who use the highest proportion of sesquisyllables. The four subjects who have the highest ratios in Figure 1 are 1) the only female culture specialist in the entire Cham community (88%), 2) a male culture-specialist (49%) and 3) a male accountant (33%) and a male computer technician (23%) working at the Committee for the Standardization of the Cham script. To the exception of the second subject, they are in positions of severe linguistic insecurity. The female culture specialist has to prove that she is as linguistically-competent as her male colleagues, while the accountant and the computer technician have to prove that they can speak as well as their colleagues who are all language specialists. Amusingly, they do it so well that they actually use a higher proportion of disyllables than those with whom they want to compete. The female language specialist, with a astonishing 88% of written disyllables produced as sesquisyllables is almost speaking the High variety, which nobody else can even approximate. Note that these four speakers, who are exposed to the High variety at work, do not hypercorrect at all.

4. Social factors and Vietnamese influence
We have briefly seen in section 2 that none of the variables that could reflect Vietnamization captures significantly the variation in the use of sesquisyllables across subjects. Furthermore, women, who are much less in contact with Vietnamese culture and in many cases seldom leave their village, use a lesser proportion of disyllables than men. It is therefore safe to conclude that there is no direct linguistic influence of Vietnamese on monosyllabization. However, this is not to say that there is no indirect influence. Contact with the Vietnamese affects Cham indirectly, through culture, its effect on language attitudes and the interaction of these attitudes with the quasi-diglossic situation. Within the community, older male speakers have an easy access to community-internal prestige. For them, using High variety features translates directly into social recognition. By contrasts, younger speakers and women are not considered worthy of community-internal prestige. Even if they master the High variety to some extent, their status in the community is not going to improve significantly (although it is occasionally said of a young man that he is making serious efforts to learn about the traditional culture and the proper language). As a result, young speakers look for prestige outside the community, in the Vietnamese polity and do not invest much effort in learning the High language. The relative ease with which community-external prestige is acquired makes it comparatively much more interesting to young men than a community-internal prestige that they are almost systematically denied because of their age. However, if this community-external prestige was not available, it is likely that young men would content themselves with the little community-internal status they manage to gain from
learning the High variety and would maintain a higher proportion of High forms. Therefore, it is Vietnamese culture as a whole, rather than the Vietnamese language, that interacts with the linguistic landscape of Eastern Cham communities. If this model is correct, the following predictions should be verified in the future. If young men are collectively successful in the Vietnamese polity and manage to acquire social status in their community thanks to the prestige they derive from outside sources, they will have little motivation to use High features in their Formal Low speech and the High variety is likely to disappear. We would then have a simple bilingual situation where Colloquial Low Cham is used within the community and Vietnamese outside it. Alternatively, if young men are not successful in the Vietnamese world or if they cannot transfer they externally-acquired status into the community, they could decide to emulate their elders and start to import High features or what they perceive to be High features in their Formal Low. In this case, the symbolic and functional role of quasi-diglossia would be maintained, although its structure could be modified.

5. Conclusions
The different degrees of monosyllabicization in the Formal speech variety of older men and of other groups do not reflect a change in progress, but are actually due to language attitudes. Moreover, these differences cannot be accounted for by variables like the use of Vietnamese, the time spent in Vietnamese areas or the number of years spent in Vietnamese schools, which suggests that there is no direct influence of the Vietnamese language on monosyllabicization. Contact with the Vietnamese society does affect the Cham and their language, but indirectly, by destabilizing the balance between the Cham language varieties.

6. References


Abstract
The paper documents and discusses the language choices used in speeches on the occasion of the XII Summit Conference of the Non-Aligned Movement (NAM), 2003, in Kuala Lumpur and the 10th Islamic Summit (OIC), 2003, in Kuala Lumpur. By focusing on the two contexts mentioned, the paper aims to identify and reveal specific linguistic conventions and norms present in the texts selected that can assist in the challenging art of becoming a true diplomat, leader or statesmen viz the ability to communicate in a manner conforming to the desired style in international diplomacy through the appropriate language choices. Research findings indicate that the language choices used are consistent across several speeches examined with regard to international diplomacy.

Introduction and Background Information
Hafriza’s (2003a, 2003b) research findings with regard to language and diplomacy suggest that the style expected in international diplomacy is often to avoid potential conflict or confrontation due to the regular norm in the diplomatic world to maintain bilateral and multilateral relations between countries. Present in both the contexts investigated in the aforementioned studies was the preference for the use of particular words and phrases that would contribute positively to the desired form of communication in international diplomacy.

Aside from the words and phrases highlighted in Hafriza (2003a, 2003b), this paper wishes to enlarge the corpus of words and phrases regularly used in international diplomacy through the exploration of language choices in speeches with regard to the style expected in international diplomacy. In relation to seeking a suitable framework to couch the discussion of language use in a specific context, Swales (1990), describes in some detail the sometimes unclear distinction between genre and register, quoting discussion from scholars such as Halliday (1978), Frow (1980), Martin (1985), Bhatia (1993) and Couture (1986). Lee (2001) in tandem with Swale’s insights also refers to the ‘confusion’ that arises from the use of the terms ‘genre, register, style, text type, domain and sublanguage (pg1)’ due to ‘various linguists and literary theorists working under different traditions or orientations (ibid).’

Here, the understanding of genre and register as expoused by Martin (1985) and Couture (1986) is borrowed. According to Martin (1985 in Swales 1990:40), “Genres are realized through registers and registers in turn are realized through language. Genres are how things get done, when language is used to accomplish them. They range from literary to far from literary forms: poems, narratives, expositions, lectures, seminars, recipes, manuals, appointment-making, service encounters, news broadcast and so on. The term genre is used here to embrace each of the linguistically realized activity types which

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comprise so much of our culture.” Couture (1986 in Swales 1990:41), on the other hand, indicates that “the two concepts need to be kept apart: genres (research report, explanation, business report) are completely structured texts while registers (language of scientific reporting, language of newspaper reporting, bureaucratic language) represent more generalized stylistic choices (emphasis mine) in a specific domain. Given the information above, the paper focused only on presenting some of the language choices (registers ala Couture (1986)) in the genre of speeches typically found in international diplomacy. In tandem with the former, however, the notion of discourse community as expoused by Bizzel (1987) and Williams (1998) has to be an essential backdrop accompanying the understanding of language choices used as it allows a researcher to tie down a more precise community and to justify the content used in the context specified.

According to Bizzel (1987 in Swales 1990:29), a ‘discourse community is a group of people who share certain language-using practices. These practices can be seen as conventionalized in two ways, Stylistic conventions regulate social interactions both within the group and in its dealings with outsiders....” Swales (ibid:29), in addition, emphasises that members of a discourse community has “mechanisms of intercommunication among its members, has acquired some specific lexis, possess one or more genres in the communicative furtherance of its aims and has a broadly agreed set of common public goals.” These aspects of a discourse community can, according to my on-going research in language and diplomacy as well as being a participant-observer as the spouse of a foreign-service officer, be extended to the international diplomatic domain. In this type of domain, words and phrases used in the selected speeches chosen can also be freely utilized in non-diplomatic domains unlike words such as ‘yellow card’ ‘red card’ and ‘offside’ as primarily predictable registers in football. In the paper then, I would like to add to the plethora of existing categories and insights for the term ‘register’ by arguing for a broader treatment that allows language choices, choices that can also generally be used in other contexts but here to be regarded as registers due to it being used in a specific situation, addressing a specific audience and wanting specific goals to be attained and goals that can only primarily be accomplished by the same specific audience. Such is the context of international diplomacy where conscious language choices, carrying significant communicative intent, are regularly made to galvanize the audience to achieve a commonality of purpose through the enactment of brotherhood among member states. This commonality of purpose and orientation as members of a discourse community can lead to the construction of a self-sustaining group identity and become part and parcel of why particular registers abound in many genres in international diplomacy.

**Methodology**

This paper surveyed 25 speeches used on the occasion of the XII Summit Conference of the Non-Aligned Movement (NAM), 2003, in Kuala Lumpur and the 10th Islamic Summit (OIC), 2003, in Kuala Lumpur. Research and examination into the language choices used in the speeches and interview data indicate a consistency in language form and function across all speeches. Due to this, this paper will illustrate the regular and salient sociolinguistic and sociopragmatic features found during the research through relevant excerpts (full appendix available by request) from 5 selected speeches. Here, excerpts of the sociolinguistic and sociopragmatic features mentioned in each section of the speech will be presented in collaboration with discussion.
Descriptive adequacy of the data found will be the primary concern in this paper due to the purpose in this paper of documenting the language of the speeches selected. The inclination towards descriptive adequacy and second, explanatory adequacy where necessary, will be augmented by the feedback by some experts in the field viz senior foreign-service officers through interview data. Here, all 25 speeches were provided for their perusal and comments. Indeed, their summation on the types of language choices expected in the speeches will be an integral part of the data description.

Discussion of language of speeches
Speeches in the international diplomacy domain generally have 4 sections. First the opening salutation. This is then followed by the greetings and praise section, the summoning cooperation section and finally the conclusion. These sections will be described in turn below.

Section 1: Opening salutations
According to interview data, opening salutations in speeches are a must in the diplomatic discourse community. Knowledge of protocol is also essential in determining the rank and file of addressees present to ensure the order of salutations in the opening is proper and correct.

The typical registers expected here can be encapsulated in H.E. Thabo Mbeki’s (President of South Africa) opening address during the Non-Aligned Movement conference, 24 February 2003:

Your Majesties Your Excellencies, Heads of State and Government Your Excellencies Ministers, High Commissioners and Ambassadors Distinguished Delegates, Observers and Guests Ladies and Gentlemen

The example above shows that royalty is always given precedence followed by Heads of State, Ministers, Ambassadors, High Commissioners and finally all others as ladies and gentlemen. This is the expected convention when there are too many dignitaries to mention by name. As indicated above, members of royalty are usually collectively honoured with Your Majesties, Heads of State and Government, Ministers, High Commissioners and Ambassadors collectively as Excellencies followed by the conventional use of Distinguished for members of the audience not royal nor possessing high government or ministrial posts. Finally, the use of the very conventional and also frequently used in all speech genres; Ladies and Gentlemen.

The language of salutations below by President Vladimir Putin, President of Russia, during OIC, was regarded as not conforming to diplomatic discourse conventions in the genre of speeches due to the absence of protocol with regard to the type of dignitaries present. President Putin’s opening salutation was simply: Mr. Chairman Meeting Participants

President Putin’s opening salutation, thus, acknowledged the Chairman, the Prime Minister of Malaysia in this case, followed by Royalty, Ministers, High Commissioners, Ambassadors and Heads of state all subsumed under Meeting Participants. Although this was regarded by the interview team as unconventional in the international diplomacy context, it reflects the vestige of an egalitarian communist society where everybody is
considered equal. Hence, possibly, the salutation meetings participants as transposed from comrades.

Section 2: Greetings and praise
The international diplomatic discourse community also demands that appropriate language choices are used in the obligatory section following the salutations. The language choices used in this section are expected to convey praise for the host country’s leader in addition to extending greetings from the peoples of the speaker’s country.

Here, for instance in example 1 below, words and phrases used (see underlined sections) are typical of the effusive ‘gushing’ style of praise in the diplomatic discourse community. The language of greetings further below is similarly extended in a cordial and warm manner. According to interview data, the language choices used (see underlined sections for examples) in said section is also concerned with building and reenacting rapport through praise, niceties and accolades.

Example 1 Text by H.E Seyed Mohammad Kahtami, President of the Islamic Republic of Iran during OIC, October 16, 2003. His statement reads

I avail myself of this opportunity to express my deep satisfaction for attending this august gathering of the Honourable Heads of State and Government of the States Members of the Organization of the Islamic Conference and to offer the warm fraternal greetings of the Muslims in Iran to all of you and all Islamic nations. I would like to seize the moment to express our heartfelt felicitations to Datuk Seri Dr. Mathathir Mohamad, distinguished Prime Minister of Malaysia on his deserved assumption of the chairmanship of the 10th Islamic Summit Conference and wishing him every success in discharging the formidable task ahead.

Example 2 H.E. President General Pervez Musharraf of Pakistan, October 17, 2003.

It is a pleasure and an honour to be here in fraternal Malaysia, together with so many great leaders from the Islamic world. Our welcome has been warm and gracious. We express our gratitude to H.E. Prime Minister Mathathir Muhammad, and to the government and people of Malaysia. The enterprise, energy, progress and prosperity achieved by Malaysia under Prime Minister’s sagacious leadership, is an example and beacon for the entire Islamic world.

Section 3: Summoning cooperation
The mandatory praise and warm fuzzy greetings over, the middle section of the genre of speeches in international diplomacy focuses the goal of summoning a sense of commonality, of cooperation, of compromise, of consensus over differences among peoples. This is where conventional diplomatic language is at its best viz the deliberate use of words and phrases so pregnant with meaning and reflection to achieve the primary purpose of continually enacting mutual goals in international diplomacy. These aspects, so important, to the survival of the diplomatic discourse community is often repeated and emphasized in various ways throughout the text.

In a speech, the middle section has two phrases. The introductory phase needs to present a particular situation of mutual concern to justify the second phase, the building of
mutual cooperation and collaboration to overcome the situation presented. Excerpts of these phrases can be seen in example 3 below.

**Example 3 (Text from President Pervez Musharraf, Pakistan during OIC):**

*We meet in a turbulent and troubled moment in history. The world is in turmoil. Reliance on military action and force define solutions to world disputes. Foreign occupation persists. Supression of people has intensified. Power asymmetries are widening. Terrorism has spread. Economic recession threatens. Poverty is growing. Inequality is increasing.... We must recognize that, unfortunately, the crisis confronting the Islamic world is not only external, it is also internal. It is rooted in our weaknesses and vulnerability. It flows from our economic, social and human underdevelopment; from our dependencies and vulnerabilities; from the divisions and differences within, and amongst our societies and states....We are at a defining moment in history, we can either seize the moment and define history or we can let the moment define destiny. We must turn challenge into opportunity. We must reflect and act quickly and collectively---for the sake of our suffering peoples and of our future generations. We must act to keep alive the immutable message of Islam and the glorious legacy of which we are the heirs. We can also help other. Collectively we can, and must, assist the poorest amongst us.*

Example 3 above is taken from parts of speech by President Pervez Musharraf of Pakistan during the 10th Session Islamic Conference (OIC) on October 17, 2003. According to interview data with senior foreign service officers, the beginning of this section typically begins with the highlighting of general and specific problems plaguing the world, in this case, terrorism, foreign occupation, economic recession, and widening power asymmetries. These in tandem with words such as turbulent, troubled, turmoil, spread, disputes and threatens serve to intensify the state of the situation highlighted.

From the section of ‘this -is-what-is-happe ning-in-the-world , the language of this section is then regularly infused with the rhetoric of ‘we’ ‘our’ versus ‘them.’ The data suggest that the use of ‘we’ and ‘our’ alternate between the ‘we’ the international diplomatic community and ‘we’ the national identity belonging to the speaker and the citizens of his country. Similarly, the use of ‘our.’ Then the ‘they’ and ‘them’ as a natural constrast to ‘we’ the former being a ‘burden’ in some way to both ‘we-s.’ Certainly, also, a sense of unity and collaboration in both uses of ‘we’ against ‘them’ is felt.

President Musharraf’s speech is four and a 1/4 pages long in actuality. The three final pages is filled with the rhetoric of ‘we’ ‘us and ‘our’ suggesting an emphasis on the building of mutual cooperation and solidarity. Altogether, there are 16 instances of the use of ‘we’ and 25 instances of the use of ‘our.’ As mentioned earlier, the use of the ‘we’ and the ‘our’ can alternate between ‘we’ the diplomatic discourse community and ‘we’ the Pakistan people. Similarly, the use of ‘our,’ ‘the fate of our collectively world’ versus ‘the thoughts and concerns of the Pakistani people.’ This is also typical in international diplomacy where the speaker , on behalf of the national ‘we’ constructs ultimately the collective ‘we’ for the purposes of cooperation, consensus and collaboration and solidarity. This can be seen in the fact that the ‘we’ the diplomatic discourse community is more pronounced than the Pakistani ‘we’ or ‘our.’ An example of this is reflected in the second paragraph of example 3 above. Here, the shift to encourage collectivism and action can also be seen through the sense and meaning inherent in use of the following words,
opportunity, quickly and collectively, act to keep alive, help, assist, convergences, bright image, dignity, fulfillment, aspire, confidence, justice, enlightenment further progress, revival, reform, tolerance, emancipation and human exultation. Compare this with words used earlier, terrorism, foreign occupation, economic recession, widening power asymmetries, turbulent, troubled, turmoil, spread, disputes, wanton, threats and the following words also in the text but not mentioned below; discrimination, clash, confrontation, division, hatred, tarnish, hijack, vengeance, violence and anger – the latter all used to persuade collective action by portraying negative images.

According to interview data, the italicized words in example 3 is also used in other genres in the diplomatic discourse community in concordance with the normal practice of sounding the clarion call for collective responsibility and action. Thus, similar and familiar words are often deliberately chosen to help achieve the goal desired.

The final example 4 below shares with example 3 above the language expected in speeches in international diplomacy viz the tendency towards wordiness, embedding, and complex construction on the phrasal and sentential level. It also contains the norm of presenting a contrast of images in the selection of words and phrases. Here, in example 4 below, for example, we have challenging, sidelined, conflict, war, against manage, resolve, prevent, peace, understanding, tolerance, accommodation, constructively, just, fairer, commitment, common purpose and coordinated action and benefit. In addition, as with the earlier examples, the use of the collective ‘we’ is regularly used in tandem with ‘our’ both to encourage collective responsibility, concern, collaboration, consensus and action.

Example 4 (Taken from speech of then Deputy Prime Minister of Malaysia, OIC, October 16, 2003):

The summit is taking place at a most challenging time for our organization. We continue to come to grips with the issues of poverty, social and economic development and political stability externally, the developing world continues to be sidelined by the wealthy, industrialized countries which have tremendous influence over global affairs.

....We should be actively involved in efforts to manage, resolve and prevent conflicts in the world. We should substitute the culture of conflict and war with that of peace based on understanding, tolerance and accommodation. ....We must work constructively to shape the future of a just world order. We must therefore continue to exert our combined efforts to ensure that globalisation works for the benefit for all.

The developing countries through NAM, the G77, the OIC must step up the fight for a fairer deal in international trade in which we are pitted against the biggest, richest and most powerful. We must demonstrate increased faith and commitment in south-south cooperation while maximizing north-north cooperation. But as with the political challenges we face, we will only succeed if there is common purpose and coordinated action.

Section 4: Conclusion
The final part of any speech is the conclusion. In the diplomatic discourse community, speeches are expected to end with an final emphasis on cooperation among member states. A classic example is presented below. Example 5 below was taken from the speech of The Prime Minister of the People’s Republic of Bangladesh, Begum Khaleda Zia, 2003. Here, the
presentation of long, complex sentences and the use of inspiring (cooperation, determination, unity, solidarity, resolve, revitalize, vision, positive returns) language prevails. However, in contrast to earlier sections, words or phrases that portray negative images are absent in the conclusion. (Please refer to example 5 below). She said Example 5:

*This must change. As a first step, we must strengthen cooperation within ourselves. We must strive to follow the code of Islam to help our less fortunate brother countries. ... I would therefore, urge upon wealthier members to set up joint ventures in OIC countries that offer cheaper labour. This would ensure positive returns. It will also generate much needed employment in the lesser developed countries. Liberalization of trade and easier access of goods and services into the markets within the member countries will also serve to strengthen the Ummah's position in the global context.*

*In this historic gathering of leaders of the Islamic countries, I would urge that we respond to the hour by sending out a very strong message of our determination, unity and solidarity. We must stick to our original resolve to speak in one voice. In this regard, our first task is to revitalize the Organization. It is meaningless to adopt resolutions that ultimately go unimplemented. It is a waste of time to debate on issues, which go unheeded. We need to do some good housekeeping. We must, therefore, make every effort to revitalize the Organization's new vision and a target-oriented agenda.*

**Conclusion**

The successful establishment of a mutual vision among member states, however, may not materialized at the initial gathering. Sometimes, according to interview data, actual government-government cooperation does not even occur due to constraints, financial or otherwise. Nevertheless, the discourse of promoting mutual cooperation over conflict and divisiveness endures even if no specific outcome is ultimately achieved despite the mootling of several plans of action.

The paper focused on the language of speeches used in the genre of speeches in the arena of international diplomacy. It has also highlighted the obligatory sections a speech must contain in an international diplomatic context. These sections, are naturally, part of every speech in any context, viz the opening salutations, the introduction, the body and the conclusion. However, what distinguishes speeches in the diplomatic context from the business, military, education or legal context is the content that is required in each section of the speech and the language that are expected to be used in the overriding goal to avoid disagreement, assume common ground or assert reciprocity and mutual cooperation. Interview data indicate that there is little flexibility given to the language norms expected in both style, language and substance in a speech for those belonging to the international discourse community in any context. This is compared to speeches in other domains where the speaker can vary the language, style and substance of their speeches in differing contexts.

Data for this paper was gathered through 25 selected speeches from the XII Summit Conference of the Non-Aligned Movement (NAM), 2003, in Kuala Lumpur and the 10th Islamic Summit (OIC), 2003, in Kuala Lumpur. These conferences involved world leaders and diplomats from around the world. Eventhough the leaders of said countries delivered the speech, the speech was written by members of their diplomatic corps familiar with the
language of international diplomacy. This suggest why the speeches surveyed in this report were seen to contain a consistency in form and function;-documenting similar goals in international diplomacy. This phenomena has been conveyed in examples 1-5 where speeches written from even far flung corners of the globe carry the same message in the same expected style. This phenomenon has also been verified by interview data. So far, all this could suggest a confirmation of the challenging art of becoming a true diplomat, --that is having the ability to cajole and manipulate language to achieve the goals of the community.

(NB: The researcher wishes to thank 8 senior foreign service officers at Wisma Putra for their input. Due to their desire to remain anonymous, their names will not be presented in the report)

References
1. Introduction
The Hlai language is spoken by a Tai-Kadai ethnic group residing in Hainan province, PR China. The Hlai people live mainly in two cities, Tongza and Sanya and autonomous counties, Ledong, Dongfang, Baisha, Lingshui, Changjiang, Baoting, Qiangzhong, and Wuzhishan (Tongshi). Some of them live in Wanning, Danzhou, Qionghai, and Ding’an. The Hlai people are also known in Chinese by the exonym name “Li.” According to the fourth census in 1990, the Hlai people had a population of 1,112,498 (Wen Mingying 1994).

The Hlai language belongs to the Tai-Kadai language family. Matisoff (1988) mentions that there are ten Hlai regional varieties on Hainan: Jiamao, Baoding, Xifang, Tongshi, Zhongsha, Baisha, Qiandui, Heitu, Yuanmen, and Baocheng. According to Wen Mingying (1994), the Hlai language can be divided into five major dialects, that is, the ha\textsuperscript{11} dialect, the gei\textsuperscript{53} dialect, the hj\textsuperscript{53}\:n\textsuperscript{53} dialect, the tha:i\textsuperscript{11} dialect, and the mo:i\textsuperscript{53}\:fau\textsuperscript{53} dialect. The variety of the Hlai language used in this study is the lau\textsuperscript{55}\:hu:t\textsuperscript{55} (Luohuo) vernacular of the ha\textsuperscript{11} dialect. The data were drawn from Hlai (Li)-Thai-Chinese-English Dictionary (Somsonge, Wen Mingying, and Wen Jing 2003).

Hlai people and other Tai-Kadai people groups such as Zhuang, Bouyei, Kam do not have traditional writing systems. Before 1950, local shamans and scholars of the Zhuang, Bouyei, Kam and some other groups used Chinese characters to write their languages. Twenty percent of basic vocabulary in their languages was capable of being represented by using Chinese characters, or parts of them. Nowadays, some local Zhuang, Bouyei, and Kam sorcerers still use this kind of writing system (Zhou Guoyan p.c.). On the other hand, the Hlai people never used Chinese characters to write their language (Wen Mingying p.c.). According to Wen Mingying (1994), in February 1952, the Chinese government and linguistic scholars devised the Hlai writing system, which is a romanization. The new writing system is based on the ha\textsuperscript{11} form of Hlai, the Baoding vernacular, which was declared the standard. This variety is spoken in Baoding village, Baoyou town, Ledong Lizu Autonomous County. The new romanized writing system is mostly used in schools.

This paper\textsuperscript{1} studies the sound system of the Hlai language and how the Hlai orthography has been developed to write this sound system.

2. Principles of orthography
An alphabet is useful as it permits unlimited creativity and expression for recording histories, writing music and books. It is a means for correspondence within the group and to other

\textsuperscript{1} I am grateful to Jerold A. Edmondson for his valuable comments and suggestions on an earlier draft of this paper. I thank Weera Ostapirat for his useful advice on the final draft of the paper and for sharing his knowledge of Tai-Kadai languages.
peoples and cultures. Pittman (1998:13) asserts that “to decipher the alphabet of a dead language is noble and to design an alphabet for a living language is sublime.”

The term orthography is definable as “a set of letters by which all the phonemes of a language are symbolized—more simply, an alphabet” (Gudschinsky 1973: 116). Bussmann (1996:343-344) defines orthography as a systematic and uniform transcription with written characters called graphemes and punctuation and lists eight principles for orthographic design as follows:

1. Phonetic principle
   Every spoken sound should correspond exactly to one written character.
2. Phonological principle
   Each written sign should correspond to a single phoneme.
3. Etymological principle
   Etymologically related words should be spelled analogously.
4. Historical principle
   The orthography should remain static over time.
5. Principle of economy
   Superfluous letters should not be included.
6. Principle of aesthetics
   For various reasons some letter combinations may not be favored.
7. Pragmatic principle
   The orthography should be generally useful.

Simon (1977) states that orthographies may be multidialectal, that is, they can be developed to serve more than one related language variety so that people with spoken language barriers may, nevertheless, be able to use the same written materials. The Hlai orthography is a multidialectal orthography. The phonologies of the five dialects were compared and considered in the design of the orthography. Different pronunciations of the same word are written identically in the orthography. The reader may assign his or her own pronunciation to the unified writing.

3. Consonants

3.1 Initials

3.1.1 Single consonants
The single initial consonants of the Hlai language consist of twenty-four phonemes represented by twenty-six graphemes as displayed in Table 1.

Most of the single consonants are written in a way resembling the Pinyin system since the scholars and linguists who determined the Hlai orthography were knowledgeable in Pinyin. The consonant graphemes of the Hlai language can be compared to the Pinyin system for Modern Standard Chinese (MSC) presented in Table 2. The bold letters indicate the graphemes that are identical with Hlai graphemes.

---

2 Pinyin is a written form of Chinese, which was originated in 1948 after the establishment of the People’s Republic of China, to make the written language more accessible to the general population (http://www.alsintl.com/languages/chinese.htm, page 1).
Table 1: Single initial consonants of the Hlai language

<table>
<thead>
<tr>
<th>Place of articulation</th>
<th>Bilabials</th>
<th>Labiodentals</th>
<th>Alveolars</th>
<th>Palatals</th>
<th>Velars</th>
<th>Glottals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manner of articulation</td>
<td>IPA</td>
<td>Graph</td>
<td>IPA</td>
<td>Graph</td>
<td>IPA</td>
<td>Graph</td>
</tr>
<tr>
<td>Unaspirated Stops</td>
<td>p</td>
<td>b</td>
<td>t</td>
<td>d</td>
<td>k</td>
<td>g</td>
</tr>
<tr>
<td>Aspirated Stops</td>
<td>ph</td>
<td>p</td>
<td>th</td>
<td>t</td>
<td>kh</td>
<td>k</td>
</tr>
<tr>
<td>Voiced Stops</td>
<td>b</td>
<td>bh</td>
<td>d</td>
<td>dh</td>
<td>g</td>
<td>gh</td>
</tr>
<tr>
<td>Unaspirated Affricates</td>
<td>ts</td>
<td>z, j</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspirated Affricates</td>
<td>ts'h</td>
<td>r, q</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>m</td>
<td>n</td>
<td>n</td>
<td>ny</td>
<td>ng</td>
</tr>
<tr>
<td>Fricatives vl.</td>
<td>f</td>
<td>f</td>
<td>z</td>
<td>zh</td>
<td>h</td>
<td>h</td>
</tr>
<tr>
<td>Lateral</td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trill/tap</td>
<td>r</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palatalized</td>
<td>?j</td>
<td>y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labialized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>w</td>
</tr>
</tbody>
</table>

Table 2: MSC initials (adapted from Li and Thompson 1981:5)

<table>
<thead>
<tr>
<th>Place of articulation</th>
<th>Bilabials</th>
<th>Labiodentals</th>
<th>Dental alveolars</th>
<th>Retroflexes</th>
<th>Palatals</th>
<th>Velars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manner of articulation</td>
<td>IPA</td>
<td>Pinyin</td>
<td>IPA</td>
<td>Pinyin</td>
<td>IPA</td>
<td>Pinyin</td>
</tr>
<tr>
<td>Unaspirated Stops</td>
<td>p</td>
<td>b</td>
<td>t</td>
<td>d</td>
<td>k</td>
<td>g</td>
</tr>
<tr>
<td>Aspirated Stops</td>
<td>pʰ</td>
<td>p</td>
<td>tʰ</td>
<td>t</td>
<td>kʰ</td>
<td>k</td>
</tr>
<tr>
<td>Unaspirated Affricates</td>
<td>ts</td>
<td>z, j</td>
<td>tʂ</td>
<td>zh</td>
<td>to</td>
<td>j</td>
</tr>
<tr>
<td>Aspirated Affricates</td>
<td>tsʰ</td>
<td>c</td>
<td>tʂʰ</td>
<td>ch</td>
<td>toʰ</td>
<td>q</td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>m</td>
<td>n</td>
<td>n</td>
<td>ny</td>
<td>ng</td>
</tr>
<tr>
<td>Fricatives</td>
<td>f</td>
<td>f</td>
<td>z</td>
<td>z</td>
<td>s</td>
<td>x</td>
</tr>
<tr>
<td>Voiced Continuant</td>
<td>l</td>
<td>l</td>
<td>ɾ</td>
<td>r</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.1.2 Consonant clusters

MSC does not have consonant clusters (Li and Thompson 1981); therefore the graphemes of the Hlai consonant clusters are not modeled on Pinyin. There are six clusters in the Hlai language. They are written simply by adding a second consonantal grapheme to the single consonants in Table 1.
Table 3: Correspondences between IPA and graphemes of consonant clusters

<table>
<thead>
<tr>
<th>IPA</th>
<th>pl</th>
<th>khw</th>
<th>gw</th>
<th>ŋw</th>
<th>hw</th>
<th>hj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphemes</td>
<td>bl</td>
<td>kw</td>
<td>ghw</td>
<td>ngw</td>
<td>hw</td>
<td>hy</td>
</tr>
</tbody>
</table>

It has been found that the consonant clusters [khw, gw, ŋw, hw] are also written with the graphemes <kv, khv, gv, ŋv, hv> respectively (Zhen Yiquing and Ouyang Jueya 1990).

3.2 Finals
There are eight consonant phonemes that can occur in the final position of a syllable. They are written with six graphemes as displayed in (4).

Table 4: Correspondences between IPA and graphemes finals

<table>
<thead>
<tr>
<th>IPA</th>
<th>-m</th>
<th>-n, -ñ</th>
<th>-ŋ</th>
<th>-p</th>
<th>-t, -t̃</th>
<th>-k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphemes</td>
<td>-m</td>
<td>-n</td>
<td>-ng</td>
<td>-p</td>
<td>-t</td>
<td>-k</td>
</tr>
</tbody>
</table>

The writing of the phonemes /-m, -n, -ŋ/ in the final position of syllables is identical to that in the initial position. On the other hand, the phonemes /-ñ, -p, -t, -k/ are written differently in the final position as shown in Table 5. While one might note that this practice violates principles of an orthography above, stops in final position are unreleased and might be regarded as phonetically distinct and the sound /ŋ/ is not found in initial position.

Table 5: Correspondences between IPA and graphemes of initials in comparison with finals

<table>
<thead>
<tr>
<th>IPA</th>
<th>ŋ</th>
<th>-p</th>
<th>-t</th>
<th>-k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphemes of initials</td>
<td>ny-</td>
<td>b-</td>
<td>d-</td>
<td>g-</td>
</tr>
<tr>
<td>Graphemes of finals</td>
<td>-n</td>
<td>-p</td>
<td>-t</td>
<td>-k</td>
</tr>
</tbody>
</table>

Note that the phoneme /ŋ/ can occur only in the final position of a syllable.

4. Vowels
Vowels are classified into single vowels and diphthongs. The writing of vowels is based on the phonemic principle.3

4.1 Single vowels
There are six single vowels that can form the syllable nucleus. They are written with the graphemes in (6).

---

3 Pike (1975:57) states that “a practical orthography is phonemic. It has one, and only one, symbol for each sound unit. These the native soon learns to recognize. He needs no “extra” symbols which correspond to sub-units in his language.”
Table 6: Correspondences between IPA and graphemes of single vowels

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Back</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IPA</td>
<td>Graph</td>
<td>IPA</td>
</tr>
<tr>
<td>High</td>
<td>i</td>
<td>i</td>
<td>uu</td>
</tr>
<tr>
<td>Low</td>
<td>e</td>
<td>e, i</td>
<td>a</td>
</tr>
</tbody>
</table>

The graphemes of single vowels are identical with IPA except the vowel [ɯ] which is written as /uu/. The vowel [e] is written with /e/ and /i/ depending on the context, that is, [e] is symbolized as /i/ when it is followed by /-ʈ, -ȵ/ and it is written with /e/ elsewhere.

Example:

blit [plet 55] ‘to touch with the finger, to dial’
blin [ben 53] ‘to fly’

This vowel lowering rule is consistent when the finals /-ʈ, -ȵ/ are present. However, the application of the vowel lowering rule seems to be inconsistent when the finals are other consonants, as exemplified below.

dipp [tep 53] ‘to walk, to go’
dip [tip 55] ‘to choose, to select’

The grapheme /i/ is realized as [e] and [i] in the same phonetic condition, i.e., before [p] therefore the reader will find it difficult to determine the precise phonetic value of the vowel /i/.

The vowel [o] can be written with three symbols, /o, a, u/. It is symbolized with /u/ and /a/ in a similar environment, that is, when it is followed by the finals /k, p, m, ŋ/ and /m, p/ respectively. And it is written with /o/ when it functions as an open rhyme.

Examples:
dum [tom 53] ‘six’
dhap [dop 55] ‘cloth’
pos [pho 11] ‘slope’

There is a length difference, which is contrastive only in syllables with codas. All vowels except /o/ distinguish length. The vowel length is indicated by the grapheme /e/ such as /deeng/ [teŋ 53] ‘comb’.

The grapheme /o/ is used to write the allophones [o] and [o:] which are in complementary distribution as follows:

/o/ \[\rightarrow [o] /_____#\]
\[\rightarrow [o:] /_____/ [i, C]\]

Examples:

hos [ho 11] ‘mark, sign’
hloi [ho:i 53] ‘many, much, more’
bhok [bo:k 55] ‘to carry, to shoulder’
Long vowels do not occur in the final position of a syllable. Only short vowels function as an open rhyme.

### 4.2 Diphthongs

There are, according to Li (1977), eighteen diphthongs, which can be classified into two types, diphthongs with semivowels as the first member and diphthongs with syllable-final semivowels. Li (1977:280) states that these two types of diphthongs can be found in languages of the Tai Stock of languages. They are characterized as follows:

One type consists of a high vowel \(i, \dot{i}, u\) as the first element and a lower vowel \(a\) or \(ə\) as the second and occurs in open as well as closed syllables...The other type diphthong consists of a high vowel \(i, \dot{i}, u\) as the second element, preceded by a lower vowel...This type occurs only in open syllables-not followed by any final consonant.

The second type of diphthongs in the Hlai language also occurs only in open syllables. Both types of diphthongs are listed in (7) with their corresponding graphemes.

| Table 7: Correspondences between IPA and graphemes of diphthongs |
|----------------------|----------------------|----------------------|----------------------|
|                      | Type 1               | Type 2               |                      |
| [a]                  | /a/                  | [i]                  | /i/                  |
| [a]                  | /a/                  | [u]                  | /u/                  |
| [u]                  | /u/                  | [u]                  | /uu/                 |
| [e]                  | /e/                  | [e:i]                | /e:i/                |
| [e]                  | /e/                  | [e:u]                | /e:u/                |
| [o]                  | /o/                  | [o:i]                | /o:i/                |
| [i]                  | /i/                  | [i:u]                | /i:u/                |
| [u]                  | /u/                  | [u:i]                | /u:i/                |

The IPA symbols are almost identical with the graphemes except the vowel length which is written with /e/ and the vowel /u/ which is symbolized as /uu/. The diphthong [o:i] is written with /oi/ since [o:] is an allophone of the phoneme /o/ as mentioned above. The diphthong [ou] can be written as /ou/ or /au/ depending on the context. When the diphthong [au] follows labial initials, i.e., [f, p, hw, b, ghw, m], it will undergo a labialization rule, that is, it is rounded as [ou]. Compare the realization of the diphthongs /au/ and /ou/ as [ou] in the following sample words.

| bhaux | [bou\textsuperscript{55}] | ‘crab’ |
| fou   | [fou\textsuperscript{53}] | ‘keep in the mouth’ |
| bauxbous | [pou\textsuperscript{55}pou\textsuperscript{11}] | ‘the year named after rabbit’ |
| bauxbou | [pou\textsuperscript{55}pou\textsuperscript{53}] | ‘the year named after pig’ |
The diphthong /au/ is realized as [au] when it follows the consonants other than labials as exemplified below.

blaux [plau\textsuperscript{55}] ‘termite’

The syllable-final semivowels are treated as vocalic forms and written with vocalic symbols because of the traditional Chinese idea rhymes.\textsuperscript{4} Edmondson (p.c.) states that the analysis of compound vowel or diphthong is based on syllabic phonology. Every syllable has an initial, a rhyme, and tone (in syllabic phonology O(nset) + R(hyme) + tone, which is over the rhyme). The rhymes themselves are then divided into N(uclear) vowel and C(oda). The vowels [i] and [u] and [ɯ] in the final position of a syllable are treated as /i/, /u/, and /ɯ/ respectively. For example the word ngais [ŋai\textsuperscript{11}] ‘to cry’ is treated as /ŋai\textsuperscript{11}/ not /ŋay\textsuperscript{11}/.

On the other hand, Edmondson and Solnit (1997:15) refer to Gedney and others in the American tradition who write the syllable-final semivowels, [-i -u -ɯ] with consonantal symbols, /-y –w -Â/ respectively. The reasons for their treatment of semivowels are quoted below.

They point out that in Tai there are no possible syllable shapes aiC/auC/auu C (where C stands for an arbitrary consonant). By assuming that –Vi/Vu/-Vu are in fact phonologically –Vy/-Vw/-Vu, then no further apparatus is necessary; double consonant codas are simply forbidden as a syllable type in Tai. A second point is that in many Tai languages vowel length is contrastive only in syllables with codas, i.e. syllables ending in /m n ŋ p t k/ as well as the semivowels. Treating these semivowels as consonants allows us to state simply that length is contrastive in closed syllables but not in open syllables, which are always phonetically long. It is perhaps also relevant that the Siamese script writes most final semivowels with consonant symbols.

While the syllable-final semivowels are treated as vocalic, the first members of the diphthongs [ia] and [ua] are treated as consonants in the word-medial position. But, in diphthongs the first members are written with vocalic symbols.\textsuperscript{5}

Examples:

goyas [ko\textsuperscript{53}ia\textsuperscript{11}] ‘strange, odd’
dexwa [te\textsuperscript{55}ua\textsuperscript{55}] ‘life, livelihood’
diengs’ius [ti:ŋ\textsuperscript{11}iu\textsuperscript{11}] ‘detailed, minute’
dhienx’ueix [di:n\textsuperscript{55}u:i\textsuperscript{55}] ‘telephone’

Since the vowels [i] and [u] are written with consonant symbols /y/ and /w/ when they follow a vocalic final, it is speculated that the consonant symbols may be used to

---

\textsuperscript{4} According to the Chinese scholars, there are three types of rhymes, simple vowel rhymes, diphthongal rhymes, and rhymes with consonantal codas. Simple vowel rhymes consist of single or simple vowel rhymes; diphthongal rhymes have the simple vowels followed by vowel coda; and rhymes with consonantal codas have syllable-final consonants (Ni Dabai 1988).

\textsuperscript{5} The majority of this type of words are Chinese loans (Weera Ostapirat p.c.).
mark the syllable boundary or else there would be three vowels in succession. However, only a few words of this type have been found and the above statement must await confirmation by further study of wider areas of the Hlai lexicon.

Besides the syllable-final semivowels, the initial glottal stop is also treated in a different way from Siamese. In Siamese, syllables having initial vowels are usually pronounced as glottal stop, which is transcribed phonetically by [ʔ]. The glottal stop is treated as a consonant and written with a consonant symbol. However the glottal stop is neither transcribed with phonetic symbol nor written in the Hlai orthography, e.g., [aːn]
‘saddle’ is written as /aen/.

5. Tones

The lau\(^{55}\) hu:\(^{55}\) (Luohuo) vernacular of the ha\(^{11}\) dialect has three tones in live syllables and three tones in dead syllables. The dead syllable tones have the same tone value as the live syllable tones. The dead syllable tone /55/ occurs with native words whereas the dead syllable tones /53,11/ occur with Chinese loans (Weera Ostapirat p.c.). The three tones have developed from the Proto tones as follows:

<table>
<thead>
<tr>
<th>Proto tone</th>
<th>Tone value</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>*A</td>
<td>53</td>
<td>[hau(^{53})] ‘horn’</td>
</tr>
<tr>
<td>*B</td>
<td>55</td>
<td>[pou(^{55})] ‘year’</td>
</tr>
<tr>
<td>*C</td>
<td>11</td>
<td>[tiː:(^{11})] ‘tongue’</td>
</tr>
<tr>
<td>*D</td>
<td>55</td>
<td>[[hur :k(^{55})] ‘offspring’</td>
</tr>
<tr>
<td></td>
<td>53</td>
<td>[plaː(^{53})] ‘to slide’</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>[eːp(^{11})] ‘duck’</td>
</tr>
</tbody>
</table>

The tones in open and closed syllables are not indicated by diacritic marks as in Pinyin but by syllable-final letters as in (8).

<table>
<thead>
<tr>
<th>Syllable types</th>
<th>Open syllables</th>
<th>Closed syllables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>x</td>
<td>unmarked</td>
</tr>
<tr>
<td>53</td>
<td>unmarked</td>
<td>pp tt kk</td>
</tr>
<tr>
<td>11</td>
<td>s</td>
<td>s</td>
</tr>
</tbody>
</table>

The high level tone [55] is marked with the letter /x/ in open syllables and unmarked in closed syllables. The high falling tone [53] is unmarked in open syllables and marked with the repetition of the finals. The low level tone [11] is marked with the letter /s/ in both types of syllables.

---

6 Jimmy Harris (p.c.) has argued that in connected speech they are not glottal stops.
7 The list of Ngao Fon-Hlai cognates and *Ngao Fon-Hlai tones given by Theraphan (2001: 199-202) is used as a guideline to collect the tones having the same tonal category.
Examples:

Open syllables
- lai [lai\textsuperscript{53}] ‘far’
- tax [tha\textsuperscript{53}] ‘rice’
- raeis [ra:i\textsuperscript{11}] ‘intestines’

Closed syllables
- kuk [khok\textsuperscript{55}] ‘foot’
- cupp [tsop\textsuperscript{53}] ‘honest, frank’
- datt [tat\textsuperscript{53}] ‘crowded’
- bhaekk [ba:k\textsuperscript{53}] ‘to mend’
- deeks [te:k\textsuperscript{11}] ‘to rub’

6. Conclusion and Discussion
The Hlai orthography is modeled on Pinyin and takes as the sound inventory the ha\textsuperscript{11} dialect and other dialects. It is based mainly on the phonemic principle, i.e., “a phoneme is represented by only one symbol, regardless of the number of allophones that comprise it” (Gudschinsky 1973:119). The writing of the vowels [o] and [e] illustrates the use of phonemic principle to develop the Hlai orthography, that is, the function of phonemes within a phonological system of oppositions has been taken into consideration when devising the Hlai orthography. The vowels [o] and [e] display the phenomenon called “phonemic overlapping”\footnote{See further discussion of phonemic overlapping in Hyman (1975).} in which one phone can be assigned sometimes to one phoneme and at other times to another phoneme (Bloch 1972).

The vowel [o] is assigned to one of three phonemes, depending on the following context:

\begin{align*}
\text{/u/} & \rightarrow \ [o]/\underline{[\text{k, p, m, }\eta]} \\
& \quad [u]/\text{elsewhere} \\
\text{/a/} & \rightarrow \ [o]/\underline{[p, m]} \\
& \quad [a]/\text{elsewhere} \\
\text{/o/} & \rightarrow \ [o]/\underline{#} \\
& \quad [o:\text{]/}\underline{[i, C]} \\
\end{align*}

Examples:

- buk [pok\textsuperscript{55}] ‘stomach, abdomen’
- fun [fun\textsuperscript{53}] ‘to rain, rain’
- nams [nom\textsuperscript{11}] ‘water, river’
- ban [pan\textsuperscript{53}] ‘classifier for animals’
- bho [bo\textsuperscript{53}] ‘treasured object’
- blongs [plo:\text{]}\textsuperscript{11}] ‘to throw’

The vowel [o] is assigned to the phonemes /u/ and /a/ in a similar environment. The vowel [o] is assigned to the phoneme /o/ under another phonetic condition, i.e., syllable-final position. The assignment of [o] to the phonemes /u/ and /a/ under a similar phonetic condition is called “complete overlapping” whereas the assignment of [o] to the phoneme /o/ within a different environment is termed “partial overlapping.” Bloch (1972:66-67) mentions about these two types of phonemic overlapping as follows:
The intersection or overlapping of phonemes will be called partial if a given sound \( x \) occurring under one set of phonetic conditions is assigned to phoneme \( A \), while the same \( x \) under a different set of conditions is assigned to phoneme \( B \); it will be called complete if successive occurrences of \( x \) under the same conditions are assigned sometimes to \( A \), sometimes to \( B \).

In a similar way, the vowel \([e]\) displays the case of partial overlapping in which it is assigned to phoneme \(/i/\) before the finals \(/u/\) and \(/-n/\) and phoneme \(/e/\) elsewhere as formulated in the following vowel lowering rule.

\[
/\text{i}/ \rightarrow [e] /\text{________}/-\text{u}, -\text{n}/

/\text{e}/ \rightarrow [e] /\text{elsewhere}
\]

Examples:
- dit \([\text{tet}^{55}]\) ‘foot’
- kek \([\text{khek}^{55}]\) ‘to carve’

However the application of this vowel lowering rule is unpredictable with other finals. The vowel \(/i/\) may be lowered to \([e]\) or remains \([i]\) in the same environment (see sample words in 4.1). This inconsistency makes the reader unable to determine whether the grapheme \(/i/\) represents \([i]\) or \([e]\).

The compound vowel \([ou]\) is also assigned to two separate phonemes, \(/ou/\) and \(/au/\). The phoneme \(/ou/\) is always realized by \([ou]\) whereas the phoneme \(/au/\) is manifested as \([ou]\) before labial initials as shown in the vowel labialization rule below.

\[
/\text{au}/ \rightarrow [ou] /\text{labials________}/

[au] /\text{elsewhere}
\]

Examples:
- eekmaus \([\text{e:k}^{55}\text{mou}^{11}]\) ‘hawk, eagle’
- gaux \([\text{kau}^{55}]\) ‘to sleep’
- baismou \([\text{pai}^{11}\text{mou}^{53}]\) ‘doorframe’

Despite the phonemic principle, the sound inventory of other dialects and MSC as a prestige language also play a very important role in the development of the Hlai orthography as discussed below.

Even though the Hlai orthography follows the phonemic principle it has been found that one phoneme is written by two symbols. The phoneme \(/ts/\) is symbolized as \(<z>\) and \(<j>\) and the phoneme \(/tsh/\) is written as \(<c>\) and \(<q>\). The environment in which each symbol is utilized is predictable. The phoneme \(/ts/\) is written as \(<j>\) when it is followed by the vowel \(/i/\) and as \(<z>\) elsewhere. In a similar way, the phoneme \(/tsh/\) is written as \(<q>\) when it is followed by the vowel \(/i/\) and as \(<c>\) elsewhere. This environment can be formulated as follows:

\[
/ts, tsh/ \rightarrow /\text{j, q}/ /\text{________}/i

/\text{z, c}/ /\text{________}/\text{elsewhere}
\]
Examples:

- jip  \([tsip^{55}]\)  ‘to light’
- qix  \([tshi^{55}]\)  ‘town, city, street’
- zuus  \([tsau^{11}]\)  ‘grandmother’
- cauhwan  \([tshau^{53}hwan^{53}]\)  ‘the sun’

The pressure to symbolize one phoneme with two symbols is caused by other Hlai dialects and MSC as a prestige language. In other places the phoneme /\(ts/\) and /\(tsh/\) have two allophones, \([ts, tc]\) and \([tsh, tch]\) respectively. The allophones \([ts, tc]\) and \([tsh, tch]\) are mutually exclusive, i.e., each sound occurs in certain different environments as seen in the following palatalization rule.

\[
/t\(s, t\sh/ \Rightarrow [tc, tch]/\text{____}_i \quad \text{[ts, tsh]/ elsewhere}
\]

That is \([ts]\) – \([tc]\) are allophones of the same phoneme /\(ts/\) and \([tsh]\) - \([tch]\) comprise one phoneme /\(tsh/\).

Following the phonemic principle, the allophones \([ts]\) – \([tc]\) should have been symbolized by one grapheme and the allophones \([tsh]\) - \([tch]\) should have also been represented by one symbol. However the phonetic principle is applied to these allophones. The two allophones are written separately because these sounds occur contrastively as separate phonemes in MSC. This contrast has influenced the allophonic status of \([ts]\) – \([tc]\) and \([tsh]\) - \([tch]\) and thus they are written with separate symbols as follows:

\[
[ts] \Rightarrow /z/ \quad [tsh] \Rightarrow /c/ \\
[tc] \Rightarrow /j/ \quad [tch] \Rightarrow /q/
\]

The four symbols, /\(z/\) - /\(j/\) and /\(c/\) - /\(q/\) match perfectly with the Pinyin in Table 2.

Writing two allophones in the orthography is caused by bilingualism, a motivation mentioned by Gudschinsky (1973: 119) below:

There will always be pressure to write allophones as long as there are bilinguals who have learned to distinguish the allophones of their own speech through learning a second language in which those phones contrast (and are therefore separate phonemes). If bilingualism is widespread, or becoming so, it may be wise to yield to the pressure and symbolize allophones as though they were separate phonemes.

While two allophones are written with two symbols, it has been found also that two contrastive sounds are written with one alphabet.

The finals /\(k/\) and /\(-n/\) are contrastive with /\(-t/\) and /\(-n/\) respectively as illustrated with minimal pairs in (9).
Table 9: Minimal pairs of /-t/ - /-t/ and /-n/ - /-n/  

<table>
<thead>
<tr>
<th>Contrastive pairs</th>
<th>Graphemes</th>
<th>IPA</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/-t/ - /-t/</td>
<td>bat</td>
<td>[pat(^{55})]</td>
<td>‘to take, to get something’</td>
</tr>
<tr>
<td></td>
<td>bat</td>
<td>[pat(^{55})]</td>
<td>‘to cut, to open (the road)’</td>
</tr>
<tr>
<td>/-n/ - /-n/</td>
<td>fans</td>
<td>[fan(^{11})]</td>
<td>‘to pinch, to nip’</td>
</tr>
<tr>
<td></td>
<td>fans</td>
<td>[fan(^{11})]</td>
<td>‘chest’</td>
</tr>
</tbody>
</table>

The phonemic principle requires that the four phonemes should be written with four symbols in the final position of a syllable. However, they are symbolized with only two graphemes, <t> and <n> because the Hlai orthography is multidialectal orthography, which has been developed to serve five dialects. The \(hau^{55}hu:t^{55}\) (Luohuo) vernacular of the \(ha^{11}\) dialect which is used as data in this study has the finals /-t/ and /-n/ while other dialects do not. Therefore, different pronunciations of the same words are unified by writing them with identical symbols. Each reader assigns his or her own pronunciation to the written symbols. Below are sample words\(^9\) ending with /-t/ - /-t/ and /-n/ - /-n/ in Luohuo vernacular and final /-t/ in other dialects or vernaculars.

Table 10: Sample words with finals /-t/ - /-t/ and /-n/ - /-n/  

<table>
<thead>
<tr>
<th>Luohuo vernacular</th>
<th>Others</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-t</td>
<td>-t</td>
<td>-t</td>
</tr>
<tr>
<td>dat(^{55}) ‘straight, very’</td>
<td>dat(^{55})</td>
<td>dat(^{55}) ‘tasteless’</td>
</tr>
<tr>
<td>tshat(^{55}) ‘to wear, to paint’</td>
<td>tshat(^{55})</td>
<td>tshat(^{55}) ‘to buy’</td>
</tr>
<tr>
<td>phut(^{55}) ‘great grandfather’</td>
<td>phut(^{55})</td>
<td>phut(^{55}) ‘to salute’</td>
</tr>
<tr>
<td>-n</td>
<td>-n</td>
<td>-n</td>
</tr>
<tr>
<td>dan(^{55}) ‘vertical’</td>
<td>dan(^{55})</td>
<td>dan(^{55}) ‘to sneeze’</td>
</tr>
<tr>
<td>gan(^{55}) ‘cool’</td>
<td>gan(^{55})</td>
<td>gan(^{55}) ‘to aim at’</td>
</tr>
<tr>
<td>tu:n(^{55}) ‘banister’</td>
<td>tu:n(^{55})</td>
<td>tu:n(^{55}) ‘to beat’</td>
</tr>
</tbody>
</table>

The ideal orthography of one language should be modeled on the sound inventory of that language or else the devised orthography would be confusing. However, there is also a pressure from multidialectal factor and prestigious status of other language that require consideration in the development of orthography and make it unable to use only one principle to create the orthography.

References

\(^9\) The sample words are provided by Wen Mingying (p.c.).


1. Introduction

1.1 Goals
This study aims to investigate the composition of particles and sentential-LE. It is assumed that temporal use of sentential-LE is derived from the compatibility with certain particles. Two pairs of particles cai/jiu (‘only’) and you/zai (‘again’) are selected to test the compatibility and incompatibility with sentential-LE in clauses, corpus, and context. In this study, the following issues will be explored:

- The semantic contribution of the sentential-LE
- The sentential-LE in compositional clauses and context
- The compatibility and incompatibility of particles and sentential-LE
- Temporal construction between particles and sentential-LE

1.2 The complexity of LE in Mandarin
Like Thai, Mandarin is a tenseless language. Sentences in Thai could be temporally ambiguous without time expressions. Time expressions in Thai could be time phrases, time markers and aspect markers. In Mandarin, however, both particles and aspect markers form a temporal frame through interaction. Mandarin LE is complex as it can occur in two syntactic positions: follows the verb or appears in the sentence-final position. The perfective morpheme suffix –le follows the verb has been referred to as ‘perfective-LE’ (Li & Thompson 1981, Mangione & Li 1993) or ‘verbal-LE’ (Shi 1990, Ross 1995, Smith 1997, Klein, Li & Hendriks 2000).

(1) a. Wo     zuotian   xie-LE   xin.
    I        yesterday  write-LE    letter.
    ‘I wrote a letter yesterday.’ (I engaged in some latter-writing activity.)

    b. Wo   zuotian     qu-LE  Austin
           I     yesterday  go-LE Austin
    ‘I went to Austin yesterday.’

Sentential-LE appears at the sentence-final position.

(2) Wo      mintian   bu     qu    Austin  le.
    I     tomorrow   NEG   go    Austin  LE
    ‘I will not go to Austin tomorrow.’
Wo jinnian shi sui le.
I this year ten years LE
‘I am ten years old this year.’

Ta lai le.
he come LE
‘He came. / He has come.

When the status of LE is ambiguous as in (4), both the closure and the new-situation meanings are available. Sentence (4) could mean ‘he completed the action of coming’ or ‘the inception of a new situation of his being here.’ In other words, both verbal-le and sentential-le interpretations are obtained.

1.3 The distinction between verbal-le and sentential-le
There has been discussion on the overlapping of verbal-le and sentential-le. Ross (1995) proposes that perfective lep and inchoative lei are two distinct morphemes. Lep functions to mark situations as anterior to some axis of orientation, either the point present or some asserted or implied situation or time; lep, on the other hand, is sentential-le. However, based on the corpus in this study, inchoativity is not the only interpretation of sentential-le; rather, the domain of sentential-le is associated with not only syntactic and semantic functions but also pragmatic and discourse context. The distinction between verbal-le and sentential-le is listed in Table 1.

As shown in Table 1, both verbal-le and sentential-le have the interpretation of inchoativity. It seems difficult to draw a line between ‘new situation’ and ‘change of state’. Note that the interpretations such as inchoativity, imminent action, and current relevant state of sentential-le are directly associated with temporal use.

Table 1: The distinction between verbal-le and sentential-le

<table>
<thead>
<tr>
<th>Verbal-Le</th>
<th>Sentential-Le</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Perfective Aspect</td>
<td>• Signals change of state</td>
</tr>
<tr>
<td>• Closed event</td>
<td>• Inchoativity</td>
</tr>
<tr>
<td>• New situation</td>
<td>• Imminent action</td>
</tr>
<tr>
<td>• Boundedness of situation</td>
<td>• Current Relevant State</td>
</tr>
<tr>
<td>• Relative sequence of non-past events</td>
<td>• Imperative</td>
</tr>
<tr>
<td>• Inchoativity (coming about of a state)</td>
<td>• Descriptive</td>
</tr>
<tr>
<td></td>
<td>• Interjection</td>
</tr>
<tr>
<td></td>
<td>• Expressing surprise</td>
</tr>
<tr>
<td></td>
<td>• Before question markers</td>
</tr>
</tbody>
</table>

1.4 Two pairs of particles

1.4.1 CAI and JIU (‘Only’)
Cai and Jiu are two scalar particles in Mandarin Chinese. Biq (1988) argues that cai and jiu are focus adverbs in that cai marks denying-expectation focus and jiu marks a simple focus. Four types of focus are involved in speech: parametric, limiting, emphatic, and temporal. Lai
(1999), on the other hand, classifies the uses of *cai* and *jiu* into four: the temporal, restrictive, conditional and emphatic uses. The different interpretations of the particles are given in Table 2.

**Table 3: The comparison of CAI and JIU**

<table>
<thead>
<tr>
<th>Sources</th>
<th>CAI</th>
<th>JIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Li &amp; Thompson (1981)</td>
<td>Two meanings:</td>
<td>(1) Immediately</td>
</tr>
<tr>
<td></td>
<td>(1) Just now</td>
<td>(2) Soon with respect to the time of utterance</td>
</tr>
<tr>
<td></td>
<td>(2) Only then</td>
<td></td>
</tr>
<tr>
<td>Biq (1988)</td>
<td>Denying</td>
<td>Simple focus</td>
</tr>
<tr>
<td></td>
<td>expectation focus</td>
<td></td>
</tr>
<tr>
<td>Lai (1999)</td>
<td>A presupposition of relative lateness of the change of state</td>
<td>A presupposition of relative earliness of the change</td>
</tr>
</tbody>
</table>

The temporal use of *cai* and *jiu* is shown in (5). (5a) is a neutral sentence without the entailment of the particles. In (5b), *Lisi* was late, so it is assumed that he should have been at UT some time earlier than three o’clock; but in fact, he was at UT as late as three. In this case, particle ‘*jiu*’ cannot be used, as shown in (5c). On the contrary, if *Lisi* is always punctual and never being late, and it is assumed that he should be at UT some time later than three; but in fact, he was at UT at three. Particle ‘*jiu*’ is used in this case, as shown in (5d), and ‘*cai*’ will result in ungrammaticality, as shown in (5e).

(5) a. Lisi san dian zai UT.
     Lisi three o’clock be-at UT
     ‘Lisi was at UT at three o’clock.’

b. Lisi chidao le, [ta san dian *cai* zai UT].
   Lisi late LE he three o’clock *CAI* be-at UT
   ‘Lisi was late. He was at UT (as late as) at three o’clock.

c. *Lisi chidao le, [ta san dian *jiu* zai UT *le]*.
   Lisi late LE he three o’clock *JIU* be-at UT *LE*
   ‘Lisi was late. He was at UT (as late as) at three o’clock.

d. Lisi congbu chidao, [ta san dian *jiu* zai UT *le]*.
   Lisi never late he three o’clock *JIU* be-at UT *LE*
   ‘Lisi was never late. He was at UT at three o’clock.

e. *Lisi congbu chidao, [ta san dian *cai* zai UT].
   Lisi never late he three o’clock *CAI* be-at UT
   ‘Lisi was never late. He was at UT at three o’clock.
1.4.2 Zai and You (‘Again’)

Li & Thompson (1981) classify ‘zai’ and ‘you’ into non-manner adverbs. ‘Zai’ refers to events that have not yet happened, whereas ‘you’ applies either to past or to present event. ‘Zai’ can also occur in commands, where the action is in the future with respect to the time of the utterance. In certain contexts, ‘you’ has the meaning ‘also’ rather than ‘again’. Whether ‘you’ means ‘again’ or ‘also’ depends completely on the discourse context.

Here is the summary of the uses of zai and you:

(i) Zai: Events that have not yet happened
(ii) You: Either past or present events

Sentences in (6) illustrate the uses of ‘zai’ and ‘you’. As shown in (6a), when the re-occurred event happened before the time of utterance, particle ‘you’ is used. When the re-occurred event will happen in the future, particle ‘zai’ is used.

(6) a. Lisi zhotian qu Austin, [ta jintian you qu le].
    Lisi yesterday go Austin, he today YOU GO LE
    ‘Lisi went to Austin yesterday; he went there again today.’

b. * Lisi zhotian qu Austin, [ta jintian zai qu le].
    Lisi yesterday go Austin, he today ZAI GO LE
    ‘Lisi went to Austin yesterday; he went there again today.’

c. Lisi zhotian qu Austin, [ta mintian hui zai qu Austin].
    Lisi yesterday go Austin, he tomorrow will ZAI GO Austin
    ‘Lisi went to Austin yesterday; he will go there again tomorrow.’

1.5 The scope of this study

In this study, only sentential-le involving the following grammatical properties is analyzed:

(i) At the sentential-final position
(ii) At least one preceding predicate or object

The patterns selected in this study are listed as follows:

(i) Temporal cai/jiu and sentential-le
(ii) Temporal zai/you and sentential-le

2. The Problems

2.1 The Function of Sentential LE

Here is the assumption: there are at least two distinct grammatical LE. Sentential-le could be either grammatical or functional.

Li, Thompson and Thompson (1981) discuss more communication function of sentential-le than others among past works. According to their definition, le claims that a state of affairs has special current relevance with respect to some particular situation. They give five categories in which the sentential-le can convey ‘Currently Relevant State’ (CRS) if the state of affairs it represents:
a. Talking about a state that involves a change  
b. Correcting a wrong assumption  
c. Reporting progress so far  
d. Alerting the hearer about what will happen next  
e. Tagging a comment to signal the end of a narrative or the end of the speaker’s current contribution to the conversation

The ‘currently relevant’ depends on the basis of the speaker’s knowledge and the relationship between him/her and the speaker, the situation in which they are interacting, and the world at large. Note that the ‘currently relevant’ is associated with the speakers or narrators in the context. Based on this point, we propose the hypothesis that the use of sentential-le primarily depends on context, conversation or discourse, rather than a single sentence in which not much ‘change’ message could be conveyed.

2.2 The Data
Sentence (7) is extracted from the context: He left Austin in 2004 and planed to come back in 2006; therefore, I expected to see him in 2006, two years later from this year, 2004. But he just sent me a message indicating that he changes his mind and decided to come back in 2005, next year. Then, ‘I will see him next year’; in other words, I will see him ‘earlier than expected’. In this sentence, the structure ‘jiu…le’ is used, rather than ‘cai…le’. The deletion of sentential-le in (7c) rescues the sentence from ungrammatical, but it changes the meaning of the context. In (7c), the entailment would be: I will see him ‘later than expected’, which does not correspond to the situation provided by the context.

(7)  

a. Wo minnian jiu kandao ta le  
I next year JIU see-COM him LE  
‘I will see him next year.’

b. *Wo minnian cai kandao ta le  
I next year CAI see-COM him LE  
‘I will see him next year.’

c. #Wo minnian cai kandao ta  
I next year CAI see-COM him  
‘I will see him next year.’

The context for sentence (8): My class started at 10:00am, and I expected to leave home at 9:00am; it happened that I got up at six in the morning and could not fall asleep anymore. Therefore, I decided to go to school earlier and left home at seven o’clock in the morning. In other words, I left home ‘earlier than expected’. Similarly, (8c) is grammatical but does not fit in with the context.

(8)  

a. Wo jintian zaoshang qidian jiu chumen le  
I today morning seven-o’clock JIU leave-home LE  
‘I left home at seven o’clock this morning.’
b. *Wo jintian zaoshang qidian cai chumen le
I today morning seven-o’clock CAI leave-home LE
‘I left home at seven o’clock this morning.’

c. #Wo jintian zaoshang qidian cai chumen
I today morning seven-o’clock CAI leave-home
‘I left home at seven o’clock this morning.’

2.3 Generalization

• JIU can co-occur with sentential-*le*, but CAI cannot
• YOU can co-occur with sentential-*le*, but ZAI cannot

If sentential-*le* has only communication function rather than temporal implication, why do we get the patterns listed above? We draw the section conclusion that sentential-*le* should have temporal implication when it meets temporal particles.

3. The compatibility of jiu…le and incompatibility of *cai…le*

3.1 Particles cai and jiu

Lai (1999) proposes the meaning representation of CAI and JIU as follows:

(9) cai (ϕ [x]) (t):
   e: ϕ \rightarrow \phi before t (i.e. \exists t’ [t’ < t ∧ \phi [t’]])
   a: ϕ \rightarrow \phi at t (i.e. \phi [t’] ∧ ϕ [t’])

e: expectable alternative scales
a: actual focus scale
t’: expectable alternative time value
t: actual time value

(10) jiu (ϕ [x]) (t):
   e: ϕ \rightarrow \phi after t (i.e., ϕ \rightarrow \phi after t) (i.e. \exists t’ [t’ < t ∧ \phi [t’]])
   a: ϕ \rightarrow \phi at t (i.e. ϕ \rightarrow \phi before or at t) (i.e. \phi [t])

Lai (1999) also points out –le expresses something that is not part of speaker’s expectation. Sentential-*le* anchors to a reference time, either the speech time or a time specified by a time adverbial, denoting that the proposition holds at the reference time. In this case, the change of state happened some time before the reference time, though it was not expected to have happened by then and might have happened some time later than the reference time. Thus, she proposed the meaning representation of sentential-*le* associated with ‘jiu’: when jiu co-occurs with sentential le, the temporal function of le overrides the non-temporal function of jiu; hence the scale induced by jiu…le is always time-related. Without -le, jiu cannot describe an event in the past.
We argue that with the sentential-\textit{le}, \textit{JIU} can be used to describe an event not only in the past, but also present and in the future, as long as the event happens \textit{earlier than expected}.

3.2 Composition

Sentence (11) illustrates the structure ‘\textit{jiu}…\textit{le}’ used in the past event, which happened this afternoon. ‘\textit{Jiu}’ co-occurs with sentential-\textit{le} whereas ‘\textit{cai}’ cannot. The use of ‘\textit{cai}’ also changes the reference time of the context.

(11) a. Xiawu sandian wo \textit{jiu} dao Austin \textit{le} afternoon three o’clock I \textit{JIU} arrive Austin \textit{LE} ‘I arrived at Austin at THREE in the afternoon.’

b. * Xiawu sandian wo \textit{cai} dao Austin \textit{le} afternoon three o’clock I \textit{CAI} arrive Austin \textit{LE} ‘I arrived at Austin at THREE in the afternoon.’

Assume that it takes three hours from Houston to Austin. Assume that I drove very fast. Then I drove from Houston at 1pm, and I arrived at Austin at three. As shown (11a), I expected to arrive at Austin in the future or some time later than ‘THREE PM’, but what actually happened is that ‘I arrived at Austin at THREE’. Therefore, the event happened ‘earlier than expected’. The actual scale entails the non-correspondence with the expectation.

As shown in (11b), I expected to arrive at Austin some time BEFORE THREE 3PM, but what actually happened is that ‘I arrived at Austin at THREE’. Therefore, the event happens ‘later than expected’, and the sentential-\textit{le} cannot co-occur here.

The reference time on the expectable alternative scales is not fixed. It depends on the dynamic context. As long as there is an event $x$ such that it happens on the actual focus scale and this event $x$ happens earlier than the event $x$ on the expectable alternative scales,
compositional structure ‘jiu…le’ is used. When this event x on the actual focus scale happens later than the event x on the expectable alternative scales, only ‘cai’ is used.

4. The compatibility of you…le and incompatibility of *zai…le

4.1 Particles zai and you

Zai (‘again’) refers to events that have not happened, whereas you (‘again’) refers to either past or present events.

We propose the semantic distinction between ZAI and YOU as follows.

(12) zai:
E: \( \neg \phi \Rightarrow \phi \) before or at \( T \) (i.e., \( T' \leq T \))
A: \( \neg \phi \Rightarrow \phi \) after \( T \)

(13) you:
E: \( \neg \phi \Rightarrow \phi \) before \( T \) (i.e., \( T' < T \))
A: \( \neg \phi \Rightarrow \phi \) after \( T' \) and before or at \( T \)

4.2 Composition

Experiential YOU (‘again’) could induce temporal scale when it co-occurs with sentential-le.

(14) a. Wo shang xingqiwu qu Austin, zuotian you qu Austin le
    I last Friday go Austin yesterday YOU go Austin LE
    ‘I went to Austin last Friday, and I went there again yesterday.’

b. * Wo shang xingqiwu qu Austin, zuotian zai qu Austin le
    I last Friday go Austin yesterday ZAI go Austin LE
    ‘I went to Austin last Friday, and I went there again yesterday.’
In (14a), the actual event entails the past experience. The sentence is true iff I have the experience of going to Austin last Friday, the time earlier than yesterday, and I went there again yesterday.

In (14b), the actual event happened yesterday. The sentence cannot be true, because the particle ‘\textit{ZAI}’ requires a future [-happened] value. By giving \textit{ZAI}, the event should happen in the future but not yesterday. In other words, \textit{ZAI} will result in the disagreement with the reference time scale of the context. The event ‘going to Austin again’ should not happen yet at the present time of utterance. Thus, it cannot co-occur with sentential-\textit{le}. At this point, we argue that sentential-\textit{le} refers to a happened event when it is associated with ‘\textit{you}’ and ‘\textit{zai}’.

However, with negation markers, \textit{ZAI} can co-occur with sentential-\textit{le}.

(15) a. Weile jian fei, wo bu zai chi bingqilin le
in order to lose fat I NEG \textit{ZAI} eat ice cream \textit{LE}
‘In order to lose weight, I will not eat ice cream anymore.’

b. *Weile jian fei, wo bu you chi bingqilin le
in order to lose fat I NEG \textit{YOU} eat ice cream \textit{LE}
‘In order to lose weight, I will not eat ice cream anymore.’

Sentence (15a) denotes that I used to eat ice, but I will not eat it in the future. The status of eating ice cream is supposed to stop in the future. This is a change of state, and sentential-\textit{le} is allowed to co-occur with ‘\textit{zai}’.

It is concluded that the constraints on the co-occurrence of ‘\textit{zai}’ and sentential-\textit{le} are: (i) presupposition of experience in the context, and (ii) negation markers. Negation can terminate the continuum of an event, stop the repetition, and change the value of time scale from [+ happened] to [- happened], in which case sentential-\textit{le} is compatible with particle ‘\textit{zai}’.
5. The Proposal

5.1 Dynamic Interpretation

The properties of temporal sentential-le are proposed as follows: (i) single sentential-le has no temporal implication of the action; (ii) speaker-oriented reference induces temporal scale in conversation; (iii) the referential time depends on the situation in which speakers are interacting and the context; (iv) temporal function of sentential-le is triggered by other variables such as particles in the discourse or context.

The interpretation of sentential-le is not static. It could be triggered by the feature [+earlier] or [+happened] on the expectation side; and it could be triggered by the feature [+past] and [+present] on the experience side. Note that in both sides, the feature [+temporal] serves as the coordinator to trigger the denotation of sentential-le. Temporal use of sentential-le therefore is inherent in its multiple communication function. On the other hand, there are four uses of cai and jiu: the temporal, restrictive, conditional and emphatic uses. In other words, particles are not restricted to temporal use. When sentential-le meets certain temporal particles, its inherent temporal denotation induces restrictive requirements for the co-occurrence with particles. These requirements prohibit the co-occurrence of ‘cai…le’ and ‘zai…le’. Then it is concluded that the compatibility of particle ‘jiu’/ ‘you’ and sentential-le is a mutually agreeable outcome. Sentential-le is only allowed to co-occur with ‘zai’ only when the habitual/continuous state is interrupted to induce the feature [+change of state]. In this case, the feature [+change of state] is neither associated with expectation, nor is it associated with experience. As long as the context with negation markers provides sufficient information to fulfill the requirement of change of state, particle ‘zai’ can co-occur with sentential-le. Sentential-le here signals ‘change of state’, which may not be associated with the feature [+temporal], and the co-occurrence of negation ‘zai’ and sentential-le may not be a temporal use.

Sentence (16) shows the dynamic temporal use of the particles and sentential-le.

(16) A: Ni zhidao Lisi zhu nar ma?
   You know Lisi live where QT
   ‘Do you know where Lisi lives?’

   B: Wo bu zhidao, ta shang ge yue jiu banjia le
      I NEG know he last MW month JIU move LE
      [cai banjia ]
      CAI move

   Zhe ge yue you banjia le
   this MW month YOU move LE
   ‘I don’t know. He already/just moved last month, and he moved again this month.’

   A: keshi, ta san ge yue qian gaosu wo, ta bu zai banjia le
      but he three MW month before tell me he NEG ZAI move LE
      ‘But three months ago, he told me that he would not move anymore.’

The speaker induces the temporal scales in conversation. The referential time depends on the situation in which speakers are interacting in the context. Speaker-oriented referential time could be ‘earlier than expected’, expressed by ‘jiu…le’, or, ‘later than expected’, expressed
by ‘caì’. Again, once the event ‘moving’ is interrupted and does not continue anymore, negation ‘zài’ co-occurs with sentential-le, which denotes the change of state.

5.3 A Compositional Analysis

On the basis of the composition of the particles and sentential-le, we propose: (i) sentential-le holds multiple communication function; (ii) particles trigger the temporal function of sentential-le; (iii) the composition of the particles and sentential-le construct temporal use.

Note that sentential-le holds multiple communication function, and the context provides sufficient information for the denotation of temporal sentential-le. We have the sentential-le associated with ‘caì jìu’ and the sentential-le associated with ‘zài /you’ here. CAI and LE do not co-occur as they are semantically incompatible whereas JIU and LE do co-occur as they are semantically compatible. On the other hand, ‘YOU’ and sentential-le co-occur only in the past or present time. The temporal scale of experiential sentences is induced by currently relevant time phrases. As Li, Thompson and Thompson (1981) point out, the ‘currently relevant’ depends on the basis of the speaker’s knowledge. Accordingly, if the speaker’s ‘currently relevant’ time is ‘now’, the present, the events cannot happen with future value in that context. When sentential-le is associated with particle ‘you’, it denotes the events happened already or are going on. In other words, the domain of sentential-le extends from the point of the experience referential time to the present. ZAI and sentential-LE do not co-occur as they are semantically incompatible whereas YOU and sentential-LE do co-occur as they are semantically compatible. In addition, to use sentential-le with ‘zài’, the habitual/continuous state must be interrupted to induce the feature [+change of state]. Negation markers denote the interruption. Sentential-le signals ‘change of state’, which may not be associated with the feature [+temporal].

In Thai, events are temporally distinguished by duration, present time with duration and past time without duration. Unlike Thai, duration is not crucial for temporal dimension in Mandarin. The interaction between particles and sentential-LE can decide the time of an event on the temporal scales.

6. Conclusion

In this study, the composition of particles and sentential-le was investigated. Temporal use of sentential-le is derived from the composition with particles caï jìu (‘only’) and you/zài (‘again’). The use of sentential-le primarily depends on the context, conversation or discourse, rather than a single sentence in which not much ‘expectation’ or ‘change’ information could be conveyed. JIÚ can co-occur with sentential-le, but CAI cannot; YOU can co-occur with sentential-le, but ZAI cannot. On the basis of the patterns, the compatibility and incompatibility of the particles and sentential-le, it has been argued that sentential-le has temporal implication when it meets temporal particles. With the sentential-le, particle JIÚ can be used to describe an event not only in the past, but also present and in the future, as long as the event happens earlier than expected. It is concluded that the reference time on the expectable alternative scales is not fixed. It depends on the dynamic context. On the other hand, experiential YOU (‘again’) could induce temporal scale when it co-occurs with sentential-le. With negation markers, ZAI can co-occur with sentential-le. The constraints on the co-occurrence of ‘zài’ and sentential-le are: (i) presupposition of experience in the context, and (ii) negation markers. Negation markers induce the change of
state in the context with the presupposition of previous experience and thus sentential-le is compatible with particle ‘zai’.

Single sentential-le has no temporal implication of the action; it is the speaker-oriented currently relevant time that induces temporal scale in conversation. The referential time depends on the situation in which speakers are interacting and the context. Temporal function of sentential-le is triggered by particles in the discourse or context. Dynamic interpretations show that temporal use is inherent in the multiple communication function of sentential-le. When sentential-le meets certain temporal particles, its inherent temporal denotation induces restrictive requirements for the co-occurrence with particles. Thus, the compatibility of the particles and sentential-le is a mutually agreeable outcome.

References
May I express gratitude to HRH the late Princess Galayani Vadhana Kromluang Naradhiwas Rajanagarindra for patiently attending to an earlier version of this paper and for offering valuable observations (including: "It is quite broad"). As readers will be aware, for years Her Royal Highness has done much to further Southeast Asian linguistic and cultural studies. I am grateful to others too who attended the SEALS 14 Bangkok conference for their comments. An observation by Matisoff (1992) to the effect that Mainland Southeast Asia can be seen as two linguistic areas, one upland, one lowland, started me thinking about what follows.

1. Uphill and downhill

The attempt here is admittedly broad and programmatic. It is to probe a two-way question: in Southeast Asia, to what extent has bilingualism historically moved ‘downhill’ or downriver, while diglossia and diglossic processes have developed in coastal areas and then moved ‘uphill’?

For uphill-downhill questions to work linguistically, they must of course associate ecology with cultural history and established ideas about the dynamics of contact linguistics and linguistic stratification. Also, terminology needs to be controlled. ‘Diglossia’ can safely be used to describe the rather marked speech level systems of Javanese and Balinese, but how freely should the term be extended? In the case of Malay, Burmese, Thai, Khmer and Vietnamese, speakers are keenly aware of communicative stratification in their languages and linguists would be in agreement, but levels and functions are less discrete. Perhaps ‘diglossic variation’ is more appropriate for these cases; ‘register variation’ seems too weak.

As for bilingualism or multilingualism, clearly a downhill account could not be exclusive. In Island Southeast Asia, inter-island contact and maritime trade have been suitable contexts for bilingual development; no hills or mountains need be in view. Mainland Southeast Asia has seen mass deportations with resettlement from one lowland area to another with new linguistic neighbors. For example, many thousands of current bilinguals in Thailand have ancestors who were resettled from Mekhong valleys to the Chao Phraya basin. These Thai-Lao speakers bear witness to how transportation can give rise to stable bilingualism lasting several generations. So the questions raised above must fit into a broader enquiry considering issues only hinted at here.

For the Thai case, Smalley (1994) has made good progress in this area, establishing an important principle well-known in other speech communities. He shows how social hierarchy correlates with multilingualism in one key aspect: those lower down socially tend to gain at least some facility in the speech of those higher up. In line with the ecological picture investigated here, it remains to add that for much of Southeast Asia,
those living in upland areas are typically those of lower social position, although lower social position is of course by no means restricted to high elevation.

2. Areal linguistics and Southeast Asia
To provide a background for language contact questions, it is useful to establish the cogency of taking Southeast Asia as a frame of reference. For several decades Southeast Asia has plausibly been considered a ‘linguistic area’ nearly on par with the defining case of South Asia (Emeneau 1956). A reason for this is that, in common with the Indian subcontinent or the Balkans, areal banding of linguistic features can be detected that cuts across or subverts what might be expected on the basis of standard genetic family trees. For example, in an outstanding foundation examination of the Southeast Asian linguistic area, Jones (1970) has shown convincingly that the syntax of classifier constructions is distributed across Mainland Southeast Asia much more by geography than by genetic language family.

A complementary approach is to assess features in common among the genetic groupings. The five established families now represented in the area—Austroasiatic, Austronesian, Sino-Tibetan (including Tibeto-Burman), Tai-Kadai and Hmong-Mien—share some broad typological characteristics, such as lack of obligatory inflectional tense morphology of the sort found in families like Indo-European and Dravidian. Across the main families can also be noted highly specific cases of intriguing convergence. Matisoff (2001), concentrating on prosodic diffusibility, and Enfield (2001), studying a case of shared lexico-semantic and syntactic polyfunctionality, have given compelling analyses involving these commonalities. In the lexical domain, Matisoff (1992) also calls attention to diffusion of names for cultural items like ‘crossbow’ and ‘needle’. Lexical formulae, such as ‘sun’ = ‘eye of the day’, but with actual vocabulary differing across languages, are yet another attestation of areal cohesion. Convergences of this specific sort surely point back to intense language contact.

3. Mega-families or protracted contact?
–Or do they? Among historical linguists, some (‘lumpers’) have preferred to account for structural and even lexical convergences by proposing ever more remote and inclusive hyphenated or compounded mega-family combinations. However, at the level of present-day individuals, whether of Mainland or Maritime Southeast Asia, a striking feature of communicative competence is linguistic versatility. Many speakers, probably most, show at least some degree of bilingual, bidialectal or diglossic communicative ability. This synchronic situation should provide useful pointers for diachronic hypothesising.

A methodological approach differing from mega-family construction is to take millennia of language contact as a firmer and more realistic initial premise. Contact accounts may repel some by evoking a hoary ‘substratum’ metaphorical phraseology. Strata metaphors alone scarcely provide satisfying explanations. Nonetheless, for Southeast Asia, prolonged contact even in documented historic times has sometimes involved substantial structural reanalysis and modified language shift. In another pioneering study of Southeast areal linguistics, Huffman (1973) establishes the facts of contact-induced syntactic convergence applying to Khmer and Thai that has occurred in the past millennium. Nor are genetic and contact approaches necessarily exclusive, as we see below in the case of diglossic hybrids based on sociolinguistic interaction among varieties within the same language family.
Also to be considered is current professional consensus recognising effective limits as to how much Southeast Asian languages have converged. Few have put forward pidgin or creole claims for mixtures among indigenous languages and we lack clear examples of mixing to the point of total genetic quandary. (Karennic may verge on such a mixture. The region’s extinct or endangered Portuguese creoles or Chinese contact varieties are of a different category.) Leaving aside mega-family speculations and sub-branching problems, basic Southeast Asian genetic affiliations are no longer very controversial: not problematic to the degree that might characterise some languages in Africa or the Americas. If we consider an area bounded by the Andamans in the west and Halmahara to the east (and excluding non-Austronesian languages of Timor), for virtually any modern Southeast Asian language of substantial autochthonous standing, whether island or mainland, by now linguists would be nearly unanimous in assigning the language to one of the five established families listed above. True, there have been noteworthy debates in the past, such as over the lineage of Vietnamese, but these have been resolved. Diachronically there may remain a few uncertainties involving the extinct Pyu. On the western margin of the area, S. Morey (p.c.) reports languages in Assam of controversial lineage, indicative of massive mixing or language switch.

4. Early contact conditions

Taking stock of such earlier work, this section attempts to review together some historical, ecological and sociolinguistic issues useful in evaluating the two-way bilingualism-diglossia dynamic suggested above. The period of interest is mainly that prior to Western colonial contact but includes Chinese, Indo-Persian and Arabic maritime ventures. The general objective is to view how contextualised sociolinguistic factors can assist in explaining the basis of the Southeast Asian linguistic area. The attempt in this and the next section is to give a broad-stroke sketch of how local natural ecology and human settlement have been organizing factors in facilitating different modes of language contact. The main contention is that diachronic development of the area’s diglossic and bilingual speech capacities can usefully be seen against its ecological features, which are to some extent distinctive for Southeast Asia. Important here are seasonal monsoons that have fostered sea commerce along with ecological zoning and river systems affecting trade products, modes of agricultural production and related socio-cultural organization.

In tracing communicative patterns that in the past gave rise to present linguistic configurations, local and foreign trade, along with pilgrimage, should not be ignored. That is, the more obvious and aggressive factors creating contact conditions, such as military invasion, forced migration and supervised resettlement, need to be supplemented. Trade has been shown to have had a deep history in the region (Benjamin 1985; Belwood 1992; Pautreau et al. 2003). While relatively local in the neolithic and early agricultural periods, with the increasing use of bronze and then iron, evidence of far-reaching trade networks becomes firm. Mon Dvaravati sites have produced a Roman coin of the Emperor Valentinus (r. 250 CE), attesting to well-connected early trade. Roman coins, lamps and other trade items of the first few centuries CE are known from many island and mainland sites and are by now common exhibits in several of the region’s museum collections. For some two thousand years trade can be shown to have involved substantial foreign connections, particularly maritime (Reid 1988, 2004), but with evidence of limited
overland exchanges as well (Lieberman 2003). Trade networks have been contexts for communicative interaction over much of the region’s past (Lombard 1995).

Records show that traders and pilgrims from afar often opted for lengthy stay-overs in Southeast Asian harbours, perhaps to wait for monsoon winds to turn or for trade goods to become available. Srivijaya provides an excellent example (Wolters 1967). Such a community could become a nexus for cross-cultural contact with subsequent local appropriation and use of overseas literary cultural resources. Early examples of the latter would be textual religious and legal practices linked to classical Chinese and Indic traditions, with Arabic to follow. In the Southeast Asian ecological context, trade networks, local control of natural and human resources and the legitimising potential of universalising textual traditions have often worked together as a synergy (Marr & Milner 1986). Luxury imports from abroad could assume the semiotic function of marking and elevating a chief or local leader. In a similar manner, so could imported linguistic and textual practices.

With trade and pilgrimage then have come literacy and sensibilities regarding texts. Maritime contact, with some overland supplementation, has facilitated the introduction of textual religion, law, literature and related court practices, but almost always as refracted by or adapted to local sensibilities (Wolters 1999). Literacy was not simply transplanted passively but was more actively appropriated for local purposes. These included the quest for sacral power or supernatural authority. The very lettering of oaths and curses might be taken as imbued with sacred powers, as when water was poured over the face an oath-curse inscription and then drunk by a chief’s supporters (Hall 1976 and sources therein; see also Wyatt 2001).

Following proposals of Wolters, we can sometimes discern Southeast Asian literary usages at odds with norms of how writing and texts were to be utilised or constrained in the donor cultures. A minor but still telling example discussed elsewhere (Diller 1995, 1996) is the exceptionally early Southeast appropriation and documentation of decimal numerals from the Indic tradition. Decimal numerals were undoubtedly used in trade (a sort of practical shorthand) from the earliest era of their invention, but Southeast Asian writers felt that they could use them also in their formal inscriptions. Thus ‘brash’ numerals were used for dating in Srivijayan and Khmer royal texts some two hundred years before such use was acceptable in India: the Indic donor culture at first preferred to indicate numerical values for dates indirectly through Sanskrit chronograms, conventionalised word-based metonymies (‘eyes’ = 2).

These developments have laid the basis of the region’s literate linguistic traditions, important in diglossic development. They are especially characteristic of lowland emporia and politically cohesive urban centres. Diglossic communication has strengthened and come to play a key role in the communication of many such centres. The maritime and lowland circumstances also reflect Mainland Southeast Asia’s general lack of centrally important upland ‘hill cities’ as found in other cultural areas (Jerusalem, Ecbatana, Fatepur).

In a different way, uplands between river systems have supported gathering, swiddening and forest trade regimes, along with varied and often shifting speech communities (Benjamin 1985). Bilingualism and multilingualism have been a regular consequence of upland ecological conditions and are so to this day. Historically, uplanders have traded their products downstream and have not infrequently become plains dwellers...
themselves, perhaps displacing or assimilating earlier lowlanders. O’Connor (1995) sees the ecological demands of upriver or mid-river agricultural regimes, including the need for specialised irrigation techniques, as giving rise cooperative and eventually highly organized social systems. This organization in turn has enabled uplanders to succeed in their lowland assimilative conquests. Tai and Burmese expansion into formerly Austroasiatic areas are among O’Connor’s examples. Only in exceptional cases (Chamic?) has a protracted uphill or upstream migration apparently occurred, for example, to flee from invaders.

5. Diglossic development in Mainland Southeast Asian river systems

In the earlier period, Mainland Southeast Asia’s large river systems have given rise to distinctive language contact profiles. These are briefly sketched here.

The Irrawaddy-Chindwin provides good examples both of downstream diglossic development and of upstream bilingualism. Among the early peoples of the lower part of this system, the Pyu are known from texts from about 500 CE. The scantness of materials has precluded firm claims about the language or its affiliation. In any event, Pali vocabulary is mixed with Pyu in inscriptions (Shorto 1979). As Burmese speakers descended from the system’s uplands in the mid ninth century, some Pyu institutions, including apparently Pali Buddhism, were taken up by the invaders, although Pyu as a language became extinct and Burmese became dominant (Aung-Twin 2002; Lieberman 2003:90). However the pattern of Pali incorporation continued, becoming the basis of Burmese diglossic variation (Bradley 1977), important to the present day. Over time the practice of glossing Pali texts word for word in Burmese (a genre referred to as Nissaya) has strengthened Pali influence on upper levels of Burmese, not only on lexicon but also on syntax.

In the uplands of the Irrawaddy and Chindwin, the classical treatment of Kachin-Shan bilingualism is in Leach’s (1954) study. This provides an excellent exemplar of the downhill bilingual principle, part of wider parallel socio-cultural processes. Keyes (1977:44), summarising work of Lehman and Stevenson, reports similar dynamics for the Chin. Prestige trade goods bolstered the status of Chin chiefs and required maintenance of both upstream and downstream networks. Vigorous commercial contact fostered multi-lingualism, both downstream with the dominant Burmese and upstream with more remote groups. Chin settlements were reported as characteristically multi-ethnic, with as many as five separate groups represented in a single village of only thirty houses. Language contact of this type shows features quite distinct from Pali-based diglossic development in Burmese.

Less clear is the early history of the lower Salween and Sittang. It was once widely accepted that the Austroasiatic language (Old) Mon had an early locus there, but recent arguments advanced by Aung-Twin (2002) shift the original core of Mon polity further east to the Chao Phraya system. The Thai Fine Arts Department (1986.2:13) reports findings that strongly support this view, with Mon antiquities and so-called Dvaravati sites widely distributed throughout the Chao Phraya system and in adjacent riverine and coastal areas, with outlying sites even in the Korat Plateau to the east. Although Dvaravati sites probably do not reflect a single centralised state (Vallibhotana 1986), Mon inscriptions in what is now Thailand consistently show Pali admixture, e.g. in an early Lopburi cave text (Fine Arts Department 1986.2:43). On the other hand, according to Aung-Twin, evidence of Mon
presence in the Salween-Sittang-Pegu area becomes firm only from the 9th or 10th century CE, when Dvaravati Mons appear to have been under pressure from the advancing Khmer empire. Mon in any case lacked chance to become a modern national language, although the island cases of Javanese and Balinese show that this is not a precondition for diglossic maintenance. The extent to which early Pali incorporation has given rise to diglossic variation in Modern Mon (or in Nyah Kur) has not been investigated as far as I am aware.

In the Mekhong area, iron-age sites of the first few centuries CE are associated with early Khmer speakers (Snellgrove 2004). Extrapolating back in time from Angkorian iconography, we can surmise that the lower Mekhong would have seen Austroasiatic Khmers and Austronesian Chams in contact and protracted competition, perhaps trade-related. Artefacts indicate that the early Mekhong commercial site of Oc-eo must have linked the region with Chinese and Indic trade networks. The earliest Khmer inscriptions already show substantial Sanskrit influence and by the time of the Angkorian empire a diglossic register of Khmer is evident. (1) is a good example of this, a royal edict, all the more telling for being set up in a provincial area quite far from the capital.

(1) Phanom Van inscription (1082 CE) of Jayavarman VI
(Fine Arts Department 1986.4:30; lines 30-32; 37-38).
Transcription, close to Indic spelling values, may approximate pronunciation. Superscripts I and K show Indic and Khmer provenance respectively.

ve:la:  kamrateng  jagat  stec  dao  ratana-bhu:mi
time[>when]  king  moving  goROY  go  gem  -  land  [=toponym]
When the king makes a royal trip to Ratanabhumi [there must be supplied:]

rangko:  thluang  vyar  juak  muay  thvoe  bali...
milled-rice  measure  two  pig  one  perform  offering

nak  ta  truac  vra  ra:ja-ka:ryya  klo:ñ  mukha-tamruac
person  REL  inspect  glorious  king-action  official  head  -police
[On duty:] persons who inspect the royal service, officials, police chiefs...

Perhaps (1) exemplifies the beginnings of Khmer royal-register language. Note that three verbs of motion are used in a formulaic sequence used only of royal persons.

Somewhat later, as Tai speakers came to dominate the Chao Phraya and Central Mekhong systems, written records of the early period show that not only did Tai speakers modify Khmer script to become the basis of their writing, but they accepted Khmer diglossic sensibilities as well. This included the use of many Sanskrit (less frequently Pali) forms to contribute to the substance of high or royal registers (Diller 1993). Khmer loans also played a role in these Tai higher registers (e.g. Khmer stec as in (1)), but were not restricted to them (e.g. truac), a piece of evidence pointing to a protracted period of Khmer-Tai bilingualism (Khanittanan & Diller 2003). Noteworthy are several lexical items in (1) such as ve:la:, stec, ra:ja-ka:ryya, truac, tamruac whose cognates persevere in Modern Thai some thousand years later in similar syntactic positions in about the same contexts of use. A comparable situation characterizes Modern Lao.

The Red River basin provided the site for a Chinese-based diglossic development. Nearly a thousand years of Chinese colonial administration were followed by Vietnamese
regimes in which Chinese models and ideologies, with local adjustment and application, continued to provide the written norms (Wolters 1986). The Chinese impact on the Vietnamese language is thus pervasive, one result being the widespread diglossic pairing of expressions. Thus ‘to observe’ can be expressed either by the indigenous Vietnamese compound *ba-thàng* or by Sino-Vietnamese *quan-sát* (Nguyen Dinh-Hoa 1979:188). Tran Quoc Vuang (1986:276-77) refers to the development of a cultural dichotomy divorcing the Sinified court from the Austroasiatic subjects ruled. Even Vietnamese regimes positioning themselves as adversaries of Chinese political and military domination nevertheless maintained their power through employing localized Sinitic cultural symbols and procedures. Nôm, an earlier Vietnamese writing system, was a local adaptation of character writing. That Sino-Vietnamese alternates have recently been felt to be more ‘literate’ and socially elitist is clearly shown by a campaign against their use by the Vietnamese socialist leader Ho Chi Minh (1970, as reported by Nguyen Din-Hoa ibid). Seeking communication that the masses could most easily understand, Ho criticised overuse of Sino-Vietnamese vocabulary and neologisms when Vietnamese equivalents could be found. This background accounts for rather contested and ambivalent attitudes regarding diglossic variants among modern Vietnamese speakers, with sensibilities apt to be affected by political beliefs and attitudes.

6. Bilingualism or diglossia?

Both bilingualism and diglossia as elements of sociolinguistic terminology have been defined and used in various ways. Basic distinctions and interactions between the processes were developed in an early study of Fishman (1967), who broadened the initial Fergusonian formulation of classical diglossia; a useful update and elaboration is presented by Foley (1997, ch. 16). Fishman’s definitions allowed for four possibilities: speech communities might be only diglossic, only bilingual, or both or neither.

In the Southeast Asian context, Javanese or Balinese would present examples of rather complex diglossia essentially without bilingualism in Fishman’s sense, if we (rather unrealistically) factor out the use of Indonesian as a current component of the total communicative system of relevant speakers (Errington 1991). Beratha (1992) discusses the Balinese system, mainly as an opposition of high (alus, H) and low (kasar, L) variants based on selected vocabulary items, but with possibilities for a middle level (M) associated with honorific pronominal usage as in (2.1). (2.2) shows that high-level items are sometimes lexically distinct from low. In this case, high-level items meaning ‘road’, ‘woman’ and ‘sea’ are derived from Sanskrit. This reflects the contact history sketched above, with Indic traders, followed by other literary experts, attested in Bali by the mid-first-millennium (Beratha ibid). Sanskrit, locally modified, forms the high alternates. (2.3) shows a different relationship, derivation based on morphophonemic alternates. Some forms may represent diachronic shifts as well. Beratha clarifies how interacting social parameters involving caste, occupation, age, etc., affect level selection. She also traces how the system has developed and describes the exceptional upland areas which lowland-origin diglossia has failed to penetrate.

(2.1)

H  ttitiang  jagi  numbás  lemat  sarœng  arit
M  tiang  jagi  numbás  lemat  sarœng  arit
L  icang  lakar  meli  tiuk  tœken  arit

‘I’ll buy a knife and a sickle.’

(2.2)

H  margi  istri  sœgara  wentœn  ampun  niki
L  jalan  luh  pasih  ada  uba  ene

road  woman  sea  exist  already  this

(2.3)

H  karang  arœp  urang  ari  natar  lœsœr
L  ka’ang  a’œp  udang  adi  natah  lusuh

coral  front  shrimp  yr.bro.  yard  just

For the Philippines, bilingualism with minimal characteristics of diglossia has been reported to me by Cebuano-Tagalog bilinguals. Perhaps lack of diglossic sensibilities in this case can be accounted for by the status of Cebuano, which claims more native speakers than Tagalog and has a long history as regional super-variety in the southern Philippines. In addition, Tagalog-Pilipino as a national language is a relatively recent and lightly enforced arrangement.

Another type of diglossic variation involves bidialectal competence and is less directly accommodated in Fishman’s scheme. These cases refer to regional speech communities with an interaction of national standard language as high and regional or local varieties as low. Many examples can be found in Southeast Asia, such as the variation of Standard Malay with local or colloquial varieties (Benjamin 1993). For Kelantan Malay and Standard Malay, Mohd-Don (2003) reports that Kelantanese speakers refer to the standard language as kecek luar ‘outside language’ and find its denser and more prescriptive morphology difficult to maintain actively in intimate conversation. Part of the problem is the need to make explicit in the standard language information about voice and actor role relationships in reported actions through verbal morphology. Colloquial speakers habitually leave such distinctions unmarked to be construed from context. Construal of this sort is a means of maintaining solidarity among speakers. Yet for specific formal purposes or highly-scripted interchanges, many local speakers control the necessary morphology actively and in any case passively understand most of a formal speech or media broadcast in Standard Malay.

The situation in regional areas of Thailand is functionally similar, although formal mechanisms differ. Varieties such as Northern Kammueang, Northeastern Isan (in effect, local Lao) and Southern Thai constitute the preferred local means of informal high-solidarity speech and show much zero anaphora in conversation. For Southern Thai, an extra possibility is to use a structurally consistent mixed variety. In hybrid Southern Thai, tones and some speech-act particles follow the local dialect but many nouns, verbs and most segmentals are shared with Central Thai (Diller 1987). Central Thai or the derived
hybrid is favored in urban commercial, bureaucratic and formal Buddhist circumstances. (3) illustrates how Central Thai differs from Southern hybrid-higher (SoT/H) and more rural-based-lower (SoT/L) versions of the same message.

(3) Southern Thai diglossic variation

CT rew33 rew33 no’y11 na:5 ya:11 dœ:n33 cha:45
SoT/H rew31 ta3 ya:31 dœ:n343 cha:11
SoT/L khæ:p44 hit55 thi2 na:31 dœ:n343 chæ:31

‘Hurry up. Don’t walk so slowly.’

A further complication is that in Central Thailand colloquial versions of Central Thai reflect analogous functional differences. Colloquial Central Thai is marked by well-known structural variants, such as simplification of most clusters, merger of phonemes /r/ and /l/ and use of stylistically lower lexical alternates. Conversation utilizes zero anaphora in a way recalling the colloquial Malay preference for avoiding heavy coding of voice and actor role.

These factors taken together show the need for an expanded sociolinguistic taxonomy rich enough to account for a range of intermediate registers and mixed bidialectal varieties situated functionally between more definitive diglossia and bilingualism. Also, the historical uphill-downhill dynamic sketched above seems less directly relevant for these more complex interactions. On a wide scale these varieties seem more recent, partly the result of formal schooling, mass media, population mobility and other modern conditions. Still, the history of lowland diglossic variation in traditional times may well have contributed to cultural sensibilities responsible for the development of diglossic uses of bidialectal competence.

7. Summary outlook

(i) The Southeast Asian ecological context of mountains, rivers and seas, along with predictable trade winds and monsoons, over several millennia has led to rather specific modes of human interaction. Although it would be the case universally that ecology has influenced local production, commerce, political power and religious belief, nonetheless their configuration in Southeast Asia has taken on particular contours.

(ii) These modes of interaction have resulted in markedly high levels of multilingual and/or diglossic communicative competence.

(iii) Through trade and constraints on natural production, speakers in inland, upland or upstream communities have tended to become bidialectal, bilingual or multilingual in languages of ecological neighbours as well as in languages of dominant trading polities downstream or on the coast. In this way, ecological position has come to have a loose one-way correlation with economic or socio-political dominance. Other determinants such as invasion, migration and resettlement are part of the contact picture too.

(iv) Predictable trade winds have led to the development of maritime ports, including some now located considerable distances up navigable rivers. Local elites of these emporia have overseen Chinese, Japanese, Indic, Persian, Arabic (and later Western) trade. Trade has required networking both among overseas posts and cartels and with
Southeast Asian inland and upstream communities. Language contact with some bilingualism would be natural in external languages.

(v) In time, maritime and riverine emporia and their courts have been the context for the localization of overseas legal and religious ideas linked to literacy and textual practice (Wolters 1999, Reid 2004). Local political power has been enhanced through modification and assimilation of external beliefs, practices and texts. A result has been the arising of Southeast Asian diglossic variation in several forms. In the first instance, Chinese, Sanskrit and Pali have been pivotal, followed by Arabic. Court languages themselves have developed diglossic layering, with higher-level vocabulary substitutes often derived from the prestigious or ‘numinous’ outside languages. Through trader networks, religious activity and political expansion, aspects of lowland diglossic variation have proceeded upriver.

(vi) More complex sociolinguistic mosaics are known in the area too. In one type, in daily-life practice local dialects may come to function as diglossic low alternating with some approximation to the politically dominant high variety. Structured mixing may occur, such as through some incorporation of high forms into lower-level speech. Bidialectal modes of this sort suggest a diglossic communicative competence somewhat outside the usual diglossia-bilingualism distinction. Also, for these cases, the ecological questions raised earlier seem less relevant than they do for the more definitive diglossic and bilingual examples, although communicative sensibilities involved in traditional diglossia may be implicated.

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ALTERNATIVE EVENT CODINGS

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1. Common uses of SVCs
Serial verb constructions (SVCs) are common in languages of Southeast Asia and of New Guinea, but have been under-reported in the languages of insular Southeast Asia.

Serial verb constructions are widely used to license the appearance of non-argument nominals not subcategorised for by the main verb, a less common use is to rearrange the grammatical or pragmatic status of the existing ones. Foley and Van Valin (1984: 207) state that:

“serial verbs … mark NPs which are not normally core arguments of the main verb of the clause”

We can represent the content of this quote as shown in (1). A participant that would otherwise bear the grammatical function adjunct can appear in the core of the clause (as an object) through the use of a serial verb construction.

(1) \[ \text{[Clause [Core \_ \_ \_ ] (Adjunct) \_ \_ \_ ]} \]

The following sentences from Papuan Malay show the alternatives with an accompanier (a co-agent). In (2) the clause contains a single verb, \textit{pi} ‘go’, and the co-agent is coded as a preposition-phrase adjunct. By contrast in (3), which uses a serial verb construction, the co-agent \textit{sa=pu pace} appears as the object of \textit{iko} ‘accompany’.

Papuan Malay
(2) \textit{De=jalan pi pasar sama sa=pu pace.}  
\text{3sg=walk go market with 1sg=poss friend}  
\text{‘He went to the market with my friend.’}

(3) \textit{De=ikoV1 sa=pu pace jalanV2 pi pasar.}  
\text{3sg=accompany 1sg=poss friend walk go market}  
\text{‘He accompanied my friend to the market.’}

We note the following differences between (2) and (3):

• the list of core arguments increases by one;  
  (though it is questionable whether this is the same core, since there are now two verbs)
• the number of adjunct participants decreases by one;

In the above example the two verbs, \textit{jalan} and \textit{iko}, are not contiguous to each other in the clause with a serial verb construction (in (3)). In other languages, if the two verbs are
contiguous the resulting form is similar to (or perhaps indistinguishable from?) an applicative construction. This can be illustrated with data from Tukang Besi. In (4) we can see a sentence that codes an instrument by means of a adjunct in a PP. In (5), on the other hand, the verb *hugu* appears with an immediately following *ako*, and the instrument is an object in the clause. This would be consistent with the behaviour of an applicative construction, but in fact *ako* also appears as an independent verb in the language (and as a ‘preposition’). There is, thus, considerable leeway in the border, if any, between a serial verb construction and a clause with a single verb but affixed to show variation. It is likely in Tukang Besi that the form *ako* has been spreading its grammatical range over a period of time, and, while not without its independent verbal functions, can equally be treated as an applicative.

Tukang Besi

(4) *No-hugu*$_{V1}$ *te roukau* *kene poda.*
   3r-chop core vegetables instr knife
   ‘She chopped the vegetables with a knife.’

(5) *No-hugu*$_{V1}$=*ako*$_{APPL/V2}$ *te poda* *te roukau.*
   3r-chop=appl core knife core vegetables
   ‘She chopped the vegetables with a knife.’

2. Uncommon (?) uses of SVCs…

Extending the quote from Foley and Van Valin shown above, I propose the extra possibility for serial verb constructions shown in (6). This is diagrammed with an argument structure representation in (7).

(6) Serial verbs can mark an argument as serving a (grammatical, pragmatic) function which it is *not normally* accorded by the main verb of the clause.

(7) \[ [\text{Clause} [\text{Core } \ldots:GF1 \ldots:GF2]] \]

This is similar, but not identical, to the function played by external possession (also known as possessor raising or possessor ascension) in English and many other languages (Payne and Barshi 1999). This construction is shown in the contrast between (8) and (9), and between (11) and (12). In (8) the possessor is a modifier inside the NP headed by *shoulder*, while in (9) appears outside that NP and functions as the object of the clause. The first person singular participant has been assigned a grammatical function in (9) that is different to the one that it has in the more basic sentence in (8).

---

1 Evidence that (8) is more basic than (9) can be found in the fact that the construction seen in (8), with the possessor appearing NP-internally, is available for subjects, objects and arguments with other grammatical functions, while the external possession construction is found only with objects; and in the restriction on external possession that there be at least some sort of construed ‘possessive extension’ that is not found with internal possession, a division similar to the alienable/inalienable distinction found in many languages which formally mark it.
Alternative event codings

[85x796]

(8) He hit my sister’s shoulder.

(9) He hit my sister on the shoulder.

In Indonesian we also find an external possession construction that allows a possessor (necessarily inalienable) to be coded with a different grammatical function, subject. The possessor must be the possessor of a P, so the conditions on this construction mean that the external possession construction in Indonesian cannot appear with active voice forms.

Indonesian

(10) Mereka meng-angkat ovari saya.

‘They took out my ovaries.’

(11) Ovari saya di-angkat.

‘My ovaries were taken out.’

(12) Saya di-angkat ovari saya.

‘I had my ovaries taken out.’

Examples of serial verbs being used to mark this same sort of pragmatic rearrangement with a serial verb construction will be presented in the following sections.

3. Palu’e

Palu’e is an Austronesian language from Flores, in southern Indonesia. It shows a basic clausal word order of S NEG V O LOC. There are ‘normal’ SVCs in Palu’e, as can be seen in the alternation in (13) and (14).

OBLIQUE

(13) Aku no’o ia pana le nata.

‘I went to the village with her.’

VERB OBJECT

(14) Aku tdu_{V1} ia pana_{V2} le nata.

‘I went to the village with her.’

In addition to this, we also encounter less normal serial verb constructions: from sentences like (15) we find serialisations that do not fit the template in (1).
In (17) and (18) it is clear that there are no more new in the clause than in (15), but the pragmatic, and/or syntactic, status of the patient has changed.

We also find a degree of grammatical ‘freezing’ in the serialised construction. Unlike a simple verb, a serialised *coma*+verb cannot participate in the voice alternation that is formally marked by the PAV, rather than AVP, word order. This can be seen in the contrast between (19) and (20).

Additionally, in the external possessor construction we find that *coma* can only be used to introduce the affected body part, and not the possessor.
(23) * ia     balu     coma     rero-gu     lae     baju-n-e
     3sg    hit     affect     friend-1gen     loc     shoulder-3gen-emph

To summarise the Palu’e data, serialising with *coma* can perform one of two separate functions:

- change grammatical functions:
  OBJECT \( \emptyset \) SUBJECT (\& SUBJECT \( \emptyset \) \( \emptyset \))

- change pragmatic implicature
  (OBJECT \( \emptyset \) proto-patient OBJECT, +SALIENT)

4. Skou

Skou is a non-Austronesian (Skou family) language from eastern Indonesia, spoken near the Papua New Guinea border. The basic typology of the language includes an S O V OBL NEG LOC order in clauses, with agreement for subject on the verb.

There are ‘normal’ SVCs in the language, typical of the kinds of serial verb constructions found in New Guinea and across the world. In (24) and (25) we can see that instead of the instrument being marked with an explicit instrumental case marker, it is also possible for an instrument to appear in a sentence as the object of the verb *ké* ‘get’, serialised with the semantically main verb.

\[
\text{Skou OBLIQUE CASE}
\]

(24) \text{Ke rangwaue=pa ritó ke=le.}
\text{3sg.nf axe=instr tree 3sg.nf=chop}
\text{‘He chopped the tree down with an axe.’}

(25) \text{Ke rangwaue ke=ké₁ ritó ke=le₂.}
\text{3sg.nf axe 3sg.nf=4sg=4sg-get tree 3sg.nf=chop}
\text{‘He used an axe to chop the tree.’}

Destinations may be coded with manner-of-motion verbs either by means of an applicative, as in (26), or in a serial construction with the verb ‘go’, which allows destinations to be coded directly, as seen in (27) and (28). This is not possible for manner-of-motion verbs, shown by the ungrammatical (29).

(26) \text{Ke ke=k-a-na pā.}
\text{3sg.nf 3sg.nf=3sg.nf-walk-appl house}
\text{‘He walked to the house.’}

(27) \text{Ke=k-a ti pā.}
\text{3sg.nf=3sg.nf-walk 3sg.nf.go house}
\text{‘He walked to the house.’}

(28) \text{Ke ke=ti pā.}
\text{3sg.nf 3sg.nf=3sg.nf.go house}
\text{‘He went to the house.’}
In addition to these ‘adjunct promoting’ serial verb constructions we also find ‘abnormal’ constructions which do not add new arguments to the subcategorisation frame of the verb, but simply rearrange them. Compare (30) below with (31). The arguments involved are the same, but (31) has the necessarily implicature that the targeted person (ke ‘him’) was successfully hit, and not just aimed at.

(30)  
\[
Pe ke \quad pe=w-áng=ko \quad ke=wí.
\]
\[
3sg.f \quad 3sg.nf \quad 3sg.f=3sg.f-hit.f=obv \quad 3sg.nf=get
\]
‘She hit him.’

(31)  
\[
Pe ke \quad pe=w-áng=ko \quad ke=wí.
\]
\[
3sg.f \quad 3sg.nf \quad 3sg.f=3sg.f-hit=obv \quad 3sg.nf=get
\]
‘She hit him (effectively).’

This is possible with other predicates as well, including complex predicates such as *lang lú* leg release, meaning ‘kick’.

(32)  
\[
Pe ke \quad lang \quad pe=r-ú=ko \quad ke=wí.
\]
\[
3sg.f \quad 3sg.nf \quad leg \quad 3sg.f=3sg.f-release=obv \quad 3sg.nf=get
\]
‘She kicked me effectively.’

A feature of serial verb constructions expressing results in Skou is that negation cannot apply to a part of the construction, but not the whole. This is shown in (33) - (36).

(33)  
\[
Naké \quad ni=ka=ko \quad ke=wang.
\]
\[
dog \quad 1sg=hitl=obv \quad 3sg.nf=die
\]
‘I killed a dog.’

(34)  
\[
* naké \quad ni=ka \quad ka=ko \quad ke=wang.
\]
\[
dog \quad 1sg=hitl \quad neg=obv \quad 3sg.nf=die
\]
‘I didn’t hit a dog but it died.’

(35)  
\[
Naké \quad ni=ka=ko \quad ke=wang \quad ka.
\]
\[
dog \quad 1sg=hitl=obv \quad 3sg.nf=die \quad neg
\]
‘I didn’t kill a dog.’

(36)  
\[
Naké \quad ni \quad ka \quad ko \quad ke \quad ing \quad a \quad ke \quad wang \quad ka
\]
\[
3sg.nf \quad the
\]
‘I hit a dog but it didn’t die.’

Verbs of throwing present a similar construction, in that they allow for a serialisation that involves the rearrangement of grammatical functions to semantic roles. In (37) we can see that the complex predicate *lu hi* takes a theme as a primary object, and a
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goal as an oblique object. In (38) the verb ká is used serialised with lú so that the goal can also be coded as a primary object.

\[
\text{OBJECT}_1 \quad \text{OBJECT}_2
\]

(37) \textit{Wúng nì=lú hi naké.}  
stone 1sg=release throw.at dog  
‘I threw a stone at the dog.’

(38) \textit{Wúng nì=lú=ko naké nì=kà.}  
stone 1sg=release=obv dog 1sg=hit  
‘I threw a stone at the dog (and hit it).’

5. Other attestations of SVC voice

This kind of pragmatic role rearranging is not an isolated instance of an aberrant serial verb construction in a few languages. The example in (39) comes from eastern Malay varieties on New Guinea; (40) is acceptable in both eastern and western varieties of ‘Bazaar Malay’, illustrating the ‘affect/be affected’ sense of \textit{kena} as a main verb. In (41) we can see the use of \textit{kena} serialised with another verb, here \textit{tipu}, to form an agentless passive.

Bazaar Malay varieties

(39) \textit{Duri kena saya.}  
thorn get 1sg  
‘The thorn pricked me.’

(40) \textit{Saya kena duri.}  
1sg get thorn  
‘The thorn pricked me.’

(41) \textit{Saya kena tipu.}  
1sg get trick(v.)  
‘I’ve been tricked.’

In Ambonese Malay we similarly find the eastern Malay sense of ‘affect’ found with \textit{dapa}, which can also be used as a serialised verb in a passive construction. Unlike the \textit{kena} passive, the \textit{dapa} passive of Ambonese Malay does allow for a \textit{by}-phrase.

Ambonese Malay

(42) \textit{Hujang dapa beta.}  
rain get 1sg  
‘The rain got me.’

(43) \textit{Beta dapa pukol (dari dong).}  
1sg get hit from 3pl  
‘I got hit (by them).’

Many mainland Asian languages unrelated to the Austronesian and Skou languages described here form passives with what might be thought of as serial verb constructions. The degree to which these serial verbs have grammaticalised as separate construction
markers varies from language to language, however, and it is rare to find the passive ‘verb’ still functioning as a main verb.

In Thai the morpheme \textit{thuuk} ‘touch’ indicates a passive, as in (44).

\begin{align*}
\text{Thai} \\
\text{(44)} & \quad \text{Chan} \quad \text{thuuk} \quad \text{mææ} \quad \text{tii}.
\end{align*}

\begin{align*}
1\text{sg} & \quad \text{touch/suffer} & \text{mother} & \text{hit} \\
& \quad \text{‘I got hit by mother.’}
\end{align*}

While \textit{thuuk} has been termed an ‘auxiliary verb’ by some authors, the evidence for this level of grammaticalisation is slight, at best. \cite{Sudmuk} is just one recent work that treats \textit{thuuk} as being a main verb, and not an auxiliary (the analysis as involving tough-movement is not incompatible with the view that it represents a serial verb construction).

The status of putatively serialised passive constructions in Chinese languages varies from language to language. Only two will be examined here, Mandarin and Hokkien.

In Mandarin the passive is marked with the synchronically otherwise functionless morpheme \textit{bei} as a VP-initial element. This morpheme has no independent function in modern Mandarin transitive clauses, but may appear in an agentless clause, as in (47). It is clear that the Mandarin \textit{bei} has, despite its attested earlier origins as a verb meaning ‘suffer’, grammaticalised to become purely a passive marker in the modern language, since it cannot function as a main verb, as shown in (48).

\begin{align*}
\text{(45)} & \quad \text{Ta} \quad \text{da-le} \quad \text{gou.} \\
3\text{sg} & \quad \text{hit-asp} & \text{dog} \\
& \quad \text{‘He hit the dog.’}
\end{align*}

\begin{align*}
\text{(46)} & \quad \text{Gou} \quad \text{bei} \quad \text{ta} \quad \text{da-le.} \\
\text{dog} & \quad \text{BEI} & \text{3sg} & \text{hit-asp} \\
& \quad \text{‘The dog was hit by him.’}
\end{align*}

\begin{align*}
\text{(47)} & \quad \text{Gou} \quad \text{bei} \quad \text{da-le.} \\
\text{dog} & \quad \text{BEI} & \text{hit-asp} \\
& \quad \text{‘The dog was hit.’}
\end{align*}

\begin{align*}
\text{(48)} & \quad * \quad \text{Ta} \quad \text{bei} \quad \text{gou.} \\
3\text{SG} & \quad \text{BEI} & \text{dog}
\end{align*}

In Hokkien the passive is marked by the morpheme \textit{ho} preceding the VP-internal agent. Unlike Mandarin, this morpheme may not appear with an agentless clause, seen in the ungrammaticality of (51). (The facts described here for Hokkien also apply to Cantonese with the \textit{béi} passive, formed from \textit{béi} ‘give’.)

\cite{DeLancey} writes: ‘I think most linguists who have looked at the question consider \textit{thuuk} to be an auxiliary, or even a preposition, but not everyone agrees, and some would argue that people who look at it this way are trying to pretend that Thai is more like English than it really is.’
(49)  I  phah  kau.
    3sg  hit   dog
    ‘He hit the dog.’

(50)  Kau  ho  i  phah.
    dog   HO  3sg   hit
    ‘The dog was hit by him.’

(51)  * kau  ho  phah

Also significantly different to Mandarin, ho does have independent transitive functions as a verb in Hokkien, meaning ‘give’, (52), and can serialise with another verb to mark a beneficiary. There is, however, no plausible meaning connection between the sense of the recipient or beneficiary in the main clause, shown in (52) and (53), with the adverse marking in the passive clauses in (50), and the causative sense in (54). This suggests that the use of ho with other verbs has grammaticised away from a simple serial verb construction, just as has bei in Mandarin.

(52)  I  ho  kau.
    3sg  HO  dog
    ‘He gave the dog (something / to someone).’

(53)  I  zi  png  ho  mama.
    3sg  cook  rice   HO  mother
    ‘He cooked the rice for mother.’

(54)  I  ho  kau  cia’  png.
    3sg  HO  dog  eat  rice
    ‘He made the dog eat rice.’

6. Conclusions
Clearly the presence of serial verb constructions that rearrange the pragmatic or grammatical functions of the participants of a clause, while at the same time representing the same event, is not confined to insular Southeast Asia. What is perhaps unusual for the languages described here in detail, Skou and Palu’e, is that the verbs used in the passive are also completely compatible with being the sole verb in a simplex predicate, with a meaning that is entirely compatible with their function in the serialised voice construction. This cannot so easily be said for the mainland Asian languages discussed here, Thai, Mandarin and Hokkien, where we find degrees of grammaticalisation with all the erstwhile ‘verbs’ used with passive predicates, and in many cases find that the marker of the passive has no function outside the passive construction.

References
Mark Donohue


1. Introduction

“...languages are a tool of humanity. They are a way to express opinions and are things of beauty, for example in the form of literature. It is necessary to carefully preserve languages...”

His Royal Highness King Bhumibhol, quoted in the preface of *The Isan - Central Thai Dictionary* (Khon Kaen University and Sahawittayalai Isan 1989).

Thailand consists of four geo-linguistic regions: Central, Northern, Northeast, and South. The Northeast, also known as Isan, is arguably the least integrated into Thailand, after the deep South. In addition, it was among the last areas to be integrated. While Thai policies have brought great benefits to Isan in education, transportation, affordable electricity, and democratic institutions, there has been a downside. The introduction of Thai as an administrative and educational language, especially after the Second World War, has been almost wholly successful at eliminating written Isan from the Northeast (Rogers 1996).

This loss may be the most significant result of Central Thai efforts for Isan acculturation. Although Isan language can still be seen on the walls of old Isan temples (e.g. see Yenchuay 2002, for photographic evidence) in the form of Thai Noi, a Sukhothai-period Mon-Khmer-derived orthography, and a few Isan people can read it, very few now teach it. This has fundamental consequences for the region, as Isan has not yet been replaced by Thai as the mother tongue. 88% of Isan speakers use an Isan dialect in the home; 11% speak both Isan and Thai, and 1% use exclusively Central Thai (Ethnologue’s Northeastern Thai entry n.d.). Isan cannot accurately be written by its native speakers, for though both Isan and Thai are part of the Tai linguistic family, there are differences. At least one Isan dipthong (a final /ɨa/) and one Isan consonant sound /ɲ/ cannot be written in Thai (referring to Hoshino & Marcus’ 1989 phonetic system). While Isan writing systems using the Thai alphabet as a basis have been suggested (e.g. see Mollerup 2001), no systematic approach exists. Literacy in Thai Noi is restricted to a few individuals in the older generation and to a few monks and academics, including some teachers at Mahasarakham University, and a handful of monks at Ubol Ratchatani’s Wat Pa Yai. The lack of an Isan written language means Isan people must express their political and economic desires and communicate with each other through a written language that is not their first language.

This paper attempts to work through some of the planning circumstances regarding the revitalization of Isan language and culture, and details a Pilot Study currently underway. It includes a discussion of the principle of choice, a presentation of the language situation in Isan, an evaluation of the prerequisites for language maintenance in the Isan context, a discussion of the planning context for language maintenance and revitalization,
and an outline of the Isan Language Maintenance and Revitalization Project (ILMRP), including progress to date.

2. The principle of choice
This paper takes the standpoint that Isan as a language, and possibly as a culture, will, after a long process of language shift rather than a sudden reduction in a number of speakers, die in the next 100-200 years. Tossa (1999) is less optimistic, and argues that the next generation is crucial, with mutual incomprehensibility already manifesting itself in the case of urban and rural Isan, and significant culture death already occurring. Without a written language, the likelihood is that Isan will never attain “safe” status as an official regional language of Thailand, and consequently will be one of the 6,000 “local vernacular languages” that will die out (Kraus 1992; cited in Ash, Little Doe Fermino, & Hale 2001).

This paper also takes the point of view that if Isan people so wish, nothing should be done to prevent this death, and that in this case Isan as a language and a culture should be recorded, catalogued and preserved in libraries and museums for mainly academic purposes. A discussion of the choices available is now presented, followed by a discussion of potential disadvantages and advantages of language maintenance and revitalization.

2.1. The choice
Significant support for the right to choose the mother tongue with respect to education, literacy and culture is evident in the UNESCO “Universal Declaration of Cultural Diversity” (2001), which was endorsed by Thailand, and in UNESCO’s Guidelines on Language and Education. Though language death may be the chosen route for Isan language and culture, Isan people should be able to consciously choose whether or not to maintain and revitalize their own language and culture within the one country, one national language framework. In a bilingual planning approach, Isan people could learn Isan as a language at school, and possibly undertake bilingual Isan / Thai basic education at elementary and primary levels. Isan people should also be able to choose not to study Isan, so Isan courses must be elective. As previously noted, Isan courses must include writing in Isan to stand a chance of success in long-term maintenance.

This choice should be made soon. Those who can remember written Isan are few in number and passing away every day. Critically, the loss of this community memory will make a real choice almost impossible within another generation. Currently, written Isan stands at Stage 8 of Fishman’s (1991) GIDS scale, and spoken Isan at 6 or 7. If written Isan died completely, the effort needed to reestablish it as a viable option would be immense.

While attitude surveys and forms of local referendum have their place in project development and language planning, the choice would effectively be made by the success or otherwise of elective Isan courses in schools. If parents do not encourage children to study the language, or children are not motivated to study it, the elective courses will fail, and written Isan will not be popularized. The choice will have been made: Isan as a language will slide further down the scale and will eventually shift so far to Central Thai that it effectively dies.

A number of potential disadvantages can be identified:
Isan maintenance and revitalization

1) Isan students will inadequately acquire Central Thai. Parents may feel that their children cannot learn two languages at the same time, or that their children may be ridiculed for knowing Isan.

2) Isan may be open to accusations of “regionalism”. Isan is, after the deep South, arguably the region least integrated into Thailand. In addition, it was integrated comparatively recently, being annexed from Lao in 1907, although anti-government insurgency flared in remote regions of Isan until the 1980’s (Rogers 1996). The historian and writer Artha Nantachukra of Mahasarakam University directly linked central government policies with the abolition of Isan as an administrative language. Such moves were aimed at “weakening the cultures of people...to make control from Bangkok possible” and Nantachukra connects this linguistic manipulation to underlying resentment still felt in Isan (quoted in Tha Hla 1995; cited in Rogers 1996). Moves to maintain or revitalize Isan speech as a language may consequently be seen as destabilizing, or even secessionist; at the least; it could polarize the situation.

3) Resources may be wasted if the project fails. A long-term language planning initiative will cost millions of baht, if not tens of millions. Even though some of this money could come from private foundations and trusts, a failure would imply depriving other, worthy projects of funding. Also, teachers’ time would be wasted in a school context of massive understaffing.

Collateral benefits may also exist:

1) Education and cognitive abilities. Isan is the poorest region in Thailand, and its education system is poorly developed (Rogers, 1996). Use of the vernacular has proven results in increasing the efficacy of education systems. UNESCO states that “Studies have shown that, in many cases, instruction in the mother tongue is beneficial to language competencies in the first language, achievement in other subject areas, and second language learning.” (UNESCO 2003:15). Hinton (2001), refers to Bialystock’s (1991) and Diaz and Klinger’s (1991) findings that bilinguals possess enhanced cognitive abilities in the form of metalinguistic skills, concept formation, classification, creativity, analogical reasoning, and visual-spatial skills. Litteral (1999) provides evidence that education in the vernacular language academically benefits minorities; in one case study in Papua New Guinea, students educated in the vernacular outperformed students educated in the first language by three hundred percent in high school selection tests (Litteral 1986; cited in Litteral 1999). Siegel (1999), reporting on previous research by the same author (1992, 1997), describes higher academic results, when compared with English-only education, for prep-school children instructed in the vernacular with English as a L2. These benefits extended to subsequent education, suggesting that Isan students taught initially in Isan would perform better in later Thai-medium education at the high school and university level. Economic benefits would possibly result.

2) Psychological and sociocultural benefits. In addition to academic benefits, the psychological and sociocultural benefits of such a reform are significant. Siegel (1999, 2002) notes education in a language other than the first language causes disadvantages,
including negative attitudes from teachers, negative self-image of students, inhibition of self-expression, and difficulty in acquiring literacy.

2.2 Attitude
In Isan, negative attitudes from teachers towards students is not a major concern, as the majority of teachers and students are Isan. However, classroom communication breakdown between Isan teachers and students can occur as they are required to communicate in a second language. Anecdotal evidence suggests teachers and students become co-conspirators in the occasional use of Isan to solve communication breakdowns resulting from the use of Thai. Despite occasional exceptions, only when an Isan student goes to Bangkok is explicit prejudice from teachers encountered, in the form of jokes referring to socioeconomic, cultural, or linguistic status. Furthermore, indications of subconscious bias against the use of non-standard aspects of language use are evident in the American context (e.g. see McGroarty 1996), and it is possible that a similar subconscious bias is encountered by Isan students in Bangkok universities. In addition to rejection by teachers, there is also a risk that Isan students reject the education system in which they are studying. Mangubhai (1997) notes that minority student attitudes toward the dominant or majority educational system take the form of either a desire to integrate while preserving the L1 culture, or a rejection of the L2 educational system. The present author has also noticed a third phenomenon: integration into the L2 system while rejecting the L1 culture.

2.3 Self-image
Identity and language are interwoven (e.g. see Hornberger 2002). While the trend is towards a more positive portrayal of Isan people, decades of linguistic indoctrination in the media and negative media have persuaded Isan students their own language is an embarrassment; by implication, they may see themselves as substandard citizens. Consequently, parents might attempt to deprive their offspring of the vernacular for fear of ghettoisation, or native speakers, particularly those with education outside the vernacular area, may reject their vernacular out of disdain (the phenomenon of auto-odi, e.g. see Bartens 2001). Isan as a language can also be stigmatized for its resemblance to Lao, the language of The People’s Democratic Republic of Laos, a country generally viewed by Thais as inferior to their own.

In the experience of this author, Thai television soap operas rarely portray Isan business people or academics; more frequently they are labourers or peasants, less generously country bumpkins or petty criminals. In addition, the Central Thai spoken by Isan people can be ridiculed when the phonetic and lexical influences of Lao show through. The psychological effects of speaking a language outlawed in the classroom, and being forced to use a second language for all educational and official purposes, effectively delegitimize a people. That rifts occur in the psychological and sociocultural fabric is not surprising. One frequently expressed sentiment in Isan stories is parents’ fear of rejection and abandonment by one’s “Thaiified” offspring (e.g. see the writings of Nobel Prize nominee Pira Sudham, for instance Monsoon Country, 1993). Legitimization of language, and the higher academic prowess that would result from vernacular use, would increase pride and self-worth (e.g. see Burtoff 1985; cited in Siegel 1999).

2.4 Self-expression
Drawing on concepts of sociopolitical and educational rights, UNESCO began recommending use of the vernacular for basic education in 1953 (cited in Litteral 1999). It
seems reasonable to expect that acceptance of one’s own language as a writing form will encourage self-expression through endowing the ability to write poetry, stories, songs, diaries, essays and academic articles. Heath and McLaughlin (1993; cited in McGroarty 1996) note that public speaking and dramatic performance in the vernacular can develop transferable personal and public skills. The resulting psychological and educational benefits have even been accepted by some opponents of vernacular education (e.g. Bull 1955; cited in Litteral 1999). The opponents have instead argued against it on grounds of practicality, or because it may inhibit acquisition of the language of education and power through interference and confusion, and thus deprive non-standard language students of opportunities.

2.5. Literacy
The difficulties in acquiring literacy in the Isan language are quite apparent. The lack of a living alphabet is one problem, resulting in a current Isan literacy rate of almost zero. Nevertheless, there are very good reasons for supposing that the legitimization of Isan will increase literacy levels. Siegel (1999, 2002) notes UNESCO’s (1968) support for vernacular as a language of literacy and academic development, drawing on research demonstrating a link between literacy and cognitive development (such as the ability to reason critically) and first language instruction. As regards literacy in Thai, while the overall country rate is around 89% (according to the Ethnologue Thailand entry n.d.), it is generally recognized that literacy rates outside urbanized areas in Isan are unsatisfactory. A disadvantaged educational system is a potential cause of unsatisfactory levels. According to the Thai Ministry of Education (“New aspirations for education in Thailand: Towards educational excellence by the year 2007,” n.d.), poverty, geographical distance, a low number of school years (9), and a lack of teachers are some of the factors limiting the education system, especially in rural areas. Rogers (1996) estimates Isan poverty levels between 1975 and 1989 averaged 42%, compared to 5% in Bangkok. Legitimising the vernacular through the introduction of a suitable orthography appears to be a valid method of increasing literacy rates. Notably, Siegel (1992, 1997) and Boggs (1985; cited in Bartens 2001) found that the benefits of L1 primary education also extended to literacy in the L2. The implication is that Isan children who were taught initial literacy in Isan, and who then studied Thai, would outperform Isan children taught only in Thai.

2.6. Economic / cultural benefits
Cost-benefit theory has been applied to language planning since at least the 1970’s (e.g., Fishman 1973, Jernudd 1975, Thorburn 1975). It was formerly an extremely contentious and problematic area of language planning. However, Baker (2002:240), citing Dutcher’s 1995 World Bank paper, notes that the development of the mother tongue appears to be critical for cognitive development and learning a second language, and states that “developmental maintenance bilingual education creates cost savings for the education system and for society”. This occurs through lower drop-out rates, faster academic achievement, and the acquirement of “productive characteristics” facilitated by studying in the native language.

Dutcher’s World Bank report is quite unambiguous, and Baker (2002) cites Dutcher’s examination of Guatemala as a case study. Due to lower drop-out and repetition rates, faster achievement, and improved results (including in the L2 national language, Spanish), US$5.6 million (227 million Baht) were achieved in cost savings per year, and
US$33.8 million (1.4 billion baht) per year in cost benefits. This is impressive for a country one third smaller than Isan with a similar socioeconomic background. By analogy, it can therefore be hypothesized that a better-educated Isan people will be more economically successful; the correlation between high levels of education and economic prosperity is generally accepted and is very evident in the 2003 UNDP Thailand Country Report.

In addition, cultural benefits, such as an Isan renaissance based on the production of Isan-language materials, may directly benefit the Isan regional economy through improved tourism. One could envisage a situation very similar to Chiang Mai’s celebration of Lanna culture and civilization, recently evidenced in the 2004 new year celebration of Lanna civilization. Isan, containing Thailand’s major Khmer historical sites as well as Lan Xang monuments such as That Panom, could be ideally placed to enjoy the economic benefits of such a renaissance, and multilingual plurality as part of a multicultural approach would likely strengthen Thai political and economic linkages with Lao and Cambodia.

3. The Isan language situation
Wardhaugh (2002) notes that Bell’s (1976) criteria approach to language assessment may be used to distinguish separate languages and make a value judgement as to the extent of a language’s development viz. a viz. dialect based on a certain level of objectivity. Bell introduced seven criteria: standardization, vitality, historicity, autonomy, reduction, mixture, and de facto norms. An analysis of the Isan context based on these criteria will be available in a forthcoming issue of Second Language Learning and Technology, an online publication by the University of Southern Queensland.

4. Isan and language planning
The UNDP 2003 HDR envisages that the 1999 passing of the National Education Act will work hand in hand with the extension of support “to community education projects which aspire to bridge the gap between local wisdom and learning, and the national education system” (UNDP 2003:74). It is possible to use language planning initiatives to bridge such a gap for Isan using Haugen’s (1983:275) revised language planning model, as reproduced in Kaplan and Baldauf (1997:29), which covers status planning and corpus planning. Status planning consists of language selection and language implementation, and corpus planning consists of codification and elaboration.

In addition, Haarmann (1990; cited in Kaplan & Baldauf 1997:50) adds the dimension of prestige planning and differentiates between language cultivation and language planning, the former being associated with individual and pressure group promotion, and the latter with institutional and official promotion. Official promotion is seen as the most effective. Due to space constraints in the current publication, these issues cannot be discussed here, but will be available in a forthcoming issue of Second Language Learning and Technology, an online publication by the University of Southern Queensland.
5. The Isan Language Maintenance and Revitalization Project

5.1 Introduction
The project exists at the pilot study stage. The Pilot Study is hosted by the Faculty of Humanities and Social Sciences, Khon Kaen University, as an interdisciplinary project involving the Department of Foreign Languages, the Sociology and Anthropology Department, and the Thai Department. The stated objectives that follow are subject to change as the project evolves.

5.2. Objectives
The long-term objectives of the ILMRP are to:

- empower Isan people to the extent where they are able to make an informed decision about preserving their own language and culture, and if a positive attitude exists, introduce an Isan orthography in a bilingual language planning approach in order to preserve culture, enrich educational achievement, and improve economic prosperity in Isan.

The short-term objectives of the Pilot Study are to:

Stage 1:
- generate a knowledge base of linguistic and sociolinguistic issues pertaining to Isan within Khon Kaen University’s Faculty of Humanities and Social Sciences, including a linguistic description of Isan and an analysis of former Isan orthographies

Stage 2:
- create and test a living Isan orthography
- obtain data about Isan people’s attitudes to the reintroduction of an Isan orthography
- depending on the results of the Pilot Study, develop the long-term theoretical framework for the Project.

5.3. Methodology
The methodology for Stage 1 of the Pilot Study consists of an extended literature review, focusing on both sociolinguistic issues and linguistic description. The methodology will involve:

1. Cataloguing existing material according to basic bibliographic information and key words
2. Identifying potential sources of information by using existing references to provide further references and by communications with or visits to relevant experts at Thai universities such as Khon Kaen, Chulalongkorn, Thammasat, Mahidol, Mahasarakham, etc. and foreign organizations such as SIL or Northern Illinois University’s Center for Southeast Asian Studies
3. Acquiring further sources through purchase, photocopying, etc. and their translation (into English) if required, followed by cataloguing and analysis
4. Linguistic descriptions of the spoken and written (archaic) forms of Isan need to be acquired and if necessary, refined. The descriptive approach adopted will likely be
tagmemics, which is linguistic analysis according to a hierarchy of ranks, and which is used by the Summer Institute of Linguistics to train field researchers (Thomas 1993). The general ontology of tagmemics divides a language into grammatical, phonological, and referential components. It is almost certain that linguistic descriptions for Isan already exist. It is proposed they be surveyed from the point of view of creating an orthography.

For Stage 2, data accumulated from the literature will be field-tested using criterion-selected informants. Standard field methodology such as observation, interviews, and questionnaires will be used. One of the outputs of Stage 1 is a project report with a description of a detailed methodology for Stage 2.

5.4. Scope of study
The scope of the Pilot Study (Stage 1) is limited to examining policy planning issues (selection, codification) and generating related end products (problem identification, allocation of norms through linguistic description).

There will be no attempt to test any orthography (through attitude surveys or qualitative field-testing) or cultivate any standardised orthography through educational spread, or elaborate a standardised literate form of Isan. These are reserved for later stages of the project.

5.5. Progress to date
Through necessity, Stage 1 of the project is very flexible, and very much seeks to establish dialogue with experts in various fields, encourage academic discussion of the topic, and acquire, catalogue, and analyze materials. The following are some developments that have taken place:

1. A nascent outline methodology for Stage 2 is being developed. While a sociolinguistic survey of a Khon Kaen community designed to examine attitude is feasible, a detailed descriptive linguistic survey may not be possible due to lack of specialist expertise.
2. Site visits have taken place to Mahidol University’s Institute of Language and Culture for Rural Development, and to Mahasarakham University, Wat Pa Yai in Ubol Ratchatani, and to Pra Khu Suthep, the main teacher at the Buddhist Mahachulalongkorn University, Wat That, Khon Kaen.
3. Mahasarakham University has agreed in principle to cooperate in the production of a proof-of-concept multilingual reader in Thai, English, and Isan, using Thai Noi.
4. The acquisition and cataloguing of about 150 papers, articles, and works relevant to sociolinguistics generally and Isan specifically has taken place.
5. Contacts have been established with a number of experts in relevant fields.
6. Some support will be provided for the development of a Thai Noi website, with a lexical database, digitized samples of Thai Noi, and relevant academic papers in order to forward a UNICODE proposal for Thai Noi. Support has already been offered by Dr. John Hartmann of Northern Illinois University, which has already digitized a Thai Noi manuscript, and Doug Cooper at the Bangkok-based Centre for Computational Linguistics. This website would attempt to initiate a Web point-of-presence for Isan Thai Noi, similar to the Web presence enjoyed by Lanna’s Kham Muang (e.g., see Northern Illinois University’s list of Lanna on-line resources).
7. Parinya Phinthong, the copyright owner of the Phinthing Dictionary (1989), has agreed in principle to cooperate in an electronic version of the dictionary, which may be hosted on the proposed Thai Noi website. Planning and funding for this project have not yet been organized, but a proposal to the Toyota Foundation, which part-funded the production of the hard-copy dictionary, is envisaged.

8. Pha Khu Suthep of Wat That has in principle agreed to the digitization and transcription of Wat That’s Thai Noi bai lan, in what will be a pilot study for the eventual digitization of the entire Thai Noi bai lan corpus, hopefully involving Khon Kaen University, Mahasarakham University, Wat Pa Yai, Ubol Ratchathani University, relevant Khorat institutions, relevant overseas institutions and the National Library of Thailand. In addition to serving as a major cataloguing and preservation initiative, this project will be of value in developing corpus analysis capabilities to complement the proposed online dictionary.

9. Increased exposure to Thai Noi will be provided in Khon Kaen University’s own Isan language and literature BA courses. Experiments will be conducted in expanding the range of domains in which Thai Noi is used, as well as the lexicon. For example, modern letters could be written using contemporary Isan, including using foreign loan words such as “computer” and “Toyota”. In addition, “New Thai Noi”, which is already being developed independently at Wat That, will be promoted. “New Thai Noi” includes a 5-tone diacritic system to simplify the writing system for students wishing to read and write Thai Noi.

10. Support will be provided for Thai Noi curriculum development at Mahachulalongkorn University (Wat That) in Khon Kaen. This may also benefit Wat Pa Yai, if interest in such a program can be encouraged.

6. Conclusion
The planning context for language maintenance and revitalization as regards Isan language is complex and challenging. Mistakes will inevitably be made in the attempt to address sociolinguistic issues in Isan, and it is not certain that Isan will survive as a language and culture in a globalizing world and in competition with a strong official national language. Nevertheless, it is to be hoped that Isan people will in time be able to exercise an informed choice about the future of their own language, hopefully before it is too late to effectively implement that choice without great expenditure of effort.

References


The Problem

It is a commonplace among linguists working on serial verb constructions (SVCs), including myself (Foley and Olson 1985) to describe them as expressing a ‘single event’ (Aikhenvald 2006; Bowden 2001; Bruce 1988; Durie 1997; Lord 1974). While this characterization may be true of SVCs in some languages, the point of this paper will be to argue that it cannot hold as a general claim for SVCs: in some languages, constructions that would be identified, both on general, language independent considerations and on language internal grounds, as SVCs, cannot reasonably be claimed to express ‘single events’ on any adequate articulation of such a notion, notwithstanding the fact that other similar constructions in the language might. As a preliminary introduction to this point and the problem this paper will address, consider the following two examples of SVCs in Yimas:

(1) (a) mŋkawŋ p mp-yara mpi-wul-ntut
    post X SG X SG O-3 PL A-get-SEQ-put.in-REM PAST
    ‘they erected the posts’

(b) nawkwantrm tma mpi-wul mpi-ŋa ntuk mpun
    chicken III DL III DL O-3 PL A-boil-SEQ-give-REM PAST-3 PL D
    ‘they boiled two chickens and gave them both to them’

(the verb wul- is used in both examples; its meaning is ‘put something down into a container’. Its core meaning shows up in (1a), with the hole that has been dug for the post as the container. (1b) exhibits one of its most common narrowed senses as ‘boil’, i.e. ‘put meat/vegetables into a container of boiling water’). Note that the basic structure of both SVCs is identical, two verb roots in a sequential temporal relationship, signaled by –mpi SEQ: the action denoted by the second verb root follows in time that expressed by the first, with the affixation for tense-aspect-mood and agreement for the core arguments flanking the roots in the SVC. Both SVCs can be within the scope of a single Illocutionary Force operator, as in these Imperative examples:

(2) (a) mŋkawŋ naŋ-yara mpi-ŋa-uŋ
    post X SG IMP PL-get-SEQ-put.in-IMP-X SG O
    ‘erect the post!’
(b) nawkwantrm naŋ-wul-mpi-ŋa-na-mpan-trm  
chicken III DL IMP PL-boil-SEQ-give-IMP-3 PL D- III DL O  
‘boil two chickens and give them both to them!’

And a single NEGative operator:

(3) (a) mŋkawŋ ta-mpu-yara-mpi-wul-ntuk-uŋ  
post X SG NEG-3 PL A-get-SEQ-put.in-REM PAST-X SG O  
‘they didn’t erect the post’

(b) nawkwantrm ta-mpu-wul-mpi-ŋa-ntuk-mpan-trm  
chicken III DL NEG-3 PL A-boil-SEQ-Q-give-REM PAST-3 PL D-III DL O  
‘they didn’t boil two chickens and give them both to them’ (NEGative scope over both verb roots)

All of these properties are canonical tests of SVCs crosslinguistically, and on these grounds both examples in (1) should be identified as such. However, there is a crucial difference between them. Yimas has a regular process of deriving Non-Finite nominalizations, which function as the complements of complement taking verbs, much like English infinitives or –ing complements (Huddleston 1984). Verbs in Non-Finite nominalizations, of course, lack tense inflection and instead take the Non-Finite marker -ru ~ -tu ~ -cu, and because they are formally nouns, also a noun class marker, most commonly -mpwi ‘talk, speech, thought’ or -nti ‘action’:

(4) (a) tpwi am-tu-mpwi ta-pu-n-(n)yaŋkuŋ-takal-war-mpwi  
sago X PL eat-NFN-talk NEG-2/3- 2 SG A-DEF-thought-feel-HAB-talk O  
‘you never think about eating sago’

(b) tpwi am-t(u)-nti yua-nti antiak  
sago X PL eat-NFN-action good-action COP.action  
‘(your) eating sago is good’

Non-Finite nominalization is available for SVCs, but to a restricted sub-set:

(5) (a) mŋkawŋ yara-mpi-wul-cu-mpwi pia-ka-i-c-mpun  
post X SG get-SEQ-put.in-NFN-talk talk O-1 SG A-tell-PERF-3 PL D  
‘I told them to erect the post’

(b) ?*nawkwantrm mpu-nampan wul-mpi-ŋa-ru-mpwi  
chicken III DL 3 PL-for boil-SEQ-give-NFN-talk  
pia-ka-i-c-mpun talk O-1 SG A-tell-PERF-3 PL D  
‘I told them to boil two chickens and give them both to them’
While (5a) is perfectly natural, (5b) is downright awkward, if not outright ungrammatical; the natural way to express the meaning intended in (5b) is with an IMPerative in a direct quote in a paratactic construction:

(6) pia-ka-i-c-mpun  
    talk O-1 SG A-tell-PERF-3 PL D  chicken III DL  
    naŋ-wul-mpi-ŋa-na-mpun-trm  
    IMP PL-boil-SEQ-give-IMP-3 PL D-III DL O  
    ‘I told them: “boil two chickens and give them both to them”’

Nor is this asymmetry restricted to these two examples, but reflects a general split among SVCs in the language:

(7) (a) num-n  
    way-mpi-waraca-mpi-ya-ru-mpwi  
    village-OBL turn-SEQ-return-SEQ-come-NFN-talk  
    pia-ka-i-c-mpun  
    talk O-1 SG A-tell-PERF-3 PL D  
    ‘I told them to come back to the village’

(b) *mparŋkat  
    park-mpi-kapi-mpi-wark-r(u)-mpwi  
    branch V PL split-SEQ-break-SEQ-tie-NFN-talk  
    pia-ka-i-c-mpun  
    talk O-1 SG A-tell-PERF-3 PL D  
    ‘I told them to split the branches, break them into pieces and tie them together’

(c) pia-ka-i-c-mpun  
    mparŋkat  
    talk O-1 SG A-tell-PERF-3 PL D  branch V PL  
    nam-park-mpi-kapik-mpi-wark-na-ra  
    IMP PL-split-SEQ-break-SEQ-tie-IMP-V PL O  
    ‘I told them: “split the branches, break them into pieces and tie them together”’

(8) (a) arm-n  
    kay  
    ak-mpi-wul-cu-mpwi  
    water-OBL canoe VIII SG push-SEQ-put.in-NFN-talk  
    pia-ka-i-c-mpun  
    talk O-1 SG A-tell-PERF-3 PL D  
    ‘I told them to push the canoe down into the water’

(b) ?*wapal-mpi-kaprapu-cu-mpwi  
    pia-ka-i-c-mpun  
    climb-SEQ-gather-NFN-talk  
    talk O-1 SG A-tell-PERF-3 PL D  
    ‘I told them to come up and gather’

(c) pia-ka-i-c-mpun  
    naŋ-wapal-mpi-kaprapu-n  
    talk O-1 SG A-tell-PERF-3 PL D  IMP PL-climb-SEQ-gather-IMP  
    ‘I told them: “come up and gather”’
Events: Pure and Simple (and not so)
In their important survey paper on SVCs in some Papuan and Austronesian languages of eastern Indonesia, van Staden and Reesink (2002) make an important distinction between what they call component and narrative serialization. Component serialization is a ‘sequence of verbs in an SVC which realizes a number of sub-events expressing a single macro-event’ (van Staden and Reesink 2002:17), while narrative serialization is ‘the integration of more than one macro-event into a clause’ (van Staden and Reesink 2002:16). A crucial notion appealed to here is that of a macro-event, itself not very clearly defined, but a sort of halfway house between component sub-events and paratactically linked distinct events. Macro-events, although expressible in multiple verb roots in SVCs are claimed to ‘have not only one temporal domain, they also have only one set of semantic roles’ (van Staden and Reesink 2002:12). On both these criteria, all the Yimas SVCs in (1) through (9) must express single macro-events and exemplify component serialization, because only a single set of
prefixal aspectual inflections for the whole SVC is permitted (e.g. single temporal domain), and there is only a single set of semantic roles, notably expressed in a set of agreement affixes flanking the SVC. Thus, on these criteria, all Yimas SVCs exemplified must be component serialization, and the contrast between component and narrative serialization does not appear to account for the difference in behavior between the (a) and (b) examples under non-finite nominalization.

But perhaps different criteria might be suggested. This distinction between component and narrative serialization does intuitively seem to capture something about the contrast between the (a) and (b) examples. Consider again the contrast between the SVCs in (7) with their English translations:

(10) (a) way-mpi-waraca-mpi-ya-turn-SEQ-return-SEQ-come
    ‘come back’

(b) park-mpi-kapik-mpi-wark-split-SEQ-break-SEQ-tie
    ‘split, break and tie together’

In an intuitive, but, I think, clear sense, the event of coming back to a place does possess the inherent component sub-events of turning around, retracing one’s path and arriving at that place. Yimas, like Kalam (Pawley 1987, 1991) just seems excessively concerned with spelling out these inherent components, while English is happy with just expressing the directionality of motion, ‘come’, and the path, ‘back’. Unlike in Yimas, the notion of ‘turning about’ is not explicitly mentioned in English, but is clearly entailed by the expression ‘come back’. There are good reasons to believe that (10a), while complex, is in fact a lexical item in Yimas. If one asks a Yimas speaker for the vernacular equivalent of Tok Pisin *kambek* ‘come back’, one will almost certainly get (10a). Furthermore, if one tries to say ‘he came back from the village’ without the rigid formulaic expression of (10a), one will immediately be corrected by Yimas speakers (this is actually how I became aware of the fixed structure of the SVC in (10a)). Quite different considerations apply to (10b). While it is a typical, rather conventional, way of describing the collection of branches for firewood, the collocation is not fixed; alternative, less explicit, formulations, like:

(11) (a) park-mpi-wark-split-SEQ-tie  (b) kapik-mpi-wark-break-SEQ-tie

are also possible to describe such events. Furthermore, if one asks for a translation of Tok Pisin *brukim paiawut* ‘get firewood’, it is by no means lilley that one will prompt (10b) as a response. The examples of (11) are just as likely or even just *kapik-* ‘break’ or *wark-* ‘tie’. Even a complex Tok Pisin expression like *brukim na bungim paiawut* ‘break and collect firewood’ is no guarantee of eliciting (10b); (12) would equally be possible:

(12) park-mpi-kapik-mpi-t-split-SEQ-break-SEQ-put down
    ‘split, break and put down (on the ground)’
And the most likely elicited translation would be a structure of chained clauses rather than an SVC at all, whereas chained clauses would not be an option to translate ‘come back to the village’. All of these facts about (10b) are in marked contrast to the lightning response by which Tok Pisin kambek ‘come back’ elicits (10a). Also, describing the collection of firewood by the expressions in (11) would not result in a sharp, automatic correction to (10b); the forms of (11) seem to be acceptable, if perhaps less explicit and colloquial, alternatives to (10b). This is in marked contrast to speakers’ demands of producing (10a). Yimas speakers are very much aware that (10a) is the way to say ‘come back (to the village)’, the only acceptable way. (10b), however, is not the only acceptable way to describe the gathering of firewood. While it may be the conventionalized formulaic way to do so (Pawley 1987, 1991), it is not mandated that one has to do it in this way; alternatives like (11) and (12) exist. Similar considerations apply to all the (a) versus (b) examples in (1) through (9) above.

These considerations suggest that the difference between the (a) and (b) examples is one of lexicalization (Pawley 1986): the (a) examples are fixed, lexicalized forms, entered in Yimas speakers’ lexicons, while the (b) examples are created by grammatical rules of the language and produced on the fly by speakers in ongoing discourse. This is not to deny that there cannot be somewhat conventionalized, formulaic expressions among the (b) examples. Some clearly are, like (10b); others probably are not, like (1b) or (8b). The point, however, is that the (b) examples, even if somewhat conventional and formulaic, are still generated by productive rules: this accounts for why there are acceptable alternatives with (closely?) synonymous meanings and why speakers are so much more flexible in their judgements of grammaticality for these variants. It must be admitted, though, that the border between lexicalized SVCs ((a) examples) and rule-produced, but sometimes formulaic SVCs ((b) examples) is perhaps a hazy one crosslinguistically and even language internally (see Pawley and Lane (1998) for an excellent discussion of exactly this problem in Kalam). As linguists we are trained to think of anything that is conventional as lexical and anything that is creative as produced by rule, but I think these equations are much too simple. Like Pawley and Lane (1998), I think the real moral to be drawn from from SVCs in languages like Yimas and Kalam is that lexicon and grammar and conventionality and creativity interpenetrate each other in complex ways (a central insight in a different arena of language also of Bakhtin (1981)): the hybrid nature of SVCs tells us much about the complex mixed nature of language systems. We should be wary of forcing such languages into the Procrustean bed of grammatical models drawn from the typological structure of European languages.

The recognition of such flexibility and hybridity also precludes us from predetermining any interrelationship between lexicalization and componential serialization and production by rule and narrative serialization. While there may be some universal tendencies, what becomes lexicalized across languages and how this is accomplished seems to vary quite widely (see Talmy (2000) for detailed discussion and exemplification). Nor can what is lexicalized even in a simple verb be regarded straightforwardly as a single event; by any adequate criteria (Levin and Rappaport Hovav 1996; Rappaport Hovav and Levin 1998), even some events denoted by simple verb roots in some language like English must be regarded as macro-events. Consider the accomplishment verb kill in English or the verb root with the equivalent meaning tu- in Yimas. The macro-event of killing necessarily involves two sub-events, an act that someone does and a change in the
state of being alive, typically in someone else, as a result of this act; in Hovav Rappaport and Levin’s (1998) terms:

(13)  \[[x \text{ ACT <Manner- CAUSE[BECOME [y <DEAD>]]}}\]

Typically with English *kill* and Yimas *tu-* the causing action and its manner are left unspecified (thought they need not be: Egbert killed Herb with a spear/knife/poison, etc); there are other lexicalizations of (13) that do highlight the causing action and its manner: *they speared/knifed/poisoned him to death*. Many serializing languages lack a simple verb root for ‘kill’, and to express this macro-event, they employ an SVC with two verb roots, one expressing the causing event, commonly ‘hit’, and another the resulting change in state, ‘die’ or ‘dead’, as in Numbami, an Austronesian language of New Guinea (Bradshaw 1993:138):

(14)  kolapa i-lapa bola uni
      boy 3 SG R-hit pig dead
      ‘the boy killed the pig’

This is clearly componential serialization in van Staden and Reesink’s (2002) terms: each verb root denotes a sub-event, act and resultant state, in the overall macro-event described in (14). In many languages these SVCs also seem to be lexicalized to express the action of killing, and this could support a correlation of lexicalization with componential serialization. But consider these facts from Watam, a Papuan language of New Guinea to be discussed in more depth in the following section. In this language, there are a number of ways in SVCs to express the macro-event of ‘kill’, distinguished by differing expressions for the manner of the causing event:

(15)  (a) rug- minik-   (b) arig- minik-  
      hit  die     shoot  die  
      (c) rutki- minik-  (d) rutki- yak- minik-  
          slash  die     slash  cut.open  die  
      (e) wak- minik-   (f) mo- minik-  
          sever  die     do  die

In Watam, ‘kill’ is always expressed in an SVC involving overt verbs for the causing event and for the resulting change of state, *minik-* ‘die’. But there is no set lexicalized SVC to express this notion, different manners of killing are denoted by varying choices of the verbs for the manner of the causing event, not unlike English *they speared/knifed/stabbed/hacked him to death*. These collocations cannot plausibly be claimed to be lexicalized, for they can further expanded in yet more specific SVCs, as in (15d) or (16):

(16)  arig- turka- minik- 
      shoot  pierce  die

When the speaker wishes to omit mention of the specific manner of force employed in the causing event, for example, when the causing event does not fit one of these, as in
‘kill with poison’, the generic verb of action mo- ‘do’ can be used. But this is just one more SVC expressing ‘kill’, not the basic lexicalized form for this: mo- minik- do die is a no more basic SVC than arig- minik- shoot die. Note that in English we have the following alternative lexicalizations:

(17) (a) they speared him to death
    (b) they killed him with a spear

The first parallels the Watam SVC, with the main verb lexicalizing the manner of action of the causing event and the PP the resulting state (this is probably a family of lexicalizations all related to put to death); the second lexicalizes the whole macro-event of causing act and resulting state and puts the manner of the act in the form of a PP realizing the instrument. In Watam only the first option is possible:

(18) (a) \text{min ma ŋ(a)-argi-r minik-ri}
    3 PL 3 SG FOC-shoot-R die-PAST
    ‘they shot him to death’

(b) *?\text{min ɔŋjaŋ ma ŋa-mo-r minik-ri}
    3 PL arrow 3 SG FOC-do-R die-PAST
    ‘they killed him with an arrow’

(18b) is ungrammatical because a lexically more specific form (18a) is available. These data strongly argue that mo- minik- do die is not the basic lexicalized form for ‘kill’ that the other SVCs in (15) are specific expansions of. There is no basic lexicalization for a general verb ‘kill’ in Watam; specific SVCs are used to denote distinct types of killing.

These facts then raise a fundamental question about componential serializations: how do we define them and distinguish them from narrative serializations if they do not correspond to lexicalized forms? Clearly, if they are not lexicalized, they are produced by rule and in this respect are indistinguishable from narrative serializations. So if lexicalization versus production by rule is not the basis of the distinction, what is? Van Staden and Reesink (2002) describe it in terms of a single macro-event (componential SVCs) versus multiple macro-events (narrative SVCs) and essentially use Talmy’s (2000) scheme of analyzing macro-events in terms of a framing event and a co-event. Hence componential SVCs are made up of a framing event and a co-event, but narrative SVCs are composed of multiple units with this structure. But this is problematic. As van Staden and Reesink (2002) themselves point out, plausible candidates for componential SVCs need not be binary (eg (7a), (15a), (16)). Nor does the distinction between (1a) and (1b) really seem to be captured in a contrast between a single macro-event consisting of framing and co-events versus two such macro-events.

Still the contrast between componential and narrative SVCs does intuitively appear to have some crosslinguistic basis, especially in light of the typological data that many serializing languages only appear to have what van Staden and Reesink (2002) identify as componential serialization (nearly all the languages in their sample), and all languages that have narrative serialization, like Yimas, Watam and Kalam, also have componential serialization. So let me try to approach this distinction from a somewhat different direction.
Let us assume a semantic notion of ‘event’ along the lines envisaged in current semantic theory, largely inspired by and derived from earlier work by Davidson (1967, 1980). In this theory, an ‘event’ is a theorized notion, a variable which ranges over the occurrences which are denoted by verbs and their subcategorized arguments. Consider these well talked about examples:

(19)  (a) Brutus killed Caesar in the Senate
     (b) Brutus killed Caesar on the Ides of March
     (c) Brutus killed Caesar with a knife

Note that all of these can be paraphrased with conjoined structures in which *it* refers back to the event Brutus killed Caesar:

(20)  (a) Brutus killed Caesar and it was in the Senate
     (b) Brutus killed Caesar and it was on the Ides of March
     (c) Brutus killed Caesar and it was with a knife

This evidence argues that Brutus killed Caesar is the event expressed in each sentence in (20) with the following semantic representations (*e* = event):

(21)  (a) $\exists e \text{ KILL (Brutus, Caesar, } e) \& \text{ IN (} e, \text{ the Senate)}$
     (b) $\exists e \text{ KILL (Brutus, Caesar, } e) \& \text{ ON (} e, \text{ the Ides of March)}$
     (c) $\exists e \text{ KILL (Brutus, Caesar, } e) \& \text{ WITH (} e, \text{ a knife)}$

Recent work in the semantic analysis of events takes this approach considerably further in the direction of still more decomposition, particularly of the core event itself. Parsons (1990), Foley and van Valin (1984), van Valin and La Polla (1997), and Rappaport Hovav and Levin (1998) offer different approaches to further analysis of events, so that for instance, kill is decomposed into an event structure like that of (13) above.

Let us now also assume crosslinguistically the validity of a syntactic packaging unit for expressing an event, such as Brutus killed Caesar. This is roughly identifiable with what is called in traditional grammar the clause (Pawley and Syder 1997). Now the mapping between the semantic notion of the event and the structural notion of the clause is crosslinguistically variable and complex. In some languages like English the whole complex event such as those represented in (21) can be mapped into a single clause with a single verb (eg (20)). For other languages only the $\exists e \text{ VERB (} ..., e) \text{ event can be realized through the main lexical verb, and the other conjuncts in (21) must be realized with their own verbs, in SVCs. This is the typical coverb type of serialization (Bisang 1986, 1992, 1998), as in Yabem, an Austronesian language of New Guinea (Bisang 1986:263; Bradshaw 1993:156):

(22)  (a) ja-mu ja-mêng malac ê-ndêng ocsalô
     1 SG IRR-return 1 SG IRR-come village 3 SG IRR-reach forenoon
     ‘I’ll come back to the village before (it reaches) noon’
And in still other cases the individual components of the event structure itself are realized overtly in an SVC, as in the structure of the Numbami and Watam examples for kill (event structure representation in (13)) in (14) and (15).

But the clause has a dual face: not only is it the favored structural unit for the realization of semantic events in the sense delineated above, but pressures also come from the pragmatic end. The clause is the favored structural realization for distinct semantic events when they are viewed in particular discoursal and textual relationships, what is often described in syntactic terms as clause union or integration (Early 1993; Lehmann 1989). In this viewpoint the clause as a structural unit fits within the overall structural system of the language, within what I will call the system of expressive space, so that the actual options available to it, the meanings it may carry, depend on its opposition with other syntactic units in the language. This point is easiest to grasp with an illustration; consider the following examples from Yimas:

(23) (a) narm pu-tupul-kamprak-r-akn
    skin VII SG 3 PL S-hit-break-PERF-3 SG D
    ‘they hit and broke his skin’

(b) mparŋkat ya-npark-mpi-kapik-mpi-wark-t
    branch V PL V PL O-3 SG A-split-SEQ-break-SEQ-tie-PERF
    ‘he split the branches, broke them and tied then together’

(c) kaprak-mpi yaŋi-ŋan na-mpay
    cut.up-SEQ pot VIII SG-OBL V SG O-3 DL A-put inside
    ‘having cut (it) up, they put (it) in a pot’

(d) tmal kray-mpi ya-kay-am-wat amtra
    sun V SG dry-SEQ V PL O-1 PL A-eat-HAB food V PL
    ‘the sun having dried it, we always eat the food’

Here is a paradigmatic opposition of syntactic compression tied to an intuitive notion of event compactness. The (a) example is a single clause consisting of two verb roots juxtaposed in an SVC. The meaning is very specific: a very close cause-effect relationship between the two events denoted by the verb roots. The effected result must follow directly and immediately after the causing event: no period of time can separate the spans of the causing event and the resulting state. Now consider (23b), also an SVC with multiple verb roots, but this time the roots are linked by the derivational affix -mpi SEQ. Unlike (23a), no necessary cause-effect relationship holds between the verb roots in this SVC; the events just follow one another in time. Still, certain constraints must hold: all events denoted by the verb roots in the SVC must be done by the same actor (n- 3 SG A), happen to the same object (mparŋkat ‘branches’) and any time delay between the sequential events must be relatively fleeting. Finally, consider the examples (23c,d), clause chaining structures so prominent in
many Papuan languages, in which separate clauses are strung out, one after another, but are dependent on the final clause for certain inflectional features, for instance tense, as in these examples. Note that while in (23c), the two verbs share the same actor and object (although the oblique NP is only a constituent of the second clause in the chain), this is not true of (23d), which have distinct actors. Verbs in dependent clauses in chained structures take -mpi SEQ, just like the SVC in (23b), to mark the sequence in time of the co-events, but the dependency across clauses in chained structures is much weaker. There is no need of shared argument NPs or setting XPs. Further, there can be a very considerable gap in time between the event expressed in one chained clause and that in the next, as in (23d). The only crucial dependency is one of tense; only the verb of the final clause is inflected for tense, but this absolute tense specification holds for all the clauses in the chain.

The important point to note here is that (23b), a clear example of narrative serialization in van Staden and Reesink’s (2002) terms, has the meaning it does because it is in opposition to an alternative structure like (23c). In turn, (23a), a plausible candidate for componential serialization, has its more restricted meaning because it is in opposition to (23b). The idea is that a Yimas speaker could choose any of these three options:

(24) (a) V-V-TNS
(b) V-mpi-V-TNS
(c) (NP) V-mpi (XP) V-TNS

(among others; I am ignoring the possibilities of subordination and coordination, both finite and non-finite, for my purposes here), but they must choose one. This is a paradigmatic approach to syntax (one typically not explored enough, not surprisingly, given the root of syntax in syntagmatic, but see Pike (1963)), and at the core of it must be something of a Neo-Gricean approach like Levinson’s (2000:31-34), and the three maxims he presents:

(25) Heuristic 1: what isn’t said, isn’t.
Heuristic 2: what is simply described, is stereotypically exemplified.
Heuristic 3: what is said in an abnormal way, isn’t normal.

In application to paradigmatic oppositions like those of (24), these heuristics mean that the use of the more complex clause chain structure of (24c) in preference to the SVC of (24b) entail that the necessary semantic features of (24b) do not hold (heuristic 2: not simply described, so not stereotypically exemplified). But if such features do obtain, by all means use (24b); hence the extreme prevalence of narrative serialization in languages like Yimas. Similarly, the presence of -mpi SEQ between verb roots in an SVC (24b), rather than the possible simple juxtaposition structure (24a), i.e. again a structure more complex than the simplest available, entails that a stereotypical, normal cause-effect relationship between the co-events fails to hold (heuristic 2 again). If there is an immediate cause-effect relationship between the events denoted by the verb roots, use (24a). Whether we want or need to identify a structure like (23a) as a componential SVC or (23b) as narrative serialization is not particularly important (although we might wish to note that, in the main, SVCs which realize semantic events in the Davidsonian sense are componential and those which result from options along a scale of clause integration are commonly narrative; this may be a more explicit way of formulating van Staden and Reesink’s (2002) distinction between a single macro-event and multiple macro-events). But ultimately what is crucial is where such
structures fit in the overall system of expressive space, ranging from lexicalized forms. through SVCs as realizations of semantic events, then SVCs as the result of clause integration, through textual reasons for clause chaining, and finally to full clausal coordination and subordination.

Central to this approach to understanding SVCs in a comparative perspective is the range and type of syntactic structures to which they are in opposition. Within the New Guinea context, there are two basic typological profiles, which I will call for want of better terms, the Papuan type and the Austronesian type. This is not to imply that genetically Papuan and Austronesian languages correspond exactly to these two types. While the ideal types are best exemplified in genetically Papuan and Austronesian languages, there is significant leakage between the categories. The remainder of this paper will look schematically at these two types.

3. The Papuan Type
The Papuan type, as I define it here, only applies to those Papuan languages with SVCs which have a clear head-final overall typological profile, i.e. the languages of the Trans New Guinea family, Sepik family, Lower Sepik-Ramu family, etc. It does not apply to those Papuan language groupings, e.g. Torricelli, which lack this profile. Crucially correlated to this head-final profile, not only in Papuan languages, but in many language families with it throughout the world (e.g. Japanese, Altaic, Tibeto-Burman, Quechuan), is the phenomenon of clause chaining. Clause chaining is formally a structure in which multiple clauses (multiple S-nodes constituents) are the complement of a single final I head node in a projected IP. The inflectional categories of the I, typically Tense and Mood, but also Illocutionary Force, are suffixes which attach only to the final verb. The verbs of the preceding clauses have reduced possibilities of inflection, typically Aspect or relative tense. These are under the scope of the inflections of the final I head, and in that sense are dependent on the inflection realized on the verb of the final clause, which alone can take the full range of inflections for an independent sentence. The basic structure is (26):
Consider the following example from Watam:

(27) namtiŋ un nakan i mbo ŋ(a)-aok-or-o endau nik
g-idbuku-r atki-ri
‘the boy put (it, a frog) in side a big pot and took it and put it inside the house’

This is a clause chaining structure with two clauses, the second of which also contains an SVC. Only the final verb is inflected for tense, with -ri PAST. The verb of the previous clause is marked as dependent its lack of tense inflection, just specification for Realis via -r R. The echo vowel of the final vowel of the root (in this case ɔ), which typically signals utterance internal short pauses, also indicates the verb’s dependence; such echo vowels are not permitted on final I-inflected verbs. Finally, the pitch drop over the final verb of the dependent clause is significantly less than that over the final I-inflected verb. (28) provides a simplified formal schematization of (27):
Because of the inflectionally truncated nature of verbs in dependent clauses and the fact that NPs and PPs of established referents tend to be elided in sentences in Papuan languages, clause chaining structures often come to look very much like SVCs, a string of verbs in which only the final one may host I. Therefore it is very much in the grain of the typical Papuan language that clause chaining structures are in opposition to SVCs in the system of expressive space. And crucially, because the most salient usage of clause chaining is in narratives, the laying out of the sequence of events in a story (in fact, as we shall see, in Yimas they are only available to express events in sequence), it should come as no surprise that it is precisely narrative SVCs to which they are opposed.

Let me consider Yimas again briefly, as it may be the limiting case. Yimas does possess clause chaining structures to express events in sequence. But they are restricted to this; to express simultaneous events, a completely different structure, a Non-FiNite OBliquely case marked nominalization, is required:

(29) (a) pu-ŋa-tay wi-(i)mpu-pra-ru-mat-ŋan
3 PL A-1 SG O-see up-paddle-toward-NFN-PL-OBL
‘while paddling up toward (me), they saw me’

(b) taw-kia-rŋan pia-mpu-kra-i-kia-ntukŋkt
sit-NIGHT-NFN-PC-OBL talk-3 PL A-1 PL D-tell-NIGHT-REM PAST-PC
‘while (we few) were sitting, they told us few’

These simultaneous non-finite structures can be used with same subjects between the clauses (29a) or different subjects (29b), exactly like the clause chaining structures with -mpi SEQ (23c,d). These are not clause chaining structures, but rather non-finite nominalizations embedded as oblique adjuncts to the main clause. As such, they are in strong accord with the general typological profile of Yimas; in marked contrast to most Papuan languages, subordination is a favored clause combining operation in texts of this language. Clause chaining has ceded some of its typical functions in other Papuan languages to subordination in Yimas, notably that of expressing two simultaneous events. But not just this. Again, very
unusually for a Papuan language, clauses repeated in tail-head linkage in Yimas most commonly occur as subordinated clauses. Furthermore, in texts, subordinate clauses are as frequent or more so than chained clauses.

But it is in opposition to narrative SVCs that the full expressive restriction of clause chaining can be seen. In a longish traditional legend, an exemplar of good style as agreed by all language consultants, narrative SVCs outnumbered clause chaining structures by a ratio of four to one. There is very strong discourse pressure in Yimas that if two events in sequence share the same participants, they should, all things being equal be expressed in a narrative SVC with -mpi SEQ. Resort to clause chaining if this condition fails to hold. The point is should, not must; it is not entirely clear sometimes why the narrative SVC option is not taken. Consider the following excerpt from the text alluded to above:

(30) m-um mnta pu-n-tay-mpi-kwalca-k
NR DIST-I PL then 3PL O-3 SG A-see-SEQ-rise-IRR
awkura-mpi pu-n-api-k
collect-SEQ 3 PL O-3 SG A-put.inside-IRR cult.house-OBL
’ve then he saw them and took off and collected them and put them inside his (male) cult house’

ma-m ma ɲarɲ mnta
other-I PL other 1 day removed then
pu-ŋkl-mampi-wampaki-k 3 PL O-3 PC A-again-throw-IRR
’ve another day, they sent out some more people’

m-um pu-n-mampi-awkura-mpi-api-k
NR DIST-I PL 3 PL O-3 SG A-again-collect-SEQ-put.inside-IRR
paympan eagle V SG
’ve again he, the eagle, collected them and put them inside’

Separated only by a single clause, the sequence of events collect and put inside is expressed in two different ways, first in a clause chaining structure and then in a narrative SVC. There does not seem to be any strong semantic difference of ‘eventhood’ here, i. e., a single event versus a multiple events. The event narrated is the same. What seems crucially different are the discoursal textual facts: the second time the sequence is mentioned, it has occurred again (mampi- ‘again’). And by realizing this sequence as a narrative SVC under the scope of the incorporated adverbial mampi- ‘again’ (itself derived from ma- ‘other’ by a grammaticalized use of -mpi), this fact can be expressed succinctly. And also because the sequence of events collect and put inside has already been discoursally activated by the earlier clause chain, the rule about realizing such structures as narrative SVCs applies even more strongly. The basic point about Yimas is that the overwhelming prevalence and salience of narrative serialization is due to the fact that the expressive load of clause chaining has been truncated. As a consequence, SVCs have expanded their expressive function greatly in Yimas, well beyond what is found in the other languages of its immediate family and adjoining languages like Alamblak (Bruce 1984, 1988).
While morphologically much simpler than its very distant relative Yimas, when it comes to SVCs, Watam is actually rather more elaborate. Like Kalam, it exhibits both extensive clause chaining constructions, with multiple clauses in these chains (those of Yimas are almost always binary), and rich verb serialization. But unlike Kalam and like Yimas, Watam lacks switch reference morphology and can freely form clause chains with clauses having different subjects. Restrictions of space preclude me from more than scratching the surface of the Watam system here. Clause chaining in Watam is mostly used to express sequential events, typically to advance the progression of events in narratives, and, as such, are again in paradigmatic opposition to narrative SVCs. SIMultaneous events are most commonly expressed by subordination, like in Yimas, with -to SIM, the marker for SIMultaneous relative tense between two clauses:

(31) minga wok nik mbirka-r wak-to-nan
    3 DL  creek inside sit-R   be.at-SIM-GEN
       an namak wok waong ndo-r ga-ri
       PROX  eye  creek side see-R go.up-PAST
   ‘while they were sitting in the creek, they both looked up at the bank’

But clause chaining is possible of simultaneous events, unlike in Yimas, if the verb denoting the second event is prefixed with ma- PROG and especially if the verb of the preceding clause is REDuplicated:

(32) minga ñgo-r sang(ang)-ar ñgum was ni ma-iri-tak
    3 DL  sleep-R  go (RED)-R nose breath  DL  PROG-go.down-PRES
   ‘while they were both sleeping, their snoring decreased’

The difference between the two constructions lies in the aspectual character of the final clause: if expressing an event of extended duration which overlaps the event of the first clause, ma- PROG is required, and the clause chaining structure of (32) is found. If, however, the event of the second clause is punctual, the subordinate clause with -to SIM is used, as in (31). This difference can be schematized in the following diagram:

<table>
<thead>
<tr>
<th>Table 1: Watam Simultaneous Interclausal Relations</th>
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<tbody>
<tr>
<td>event 1   _______________   _______________</td>
</tr>
<tr>
<td>event 2   _______________   •</td>
</tr>
<tr>
<td>ma- PROG   -to SIM</td>
</tr>
</tbody>
</table>

Clause chaining structures for sequential events are formally very similar to SVCs. Non-final verbs in SVCs and those of dependent clauses in chaining structures are only inflected for status, by -r for Realis and ø/mbe for IRRealis. SVCs do not constitute single words in Watam, unlike Yimas (there is a true class of compound verbs in Watam distinct
from SVCs, as determined by being subject to word level phonological rules), and with the very extensive elipsis of phrases with established referents, clause chaining structures often look formally indistinguishable from them. But there are three features which do distinguish clause chaining structures from SVCs. First, the final verbs of dependent clauses may be suffixed with the utterance internal pre-pause echo vowel; such an echo vowel is never permitted inside an SVC:

(33) (a) un an ajuna ŋg(a)-irki-r-i
pot PROX straight FOC-go.down-R-V
wakar ŋgα-pka-r-a
ground FOC-throw-R-V
un burburu-ri
pot shatter-PAST
‘the pot went straight down, hit the ground and shattered’

(b) ma markum ŋgα-rugu-r-(*u) minik-ri
3 SG pig FOC-hit-R-(*V) die-PAST
‘he clubbed the pig to death’

Secondly, verbs in clause chaining structures can individually take the FOCus prefix ŋgα-, as in (33a). In SVCs, only the first verb may be prefixed with this, as in (33b) and (34):

(34) nomgai or ŋgα-soki-r ungur apuk-ri
crocodile leg FOC-hold-R pull-R swallow-PAST
‘the crocodile grabbed (it, a chicken) by the leg, pulled (it) and swallowed (it)’

Any SVC internal position of ŋgα- FOC is ungrammatical:

(35) *or soki-r ungur ŋg(a)-apuk-ri
leg hold-R pull-R FOC-swallow-PST

Finally, verbs in dependent clauses are marked by a distinctive falling pitch, not as low and not over such a large pitch range as those of final, independent clauses, but quite distinct nonetheless. Verbs within SVCs have no such fall in pitch: all are spoken with roughly the same pitch except the last, which takes on the distinctive falling pitch of the end of a clause or sentence.

Watam contrasts with Yimas is that clause chaining is very common, on a par with SVCs. Further, SVCs can be more extensive: while Yimas SVCs almost never consist of more than three verb roots and are usually comprised of two, Watam SVCs of up to five verbs are not rare:
(36) min ma mo ndo-r angi-r agiga-r rug-r minik-ri
3 PL 3 SG DAT see-R get-R take.up-R hit-R die-PAST
‘they saw him, got him, carried him up and beat him to death’

What is the point here of such a complex narrative SVC, rather than a clause chaining structure? Note that much the same meaning could be expressed in a sequence of chained clauses:

(37) min ma mo ndo-r-o angi-r agiga-r-a rugu-r minik-ri
3 PL 3 SG DAT see-R-V get-R-V take.up-R-V hit-R die-PAST
They saw him, got him and took him up, and beat him to death’

Why (36) over (37)? Clearly narrative SVCs are in paradigmatic opposition to chained clauses in Watam, just as in Yimas, but given their roughly equal distribution, what induces speakers to favor (36) over (37)? The answer is again mainly textual and discoursal. An SVC like (36) strongly highlights the idea that the events (there are three distinct macro-events here: seeing, taking and killing) follow each other in rapid succession. This again illustrates the pragmatic heuristic principles of (25): simple description, stereotypical exemplification, e.g. rapid sequence of events. This rapid sequence is not highlighted in (37); while the events could unfold as such, the description does not force such an interpretation, indeed invites one to consider an alternative reading of perhaps some delay. But there is still another, perhaps more important factor. Looking at the distribution of complex narrative SVCs like (36) across a range of narrative texts, it is very striking that they always occur in the final clause of the sentence. Even if non-final dependent clauses contain SVCs (as they commonly do, see (32)), they are typically simpler than those available to the final independent clause. This is because the final clause expresses the main point, the most highlighted foregrounded event of the whole sentence. Consequently if there is a string of interrelated sequential events that the speaker wishes to highlight, the ‘punchline’, if you like, of the sentence, then a narrative SVC is the ideal way to do so. This is not to claim that chained clauses are backgrounded; they are not in Watam, as in Yimas. Truly backgrounded information is best expressed in subordinate clauses. But the binary foregrounded-backgrounded distinction is insufficient for our purposes here. Events described in the final clause are more important, more highlighted, than those expressed in the dependent clauses that lead up to them: that is why they are expressed in a final clause and in not yet another dependent clause. In a sense, they are the climax of the sentence, and, if complex, what better way to package them than in a narrative SVC.

4. The Austronesian Type
The paradigmatic oppositions in the system of expressive space are quite different in Austronesian languages in comparison to Papuan languages. Crucially, this is tied to the fact that Austronesian languages are head-initial, rather than head-final like most Papuan languages. The head-initial typology is quite different and one of its most salient crosslinguistic generalizations is a marked dispreference for clause chaining. In contrast to the structure of (26), which is very common, (38) is rather rare outside of Africa, where it is an areal feature:
Rare though (38) may be, something like it does occur in Austronesian languages. Crowley (2002) reports it for some southern Vanuatu languages, e.g. Erromangan (Crowley 2002:181):

\[(39) \begin{align*}
(a) & \quad \text{yau yyo-velom } m-o-yh-i \\
& \quad 1 \text{ SG 1 SG REC PAST-come DEP-see-3 SG O} \\
& \quad \text{I came and saw him’}
(b) & \quad \text{yau yyo-velom } im iyi y-o-yoh-yau \\
& \quad 1 \text{ SG 1 SG REC PAST-come and 3 SG 3 SG REC PAST-see-1 SG O} \\
& \quad \text{‘I came and he saw me’}
\end{align*}\]

(39b), in which the subjects of the two linked clauses have different referents, is a simple coordination structure, with the two clauses linked with the conjunction \textit{im} ‘and’ and the verbs in each clause fully inflected, each taking the requisite prefixed portmanteau inflection for TeNSe and person/number of subject. (39a), in which the referents of the subjects of the two clauses are the same, is a clause chaining structure. The pattern is opposite to that of the head-final Papuan languages: the verb of the first clause carries the full I prefixal inflection for TeNSe, as befits a head-initial language, while the second clause is dependent. Its verb is only prefixed with the DEPendent marker \textit{m-}, which stipulates that the verb has the same TeNSe and subject referent as that of the preceding clause. (39a) can be represented more explicitly as (40):
Clause chaining structures like (40) are rare in Austronesian languages, and in the two Austronesian languages of New Guinea to be investigated here, they are unattested. This entails that there are no clause chaining structures in paradigmatic opposition to narrative SVCs in these languages, and, given the close correlation between narrative serialization and clause chaining discussed above, it should not be surprising that narrative SVCs are uncommon in Austronesian languages (But not unattested. While van Staden and Reesink found little convincing evidence of narrative SVCs among the Austronesian languages of their sample, Nêlêmwa (Bril 2002) of New Caledonia is a clear example of an Austronesian language with narrative SVCs, albeit not as elaborate as those of Kalam or Watam. How they arose in that language is not clear).

So SVCs in Austronesian languages are mainly of the type identified by van Staden and Reesink (2002) as componential serialization, the use of a string of verbs in an SVC to fill out the full expression of a semantic event within the formal structural unit of a single clause (single S-node constituent). In the limiting case, these SVCs will mainly be in paradigmatic opposition to coordinated clauses. Yabem (Bisang 1986; Bradshaw 1983, 1993, 1999; Dempwolff 1939) is one language that exhibits this pattern. Verb roots are used in SVCs like prepositions in simple clauses in English: to fully express the participants, settings and adjuncts of an event within a single clause:

\[(41) \quad (a) \quad \text{sê-janda moc sê-moa gwêc} \quad 3 \text{PL-hunt bird 3 PL-stay sea} \quad \text{‘they hunted birds at sea’}
\]

\[(b) \quad \text{da-ê wang ê-pi bau} \quad 1 \text{PL-IN-pull canoe 3 SG IRR-go.up shore} \quad \text{We’ll pull the canoe onto the beach’}
\]
‘Event’ and serial verb constructions

(c) ka-sing i ga-wing teocac
1 SG R-catch fish 1 SG R-accompany my elder brother.COLL
‘I caught fish with my elder brother’

d) eng kê-pê moc kê-kô ondoc
3 SG 3 SG R-shoot bird 3 SG R-stand where
‘where did he shoot birds?’

e) Kolengjam gê-job bôc gê-dêng komô
Kolengjam 3 SG R-look.after pig 3 SG R-reach rainy season
‘Kolengjam looked after the pigs during the rainy season’

Note that all the verbs in these Yabem SVCs are fully inflected for the verbal categories of
person/number of the subject and status, Realis or IRRealis (only in singular). Verbs in SVCs
may individually selected object NPs, as all these examples, and need not even share
subjects, as in (41b) and the following examples:

(42) (a) aê ka-kêng bing gê-ja malac
1 SG 1 SG R-give talk 3 SG R-go.to village
‘I brought a message to the village’

(b) ta-sêwa ngap ê-nèc malac-lung
1 PL IN-pour.out lime 3 SG IRR-stand village-plaza
‘we’ll pour out the (betel) lime in the village plaza’

c) sê-jong buc gê-wing
3 PL-collect betelnut 3 SG R-accompany
‘they collected betelnuts as well (at the same time)’

All of these features make SVCs in Yabem very hard to distinguish from coordinated
clauses. Bradshaw (1993) points out two criteria that do distinguish them: intonation, i. e.
there is no clause final falling contour intonation possible within SVCs, and the differential
behavior of conjunctions. Overt conjunctions like ma ‘and’ are inadmissible in SVCs:

(43) (a) *sê-janda moc ma sê-moa gwêc
3 PL-hunt bird and 3 PL-stay sea
‘they hunted birds at sea’

(b) *aê ka-kêng bing ma gê-ja malac
1 SG 1 SG R-give talk and 3 SG R-go.to village
‘I brought a message to the village’

The conjunction ma ‘and’ coordinates clauses, including those with SVCs, which denote
events following each other sequentially (Bradshaw 1999:279):
William Foley

(44) nê lau sê-ngô bing tonang
3 SG people 3 PL-hear word that

ma sê-kêng jaeng gê-dêng lau Buso to Lababia
and 3 PL-send message 3 SG R-reach people Buso with Lababia

ac sê-ja sê-wing êsêac
PL 3 PL-go.to 3 PL-accompany 3 PL

ma sê-kic bing sê-wing taung
and 3 PL-bind talk 3 PL-accompany selves

‘his people listened to those words and sent a message to the Buso and Lababia people, and the latter went and joined them and they planned together’

There is one final type of SVC in Yabem which should be mentioned, a type we might call super-serialization. In this type the second root no longer takes verbal inflection, but occurs simply on its own uninflected. These roots express resultatives, the states that result from a causing activity in an overall event that is accomplished. This kind of SVC often expresses components within the core semantic structure of the event itself rather than adjuncts or participants of secondary predications. It is not surprising then, in the light of the heuristics of (25), that they are in a more morphologically truncated form (Bradshaw 1983:186,195):

(45) (a) kom gê-jac intêna ngalêngô kê-sa
rain 3 SG R-hit road slippery 3 SG R-go.up
‘the rain made the road slippery’

(b) sê-jac bu tulu kê-sêp laclu
3 PL-hit water apart 3 SG-go.down cup
‘they poured water into a cup’

(c) êsêac sê-nam awêng tông
3 PL 3 PL-make mouth 3 PL fastened
‘they will remain silent’

(d) eng gê-mac êndu
3 SG 3 SG R-sick/die die
‘he died’

Note, for example in (45b), that the semantic event pouring being described is necessarily realized in two serialized roots, the verb -jac ‘hit’ and the resultative tulu ‘apart, be separated’, of course in combination with an object NP whose referent is a liquid. The difference for pour in English and Yabem is one how of lexicalization is accomplished, not a question of whether the event denoted is semantically complex or not. It clearly is, in both languages.
The other Austronesian language I wish to look at briefly is Mangap-Mbula (Bugenhagen 1995), a member of the same North New Guinea sub-group of Oceanic as Yabem, but in a different branch. Overall, the typology of Mangap-Mbula is quite similar to Yabem, but crucially, SVCs are more restricted. The language does have a rich set of compound verbs, often with idiosyncratic meanings, as is typical of compounds:

(46) (a) zem-ke    (b) so-taara
leave-hide    say-cut
‘fall into a deep sleep’   ‘advise’

(c) zuk-kaala   (d) tar-paala
wrap-cover    cut-break
‘enfold’    ‘split’

These are word level compounds and not true SVCs (Bugenhagen 1995:165-167) and are probably inherited from Proto-Oceanic, as similar compounds are prevalent in Tolai (Mosel 1984) and Tawala (Ezard 1997), languages of other first order sub-groups within New Guinea Oceanic languages (Ross 1988). True SVCs in Mangap-Mbula are structured like those of Yabem, with verbs fully inflected for person/number of their subjects and individual choices of subjects and object NPs:

(47) (a) ti-ketoto    zin raskol    i-su    Lae
3 PL-chase (RED)  3 PL criminal  3 SG-go.down  Lae
‘they are after the criminals in Lae’

(b) kam    buk    i-mar
2 SG.do  book  3 SG-come
‘bring the book’

(c) i-zem    mburu    kini    (i)-se    woonggo
3 SG-leave possessions  LOC.3 SG  3 SG-go.up canoe
‘he left his possessions in the canoe’

The function of these SVCs in Mangap-Mbula is as coverbs (Bisang 1998), specifying the location or direction of NPs within the clause. In at least some of these SVCs the agreement prefix is missing (it is optional in (47c) above), and the border between true SVCs and verb compounding is hazy:

(48) (a) nio    an-re    la    pizin
1 SG. NOM  1 SG-see  go  REF.3 PL
‘I looked over at them’

(b) boobo    sa-la    pizin
2 SG.call  go.up-go  REF.3 PL
‘call up to them’
If SVCs in Mangap-Mbula are essentially restricted to coverb functions, how then is the further expressive range of Yabem SVCs achieved in this language? For example, how are resultatives expressed? Or aspectual meanings? Or accompaniment? Or indeed temporal settings, as in (41c)? These are expressed in coordinated clauses with ‘and’, but crucially, in Mangap-Mbula there are two conjunctions for ‘and’, ma and mi, a distinction between tight and loose coordination along the lines suggested in Moyse-Faurie and Lynch (2004) and well illustrated in the following sentence with both:

(49) to-na i-ko mi i-mili ma i-mar kar
then-TOP 3 SG-flee and 3 SG-return and 3 SG-come village
‘after that, he fled back to the village’

Note that the relationship between -ko ‘flee’ and -miili ‘return’ is semantically weaker, more precisely, non-implicative, than that between -miili ‘return’ and -mar ‘come’: one can flee some place without having to return anywhere, but one cannot return to a place without coming to that place. Hence the coordination between -ko ‘flee’ and -miili ‘come’ is signaled by the loose coordinator mi ‘and’, while that between -miili ‘return’ and -mar ‘come’ is marked with the tight coordinator ma ‘and’. Now, all the meanings noted above, expressed in SVCs in Yabem, are expressed by coordination with the tight coordinator ma ‘and’ in Mangap-Mbula:

(50) (a) cause-effect
(i) ti-pun-i ma i-meete
3 PL-hit-3 SG O and 3 SG-die
‘they killed him’

(ii) Keke i-pun ḅe ma i-meete son
Keke 3 SG-hit pig and 3 SG-die NEG
‘Keke didn’t kill the pig’ (note that son NEG has scope over both conjuncts)

(iii) yok i-lol lele ma sik
water 3 SG-cover area and completely cover
‘water completely covered the area’

(iv) ḅ-oso pizin ma ti-mar
1 SG-say REF.3 PL and 3 PL-come
‘I had them come’

(b) aspectual
(i) ni i-kaman uraata ma i-mbotmbot
3 SG.NOM 3 SG-do (RED) work and 3 SG-stay (RED)
‘he continued to work’
(ii) zin ti-kan kini ma i-map
   3 PL.NOM 3PL-eat food and 3 SG-end
   “they ate up all the food”

(b) accompaniment
an-j-kom Abike ma am-la mokleene
   1 SG-get Abike and 1PL EX-go garden
   ‘I went with Aibike to the garden’

(d) aspect and temporal setting
am-ru u-unu ma am-bot ma mbe
   1 PL EX-seek reason-3 SG and 1 PL EX-stay and night
   ‘we continued to seek the reason until dark’

The following table summarizes the comparison between Yabem and Mangap-Mbula:

<table>
<thead>
<tr>
<th></th>
<th>Yabem</th>
<th>Mangap-Mbula</th>
</tr>
</thead>
<tbody>
<tr>
<td>coverbs</td>
<td>SVCs</td>
<td>SVCs</td>
</tr>
<tr>
<td>cause-effect</td>
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<tr>
<td>aspectuals</td>
<td>SVCs</td>
<td>coordination with ma</td>
</tr>
<tr>
<td>accompaniment</td>
<td></td>
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<tr>
<td>setting</td>
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<td></td>
</tr>
<tr>
<td>‘and’</td>
<td>coordination with ma</td>
<td>coordination with mi</td>
</tr>
</tbody>
</table>

5. Conclusion
There are two salutary conclusions to be drawn from the data and analyses presented in this paper. First, it does not seem likely that there is a typologically or theoretically coherent notion of SVCs that can be usefully applied across languages. The range of what we would define as SVCs on language internal grounds is very variable across languages, from very restricted, mainly coverb functions in Mangap-Mbula, to complex narrative strings with no internal semantic coherence in Watam. What is expressed as a narrative SVC in Watam in (36) could never be expressed as an SVC in Mangap-Mbula, but would require a number of clauses, probably mostly conjoined with the loose coordinator mi ‘and’. And, as we have seen, even between relatively closely related languages, like Yabem and Mangap-Mbula, what is an SVC in one language may not correspond to one in another. With such a poor crosslinguistic fit, it seems unlikely that the notion of SVC is a useful theoretical concept. Rather SVCs seem to be the result of various pressures, both semantic and pragmatic/discoursal, to express complex information in a single clausal unit.

Secondly, crosslinguistic data in this paper allow us to put to bed permanently the old chestnut that SVCs express a single event, however, that notion is more or less
elaborately defined. The contrast in form for the same meaning in Yimas example (30) should put pay to that. But also consider the way the event kill is expressed across the four languages: a lexicalized root tu- ‘kill’ in Yimas, an SVC in Watam and Yabem, and coordinated clauses in Mangap-Mbula. Do we really want to claim, in the light of this formal diversity, that kill is a simple event in Yimas, a macro-event with two component sub-events in Watam and Yabem, and a sequence of two independent macro-events in Mangap-Mbula? Clearly, such a conclusion is absurd. Whatever the semantic structure of kill is, it is the same in all four languages, and in none of them is it a single event. There are undoubtedly universal semantic constraints on what can be lexicalized, what can be an SVC (though examples like (36) from Watam indicate they must be pretty weak) and what must be coordinated, but our knowledge in this area is woefully insufficient to allow us to read off from the formal crosslinguistic variation in the data, semantic and perhaps ultimately conceptual notions like single or multiple eventhood. SVCs might express a single event, if we can precisely define that notion (45b), but they need not (36). But then again, coordinated clauses might express a single event (50a iii), but need not (50a iv). While SVCs may not constitute a theoretically and typologically coherent notion, whatever they are, their continued detailed study will pay rich dividends in unraveling the role of lexical, semantic and pragmatic constraints on the formal structure of language.

References


A KARAOKE APPROACH FOR LANGUAGE TEACHING: A CASE OF “LEARNING TO READ THAI FROM SONGS” PROJECT

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Introduction
Video is known to be an effective language teaching aid. This paper explores the features of a special type of video: karaoke, music videos with text lyrics on screen, and how these features can be effectively incorporated into instructional materials for teaching reading skills for non-Roman script Less Commonly Taught Languages, using examples from Thai materials. The paper covers the following topics:

- Problems of teaching non-Roman script languages
- The importance of reading in L2 learning; reading process
- Discussion of the features of karaoke that are relevant in teaching Thai reading skills
- Design and implementation of ‘Learning to Read Thai from Songs’ project

Problems in teaching non-Roman script languages
Assuming that the goal of language instruction is for learners to learn all the skills involved in language use: listening, speaking, reading and writing, one of the main problems of learning to read in a non-Roman script language is obviously learning to “decode” the unfamiliar script or orthography of the language, especially at the level of grapheme-phoneme (symbol-sound) mapping which is crucial in the word identification and word recognition process in reading.

This level of grapheme-phoneme mapping occurs in all the three major forms of writing system, depending on the unit that is represented by a grapheme:-

1) In Logographic/Ideographic writing systems such as Chinese, the whole symbol corresponds to the whole phonological form of the morpheme or word.
2) In Syllabic writing systems such as Devanagari or the Kana character in Japanese, each symbol corresponds to each syllable in the language.
3) In Alphabetic writing systems such as English and Thai, each symbol (letter) can be said to corresponds to a phoneme.

Alphabetic writing systems can be further classified into 2 groups:

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1 This paper is based on a project funded by Arts and Science Faculty Award of University of Hawaii in 2003. I also would like to acknowledge University Research Council of the University of Hawaii which provided a travel grant to present this paper at SEALS 14 Annual Meeting.
1) the systems where there is a one-to-one relationship of letter to phoneme in every or most of the words, and
2) the systems where the relationship of letter to phoneme is not regular.

Thai can be regarded as belonging to the first group since the letter-phoneme mapping is quite systematic, and English can be considered as one of the latter group, since many English words do not have one-to-one relationship between letters and phonemes.

With respect to word-boundaries, which is generally a unit for word identification in reading, Henderson (1984:16) observes that most alphabetic scripts mark word boundaries by a space. However, there are alphabetic languages that lack word spacing, such as Sanskrit, Hebrew and Greek. These languages use other devices to mark word final grapheme. Thai and a number of languages on the mainland of Southeast Asia also belong to this latter group of alphabetic writing systems which do not use space to mark boundary: “thaileavesnospacesbetweenwords”, but use other devices than space among words to mark word boundaries. This presents additional problems for learners in word recognition/identification among strings of letters in such languages, in addition to learning to decode unfamiliar non-Roman scripts.

In this paper, I will address specifically the problem of reading Thai script, as an example of an alphabetic, non-Roman script language that does not use space to mark word/syllable boundaries. I will demonstrate how the features of karaoke make it a good audio-visual aid in teaching reading and other skills in Thai, while providing a positive and fun learning experience for language learners.

Characteristics of Thai script
In summary, the following are notable characteristics of Thai script:

- alphabetic, with fairly systematic correspondence between letter and sound
- written from left to right
- no spaces between words/morphemes
- vowel symbol(s) are in fixed position(s) around the initial consonant/consonant clusters
- tone markers represent tones; the position of the tone marker is above the initial consonant. The value of the tones also depends on the class of the initial consonant.

The following is an example of a Thai sentence in normal Thai writing, i.e., no space between words or syllables. This sentence consists of 5 morphemes: In this example, the vowels are shown in lighter shade to demonstrate how vowel positions correspond with morpheme/syllable boundary.

เขากำเนิดมีวัฒนาการ

The above sentence can be shown with spaces among morphemes as follows:

2 Thai script developed from "Grantha", an ancient Brahmi script of South India since 1283 A.D. Grantha is also the source of Khmer (Danivivathana 1987).
3 The sentence means: "He is a scholarship student"
The vowel forms in the above examples are presented below; C represents the required final consonant position for that particular vowel form.

The fixed position of the vowel forms and tone markers in a syllable can be used as a device to help the readers mark/recognize syllable boundary in Thai writing, especially with the vowels that appear in the position before initial consonants which help mark the beginning of a syllable. The fact that most of Thai minimum words (morphemes) are monosyllabic means that the vowel positions can be helpful in marking most of the morpheme boundaries as well.

The minimum words in Thai language are predominantly monosyllabic but polysyllabic words/morphemes also occur. Compounding and reduplicating are two main processes in word formation in Thai. (Haas 1965). Therefore, syllable is regarded as a unit in Thai that is identified in the reading process (Brown 1979: 30).

The tasks that a learner of Thai encounter in reading Thai scripts at word level are therefore as follows:

- learn to “decode” or “decipher” unfamiliar scripts
- learn to identify syllable, morpheme, and word boundaries

The importance of reading skill in L2 learning

Researchers in second language acquisition have found that reading is a powerful language acquisition resource. Many researchers have documented the importance of encouraging authentic reading and writing activities with L2 learners, for example, Tomlinson (2000) and Krashen (1993). However, many L2 learners are inhibited from developing confidence and fluency in reading, and miss the opportunity of using reading to acquire L2 because for them reading is a negative experience which provides little enjoyment or success. (Tomlinson 2000). Therefore, one way of encouraging L2 learners to develop confidence and fluency in reading is to provide positive reading experiences with enjoyment and a certain degree of success.

The reading processes

Reading is a complex cognitive activity. Research on reading suggests that reading involves two basic cognitive processes (Ehri 1998):

1) deciphering the symbols(graphemes)
2) comprehending the meaning of the graphemes and the message conveyed

“Meaning” here includes word meaning and text meaning. In order to understand the meaning, the reader makes use of contexts from various sources such as grammatical and
semantic context within the sentence to determine the meaning of the word, as well as situational, pragmatic and schematic (world knowledge) contexts to understand text.

The two basic levels of cognitive processes above sometimes are referred to as lower level and higher level processing, with deciphering and word identification as lower level skills, and comprehension of text from various contexts as higher level skill.

The following (Figure 1) summarizes the processes of reading according to the interactive model of reading proposed by Rumelhart (1977) and subsequently as adapted by Ehri (1998: 6)

![Figure 1: Interactive model of reading.](image)

The bottom two boxes in the diagram refers to the “lower-levels” in reading processes., i.e. (Ehri 1998):

- the knowledge of graphophonemic system enables a reader to convert letters into sounds in order to decode unfamiliar words.
- the lexicon, or lexical knowledge refers to words that a reader holds in memory, including the written forms of the words known by sight.

Research on reading show that readers use various strategies in recognizing words. Ehri (1998) identifies at least 5 different ways:

1) By assembling letters into a blend of sounds. This is a strategy that readers use to read words they have never seen before. This strategy works well with a language with systematic correspondences between letters and sounds.
2) By pronouncing and blending familiar spelling patterns, i.e. by decoding chunks or clusters of letters. This is how a more proficient reader processes longer and less familiar words. The clusters of letters usually correspond to syllables or onsets and rimes of syllables. Syllabic units are not recognized prior to letters, nor vice versa. Both are recognized more or less simultaneously. (Weaver 1994: 210)
3) By retrieving sight word from memory. The readers use this strategy to recognize words that cannot be read accurately by decoding letters into sounds because of idiosyncratic spellings. Proficient readers also automatically recognize many words

4) By analogizing to words already known by sight. Goswami (1990), cited in Ehri (1998) and in Goswami (1998), found that beginning readers can use their knowledge of rhyming words to read word by analogy.

5) By using context cues to predict words. The contexts are the readers’ knowledge of the language and the world and their memory of the text already read. However, this does not account for the way that readers read most words in texts. Studies show that on the average, only 25-30% of the words can be guessed correctly. (Stanovich 1980, cited in Ehri 1998)

A large number of studies of reading in L1 have consistently shown that efficient/fluent word recognition skills play a critical role in successful reading. This efficient/fluent word recognition skill is also referred to as an “automatic” word recognition skill. Laberge and Samuels (1974)’s Automaticity Theory described the development of fluency/automaticity using 3 components (Samuels 1992):

1) decoding
2) comprehending
3) attention

Decoding and comprehending are the two basic cognitive processes in reading mentioned above. “Attention” refers to “selective attention”, i.e., “the ability to focus one’s mental energy and effort on certain aspects of the environment and to filter out other part that one do not want to process” (Samuels 1992: 129). Mental energy and effort are needed in cognitive processes such as decoding and comprehending in reading, and there are limits on how much information the human mind can process at one time.

Samuels, Schermer and Reinking (1992: 131) state that in reading, a beginning reader focuses attention on decoding first, and only later switches attention to comprehending, therefore making beginning reading slow and difficult. Besides, the visual unit that a beginning reader used in decoding is often as small as a single letter. With practice, the length of the visual unit increases. This model of the shift in attention or focus of a beginning reader is illustrated as follows:
As for proficient/fluent readers, they learn to perform both processes in a way that allow their attention to focus on the meaning of the text while the mechanics of deciphering operates ‘automatically’. The visual unit in fluent reading is the whole word. This model of a fluent reader is illustrated as follows: (Samuels, Schermer and Reinking 1992: 133)

**How to become a fluent or proficient reader**

Studies and researchers have provided empirical evidence that repeated reading through practice is a primary factor in helping L1 learners develop fluency/automaticity and accuracy in word recognition. Through practice, readers become able to reduce the cognitive burden of word recognition and direct more attention to comprehension. Thus they can achieve a faster reading rate and also better comprehension. (Taguchi 1998).

Procedures for repeated reading involves rereading a short passage orally or silently until the learner is able to read with ease. The procedure can be “assisted”, with a live or audiotaped reading of the text being read provided for the reader, or it can be “unassisted”, without audio reading model of the text supplied.

Taguchi (1998) studied the effects of repeated readings in L2 or FL in Japanese learners of English. The study found that repeated readings are equally effective in
developing the word recognition skills of FL readers within practiced passages as it is for L1 readers, and that using an audio model of reading passages in the repeated readings in L2 or FL has some advantages, one being that it provides prosodic features which help learners segment sentences into meaningful units. In addition, the use of audio reading model in repeated readings can keep learners interested in their reading activity as opposed to repeated reading without audio models which has often been argued to cause learners to become bored and unmotivated.

Another issue in the development of reading skills in FL is the issue of the two aspects of reading skills: silent reading skills and reading aloud (oral reading) skills, especially for adult learners.

In Taguchi’s 1998 study of repeated readings, the reading procedure used for the repeated readings was silent reading, both with and without audiotaped models of the text. Oral reading was only used one time in the final reading to calculate the reading rate in comparison with silent reading. Taguchi made the observation that older, more mature FL/L2 learners rarely read aloud when reading for information or for enjoyment. Therefore, if oral reading is always required in the repeated reading procedure, it might cause them to become less interested or less motivated.

Kailani (1998) observed that the literature on the development of reading skills, in which reading for meaning is central, have placed emphasis on silent reading and de-emphasize reading aloud. However, he proposed that both types of reading can be complementary to each other in language teaching, i.e. reading aloud is primarily useful as “reading for language” and reading silently is useful for “reading for meaning”.

Kailani acknowledged that in real life we rarely read aloud; however, he suggested that there are certain types of texts that are natural for reading aloud such as songs, lyrics, plays, dialogues and prose and verse from literature.

Kailani gave various justifications in using oral reading or reading aloud in FL teaching from his observations in teaching Arab learners of English, for example:

- reading aloud systematically trains learners to recognize the visual configuration of words, and to associate sound with meaning
- reading aloud improves pronunciation and oral fluency
- reading aloud provides exposure to and practice in the prosody in FL such as its intonation and rhythm and thus enhances the comprehension process

Thus, Kailani suggested that with the suitable reading materials that correspond to learner’s level and interests, reading aloud can be integrated into language development as a whole.

Regarding the issue of the association between the sound and visual word recognition in the reading process, one of the research results of characteristics of proficient readers uncovered by Weaver (1998: 210-211) is that proficient readers automatically “hear” the words of the text in their mental ear. This suggests that automatic word recognition includes the automatic association between word form and pronunciation.

To sum up, studies suggest that:
- Repeated readings is a way to develop automaticity/fluency in word recognition skills in both L1 and L2.
- For L2, assisted reading, i.e. using an audiotaped model of the reading passage in the repeated readings, has some additional advantages with respect to pronunciation and prosody of L2.
- For L2, oral reading improves pronunciation and oral fluency of learners and reinforce the association of the sound, the meaning and the word form.

**Features of karaoke that are relevant in teaching reading skills**

“Karaoke” is music video with text lyrics on screen. The typical purpose of karaoke is to provide lyrics to sing along with the melody, with the text lyrics corresponding to the melody highlighted as the music progresses. Karaoke also has accompanying vocals to serve as a audio “model” of the sing-along. This separate soundtrack of accompanying vocals can be muted. The text lyrics on screen can be in “transliteration”, or in the local script or both. Thus karaoke provides audio, visual and also textual information at the same time.

We can also view karaoke as songs with visuals and lyrics. Hubbard et al. (1993: 92) listed the following arguments in favor of using songs in language teaching for all age groups, which also can be considered as arguments in favor of karaoke:

- songs increase motivation to learn a language because by learning a song, learners feel a sense of achievement
- songs give learners intensive practice in selected patterns, but without boredom
- songs are memorable for learners, as well as the language practiced in them.
- songs can give learners pronunciation practice
- songs can provide learners with insight into FL culture
- singing songs is a group activity which help bring the group together and breaks down the barrier that prevents learners from learning a language effectively

In addition, some song lyrics make use of poetic devices such as rhyming and repetition (word repetition and sentence structure repetition). Such karaoke lyrics thus provide repetitive examples of the words and grammatical patterns used in real meaningful context, and in the case of rhyming syllables, they also makes use of repetitive syllable structure. As mentioned above, Goswami (1998), found that beginning readers can use their knowledge of rhyming words that differ in the initial consonant or consonant cluster to read words by analogy.

As discussed above, in non-Roman script alphabetic language with no space as word/syllable boundary marking, recognizing word/syllable forms among the strings of letters is a crucial step in the reading process. The text that provides opportunities to repetitive exposure and practice in these patterns therefore enhance the reading skill, which is regarded as an important skill in L2 acquisition process.

Other features of karaoke that can enhance language learning process, especially in script reading skill are:

- For karaoke with the lyrics shown in L2 script, the highlighted text help guide the learners’ eye to the beginning of the syllable/word, which is helpful for readers especially in scripts with no space among words, such as Thai. The speed that the
highlighting moves along the text also set the word/syllable reading pace for the learners to follow.

- Karaoke lyrics can be used as a reading practice text in both assisted and unassisted reading. The vocals accompanying the lyrics provide the audio model for reading in an assisted reading practice. Or, the vocals can be turned off, for unassisted reading practice.
- For oral reading practice, the learners can compare their pronunciation with the karaoke vocals model, thus helping them practice for accuracy in pronunciation.
- The visual information from karaoke scenes, if corresponding to the text being presented, provide contexts to aid in the understanding of the text whether presented for reading comprehension activities or listening comprehension activities, especially for some cultural concepts that are best understood from visual information. In addition, the accompanying vocals and the lyrics on screen support each other by providing complementary help on the reading and listening comprehension activities.

In sum, as a language teaching material, karaoke can thus be viewed as a short authentic text with the sung vocals functioning as an audio reading model, accompanied by corresponding visual context.

**Shortcomings of karaoke as a language teaching material**

As is the case with any “authentic” language materials the main purpose of which is for entertainment - not for use as instructional materials, commercially available karaoke has some shortcomings in the following issues concerning the use as an instructional material for non-Roman script languages:

1. **Language issues**
   - **lyrics text script**: In non-Roman script languages, karaoke lyrics texts can be in either the script of the language, or, for international appeal for foreign consumers, can be in “transliteration”, using Romanization. The main problem with transliteration is that, often in non-Roman script languages, there is no standardized transliteration system, so each karaoke company may use a transliteration that they themselves devise, which is to some degree inconsistent with all others. Another potential problem is that some karaoke songs have lyrics as text in transliteration only, which makes them unusable as instructional materials for script reading
   - **genres/registers/styles**: Language styles/registers used in lyrics depend on the targeted audience and the subject matter of the songs. For example, pop songs targeted for teenagers tend to include a great deal of trendy colloquial forms and slang. Love songs tend to incorporate more literary words. Country songs tend to use simple language, though they also can be peppered with local dialectal vocabulary items. The types of songs that are made into karaoke may not be appropriate for use as class material to suit the classes’ purposes, needs and the language level and skill to be taught.

2. **Lyrics content and accompanying visuals**
   - Ideally, karaoke lyrics to be selected for use as language material text should be meaningful and coherent, with accompanying visuals that correspond well to, or are
relevant to, the content conveyed in the lyrics in order to be helpful as visual context for language material in language learning. However, commercially available karaoke songs do not always provide visual cues relevant to the songs.

3. Vocals
Two important issues for vocals in the karaoke that are suitable for use as “reading models” in language instruction material are 1) clear pronunciation, 2) slow speed:

1. **Pronunciation:** The pronunciation should be clear and not distorted to fit in with the tune. This is of special importance with prosodic elements of the pronunciation that can be distorted by the tune such as stress patterns and tones.

2. **Speed:** The speed of the music and vocals should be slow.

However, a majority of commercially available karaoke, especially pop songs, do not always pay attention to the issue of clear pronunciation. Some pronunciations are even deliberately distorted to add colors to the vocals. Certain types of rhythms in karaoke pop songs are naturally fast and therefore unusable as language instructional materials for beginners.

Using karaoke features in “Learning to Read Thai from Songs” project
As discussed above, karaoke has many desirable features and thus has good potential for use as a language teaching material, especially for reading skill. The shortcomings mentioned are only prevalent in commercial karaoke which are not intended to be language instructional materials. Those shortcomings can easily be avoided in karaoke type material which incorporates only the desirable features of karaoke and is developed for use as instructional material for language teaching.

“Learning to read Thai from songs” project aims to develop such material. This project aims to enhance the instruction of reading skill in beginning level of Thai. The target audience is students who already know all of the Thai alphabet and writing system and some basic conversational Thai. Thai script reading and recognition practice in addition to other language skills practice such as pronunciation practice, structural drills are achieved by using a multimedia presentation of lyrics text and sung vocals of Thai songs, accompanied by corresponding animations, accessible via the web. The project website address is: [http://www.hawaii.edu/thai/thaisongs](http://www.hawaii.edu/thai/thaisongs)

The presentation of each song in this project consists of the following:

- Background information about the song, such as the history, the subject matter referred to, the lyricist and composer, if known.
- Text lyrics in Thai script, with syllable/word boundary marked by space
- Audio of pronunciation/reading linked to the text lyrics, by word and by verse

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4 For Thai, Deepuengton (1982) concluded that in Thai country songs, tone distortion may occur in pitch height and pitch contour, with Thai "mid level " tone has a greater tendency to be distorted. The perception of distorted tones in Thai is conditioned more by the contour shape of the tone than the pitch height. However, with contextual clues, Thai native speakers can perceive the distorted tone correctly at a high percentage.
The sung vocal is presented in two ways:

1. as an audio file of the whole song
2. as a "karaoke" style sing-along, i.e. the lyrics words are each highlighted in corresponding with the sung words, accompanied by the animation which corresponds with the meaning of each verse. The user can choose to play either by verse or by the entire song and can play it repeatedly.

The sung vocals are performed by a commissioned singer and musician for clarity of pronunciation and control of the pace and speed of the sung songs.

Seven songs are selected for this project. The criteria for selection are:

1) language features such as vocabulary items and sentence structures that are appropriate for beginning learners of Thai
2) commonly known songs that are royalty/copyright free such as children’s songs, traditional folksongs and special occasion songs, for example.

The seven songs included in the projects are:

1. ชาง (Elephant)
2. สุขาอยูหนึ่ง (Where is the Bathroom?)
3. ผูใหญ่นัก (Village Chief Lee)
4. ตาอินกะตานา (Old Man In and Old Man Na)
5. งามแสงเดือน (Beautiful Moonlight)
6. ใกลเขามาอีกนิด (Come a Little Closer)
7. ตามองตา (Our Eyes Meet)

Figure 4a. and 4b. are screen shots from the display page of the song “Elephant”, showing a presentation format of a song in this project. Figure 5 is a screen shot of a “karaoke sing-along” display of the “Elephant” song, with the play by verse option. The word being sung is งวง (trunk) which is highlighted. The animation shows an arrow pointing to the “trunk” of the elephant.
Figure 4a: A sample screen shot from the song “Elephant”

Figure 4b: A sample screen shot from the song “Elephant”
The design and implementation of a “karaoke” sing-along page

In incorporating the desirable features of karaoke into each sing-along multimedia web page, the display page is designed to have the following elements:

- animation from still images
- synchronization of the animation with the sung vocals
- correct display of the text lyrics in Thai script that is viewable by a computer of any platform
- display of English glosses of selected words in the lyrics text
- synchronization of the highlighting of the words in the text lyrics with words being sung
- a trigger to start and stop repeated play of sung vocal and text lyrics highlight for each verse at a time and also continuously for the whole song

We chose to use Macromedia Flash MX software as the solution to achieve the technical requirement outlined above. Flash MX is an animation creation program for the web that has a timeline feature allowing for the time-aligned synchronization of actions of graphics, audio and text objects.

The Thai text lyrics in each “karaoke” sing-along page is recreated as a graphics object (.gif file) in order to control the correct display of the Thai font and to interact and synchronize with other objects, namely the corresponding sound file and the highlight color.

Figure 6 shows a sample timeline structure and Figure 7 shows a sample of the Flash Action scripts used for each object.
The Flash MX action scripts\textsuperscript{5} developed for use in the “karaoke” sing-along pages of this project can be used as templates for further development of other songs and other types of text materials for the instruction of Thai script reading. These Flash MX scripts and templates are available for distribution for academic use.\textsuperscript{6}

Conclusion
I have presented the issues concerning the teaching of script reading in non-Roman script languages, using Thai as an example, and addressed the importance of reading in language learning. The merits of karaoke as potential instructional materials for enhancing reading skills are also discussed. I have proposed that karaoke can be regarded as a short authentic text with the sung vocals functioning as an audio reading model, accompanied by corresponding visual context. Despite the shortcomings of commercially available karaoke for use as language teaching materials, with currently available technology we can incorporate desirable features of karaoke in creating multimedia instructional materials for language instruction and learning, as shown by a project such as “Learning to Read Thai from Songs” which can be viewed from the website: http://www.hawaii.edu/thai/thaisongs

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{timeline.png}
\caption{Timeline and synchronization of actions of each object}
\end{figure}

\textsuperscript{5} Flash MX action scripts for this project were written by Mr. Yudthaphon Vichianin, Communication and Information Sciences Program, University of Hawaii-Manoa (yudthaph@hawaii.edu)

\textsuperscript{6} Those interested in obtaining the Flash scripts and templates mentioned in this paper can contact the author at yuphapha@hawaii.edu
A karaoke approach for language teaching

References

Figure 7: A sample of flash action script


WHAT IS /nîa/ DOING /nîa/? : GRAMMATICALIZATION OF TOPIC IN THAI

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0. Preliminary
In the study of grammaticalization, there have been discussions about possible processes in which topics become subjects in the linguistic system (Givón 1979, Shibatani 1991). It is not very common, however, to find discussions that consider the process in which the topic itself comes to be established as a grammatical notion. In other words, we do not know very much about how the notion ‘topic’ arises. This deficit in re-search reflects the lack of true appreciation of the notion’s cen-tral position in many topic prominent languages.

There are at least two reasons for this gap in the gram-maticalization research. One is that topic-comment structure in topic prominent languages is considered given, and no further probe is felt necessary. Second, the process may be only ob-served in actual discourse, as topic is indisput ably a discourse notion; whereas, we still tend to fixate on sentence level inves-tigation. In this paper, I break away from these traditions and problematize the notion of topic and study how it emerges in interaction among Thai speakers in conversation.

Traditionally grammaticalization is viewed as a dia-chronic process of a lexical word becoming a grammatical word, or a grammatical word becoming a more grammatical one. However, at any stage before the point when the original word and the grammaticalized word are completely separated in the minds of the native speaker, and hence in the language, two or more meanings or functions co-exist, and at such a stage different meanings or functions are completely context sensi-tive. This paper adopts a synchronic view of grammati-caliza-tion because the process of grammaticalization of topics is still very much at the initial stages, and much can be gained by looking at how people treat topics in their speech.

Thai can be classified along with many other Asian languages as a topic prominent language as it satisfies most criteria for such a language (Li and Thompson 1976: 466-471). Some topic prominent languages use a special morpheme to mark topics; ‘wa’ in Japanese, ‘(n)ung’ in Korean, ‘nya’ in Lisu, and so forth. In Thai, it has been suggested, demonstra-tives play a similar role (Ekniyom 1982, Diller and Juntana-malaga 1989): /nân/ and /nîi/ (in formal style), and /nîi/ and /nîa/ (in colloquial style). Among these /nîa/ is most in-teresting because it has a different phonological shape from normal demonstratives, suggesting that its function is now suf-ficiently differentiated from that of the ordinary demonstratives. (/nîa/ is a contracted form of the demonstrative /nîi/ ‘this’ and the pragmatic particle /nâ/). In this paper, I will be concerned only with /nîa/.

This paper consists of two major sections. In the first section, I will consider whether /nîa/ can be categorized as a topic marker. The answer to this question turns out to be nega-tive. The different functions that /nîa/ performs in conversa-tional discourse suggest that /nîa/ has not yet been developed into a full-fledged topic marker but is at an
incipient stage of development. In the second section, I will discuss a possible source for systematizing or grammaticalizing the notion of topic by examining how speakers employ /nía/ to organize their discourse.

1. Is /nía/ a topic marker?

1.1. /nía/ as a topic marker

Before considering the status of /nía/ as a topic marker, we need to define the notion of topic, or a topic noun phrase in a sentence. Though topic is a notoriously difficult concept to define, previous research has identified general characteristics of a topic noun phrase.

(a) Structural property: Structurally, a topic noun phrase is the left most constituent of a sentence.

(b) Anaphoric property: The information status of a topic noun phrase is definite, identifiable, presupposed, or ‘non-challengeable (Givón 1985).’

(c) Cataphoric property: A topic noun phrase anticipates a comment that follows. This is related to the function of a topic noun phrase “to provide a framework within which the main predication holds” (Chafe 1976:50).

For /nía/ to be identified as a topic marker, it has to appear with a topic noun phrase as defined above. /nía/ in excerpt (1) seems to qualify as such. This excerpt is from a parent-teacher conference at a college in Bangkok. In line 67, a female teacher (FT) marks /khaneen/ ‘grade’ with /nía/. This leftmost NP (‘grade’) represents a presupposed concept which was first mentioned in line 65 and provides the conceptual framework within which the predication ‘reaching a 1.5 GPA’ is made. Thus, this noun phrase has all three properties mentioned above, and /nía/ appears with this topic NP.

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(1)

65 FT: ท่านให้เกณฑ์ก่อนมาดีน่ากลัว
   HES LINK LP grade LP NEG good PP SLP
   ‘And her grades are not good, you know.’

66 P: ถ้ากลัว
   QP SLP
   ‘Is that right?’

67 FT: คุณมีแนวโน้มจะต้องผ่านเกณฑ์
   grade—PP | reach one point five QP |
   กี่ไม้
   kō māy sāap
   LP NEG know
‘About her GPA, did it reach one point five or not? I don’t know.’ (I am not sure if her GPA last year was at least one point five.)

Excerpt (2) is from a job interview for a waitress position in a hotel restaurant, and English ability is an important requirement for the job. The male interviewer (M) asked about the applicant’s English training prior to this line; ‘Did you study English since you were a child?’ (line 31) and ‘Why did you say you started studying English since Grade 7?’ (line 49). After M asked about the applicant’s previous job experience and training, he comes back to the topic of English in line 97.

97 M: ภาษาต่างประเทศ

лично ภาษาป้า;
language English PP;
วันๆ ใครๆ ให้หน่อย
day day one | use often how much SLP
‘The English language, how often do you use it a day?’

In the spoken data I examined, there are a number of clear cases of /nía/ appearing with a topic noun phrase. Based on these examples, we can conclude that /nía/ serves the grammatical role of topic marking. However, we should immediately note that there are many topic noun phrases with the three properties above that are not marked with /nía/. In addition, I will show next that further investigation reveals that /nía/ appears with non-topic constituents as well.

1.2. /nía/ in other contexts

In conversation /nía/ appears not only with a topic noun phrase but also with a certain type of question and with a conditional clause. Examination of these other uses requires us to modify the definition of /nía/; i.e., it is not simply a topic marker.

1.2.1. Question /nía/

The particle /nía/ appears in questions with presupposed in-formation. That is, it shares the anaphoric property of the topic marking /nía/. In other words, a question with non-presupposed information cannot be asked with /nía/. Typical non-presupposed questions are “Do you know…?”, “Do you believe …?”, and “Can you guess…?” Here are a few examples:

728 คิดว่า นักเรียนเล่าเรื่อย 50 บาทนะ

 chưa may | man Yan | say | 50 baht PP
believe QP | it | still take PP PP 50 Baht PP
‘Do you believe it? They took that 50 baht!’
These questions simply ask if the addressee knows something or believes something. In contrast to these simple questions, the /nǐa/ question is based on some presupposed information (‘nonchallengeable information’). For example, if the speaker knows that the addressee went to a hospital, she can use this presupposed information as the basis of the question, “Which hospital did you go to?” It would be absurd to ask this question if there is no presupposed information. In the next excerpt, Daw is directly quoting what her doctor said after she told him that she had taken a certain medicine. The doctor quoted here disapproved of this prescription, and said “Which hospital did you go to!” This is a presupposed question, and /nǐa/ can appear with it.

The /nǐa/ appearing in a presuppositional question shares the cataphoric property of the topic marking /nǐa/. In contrast to a question without /nǐa/, the /nǐa/ question anticipates an answer that bears significant relevance in discourse. Like a topic noun phrase, the /nǐa/ question sets a framework for which an answer is invited. Obviously the doctor quoted in 311 is not simply asking the identity of the hospital, but wants to find out which hospital delivers poor treatment to its patients.

In a conversation where two students met for the first time ((6) below), we find many /nǐa/ questions. These questions are based on the assumption that the addressee ‘has a major,’ ‘has brothers and sisters,’ ‘has an age,’ and ‘has classes to attend.’ These questions are important for the development of the conversation.
1.2.2. Conditional /nìa/
Conditional clauses with /nìa/ are very common. The sentence in (7) below consists of the conditional clause ‘if you drive a Mitsubishi’ (line 378) and the consequent clause ‘you will be-come like those in the commercial - I mean - you will be happy’ (379). Notice that the conditional clause is marked with /thaàa/ ‘if’ at the beginning and /nìa/ at the end.

(7)
378 ถ้าคุณไปซื้อมือถือในโฆษณาที่มีภาพซุ้ม
thàa kàa thàa Mitsubishi kàa thàa lèaw nìa
if drive Mitsubishi if they ASP NIA
‘If you drive a Mitsubishi,

379 ก็จะมีคนที่มีเงินอยู่ในมือถือเช่นกัน
kè ā ca pen mèan nay khoosanaa khaa mìi khwam-sùk
LP CM COP same in commercial LINK have happiness
‘you will be like those in the commercial - I mean - you will be happy.’

Below are few more similar examples.

(8)
318 คืออย่างที่บอกนะครับ
kàa yàan thí book nà há
HES like SBR tell PP SLP

ถ้าถ้าโฆษณาในไทยไม่ชอบนี่
thàa-kàa khoosanaa an này này chàa nìa
if commercial CLS which NEG like NIA
Like I said, if a commercial I don’t like comes on,
We noted above that a /nǐa/ marked topic and question are both presuppositional. According to Haiman (1978), a conditional clause is also presuppositional (p. 585). We will consider this suggestion below.

First, we should note a fundamental difference that exists between a conditional and other adverbial clauses in terms of their relationship to the main clause. A non-conditional adverbial clause simply combines two facts, but a conditional clause creates a particular world and makes a statement within this created reality. If we compare ‘Since he is a rich man, he can buy an expensive car’ and ‘If he is a rich man, he can buy an expensive car,’ this difference is evident. Haiman describes this nature of a conditional in the following way: a conditional clause is a request for the addressee to “accept for a time a proposition \( p \) which provisionally becomes the framework of reference for the discourse.
– in particular, for the consequent proposition $q$” (p. 580). To put it differently, upon a speaker’s uttering and an addressee’s hearing a conditional clause, the speaker and the addressee enter into a contractual agreement that they assume the condition as a temporary presupposition and as a framework within which a particular statement is made. In this way, a conditional clause shares both anaphoric and cataphoric properties with the topic NP and /nía/ marked question.

The kind of contractual agreement observed for a conditional clause is not required for a ‘true topic’ because the presupposition has already been established in the minds of the addressee. However, it becomes necessary if a topic has not been completely established. I call this type of topic a ‘provisional topic,’ and will come back to discuss its nature later.

1.2.3. Discourse marker /nía/

The cataphoric property of the constituent marked with /nía/ is evident in all three cases we examined – the topic noun phrase, presupposed question, and conditional clause. That is, the /nía/ marked constituent sets up a framework and anticipates a comment to be supplied within it. Sometimes, however, /nía/ appears without any preceding constituent. Even in this case, /nía/ exerts a cataphoric force and directly brings into the discourse information with significant relevance. This is /nía/’s discourse marker function.

In the next excerpt, Daw is explaining her encounter with some traffic police. In line 724, she describes how she showed her wallet to the police. In line 725, she starts her utterance with /nía/, and says ‘I have only a credit card and 50 Baht.’ This information supplements the information in the previous line.

(11)

724 เล่าเรื่องแล้วก็ลงมาถึงตัวตั้งให้มีบุญ
โปรด ปล่อย ใส่เงิน กระชำกวาง หาย ผ่าน ทัน
LINK finish ASP LP take wallet give/CAUS it see
‘Then I showed them (the police officers) my wallet.’

725 เนื่องมีเด็กเห็นขัดกันแบบ 50 บาท
น้า มี เตี้ย บัตรเครดิต ใบหน้า 50 บาท
NIA have only credit card and banknote 50 Baht
‘I have only a credit card and 50 Baht.’

726 เข้าถาม ผ่านอัตเอ้าท์ 50 บาทเท่า
เชื่อว่า ไม่ | เชื่อว่า ไม่ | ไม่ พอ | 50 บาท นะ
believe QQ | it still take PP PP 50 Baht PP
‘Do you believe it? They took that 50 baht!’

Below is another example of the discourse marker /nía/. Daw is quoting a doctor in the three lines. In line 95, the doctor is assumed to begin his utterance with /nía/.
1.2.4. Interim conclusion

Although /nǐa/ may appear after a topic noun phrase in a topic-comment structure, it has not attained the status of a topic marker. This is because the particle is not grammatically required for all topics, and /nǐa/ appears with other structures besides topic NPs as demonstrated in the discussion so far. /nǐa/’s current status can be best described as a pragmatic particle with both anaphoric and cataphoric dimensions.

2. Topic establishment with /nǐa/ in conversation

I come back now to the issue of the grammaticalization of topic in Thai, by focusing on the case of /nǐa/ appearing after an NP. As I have already mentioned, at the present stage of development, /nǐa/ performs at least two pragmatic functions. The first is to mark the information as presupposed or poten-tially presupposed. The function of marking potentially presupposed information is particularly useful because the speaker may not always be certain if the information he wants to use as a framework is really presupposed. The second function, the cataphoric function, is also useful because it alerts the addressee that some important information will be supplied for the /nǐa/ marked NP.

With these two functions, the speaker can put poten-tially presupposed information on the table before completely integrating it into a clause structure. In other words, a /nǐa/ marked NP can be characterized as an underdeveloped topic NP both pragmatically and syntactically. I call this type of noun phrase a ‘provisional topic,’ and claim that these func-tions are the basis of possible grammaticalization of /nǐa/ as a true topic marker, though, of course, the future of this particle cannot be predicted (cf. Chafe 1976:52-3).

I will show below how pragmatically and syntactically underdeveloped constituents, or provisional topics, are used to negotiate information building in conversation. In this next ex-cerpt, the interviewer asked one of the interviewees a rather complex question: ‘What message do you think the commer-cial you like is trying to communicate to us?’ In fact the ad-dressee did not understand the question at first and
Grammaticalization of topic in Thai

A speaker can thus provide manageable chunks of information when dealing with complex information. The next excerpt also illustrates the same point. The speaker supplies bits of information, ‘Mitsubishi,’ ‘for me,’ and ‘if compared with other models’ before offering a comment ‘not superior to other models.’ It is difficult to integrate all these pieces of information in a simple sentence, especially when the speaker is producing utterances on line in conversation.

(13)

Nisa: น่าจะเอื้อมยิ่งกว่ามาก

ask  say/COMP | HES  YS.2 think  say/COMP |
khōtōx̂ naa  thīi nō̂t yû chhōp nīa |
commercial  SBR YS.2 like  PP |
'I asked ... uhm... What do you think the commercial that you like, you know,

โอ้โอ๋ อ๊ะนี่
Oreo  PP
'the Oreo commercial, you know.

ดูแล้วนี่

look ASP  PP
'after watching it, you know,

What do (you think) they want to tell us?'
Since a /nìa/ marked noun phrase can be prematurely executed, it may not be successfully closed. The speaker in the next ex-cerpt produced two /nìa/ marked NPs in succession. First she says, 'the ability of the (VISA) card' with /nìa/, and then says 'the people who can use it' with /nìa/. The second noun phrase is followed up by the comment provided in line 305, while the first one is abandoned.
The above examples amply attest that speakers build up complex information by presenting information piece by piece without much pre-planning. This discourse pattern or strategy is not unique to Thai, and similar strategies have been reported in other languages such as Mandarin (Tao 1996) and Caddo (Chafe 1976). English speakers also use so-called ‘try markers’ (e.g. “Remember Tom?”) before making a complete sentence (Sacks and Schegloff 1979, Keenan and Schieffelin 1976). Indeed, this type of discourse pattern may be a precursor of a grammaticalized topic.

3. Conclusion

/ni^a/ is not a true topic marker (yet) but is a pragmatic particle that performs dual functions. Anaphorically it marks or suggests presupposed information, and cataphorically it sets up a framework for an upcoming comment. The phonological change from /ni^i/ to /ni^a/ suggests that /ni^a/ is developing a new function that is different from the original demonstrative /ni^i/. However, /ni^a/ is still a multi-purpose particle, and none of the functions has been fully grammaticalized, or specialized.

Development of the pragmatic particle /ni^a/ from a demonstrative takes us home to the complexity of grammaticalization and language change (cf. Herring 1991:254-5). On the one hand, the change from a demonstrative to a pragmatic word can be seen as an example of ‘subjectification’ in the process of grammaticalization (Traugott 1982). A word is becoming increasingly more subjective. The current status of /ni^a/ is at this stage. /ni^a/ may or may not proceed to become a true topic marker. If it does happen, it will be an example of the process of pragmatic notion systematized in grammar (Givón 1979).

References


**Abbreviations:**

1M = first-person male pronoun; 2 = second-person pronoun; 3 = third-person pronoun; ASP = aspect auxiliary; BAC = backchannel; CAUS = causative; CLS = classifier; CM = challengeable marker; COMP = complementizer; COP = copula; HES = hesitation; LINK = linker; LP = linking particle; NEG = negative marker; OS = older sibling; PP = pragmatic particle; QP = question particle; REC = reciprocal; SBR = subordinator; SLP = speech level particle; YS = younger sibling
TAOIST INFLUENCE IN TAI LANGUAGES
AND CULTURES

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Abstract
This paper hypothesizes that Taoism was the main source of old Chinese words in Tai languages. The writer proposes that some 1500 years ago Tai speakers were living in the vicinity of what is now North Vietnam and Southwestern China. Then the Tai people along with the Vietnamese were under a Taoist theocracy. Under its strict rule, the Tais and their neighbours were required to recite Tao Te Ching, the holy book of Taoism. As the result, influxes of Chinese words, from other Taoist ceremonies as well, flowed into Tai languages. To illustrate the point the writer establishes relationships between 50 Tai words and 50 corresponding Chinese words as used in Tao Te Ching. Also 50 Thai words and 50 corresponding Vietnamese words are presented as evidence of close contact between them in ancient time.

I Introduction
The purpose of this paper is to present two sets of data as evidence for the hypothesis that about 1500 years ago Tai speakers were living in the vicinity of what is now North Vietnam and Southwestern China along with the Vietnamese. Then they were under a Taoist theocracy. The first set of data is composed of 50 corresponding words between Thai and Chinese. The second set is composed of 50 corresponding words between Thai and Vietnamese.

The first set of the corresponding words is used as evidence that the Tai people were once Taoist followers. Since Taoist rulers were required to know Tao Te Ching by heart (Maspero, 1981) and ordinary people were required to recite Tao Te Ching (Robinet, 1997), it may be deduced that Tao Te Ching must have been one of the very few channels through which ancient Tai farmers, who lived in far away and isolated areas, could get exposed to the Chinese language. Chinese words must have permeated the Tai language through such recitation and also from other Taoist ceremonies as well. I believe that for Tais who are still practicing Taoism, i.e. the Zhuang in China, Chinese words borrowed from Tao Te Ching and other Taoist rituals must still form a big part of the vocabulary of their language. For those who later adopted Buddhism such as the Tais in Burma, India, and Thailand, a lot of Chinese words borrowed through Taoism must have fallen out of use. The 50 Chinese words in the first set of data are chosen from Tao Te Ching, the Definitive Edition, Lao Tzu, Translation and Commentary by Jonathan Star.

The second set of data, 50 corresponding words between Tai and Vietnamese, is used to reflect the close contact between Tais and Vietnamese in ancient time. Since the Vietnamese are still more or less at the same location as in ancient time, the data could imply the place and the time of the contact. The words in this set are chosen from Vietnamese –English Dictionary, Nya Xuat Ban TP.
II Why North Vietnam and Southwestern China?
William J. Gedney (1994) who studied most of the Tai languages of the area stated that the area had the most diverse Tai languages. The Tai languages of all the 3 branches of the Tai family may be found in the area which is a very good indication of this area being the Tai homeland.

Once one visits villages in North Vietnam and Southwestern China - an area untouched by modern development - it is not at all difficult to think of the places as the homeland of the Tai people. The people there seem to be living their old traditional way of life in the way of their ancestors. Spirit worship is very prominent. In every house, a space, or a shelf, is set aside for ancestors’ spirits. At the village level, a place for the spirit of the village is indispensable. The same is true for the spirit of the city. (Bangkok still has the City Pillar, Lak Muang, or the spirit of the city as remnant of ancient spirit worship.)

At present, millions of Tai speakers in Southwestern China still practice Taoism (David Holm 2003). The same is true for the Tais in North Vietnam though in a more limited form than that of their ancestors. In North Vietnam, Taoist place names and ethnic group names are good evidence that Taoism once flourished in the area. Many cities carry Tai names, though a lot have been changed. “Dien Bien Phu” is known as “män, A3-thñ, A1”, “City of Heaven”, by the Tais there. The word “thñ/ th:n, A1” is borrowed from the Chinese word “Tian”, (Heaven). According to some Tai chronicles, i.e. Ahom Buranji, this city used to be the center of the Tai administration. Aside from place names, traces of Taoism may be found among the names of the different groups of Tais. A large number of minority ethnic groups in North Vietnam, including Tais use color terms to distinguish among themselves, i.e. Black Tai, White Tai, Red Yao, White Mong. Black, white, red, green, and yellow colors are used in Taoist ceremonies to tell directions.

III How did Taoism get to North Vietnam and Southwestern China?
The area was under the Chinese rule from 111 B.C. to 938 A.D. (Taylor, 1983; Huard and Durand, 1998). Also around the 5th century, a lot of Taoist followers in China were migrating down south to escape from K’o Ch’ien Chih’s reformation of Taoism (Mather 1979, Yu 2000). Taoist theocracy had always been an important part of governing Tai people in ancient time. Chronicles of different Tai groups, i.e. Ahom and Chiangsaen , almost always described the entry of their new rulers to a newly established city via a ladder hanging from heaven or from “above”, symbolizing China. New rulers of a “mu’ang”, city, were most of the time sent from above or from heaven. They were always from somewhere else and never from the same village or city with the local people. The duty of the new ruler was to collect tax or levy in kind, such as rice, and send it to the Chinese Emperor. In far out cities and villages, rulers and headmen had the same prestige as kings or emperors (Robinet 1997). At some point during the Chinese rule, a system of bridled-and-haltered prefectures and counties was applied to the area. In this system, the areas were protectorates under native rulers who owed allegiance and tribute to China (Holm 2003, p.165). Since the Chinese regarded all other people as barbarians they had to “civilize” or “cook” their chosen native rulers before granting them official titles. Mastering Chinese and knowing Tao Te Ching by heart must have been part of the “civilizing” or “cooking process” applied to the chosen native rulers. Only the people of the ruling class of barbarians were put through the “civilizing process” or “cooked” by the Chinese. The rest remained barbarian or “raw” (Holm, 2003, p. 167).
IV A Very Brief Introduction to Taoism and Taoist Theocracy

Religious Taoism is quite different from philosophical Taoism. Only the first will be our concern here. Taoism is a native religion of China. It has never been a unified religion. Different schools have different teachings based on their own different revelations. However, all sects worship Laozi, Taoism’s originator, and Tao Te Ching. The latter, composed of about 5000 words, is purported to have been written by Laozi himself before he left the city where he worked for the royal court and went into seclusion. Laozi was said to live in the Spring and Autumn Period of the Chinese history, the Zhou dynasty.

Zhang Daoling is said to be the first person who organized a Taoist movement late in the Han Dynasty period, 206 B.C. – 220 A.D. In 142 A.D. he claimed to have received new revelations from Laozi. He went on to found the Taoist Celestial Masters sect and became its first Celestial Master (Robinet, 1997). As the Celestial Master, he performed spiritual healing and won a large number of followers. After their successful rebellion in 184 A.D., they founded an independent theocratic state in the Hanzhong Valley of Sichuan (Wikipedia, Tianshi Dao) The Zhang Celestial Masters flourished for three generations. Their followers were required to pay fees of five pecks of rice to join the movement. Zhang Daoling is thus said to have laid the basis of Taoist theocratic states. Of the many Taoist sects, the Southern Celestial Masters appears to be the one that the Tai people were exposed to. Several events, especially Kou Qianzhi’s reformation of Taoism, drove Celestial Masters followers down south. Later they came to be known as the Southern Celestial Masters sect.

V Sino-T(h)ai Lexical Correspondences From Tao Te Ching

Below are the chosen 50 words with the most straightforward sound correspondences. The number of words could easily triple if more Tai languages are taken into account, especially those whose speakers still practice Taoism, i.e. in Yunnan and North Vietnam.

<table>
<thead>
<tr>
<th>Chinese</th>
<th>Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 戰 chan⁴</td>
<td>(pra-) can¹ To fight.</td>
</tr>
<tr>
<td>2. 彰 chang¹</td>
<td>(pra-) chan¹ To contest.</td>
</tr>
<tr>
<td>3. 真 chên¹</td>
<td>ciŋ¹ True, genuine.</td>
</tr>
<tr>
<td>4. 交 chiao¹</td>
<td>kiaw² To connect, to hook on.</td>
</tr>
<tr>
<td>5. 巧 ch’iao³</td>
<td>chiaw³-(chaan¹) Expertise; skillful.</td>
</tr>
<tr>
<td>6. 知 chih¹</td>
<td>(ruu⁴-cak²-mak⁴)-cii² To know.</td>
</tr>
<tr>
<td>7. 沖 ch’ung²</td>
<td>chong¹ To stir; to blend.</td>
</tr>
<tr>
<td>8. 居 chū¹/ju</td>
<td>yuu² To stay, to live.</td>
</tr>
<tr>
<td>9. 缺 ch’ueh¹</td>
<td>chua³ Bad.</td>
</tr>
<tr>
<td>10.</td>
<td>忠</td>
</tr>
<tr>
<td>11.</td>
<td>畏</td>
</tr>
<tr>
<td>12.</td>
<td>小</td>
</tr>
<tr>
<td>13.</td>
<td>鄉</td>
</tr>
<tr>
<td>14.</td>
<td>學</td>
</tr>
<tr>
<td>15.</td>
<td>開</td>
</tr>
<tr>
<td>16.</td>
<td>敢</td>
</tr>
<tr>
<td>18.</td>
<td>口</td>
</tr>
<tr>
<td>19.</td>
<td>古</td>
</tr>
<tr>
<td>20.</td>
<td>官</td>
</tr>
<tr>
<td>21.</td>
<td>廣</td>
</tr>
<tr>
<td>22.</td>
<td>離</td>
</tr>
<tr>
<td>23.</td>
<td>馬</td>
</tr>
<tr>
<td>24.</td>
<td>命</td>
</tr>
<tr>
<td>25.</td>
<td>莫</td>
</tr>
<tr>
<td>26.</td>
<td>乃</td>
</tr>
<tr>
<td>27.</td>
<td>難</td>
</tr>
<tr>
<td>28.</td>
<td>寧</td>
</tr>
<tr>
<td>29.</td>
<td>保</td>
</tr>
<tr>
<td>30.</td>
<td>炊</td>
</tr>
<tr>
<td>31.</td>
<td>三</td>
</tr>
<tr>
<td>32.</td>
<td>散</td>
</tr>
<tr>
<td>33.</td>
<td>深</td>
</tr>
<tr>
<td>34.</td>
<td>響</td>
</tr>
</tbody>
</table>
35. shêng⁴ Holy, sacred, divine. sêŋ⁵ Sacred.
36. shih⁴ Yes, right, the verb to be. chay³ Yes, the verb to be used with the negative “may”.
37. shih⁴ A market, to trade. sii⁴ To buy.
38. shui⁴ Taxes. suay² Taxes.
39. ssu⁴ Four. sii² Four.
40. shih⁴ The earth, Earth, soil; room. thii³ Land; room
41. to¹ Much, many. (yay²)-to³ Big.
42. 셰sang¹ A granary. chang⁵ A granary.
43. tsao³ Early in the morning. chaaw⁴ Early. In the morning.
44. ts'ao⁴ A chisel, to chisel. csî² To drill, to make a hole.
45. ts'ui¹ To withdraw, to recede, to field. thay⁵ To recede, withdraw.
46. ts'ao³ The sky, heaven, the weather. thên³, thêen⁵ A ruler, a priest.
47. wang²/wu² Not; without. waa³ Not; without.
48. wei⁴ To speak of, to say, to be called. waa³ To say.
49. ying² Fill, full, surplus. yin⁵ A lot.
50. yu³ To have, to exist, to be. yuu² To exist, to be.

(Thai tones: 1 = mid; 2 = low; 3 = falling; 4 = high; 5 = rising)
VI Thai and Vietnamese corresponding words

<table>
<thead>
<tr>
<th>Vietnamese</th>
<th>Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. bāng</td>
<td>ban⁵</td>
</tr>
<tr>
<td>2. báo</td>
<td>pao² (to tell)</td>
</tr>
<tr>
<td>báo cao</td>
<td>pao⁵</td>
</tr>
<tr>
<td>3. bao</td>
<td>pao²</td>
</tr>
<tr>
<td>4. trai (tr = c)</td>
<td>cha:y¹</td>
</tr>
<tr>
<td>5. trăng</td>
<td>(kra)ca:ŋ¹</td>
</tr>
<tr>
<td>6. sáng</td>
<td>sa:ŋ⁵</td>
</tr>
<tr>
<td>7. cán (c = k)</td>
<td>ka:n³</td>
</tr>
<tr>
<td>8. tài</td>
<td>thay³</td>
</tr>
<tr>
<td>9. trái</td>
<td>sa:y⁴</td>
</tr>
<tr>
<td>10. song ka</td>
<td>so:ŋ⁵ “2”</td>
</tr>
<tr>
<td>11. song ngữ</td>
<td>so:ŋ⁵</td>
</tr>
<tr>
<td>12. song song</td>
<td>so:ŋ⁵</td>
</tr>
<tr>
<td>13. song tring</td>
<td>so:ŋ⁵</td>
</tr>
<tr>
<td>No.</td>
<td>Vietnamese</td>
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</tr>
<tr>
<td>14.</td>
<td>song thân</td>
</tr>
<tr>
<td>15.</td>
<td>Xe song mã</td>
</tr>
<tr>
<td>16.</td>
<td>eo (ε = e)</td>
</tr>
<tr>
<td>17.</td>
<td>gạo</td>
</tr>
<tr>
<td>18.</td>
<td>gạo cám</td>
</tr>
<tr>
<td>19.</td>
<td>gạo nép</td>
</tr>
<tr>
<td>20.</td>
<td>thò (o = o')</td>
</tr>
<tr>
<td>21.</td>
<td>chó</td>
</tr>
<tr>
<td>22.</td>
<td>chó má</td>
</tr>
<tr>
<td>23.</td>
<td>chuột</td>
</tr>
<tr>
<td>24.</td>
<td>rồng</td>
</tr>
<tr>
<td>25.</td>
<td>may</td>
</tr>
<tr>
<td>26.</td>
<td>mẹ</td>
</tr>
<tr>
<td>27.</td>
<td>mẹ đẻ</td>
</tr>
<tr>
<td>28.</td>
<td>mêo</td>
</tr>
<tr>
<td>29.</td>
<td>miếng</td>
</tr>
<tr>
<td>30.</td>
<td>mo</td>
</tr>
<tr>
<td>31.</td>
<td>viéc</td>
</tr>
<tr>
<td>32.</td>
<td>tron</td>
</tr>
<tr>
<td>33.</td>
<td>mục</td>
</tr>
<tr>
<td>34.</td>
<td>cảng (c=k)</td>
</tr>
<tr>
<td>35.</td>
<td>cắm</td>
</tr>
<tr>
<td>36.</td>
<td>cắm</td>
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<tr>
<td>37.</td>
<td>cán</td>
</tr>
<tr>
<td>38.</td>
<td>đam</td>
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<tr>
<td>39.</td>
<td>mương</td>
</tr>
<tr>
<td>40.</td>
<td>mương</td>
</tr>
<tr>
<td>41.</td>
<td>nghé</td>
</tr>
<tr>
<td>42.</td>
<td>eo</td>
</tr>
<tr>
<td>43.</td>
<td>nang(tiên)</td>
</tr>
<tr>
<td>44.</td>
<td>cam</td>
</tr>
<tr>
<td>45.</td>
<td>vái</td>
</tr>
<tr>
<td>46.</td>
<td>bè</td>
</tr>
<tr>
<td>47.</td>
<td>ngà</td>
</tr>
<tr>
<td>48.</td>
<td>giáp ty</td>
</tr>
<tr>
<td>49.</td>
<td>giáp thân</td>
</tr>
</tbody>
</table>
References
*Vietnamese-English Dictionary*, Nga Xuat Ban TP.
In this paper we show the range of orders among clitics within a cluster in the Central Philippine (CP) languages. Based on the framework in Billings and Kaufman (2004), we show that CP languages show all of the following ordering types: NOM-first, Actor-first, light-before-heavy, and participant-first.1

CP is a subgroup of Greater Central Philippine, in turn part of Philippine, Malayo-Polynesian, and Austronesian (Blust 1991). The languages include Tagalog (in Central/Southern Luzon); Bikol (in Southeastern Luzon); the Bisayan languages (in the Visayan islands in the center of the Philippines), including Cebuano; Mamanwa, Davawenyo, Mansaka, Kaagan, and Tagakaulo, arrayed from north to south along the eastern coast of Mindanao; and Tausug, on Jolo Island, to the southwest of Mindanao. Although the subgrouping within CP is debated (Zorc 1977; Gallman 1997), its unity is agreed upon.

Space does not permit a full description of the voice system here. Due to referentiality restrictions, discussed by Billings (2005), in the CP languages we have investigated, so-called Actor voice (AV) does not allow clusters of personal pronouns. Therefore, in such a cluster, the Actor-role pronoun bears GEN case and the one with the other role (usually Theme) bears NOM case. (Pronouns with the third case, OBL, are rarely realized as clitics and are not discussed further here.)

In CP the verb is first unless there is negation or a topicalized adjunct. The non-clitic word order is shown in (1):

(1) a. Unmarked affirmative order Verb NP NP
    b. Unmarked negated order Neg Verb NP NP
    c. (1a) with a topicalized adjunct Adjunct Verb NP NP
    d. (1b) with a topicalized adjunct Adjunct Neg Verb NP NP

In (1a–c) the clitic cluster is positioned after the first element (and also verb-adjacent). Only in complex structures like (1d) can we distinguish Wackernagel from verb-adjacent positions. Lee (2004) reports that in Tagakaulo, Kaagan, Mansaka, and Davawenyo only the order Adjunct Neg {clitics} Verb ... is attested. In Tagalog and Tausug, both that order and Adjunct {clitics} Neg Verb ... are found. In addition, Tausug (but not Tagalog) allows clitics

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1 We thank the following colleagues for help with this paper: Scott Burton, Grace Collins Hargis, Daniel Kaufman, Helen Miller, and Elizabeth Zeitoun. Standard disclaimers apply.
to follow some complementizers; see (5b) and (6c) below for examples. Again, space limitations do not allow us to discuss this aspect of clitic ordering here.

We now sketch the typological framework of Billings and Kaufman (2004:15–19), showing each pattern and any CP languages that represent it. Surprisingly, most are represented.

Like normal syntactic constituents, clitic pronouns can be ordered based on morphosemantic factors. These include case, semantic roles, or agreement features. Unlike normal syntax, their order can also be based on prosodic weight.

It is often difficult to determine whether it is morphological case or semantic roles that determine the order. This is because, as we mention above, multiple pronominal clitics appear in a subset of voice configurations. In CP, it is impossible to tease case apart from roles. In at least one (non-CP) Austronesian language, however, it is possible to show that the semantic role and not case is the determining factor:

\[(2)\]

a. Masaiv \{-ik -su\} tasa ahil. (Isbukun Bunun)
give.AV 1SG.NOM 2SG.OBL one book
‘I gave you a book.’

b. Tahuan \{-ku -as\} bunun tu halina.
teach.non-AV 1SG.OBL 2SG.NOM Bunun LNK word
‘I taught you Bunun.’ (Huang et al. 1999:186–187)

(In our numbered examples Actor pronouns are bold-faced.) Though these data suggest that grammatical person may be the factor, Huang et al. (1999: 188) add that person (as well as case or number) does not affect ordering. Thus, in Isbukun Bunun, the Actor pronoun is ordered before the other one regardless of morphological case (here NOM vs. OBL) or the verb’s voice.

We know of no language where case, and crucially not the semantic roles, determines the order of two clitic pronouns. However, because the pronouns could be ordered by normal syntax, if such a language is found, it would not be a problem.

In the remainder of the data presented in this paper, only two orders based on case or roles are attested: either the GEN-case Actor precedes the NOM-case non-Actor or vice versa. In CP, Mamanwa and Tausug show the former type most clearly, whereas the latter order is evident in Tagakaulo, although only as a secondary tendency, overridden by other factors. Before presenting details of these orders, however, we continue to present the typology of Billings and Kaufman.

Unlike case or semantic roles, agreement features do not change to reflect grammatical relations. The only feature of this kind relevant to CP languages is person. (Collins 1970 has argued that number is also a factor in Tagakaulo, but we dispute this claim. See below.) In some languages, a third-person clitic pronoun follows either a first- or a second-person clitic pronoun. In CP, this pattern is most evident in Tagakaulo, but also to a lesser extent in three other CP languages of Southeast Mindanao: Mansaka, Davawenyo, and Kaagan.

Moving next to prosody as an ordering factor, as has been widely publicized for Tagalog (e.g., by Schachter 1973), a monosyllabic clitic pronoun precedes a disyllabic one. In a few CP languages, this prosodic constraint is categorical; only if the pronouns have the same number of syllables do other (namely, morphosemantic) factors emerge. Tagalog, Bikol, Mansaka, and Davawenyo are representative languages. Tagakaulo, quite rigidly
morphosemantic in its ordering of clitic pronouns, also shows evidence of prosody playing a role. In addition, Cebuano shows a mixture of prosodic and morphosemantic factors (Billings and Konopasky 2002:18).

To summarize briefly, several factors appear relevant to the ordering within the clitic cluster of two personal pronouns. First, case/roles can be the deciding factor, with either the GEN Actor first or the NOM non-Actor appearing first. Next, person can play a role, with third-person pronouns appearing later than others. Finally, prosodic weight can influence the ordering, with lighter clitics preceding heavier ones. With these three factors in mind, we now turn to the details of the CP languages.

In order to clarify the discussion, the remainder of this paper concentrates on three CP languages: Tausug, Tagalog, and Tagakaulo. These are the clearest exemplars of each of the types found. Tausug shows Actor-first ordering categorically and is therefore the simplest case to present. Tagalog uses prosody, with Actor-first kicking in if prosody is controlled for. Finally, Tagakaulo uses person and case as well as prosody (with a rather complex interaction of these three factors).

Before discussing these languages’ clusters, we present their inventories of clitic pronouns in the two relevant cases:

<table>
<thead>
<tr>
<th></th>
<th>Nominative case</th>
<th></th>
<th>Genitive case</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tausug</td>
<td>Tagalog</td>
<td>Tagakaulo</td>
<td>Tausug</td>
</tr>
<tr>
<td>1SG</td>
<td>aku</td>
<td>ako</td>
<td>aku</td>
<td>ku</td>
</tr>
<tr>
<td>EX1PL</td>
<td>kami</td>
<td>kami</td>
<td>kami</td>
<td>namu’</td>
</tr>
<tr>
<td>IN1DL</td>
<td>kita</td>
<td>—</td>
<td>kita</td>
<td>ta</td>
</tr>
<tr>
<td>IN1PL</td>
<td>kitaniyu</td>
<td>tayo</td>
<td>kitadun</td>
<td>taniyu</td>
</tr>
<tr>
<td>2SG</td>
<td>kaw</td>
<td>ka</td>
<td>kaw</td>
<td>mu</td>
</tr>
<tr>
<td>2PL</td>
<td>kamu</td>
<td>kayo</td>
<td>kamu</td>
<td>niyu</td>
</tr>
<tr>
<td>3SG</td>
<td>siya</td>
<td>siya</td>
<td>sakanan</td>
<td>niya</td>
</tr>
<tr>
<td>3PL</td>
<td>sila</td>
<td>sila</td>
<td>silan</td>
<td>nila</td>
</tr>
</tbody>
</table>

In addition, if topicalized, the NOM-case personal pronouns can appear at the front of the clause (rather than in clitic position). The clitic and topicalized paradigms of the subject case differ only in their 2SG forms: *kat(w)* as opposed to *ikaw* (resp.).

Our Tausug data so far come from Hassan et al. (1994). All page numbers for Tausug refer to that work. (The translations are theirs; the glosses, ours.) From this corpus we found about half of the possible combinations of personal pronouns with NOM and GEN case. Each example of two such adjacent pronouns are in the order GEN Actor plus NOM non-Actor. The examples in (4) through (6) illustrate this ordering.

(4) a. Iyaabi-abi *{namu’ siya}* … (42)
    invite EX1PL.GEN 3SG.NOM
    ‘We invited her …’

b. Biyuga’ *{niya aku}* … (103)
    discourage 3SG GEN 1SG.NOM
    ‘He discouraged me …’

c. Kiyabakan *{nila siya}* … (296)
    find 3PL.GEN 3SG.NOM
    ‘They found him …’
Examples (4a–b) show that grammatical person does not affect the order. Furthermore, there are a number of combinations in which a monosyllable precedes a disyllable as in the following:

(5) a. Baytaan \{ku \_ sila\} … \(1SG.GEN 3PL.NOM\) ‘I’ll tell them …’
   b. … \(\_ \_ mu \_ kami\) \(\_ \_ di’ kakitaan\). \(2SG.GEN\ EX1PL.NOM\) not see ‘… so you won’t see us.’

Nonetheless, there is one crucial combination that allows us to eliminate prosody (as well as person) as the ordering criterion; (6a–c) show that the main factor must be Actor-first:

(6) a. … sīpug \{niya \_ kaw\} … \(3SG.GEN 2SG.NOM\) ‘… he shamed you …’
   b. … \(\_ \_ niya \_ kaw\) \(\_ \_ karungugan\). \(3SG.GEN 2SG.NOM\) \(\_ \_ hear\) ‘… so he’ll hear you.’
   c. … \(\_ \_ niya \_ kaw\) \(\_ \_ di’ kakitaan\). \(3SG.GEN 2SG.NOM\) not see ‘… so you won’t be seen.’

If prosody or person were the crucial factor(s), then the reverse order would result. Although our only data of this kind are of this combination, the fact that we found several examples (these and a few more), and none of kaw niya, indicates that the crucial ordering factor is role and not person or prosody.

There is one small fly in the ointment in this regard, however. An issue that we otherwise avoid in this paper is non-pronominal clitics. In CP languages, other elements—such as adverbials and, optionally, demonstrative pronouns or OBL-case personal pronouns—are found in the clitic cluster. In (7a) we list a cluster with personal pronouns and an adverbial clitic. Although clitics other than personal pronouns have been studied in the CP languages (Billings and Konopasky 2002; Lee 2004; McFarland 2001; Schachter 1973), we have not investigated Tausug in this regard. However, the order in (7a) is similar to certain other languages that we have examined.

(7) a. Biyabantug-bantug \{niya \_ sadja kaw\} … \(3SG.GEN\ only 2SG.NOM\) ‘He keeps on flattering you …’
   b. Di’ \{sa \_ kaw \_ yan niya\} hārun … \(2SG.GEN\ that\/there\ 3SG.NOM\) give.mercy ‘He won’t hesitate to harm you …’

It is also common for adverbial clitics in a few of the languages to precede any pronouns, as with emphatic sa in (7b), which happens to be the recalcitrant example referred to above, the only apparent exception to Tausug’s Actor-first order. It is unclear to us what function yan serves here. It is clearly part of the clitic cluster. The cluster appears before the verb (due to
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negation, discussed above), meaning that the cluster ends with *niya*. However, the meaning of *yan*—which translates as either ‘that’ or, if adverbial, ‘there’—does not appear to be expressed in the sentential translation that Hassan et al. provide. Nor have we found demonstrative pronouns between personal pronouns in the any CP languages. Our best guess at this point is that *yan niya*—perhaps as an appositive that means ‘3SG over there’—is an optional clitic. Billings (2005) discusses certain elements that optionally appear within the clitic cluster in Tagalog; we have also found similar data from Tagakaulo. If *niya* in (7b) is part of a larger constituent such as *yan niya*, then this example doesn’t really constitute an exception to our role-based generalization for Tausug: that the Actor pronoun appears first.

Before moving to Tagalog, it is worth mentioning that the only other language we found with Actor-first ordering as its main criterion is Mamanwa (Helen Miller p.c.; Miller, J. and Miller, H. 1976; Miller, H. and Miller, J. 1991). Tausug and Mamanwa, according to Gallman (1997:4), along with two other languages that we have not studied (and possibly Cebuano), make up the northern subgroup of East Mindanao. Constituent order is not generally considered reliable evidence for subgrouping, due to relative ease of borrowing such traits (Lee 2004:120–22). However, that Tausug and Mamanwa share the same order of clitic pronouns can at least possibly be explained by shared innovation. One of Mamanwa’s neighbors, Agusan Manobo (Weaver and Weaver 1964), shows a mixture of NOM-GEN and person-sensitive ordering. In this regard, we have not yet investigated the Sama-Bajaw languages surrounding Tausug. Pallesen (1985) describes the current areal picture of Tausug and its neighbours.

Unlike role- or case-determined ordering, where there exists only a single order for any combination, prosodically based ordering can sometimes result in a tie, because the clitics are of equal prosodic weight. As such, in all the CP languages that utilize prosody as their main criterion, some second factor emerges. In Tagalog, the tie-breaker is Actor-first ordering (as has just been presented for Tausug). In two other languages, Mansaka and Davawenyo, person breaks the tie (Lee 2004:96, 112). We illustrate the prosodic strategy using Tagalog data.

As Schachter (1973) and others have shown, Tagalog orders its personal pronouns within the cluster based on prosodic weight. A monosyllable precedes a disyllable. There are no exceptions in this regard, although—as Billings (2005) and McFarland (2001) report—some disyllabic pronouns have come to be reduced to monosyllables phonetically but appear to remain disyllabic phonologically.

Examples (8a–c) show this light-before-heavy ordering:

(8) a. Nakita *{ko} siya*.  
   see 1SG.GEN 3SG.NOM  
   ‘I saw her/him.’

b. Nakita *{mo ako}*.  
   see 2SG.GEN 1SG.NOM  
   ‘You saw me.’

c. Nakita *{ka nila}*.  
   see 2SG.NOM 3PL.GEN  
   ‘They saw you.’ (all from Billings and Konopasky 2002)
As exemplified in (9), if two clitic personal pronouns with the same number of syllables co-occur in a cluster, then there is a strong tendency to order the GEN-marked Actor first. (This pair of examples happens to be negated—not a crucial factor.)

(9) a. Hindi \{ako \ nìla\} nàkita.
   not 1SG.NOM 3PL.GEN see
   ‘They didn’t see me.’ (both from Schachter 1973:218)

b. Hindi \{nìla \ ako\} nàkita.
   not 3PL.GEN 1SG.NOM see

Schachter calls the ordering tendency in (9a–b) “only a matter of preference”; McFarland (2001), who reports a corpus search of modern Tagalog, did not find even a single token of the NOM-before-GEN ordering in (9a). In addition, because of a morphological quirk, monosyllabic personal pronouns cannot co-occur in Tagalog, only disyllables can appear together. Our data on Bikol, although quite limited, point in this direction as well; see Billings and Konopasky (2002:18) for discussion.

Tagalog (along with Mansaka, Davaweny, and Bikol) exemplifies how prosody can be used to order clitic pronouns. As we show below, Tagakaulo and especially Kaagan use prosody but not as their only factor to order clitic pronouns.

The third and final language we present in detail here is Tagakaulo. In that language, by far the most documented of the East Mindanao languages, three factors interact: person, case, and prosody. We sketch some of the facts here. Page numbers referred to below are from Lee (2004)—chapters 2, 3, and 7 of which give additional details. See also Collins (1970).

To begin, Tagakaulo invariably orders NOM-case third-person pronouns after any other clitic personal pronoun. That is to say, 3SG.NOM sakanan and 3PL.NOM silan invariably follows any other clitic pronoun. See the full paradigms in (3) above.

(10)a. Alladan \{màyu \ sakanan\} …
   guide 2PL.GEN 3SG.NOM
   ‘You will guide [(me) to her/him] …’

b. Kita-en\{ku \ silan\}.
   see 1SG.GEN 3PL.NOM
   ‘I will see them.’ (both from S. Burton, p.c.)

These examples could still be accounted for using prosody or roles. In (10a) a disyllable precedes a trisyllabic form; in (10b) the pronouns have one and two syllables, respectively. In both examples we also see Actor-first ordering (as in Tausug).

Needed are examples in which person, role/case, and even prosodic weight can be teased apart. In combinations of 3SG.GEN nan or 3PL.GEN nilan plus a NOM-case pronoun, it is always possible for the third-person form to appear after the first- or second-person pronoun. Several such examples, using nan as the third-person pronoun, are listed in (11a–f). The ender of translated 3SG pronouns is as in the sources.
(11)a. … kallatan {aku nan}. (60)
love 1SG.NOM 3SG.GEN
‘… he loves me.’
b. Pig-usip {kami nan} … (S. Burton, p.c.)
ask EX1SG.NOM 3SG.GEN
‘He asked us …’
c. Pig-alin {kita nan} … (S. Burton, p.c.)
transfer IN1DL.NOM 3SG.GEN
‘We transferred him/her …’
d. Pigdawat {kitadun nan}. (53; S. Burton, p.c.)
accept IN1PL.NOM 3SG.GEN
‘He accepted us.’
e. … kadamanan {kaw nan}. (S. Burton, p.c.)
be.angry 2SG.NOM 3SG.GEN
‘… he/she will get angry with you.’
f. Lyugpatan {kamu nan}. (54; S. Burton, p.c.)
jump.over 2PL.NOM 3SG.GEN
‘He/She jumped over you.’

(Using 3PL.GEN nilan instead of 3SG.GEN nan results in the same orders.) Whereas (10a–b) above could be analyzed using roles (Actor-first) or prosody (light before heavy), examples (11a–f) show that only grammatical person can be used. In all but (11e) the pronouns’ order is heavy before light, suggesting that the crucial factor isn’t prosody (about which more below).

Shifting to combinations that do not involve a third-person pronoun (and setting aside portmanteau forms that cannot be discussed here), we observe that it is always possible for the NOM-case pronoun to precede the GEN-case form:

(12)a. Pig-alilinan {kaw nami}. (S. Burton, p.c.)
banish 2SG.NOM EX1PL.GEN
‘We banished you.’
b. Pig-alilinan {kamu nami}. (S. Burton, p.c.)
banish 2PL.NOM EX1PL.GEN
‘We banished you.’
c. Pagalasen {aku mu} …? (S. Burton, p.c.)
CAUS.clear.field 1SG.NOM 2SG.GEN
‘Will you cause me to clear a field …?’
d. Ananga’ {kami mu} pa-agad? (S. Burton, p.c.)
why EX1PL.NOM 2SG.GEN CAUS.accompany
‘Why will you be allowed to accompany us?’
e. Padalayi {aku mayu} … (S. Burton, p.c.)
CAUS.send.IMPER 1SG.NOM 2PL.GEN
‘Send me [an envelope].’
f. Pandasali {kami mayu} … (48)
pray EX1PL.NOM 2PL.GEN
‘Pray for us …’
Moreover, the order in each of these is NOM before GEN, which eliminates roles (Actor-first) as an explanation. The picture for Tagakaulo is that person (third-person last) takes priority, and if there is no third-person pronoun in the cluster, then case (NOM before GEN) emerges. Because it is possible for a cluster not to include a third-person form, a tie-breaker can emerge. (Similarly, it is possible for a cluster to have equally heavy clitics, causing another factor to emerge in prosodically ordered systems.) In Tagakaulo, the tie-breaker is case.

The facts presented so far about Tagakaulo are far from complete. In fact, prosody appears to be a factor that allows for optional orders. This is particularly evident in clusters with trisyllabic pronominal clitics. For example, whereas (11d), with \{kitadun nan\}, is the unmarked form, the opposite order is also attested. (The same goes for the only other combination that includes kitadun, with nilan. The only other trisyllabic clitic pronoun, sakanan 3SG.NOM, is invariably final because it satisfies the main ordering criterion of third-person last.) Certain clusters of one- and two-syllable pronouns also seem to be explained by prosody. The opposite cluster-intern al orders of (11f) and (12d) are also attested. Indeed, (12d) is considered the more marked order. We have not been able to explain many of these loose ends. Certainly, as with any real language, there is flux. The exact nature of the variation has not been found.

One more point is worth mentioning about Tagakaulo in this regard. The early field work on that language—often called Kalagan at the time—and the current cite, where Scott and Becky Burton now work, are different; the work was relocated in order to be more in the center of the Tagakaulospeaking area (S. Burton, p.c.). In addition, several Summer Institute of Linguistics members and affiliates have been involved with the work on that language over the years. For these reasons, for our Tagakaulo examples we present data either consistent with Scott Burton’s unpublished (but comprehensive) database of pronoun orders or even directly from it. The other thorough analysis of Tagakaulo is Collins (1970:4–5, 41–42, 72–74, 103–04). Slight differences between that work—which argues that number is also involved in the cluster-internal ordering—and the Burton database may also be explained by the different areas where the data were gathered.

Setting aside the confusing details of the preceding two paragraphs, the main ordering factors of Tagakaulo—person, case, and prosody—can be accounted for. As the discussion of Tagalog and especially Mansaka and Davawenyo (both part of the East Mindanao subgroup) show above, prosodic ordering is probably an inherited trait from CP. The person- and case-based factors seem to be borrowed. Lee (2004:120) summarizes the historical situation. We merely sketch it here.

Tagakaulo and nearby Sarangani Manobo have had extensive contact, observable from the high percentage of shared vocabulary: over 50 percent according to Burton (2003:29). They are from different subgroups of Greater Central Philippine: CP and Manobo (Blust 1991). Burton (2003) has documented this and other aspects of the contact between East Mindanao and Manobo. In addition, the clitic-ordering system in Tagakaulo is similar to how clitics are ordered in Sarangani Manobo. Fortunately for the current purposes, the ordering of clitic pronouns in that language has already been published, in Dubois (1976:50). Recall that a combination of person, case, and prosody determines the pronouns’ relative order within a cluster in Tagakaulo. In Sarangani Manobo, both of the morphosemantic constraints (but not prosody) are observed in the clitic ordering.

A very closely related language, Kaagan, has an ordering pattern quite similar to that of Tagakaulo. The two languages are so similar that Kaagan’s pronoun inventory is
nearly identical to the one for Tagakaulo in (3) above. Clitic pronouns in Kaagan are ordered by prosody with just a few exceptions. The crucial combinations consist of pronouns with differing prosodic weight and in which only the monosyllabic pronoun expresses third person; both orders are attested. That is, 3SG.GEN nan plus any of (i) 1SG.NOM aku, (ii) IN1PL.NOM kita, (iii) IN1PL.NOM kitarun [sic], (iv) EX1PL.NOM kami, and (v) 2PL.NOM kamu. Of these five possible combinations, the vast majority are attested with nan first as opposed to last: 46 vs. 4 tokens, 8 vs. Ø, 2 vs. Ø, 3 vs. Ø, and 10 vs. 1 (resp.). Ordering nan first satisfies prosody, but the opposite order satisfies third-person last. These ratios strongly suggest that prosody is more prevalent but that person-based ordering rarely intervenes. That is, third-person last is not a tie-breaker but rather a co-existing constraint. (Because of the relatively small corpus available to us, we have not been able to find any pattern in the variation.) Tagakaulo attests similar variation with combinations (iii) and (v). Burton (2003:39) argues that, whereas Sarangani Manobo strongly influenced the proto-language that preceded the recent breakup of Tagakaulo and Kaagan, there has been less influence on Kaagan since it moved away from the other two languages. This may account for why Kaagan has only vestiges of person-based ordering.

We find it interesting as well that, prosody aside, the features that tend to cluster together—in CP and Austronesian overall—are case and person as opposed to role. Billings and Kaufman (2004:16)—citing analyses from Agusan Manobo (Weaver and Weaver 1964), Sarangani Manobo (Dubois 1976: 48–50), and Mayrinax Atayal (Huang 1995: 28–36)—report that in each of these languages both case (NOM before GEN) and person (third last) are operational. Liao (2004:287, 463–66) proposes much the same analysis about Squiliq Atayal and Dibaba won Manobo. With Tagakaulo now added to the list, all six of the languages we know about use both case and person. That is, we know of no Austronesian language where NOM-before-GEN ordering is not accompanied by third-person last (or vice versa). We offer a plausible explanation. Case and person are morphological notions, while a nominal expression’s semantic role probably has more to do with its information structure (including referentiality). In this sense, Billings and Kaufman’s hypothesis—that orders with the GEN-case Actor first is crucially role-based, whereas the reverse order crucially refers to case—is strongly corroborated.

To summarize this paper, we have shown that a number of strategies are employed in ordering two clitic personal pronouns in the modern CP languages. Some (Tausug and Mamanwa) position the GEN-case Actor first; others (Tagalog, Bikol, Mansaka, Davawenyo, and for the most part Kaagan) place the lighter one first; and yet others (Tagakaulo and, to some extent, Kaagan) use morphosemantic features of case (NOM-first, Tagakaulo only) and person (third-person last). The facts presented here, furthermore, corroborate the typology of Billings and Kaufman (2004) for Austronesian overall.2

References

2 Our work on CP pronominal clitics continues, primarily in the Bisayan languages. This paper shows our findings to date. See in particular Lee and Billings (2005).


THAI /yîng/ AND THE SYNTAX-SEMANTIC MAPPING OF COMPARATIVE CORRELATIVES

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1. Introduction
This paper performs an analysis of Comparative Correlatives (henceforth CC) (Beck 1999; Culicover and Jackendoff 1999; McClawley 1988; a.o) in Thai, and shows some theoretical consequence with regards to the representation of CC in general. In English, CC is expressed by ‘the more/-er…the more/-er’ template, for instance:

(1) The more you eat, the fatter you get.

CC always expresses a particular meaning of contingency between two clauses (Quirk et al 1985:1087). To be more precise, there exists a proportional relation between the degree expressed in both clauses. Intuitively, the meaning of the first clause determines the meaning of the second one (McClawley 1988), e.g. in (1) the increasing degree of your eating determines (in an abstract manner) the increasing degree of your fatness, but not the other way round. The fact that the first clause determines the semantics of the second clause is further used to argue that the semantics of CC is that of conditionals in that the first clause functions as a conditional clauses whereas the second one a matrix clause (Fillmore et al 1988). Example (2b) is said to be a paraphrase of (2a) in this regard (from Culicover and Jackendoff 1999):

(2) a. The more you eat, the fatter you get
b. If/when/As you eat more, you get correspondingly fatter.

At first blush the study of CC seems uninteresting in that its form-meaning relation is absolutely arbitrary, i.e. its semantics bears no relation with the special arrangement of words in (1). Instead it is generally assumed that (Culicover and Jackendoff 1999; Fillmore et al 1988; Goldberg 1995) CC is a typical example of syntactic idiosyncrasy. For instance, Culicover and Jackendoff (1999) contended that the paratactic structure (i.e. simple combination of two clauses without any overt connectives) of CC does not conform with X-bar theory. In addition, the combination ‘the+more/Adj-er’ without a following NP is ungrammatical in English:

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1 I would like to thank James Higginbotham, Audrey Li, Steve Matthews, Jean-Roger Vergnaud for comments on the early draft of this paper, and Kinkarn Thepkanjana for her comments on Thai data. All mistakes are my own.

2 Another term called ‘comparative conditionals’ is also used to capture this semantic interpretation.


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A constructionalist approach suggests that ‘the more/-er…the more/-er’ is like a formal idiom which maps to an arbitrary meaning (Fillmore et al. 1988). The purpose of this paper is to show that a constructionalist approach toward CC is unnecessary. The semantics of CC is entirely compositional from the semantics of individual lexical items on one hand, the syntax-semantics mapping of CC on the other hand.

2. A Brief Typology of Comparative Correlatives
A study of world’s languages reveals an interesting pattern of CC (also see den Dikken (to appear)). The following is merely a shortlist of them:

German
(4) Je müder Otto ist, desto aggressiver ist er
   The tired-er Otto is the aggressive-er is he
   ‘The more tired Otto is, the more aggressive he is’

French
(5) Plus quelqu’un est grand, plus il a de grand pieds
   more somebody is tall more he has of big feet
   ‘The taller somebody is, the bigger his feet are’

Italian
(6) più si mangia (e) più si ingrassa
   more SI eats (and) more SI gets-fat
   ‘The more you eat, the fatter you get’

3 Audrey Li (personal communication) suggests that the following sentence is grammatical:
   a. Mary is the more beautiful of the two (sisters).
   However, the usage is very archaic in English which becomes unproductive:
   b. ?? John earns the more of the two (brothers).

4 Recall that some linguists use the term ‘comparative conditionals’ to express the same construction. It is found that there is also a tendency for languages to express the semantics of CC by means of conditionals. Japanese and Korean are two typical cases:

Japanese:
   a. keikaku tassei-wa hayak-ereba hayai hodo ii
      plan achievement-TOP quick-if quick extent good
      ‘The more quickly we achieve the plan, the better (the situation) is’

Korean:
   b. mek-(*umyen) mek-ul (*swulok) sal-i cci-n-ta
      eat-if eat-PRS the-more flesh-NM get thick-IN-DC
      ‘The more (he) eats, the fatter he gets’

A full understanding of these sentences is still missing in the literature. In this paper, I treat this class as different from our original understanding of CC which involves parallel clauses.
Mandarin
(7) Ni yue da sheng shuo hua, wo yue bu ting
   You the'er big voice talk speech I the'er not listen
   ‘The louder you talk, the less you listen’

Since it is called ‘comparative correlatives’, there is a great tendency for languages to express it using comparatives. In contrast, the following sentences are ungrammatical:

(8) a. *The hardworking you are, the high score you get.
    b. *The most hardworking you are, the highest score you get.

Second, and most importantly, the ‘correlative marker’ (henceforth CM) is found in both clauses of CC. Absence of CM in either/both clauses leads to ungrammaticality. In English CC, ‘the’ is the CM:

(9) *(The) more you eat, *(the) fatter you get.

At last, CM always occupies the sentence-initial position (or at least a preverbal position).

(10) a. *The more you eat, you get the fatter.
    b. *you eat the more, you get the fatter.

Languages differ in terms of (i) whether the realization of CM is overt (e.g. English, German, Dutch, Chinese) or not (e.g. French, Italian); (ii) whether the semantics of comparatives in CC is expressed by comparatives (e.g. most European languages) or is incorporated into the lexical meaning of CM (e.g. Chinese, Thai).

3. Thai ‘yîng’
In Thai, the semantics of CC is represented by the construction ‘yîng…yîng’, as in the following example:

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5 Note that Chinese and Thai do not express CC using comparative morphemes. Later on it is shown that the semantics of comparatives is not expressed by comparative morphemes in those languages, instead it is the correlative marker which incorporates the meaning of comparatives.

6 This pair of ungrammatical sentences also shows that the semantics of CC is more than conditionals. Theoretically speaking, the pair could mean the following:
   a. If you are hardworking, you get a high score.
   b. If you are the most hardworking, you get the highest score.

7 Culicover and Jackendoff (1999) noted that English also has an alternative construction called reversed CC:
   a. You get (the) fatter, the more you eat.
   In this case, the first clause is the main clause whereas the second clause the conditional clause. ‘The’ in the main clause could be omitted in reversed CC. I exclude the discussion of reversed CC in this paper, and treat it as a different class of constructions than CC (also see den Dikken (to appear)).
Thai ‘yîng...yîng’ construction has rarely been discussed by any grammarians in detail (e.g. Noss 1967). It differs from other languages in that it is not expressed by comparative morphemes. It is sensible to treat ‘yîng’ on a par with ‘the’ in English CC, at least on a very abstract level. Our present attempt is to depict a possible way to decompose the semantics of CC to combinations of the semantics of individual items. In Thai, a single occurrence of ‘yîng’ means ‘exceedingly’, ‘even more’, or ‘all the more’ (Haas 1964). For instance:

(12) a. man yîng náo khôñ pai’ik nài wan nii
    it exceedingly cold raise go more in day this
    ‘It’s even colder today’

    b. múa phôm taam khâw, khâw kî yîng xán rew khôn
    when I follow 3sg 3sg then exceedingly walk fast up
    ‘When I followed him, he walked even faster’

In English, adverbs like ‘even more’ presuppose the truth of some proposition. For instance ‘Today is even hotter’ presupposes that the weather was hot sometime before today. We use the symbol ‘’ to represent this presupposition:

(13) a. ‘It’s even colder today’ ‘It is cold sometime before’
    b. ‘When I followed him, he walked even faster’
    ‘He already walked fast in other situations’

Thai ‘yîng’ expresses the same presupposition as English ‘even more’ and it is radically different from the ordinary comparatives ‘-kwâa’ which does not have this same semantics. The most usual way of expressing comparatives in Thai is the use of ‘–kwâa’ suffix. For instance:

(14) a. phôm súu-kwâa khun
    I tall-COMP you ‘I am taller than you’

    b. Phûuying khon níi súai-kwâa
    Woman CL this pretty-COMP
    ‘This woman is prettier (than others)’

On the other hand, ‘yîng’ cannot be used as a comparative morpheme in the usual sense:

(15) *Khaw súung-yîng khun/*khaw yîng súung khun
    3sg tall-exceedingly you / 3sg exceeding tall you
    ‘He is even taller than you’
Note that ‘–kwaa’ merely expresses degree comparison without any presupposition. It is analogous to ‘Peter is taller than John’ where there is no presupposition of Peter’s and John’s height (e.g. both could be short). This is different from ‘Peter is even taller than John’ which has a presupposition of John’s height (i.e. John is tall). Thus in Thai, the following contrast is observed:

(16) a. khun mâi suûng, khâw suûng-kwaa
   you not tall 3sg tall ‘You are not tall, he is taller’

b. #khun mâi suûng, khâw yîng suûng
   you not tall 3sg exceedingly tall
   ‘You are not tall, he is even taller’

‘yîng’ could also form idiomatic expressions with roughly the same meaning as ‘even more’. To name a few:

(17) a. yîng kwâ náng ‘moreover’
   b. yîng khânm ‘even more’
   c. yîng dii yâi ‘even better’
   d. yîng pai kwâ nán ‘in addition’

Traditional treatment of ‘yîng’ renders it to be an adverb meaning ‘exceedingly’ which modifies a predicate (e.g. verb or adjective). However it is intuitively true that the semantics of ‘yîng’ is more than just ‘exceedingly’. Consider the following English pair, for instance:

(18) a. The more you eat, the fatter you get.
   b. If you eat exceedingly, you get fatter exceedingly.

Example (18a) has a different interpretation than (18b) in that the notion of ‘proportionality’ is inherent in (18a) but it is absent in (18b). Assume that the semantics of Thai CC is decomposable by the semantics of ‘yîng’ and the way the two clauses are combined (instead of postulating a syntactic construction which is entirely ad-hoc), we have to redefine the semantics of ‘yîng’ so as to generate the desired meaning of CC.

4. Some properties of ‘yîng…yîng’
One universal property of CC is the notion of ‘semantic dependency’, i.e. the semantics of the second (or main) clause depends on that of the first (or conditional) clause. This is significant when different orders of clauses are compared:

(19) a. yîng nûuń k饥 yîng khîiki
   CM sleep then CM lazy
   ‘The more one sleeps, the lazier one becomes’

b. yîng khîiki k饥 yîng nûuń
   CM lazy then CM sleep
   ‘The lazier you are, the lazier you are’
As a result, it is the entire construction which determines the directionality of semantic dependency. Schematically:

(20) \[ [[C_{P1} \ldots yîng \ldots ]] [C_{P2} \ldots yîng \ldots ]] \]

One of the semantic differences between ‘yîng…yîng’ and ‘yîng’ in Thai is the latter but not the former expresses presupposition of the truth of some proposition (as mentioned before). On the other hand, since ‘yîng…yîng’ construction is interpreted as a hypothetical conditional sentence (c.f. McClawley 1988), the truth of the main clause depends on the truth of the conditional clause which is not presupposed. Instead CC merely expresses a generic relation between the two clauses. For instance:

(21) Khun yîng phûut, khâw yîng mâi fang
You CM speak 3sg CM not listen
‘The more you talk, the less he listens’

The sentence neither presupposes the proposition ‘you speak’ nor ‘he does not listen’, rather it states whether he listens to you or not depends on whether you speak or not, and moreover the degree of him not listening is dependent on the degree of you speaking.

Another common property of CC is the parallel occurrence of the correlative marker. Similar to English, the parallel occurrence of CM is mandatory, otherwise it results into ungrammatical sentences:

(22) a. *khaw yîng sung, phom diicai maak
3sg CM tall I happy very
‘The taller he is, I am very happy’

b. *kha w suung maak, phom yîng diicai
he tall very I CM happy
‘The taller he is, I am very happy’

At first blush, this is puzzling if we treat CC on a par with conditionals, i.e. conditionals do not require parallel occurrence of a single lexical item in both clauses. A detailed look at its semantics of CC reveals that it denotes a ‘proportional’ relation between the two clauses, which is missing in conditionals. The most sensible hypothesis is that the parallel occurrence of CM generates the meaning of proportionality. Notice, again, that it is ungrammatical to have parallel occurrence of comparative morpheme ‘–kwaa’:

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8 I assume that this statement about conditionals is accurate merely for the present purpose. Conditionals are always expressed by ‘if’ and ‘then’ in both clauses respectively. On a more abstract level, the occurrence of ‘if’ and ‘then’ are symmetric to each other in that there is no if-clauses without then-clauses, and vice versa. I leave this for further inquiry.
Thai /yîng/ and syntax-semantic mapping

(23) *khun khâyân màak kwàa, kháw diicai màak kwàa  
you hardworking much COMP 3sg happy much COMP  
‘(If) you are more hardworking, he is happier

5. Thai ‘yîng’ as a conflation of wh+↑DEGREE

Given the fact that ‘yîng…yîng’ construction expresses the meaning of proportionality, we  
have to redefine the syntactic/semantic category of ‘yîng’. Instead of treating it as an  
ordinary adverb, I propose that it is a wh-operator which expresses an increasing degree  
(represented by DEGREE). The expression ‘wh+↑DEGREE’ is to signal the conflation of  
the three components (↑ means ‘increasing’). The reason why ‘yîng’ is a wh-word is that it  
functions as an operator which scopes over the clause that it c-commands. The claim that  
‘yîng’ is a scopal operator could be verified by the following sentences:

(24) a. Kháw khít wâa khun yîng khâyân, kháw yîng diicai  
3sg think that you CM hardworking 3sg CM happy  
‘The more hardworking he thinks you are, the happier he is’

b. Kháw yîng khít wâa khun khâyân, kháw yîng diicai  
3sg CM think that you hardworking 3sg CM happy  
‘The more he thinks that you are hardworking, the happier he is’

In (24a) ‘yîng’ scopes over the adjective ‘hardworking’ in the first clause and the VP ‘think  
that you are hardworking’ in the second clause. Their meanings are different in that in (24a),  
the degree of his happiness depends on the degree of your hardworking that he thinks. On  
the other hand, in (24b), the degree of his happiness depends on the degree of his  
thinking of your hardworking. In English, the scope of ‘more’ works the same way. The following  
contrast verifies that

(25) a. The more he thinks that you are hardworking, though you never are, the happier he  
is.

b. #The more he thinks that you are hardworking, though he never does, though you are  
ever, the happier he is.

Second, ‘yîng’ is a DEGREE morpheme. This could be testified by some replacement tests.  
In English, for instance, ‘the’ in CC could be replaced by degree expression like ‘how  
much’. In Culicover and Jackendoff (1999:550):

(26) ‘How much harder has it rained, the faster a flow you see in the river?’ (c.f. ‘The  
harder it has rained, the faster a flow you see in the river’)

Similar in Thai, the degree expression ‘thâw-rai’ could replace ‘yîng’ and form a wh-  
question.9 Note that other wh-words cannot replace ‘yîng’:

9 One main difference between ‘ying’ and ‘thaw-ray’ is the syntactic position. While ‘ying ’  
is always VP-initial, ‘thaw-ray’ and other wh-words (probably except tham-may ‘why’) are in-situ.
(27) a. *khun khayān [arai]… you hardworking what
   b. *khun khayān [khai]… you hardworking who
   c. *khun khayān [nài]… you hardworking which
   d. *khun khayān [arai]… you hardworking what
   e. khun khayān [thâw-rai] you hardworking how-much (c.f. khun yîng khayān ‘the more hardworking…)

Thai could also CC by using ‘thâw-rai’, without any loss of meaning. Note that in the main clause a quasi-parallel occurrence ‘thâw-nân’ is used.10

(28) khun khayān thâw-rai, khaw ca diicai thâw-nân
‘(If) you are hardworking to some degree, he will be happy to that degree’

The above example is still considered as CC in that it involves parallel occurrence of thâw ‘as much as’ in both clauses. Without parallel occurrence of ‘thâw’, the sentence becomes a question, similar to English:

(29) khun khayān thâw-rai, khâw ca yîng diicai?
‘How much more hardworking you are, the happier he is?’

The last semantic component of ‘yîng’ is that it specifies the ‘directionality’ of DEGREE, i.e. the degree involved inside ‘yîng’ is inherently increasing. For instance:

(30) Khun yîng phûut, khâw yîng fang
‘The more you talk, the more he listens’

Intuitively, the semantic interpretation of this sentence involves an increasing degree of talking and increasing degree of listening. Thus the increasing degree of listening depends on

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10 This construction is highly compatible with CC in correlatives languages. For instance in Hindi, CC is expressed by ‘how much…that much’ correlatives construction (den Dikken (to appear)).
the increasing degree of talking. The fact that ‘yîng’ inherits an increasing degree obviates
the need for a comparative morpheme in the construction of CC, simply because
comparative morphemes such as ‘more’ or ‘less’ explicitly express the direction of
comparison. On the other hand, in English, ‘the’ in CC does not specify the directionality of
comparison. The following sentence is ungrammatical:

(31) *The you eat, the fat you get.

Assuming the compositionality of semantics in which the meaning of CC derives from the
meaning of individual items, and the semantics of CC is universal across-the-board, we have
to contend that the lexical semantics of CM differs from language to language. In general,
we could classify the semantics of CM in the following two classes:

(32) Semantic components of the correlative marker:
   (i) CM= wh+DEGREE: English ‘the’, French ‘∅’, German ‘je’, Italian ‘∅’, etc.
   (ii) CM= wh+↑DEGREE: Thai ‘yîng’, Mandarin ‘yue’, Cantonese ‘yuht’, Indonesia
       ‘makin’, etc.

One discussion concerns the lexical meaning of DEGREE. I use capitals to suggest
that the degree involved in CC is an abstract one. That is to say, the meaning of CC does
not involve comparison of physical measurement of any kind. For instance in English ‘the
more you eat, the fatter you get’, it does not mean that if you eat 10 pounds of food, you
will get 10 pounds of weight, or 9 pounds, 8 pounds, etc. Instead, we are comparing
abstract degree in the two clauses. As long as you get some weight (no matter how much it
is) if you eat something, the sentence is still true. In fact it is not a novel idea that
comparative sentences involve abstract degrees but not absolute values. For instance:

(33) a. I drink more wine than water.
   b. Michael Jordan scores more baskets than Dennis Rodman has tattoos (Kennedy
      2001)

In (33a), it means that the abstract degree (or DEGREE) of my drinking wine is more than
the abstract degree of my drinking water. The sentence is still true even though I might
drink more water than wine in physical volumes. Example (33b) further verifies the
semantics of DEGREE in that the two items under comparison are not compatible with
each other (i.e. scores vs. number of tattoos). However the sentence is still valid, showing
that what is really compared is the abstract DEGREE rather than any physical properties.

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11 Languages tend to use an increasing degree to signal the meaning of CC. In English, ‘the more
you eat, the fatter you get’ is more natural than the alternative ‘the less you eat, the less fatter
you get’, though the two sentences express the same generic relation (e.g. the second sentence
is natural only in the context of stressing the decreasing degree of eating and getting fat).
12 One could therefore posulate that CC expresses a monotonic increasing function between the
two clauses (Leung 2003).
6. Parallel occurrence and the notion of proportionality
This paper tries to argue against a constructional approach in favor of a compositional approach toward CC. Our task is to see to what extent the phonetic realization of sentence (i.e. PF) determines the semantic interpretation (i.e. LF). I propose the following schema which describes the correspondence between PF and LF in Thai CC:

\[
\text{PF: } [\text{NP}_1 \text{ yîng } \text{VP}_1] \quad \text{[NP}_2 \text{ yîng } \text{VP}_2]
\]

\[
\text{LF: } \forall x \text{ DEG}(x), \text{If } [\text{NP}_1 \text{ VP}_1] \text{ to } \uparrow x, [\text{NP}_2 \text{ VP}_2] \text{ to } \uparrow x
\]

The expression of LF representation is the more interesting. Its statement is based on its semantic parallelism with hypothetical conditionals (McClawley 1988). Note that the following two sentences are semantically identical to each other:

(35) a. The more you eat, the fatter you get

b. If you eat more, you get correspondingly fatter.

To be more precise, the LF representation reads as ‘for any abstract degree x which is increasing, if NP, VP, to x, then NP, VP, to x’ . Note that in the paraphrase (35b), the word ‘correspondingly’ is obligatory, otherwise its meaning will be different. I contend that the sense of ‘correspondence’ and moreover ‘proportionality’ between the two clauses is represented by the parallel occurrence of the abstract degree x in both clauses in LF. This abstract degree is morphologically realized by the correlative marker ‘yîng’ in Thai. As mentioned before, different languages have their own strategies expressing the same semantics. The following is a compatible schema in English (36):

\[
\text{ PF: } [\text{The more NP}_1 \text{ VP}_1] \quad [\text{the more NP}_2 \text{ VP}_2]
\]

\[
\text{ LF: } \forall x \text{ DEG}(x), \text{If } [\text{NP}_1 \text{ VP}_1] \text{ to } \uparrow x, [\text{NP}_2 \text{ VP}_2] \text{ to } \uparrow x
\]

The difference between English and Thai is not an issue of LF (assuming that both have the same semantics), but rather it is the correspondence (shown by the line) between PF and LF which distinguishes between them. In English, ‘the’ merely associates with an abstract degree, whereas in Thai, ‘yîng’ conflates both the abstract degree and its directionality (i.e. increasing). If this is the correct LF representation of CC (which is also intuitively accurate), it provides a clear explanation of why CC must involve parallel occurrence of the correlative markers. Typologically speaking, this prediction is correctly born out:13

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13 It should be noted that in French and Italian (and many other languages), the correlative marker is not overtly expressed. One of the reasons might be morphological blocking. In French the correspondence of ‘the’ is ‘le’ and the combination of ‘le plus’ means ‘the most’ rather than ‘the more’.
Thai /ying/ and syntax-semantic mapping

(37)
English: [the...] [the...]
Mandarin: [...yue...] [...yue...]
Cantonese: [...jyut...] [...jyut...]
French: [∅-plus...] [∅-plus...]
Italian: [∅-piu...] [∅-piu...]
Indonesian: [...makin...] [...makin...]
German: [je...] [desto...]

Now the prediction is neatly derived. For instance in the following sentence:

(38) *The more you eat, fatter you get.

The PF-LF correspondence schema is as follows:

(39)

\[ *PF: \quad \text{[The more NP; VP;]} \quad \text{[ more NP; VP;]} \]
\[ LF: \quad \forall x \text{ DEG}(x), \text{If [NP, VP;] to } \uparrow x, [NP, VP;] to } \uparrow x \]

The conclusion is clear. The lack of a correlative marker in one of the two clauses entails that one correspondence link between PF and LF is missing (shown by the dotted line), thus ungrammatical. One might question if we could reanalyze (38) as involving PF-deletion of the correlative marker in the second clause while preserving the meaning at LF. It is noted that there are languages which require parallel occurrence of CM (e.g. English), and there are languages which require covert occurrence of CM (e.g. French, Italian). However there are no languages which allow an asymmetry between the two clauses in terms of phonetic realization of CM. That is to say, the following sentence is still ungrammatical:

(40) *The more you eat, the fatter you get. (‘the’ gets deleted at PF)

The reason why phonological ellipsis of CM in the second clause is not legitimate is outside our current discussion, which I leave for further research. I contend the following generalization of CC in terms of morphological realization:

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14 The case from German which involves distinct phonetically realization of correlative markers is not a counterexample of my proposal here, but rather it shows that a single feature assumes different guise in different contexts. This is hardly surprising in world’s languages. For instance pronouns are said to be another guise of the referential NP. As a result, we could understand a sentence like ‘John likes his mother’ as semantically equivalent to ‘John likes [the John]’s mother’ in which ‘the John’ is phonetically realized as ‘his’. For a more formal discussion along this line, please refer to Elbourne (2001).

15 English has VP-ellipsis in which the VP in the second clause could be deleted at PF, while preserving its semantics at LF:

a. John liked Mary, and Peter did like Mary too.

On the other hand, ‘the’ in the second clause in CC cannot be deleted probably because its semantics cannot be recovered elsewhere, hence violating Full Interpretation (Chomsky 1995). Now the question is whether ‘the’ is deleted at PF after spell-out, thus the lexical features of
(41) ‘The two occurrences of correlative markers in comparative correlatives are either both overt or covert’

7. Conclusion
This paper starts by discussing the general consensus that comparative correlatives (CC) constitutes an example of idiosyncrasy (Culicover and Jackendoff 1999; Goldberg 1995). While arguing against this hypothesis, I contend that the semantics of CC is entirely compositional by the semantics of individual lexical items without the construction. The most intriguing issue is the lexical semantics of the correlative marker (CM) and the derivation of the notion of ‘proportionality’ in this construction. I show that CM is a sentence operator which scopes over the clause which it attaches to. Languages differ in terms of the lexical semantics of CM, some being merely a DEGREE operator, while others being a conflation of a DEGREE operator along with its directionality. Moreover, the sense of ‘proportionality’ is an illusion to native speakers in that the abstract DEGREE involved in the two clauses are identical to each other. The identity of the abstract degree in both clauses comes from parallel occurrence (either overt or covert) of the CM. From the point of view of language acquisition, what Thai native speakers have to acquire is not the whole ‘yîng…yîng’ construction itself, but rather the lexical meaning of ‘yîng’ as a sentence operator and the semantic interpretation of parallel occurrence of CM.

Reference

‘the’ is not missing at LF. Further research could pay attention to the typology of PF-deletion of correlative markers.
ASSESSING MALAYSIAN UNIVERSITY STUDENTS’ ENGLISH VOCABULARY KNOWLEDGE

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Abstract
Numerous explorations in ESL vocabulary research have accentuated the importance of testing lexical knowledge for practical and diagnostic purposes (Nation, 1990; Laufer 1992). In MARA University of Technology, as in most other universities in Malaysia, university students are taught through the English medium and expected to cope with a daunting amount of new English vocabulary in their academic fields, despite being severely hampered in word knowledge. In this context, there is a particular need to diagnose the vocabulary knowledge of learners in order to design and prescribe effective programmes or strategies of vocabulary expansion. In the light of the magnitude of gauging the vocabulary level of specific learners, this research study aimed to estimate the vocabulary level of students enrolled in proficiency courses in a Malaysian university. The students’ vocabulary knowledge was tested using the Vocabulary Levels Test (Laufer and Nation, 1983; 1990). The results revealed that on the average the students were far below the university threshold level in terms of vocabulary knowledge. Correspondingly, the findings are potentially useful in the implementation of functional classroom instructional practice. Implications of the findings for promoting explicit vocabulary instruction and developing independent vocabulary enhancement skills in a language classroom were considered.

Introduction
In the present context of higher education in Malaysia and numerous other countries where English stands as a second or foreign language, though the national language is the medium of instruction, most of the reading materials pertaining to their field of study are still in English. Realizing that English is the language of knowledge and widely used globally, there has been a growing concern within the Malaysian Government to make a conscious effort to re-emphasize the importance of English throughout the educational system. Many university students are now taught via the English medium and expected to cope with a daunting amount of new English vocabulary in their academic fields. In order to confront their everyday learning, learners must have access to meanings of a wide array of vocabulary.

With the shift in language paradigm, the enduring effects of vocabulary limitations of students are becoming increasingly perceptible. Like it or not, teachers and learners are confronted by numerous challenges, one of which is learners’ inability to cope academically as they are severely hampered in word knowledge. Therefore, there is a growing recognition on the importance of vocabulary and the need for more systematic vocabulary development for second language (L2) learners.

One of the major interests addressed by researchers is the number of words L2 learners need in order to undertake their studies successfully. However, L2 learners with advanced proficiency in English may generally be expected to have acquired a minimum productive English vocabulary of 2,000 to 3,000 word families for use in speaking and
writing along with a slightly larger receptive vocabulary of 3,000 to 5,000 word families. This figure is only an estimation and that at least for L2 learners enrolling in institutes of higher learning, the university word level with a vocabulary of about 5,000 to 10,000 words is a more realistic minimum size (Nation, 1999). Thus, anything below the university word level would definitely handicap learning.

Addressing the issue above, we as language teachers cannot be accountable for students’ inadequate vocabulary but we should be responsible for empowering our students to enrich their vocabulary knowledge. Within this context, the researchers carried out the Vocabulary Levels Test (VLT) (Laufer and Nation, 1983;1990) in MARA University of Technology, Penang (UiTMPP), Malaysia to assess the vocabulary levels of students enrolled in proficiency courses in a Malaysian university and also to prescribe effective strategies of vocabulary expansion.

Problem Statement
The study was initiated by the researchers’ collaborative efforts to brainstorm on certain instructional issues, which surfaced in the ESL classrooms. Addressing the issue of the students’ low proficiency level in listening, speaking, reading and writing as revealed by students’ poor performances in the classroom assessments, the researchers conducted the study.

The researchers initial interview with the students revealed a great deal of information about students past experiences in the language classroom.

Students’ poor vocabulary knowledge is traced to the following:

• Most students are not keen to learn English
• Most students are not interested in reading
• Most students are unwilling to take the lead in attempting new vocabulary
• Most students are not confident to speak the language
• Most students are dependent on teachers’ explanation

Relatively, there are studies on L2 learners’ poor vocabulary knowledge but there has been a vacuum in research on vocabulary enhancement. Similarly, this has been the case regarding the vocabulary enhancement of English language learners in UiTMPP. This has resulted on speculation on the actual vocabulary knowledge of the learners. As such the study involves:

• a systematic research on vocabulary levels in English language learners.
• the development of an intervention strategy to foster vocabulary development in English language learners.

Objective
This is an exploratory study and the primary aim of this study is to improve students’ vocabulary knowledge by designing and prescribing effective strategies of vocabulary expansion. The study set out to access the vocabulary knowledge of UiTMPP students and improve students’ vocabulary knowledge by selecting methods to implement functional classroom instructional practice to promote explicit vocabulary instruction.
Research Question
The research question that has guided the study is as follow:
1. What are the Vocabulary Levels of UiTMPP students?

Literature review
In all the challenges posed by vocabulary instruction, nothing seems more appropriate than to increase learners’ word knowledge in an effort towards increasing their language proficiency. To state it plainly, if teachers and learners do not take any effort towards vocabulary enhancement, the overall learning experience for students will be marginalized.

Many researchers have focused on projects that can increase learners’ word knowledge. The EVENTS – English Vocabulary Enhancement Of Nonnative-Speaking Tertiary Students project was set up to increase the English Vocabulary proficiency of tertiary students online. Hill (2001) claims that this online project increased vocabulary knowledge of students.

Generally, being proficient in the L2 is not just a matter of having a certain level of word knowledge or grammar rules for that matter, but being able to exploit that knowledge effectively. Haynes and Baker (1993) carried out a study on reading and word knowledge to examine the setbacks faced by L2 learners, which hinders successful comprehension. According to the researchers, the most significant handicap for L2 readers is not the lack of reading strategies but insufficient lexical knowledge. Thus, from various points of view, vocabulary is a priority area in language teaching.

In another study carried out by Nurweni and Read (1999) in an Indonesian university to estimate the English vocabulary knowledge of first year students, they reveal the students word knowledge was far below the university threshold level. The results showed that on average the students had some knowledge of only 1226 English words, a figure that falls short of the 3000 – 5000 word range, which is widely considered the threshold level for independent reading.

Up to date, there are very few quantitative studies where vocabulary size is measured at different stages of language learning over a long period of time. One of the studies is a study by Milton and Meara (1995) on vocabulary growth on 53 European students of advanced proficiency level. They reveal that significant vocabulary growth can occur if learning is done in a L2 environment. In their study, the average growth in vocabulary per person approached a rate of 2500 words per year over the six months of the programme.

Other studies pertaining to vocabulary growth mostly measure small increments resulting from different testing tasks, learning tasks, teaching methods or input condition (Hulstijn, 1996). The paucity of study in the area of L2 vocabulary size development is due to the difficulties researchers have experienced with defining the nature of language knowledge and with designing valid and reliable tests, which measure this knowledge.

Although the amount of research on L2 vocabulary acquisition has increased in recent years, only a handful of researchers have built a sustained record of research on L2 vocabulary (Meera, 1993). Many ways have been suggested on students’ vocabulary development, yet, it is important to note that there is insufficient empirical evidence on its effectiveness as a method of developing language proficiency. But what researchers have
found seems to attest to the positive effects of language enhancement on language proficiency and that language enhancement should be a part of language instruction.

**Methodology**
The quantitative method using the passive version of the Vocabulary Levels Test (VLT) developed by Paul Nation (1983, 1990) was used in this exploratory study. The test was administered among the UiTMPP students in November 2003. Data collected was analyzed using the Statistical Package for Social Sciences (SPSS).

**Subjects**
Respondents in the study comprised of Science students from UiTMPP. They sat for the Preparatory English (Semester 1), Mainstream English 1 (Semester 2) and Mainstream English 2 (Semester 3). Generally, they were diploma students from the Engineering faculty.

**Instrument**

**VLT**
The instrument used for this study was the passive version of the VLT developed by Paul Nation (1983, 1990). This diagnostic testing of vocabulary knowledge measures the students’ passive vocabulary knowledge, which is based on words from 5 word-frequency levels (2000, 3000, 5000 words, the university word level and 10,000 words).

441 students were chosen randomly to sit for the VLT for 25 minutes in a controlled classroom. The test comprises 90 items; 18 items in each frequency level. 1 mark was given to each correct item and the maximum score for each level is 18 and 90 for the whole test.

Each item tests the target words out of context. This is because context might provide clues to their meanings. The test was designed with a purpose to investigate the number of words the students could understand without any clues, rather than the testees’ guessing abilities.

According to Read (1988), the test is found to be a useful tool for diagnostic purposes. The basic statistical data showed, the test displayed reliability coefficients of 0.94 and 0.91 when administered twice during the three-month English Language Proficiency Course to assist with placement and course planning decisions.

The instrument administered consists of 2 major sections as follows:
1. Background knowledge - Initial Interview (Section A)
2. VLT (Nation, 1983, 1990) (Section B)

**Data analysis and findings**
Descriptive statistics such as frequency, percentage, mean and standard deviation are used to describe the characteristics of the respondents and results of the students’ VLT.
1. Demographic Variables
Table 1, 2 and 3 present the demographic characteristics of the respondents. The demographic variables are arranged in the following order: age, gender and semester.

| Table 1. Distribution of respondents according to age |
|----------------|----------------|----------------|
| Variables     | Frequency | Percentage |
| Age           | N = 441    |              |
| 18 - 19       | 298       | 67.58        |
| 20 - 21       | 129       | 28.76        |
| 22 and above  | 4         | 0.91         |

| Table 2. Distribution of respondents according to gender |
|----------------|----------------|----------------|
| Variables     | Frequency | Percentage |
| Gender        | N = 441    |              |
| Male          | 318       | 72.11        |
| Female        | 123       | 27.89        |

| Table 3. Distribution of respondents according to semester |
|----------------|----------------|----------------|
| Variables     | Frequency | Percentage |
| Semester      | N = 441    |              |
| 1             | 149       | 33.79        |
| 2             | 150       | 34.01        |
| 3             | 142       | 32.20        |

2. VLT
Table 4, 5 and 6 present the means and standard deviations for the passive vocabulary scores according to the students’ semester.

<table>
<thead>
<tr>
<th>Table 4. VLT – Semester 1 (N=149)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
</tr>
<tr>
<td>No of Items</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
</tr>
</tbody>
</table>

Table 4 indicates the mean scores of the first semester students’ vocabulary knowledge. As a whole, their English vocabulary knowledge was not very impressive. On average, 149 first semester students understood the meaning of only two-third of the words (mean score of 12.87 or 71.5%) and one-third of the words were unknown at 2,000-word level. The other figures were correspondingly lower: mean score of 11.69 or 65% at 3,000-word level, mean score of 9.58 or 53% at 5,000-word level, mean score of 8.99 or 49% at the university word level and mean score of 4.73 or 26% at 10,000-word level. The result also indicates that on average the students’ total mean score for all five levels was 48.

Besides the mean scores, the standard deviation of each word level for the first semester students seems to increase from 3.22 at 2,000-word level, 4.31 at 3,000-word level, 4.41 at 5,000-word level, 4.65 at university word level and 4.81 at 10,000-word level.
Table 5 indicates the mean scores of the second semester students’ vocabulary knowledge. Generally, their English vocabulary knowledge pattern revealed a similarity to the first semester students’ results.

On average, 150 second semester students understood the meaning of slightly higher than two-third with mean score of 13.35 or 74% of the words at 2,000 level. The other figures were gradually lower with mean score of 11.87 or 69% at 3,000-word level, mean score of 10.13 or 56% at 5,000-word level, mean score of 9.52 or 53% at the university word level and mean score of 4.73 or 26% at 10,000-word level. The result also indicates that averagely the students’ total mean score for all five levels test was around 50.

Besides the mean scores, the standard deviation of each word level for the second semester students seems to increase starting from 2.90 at 2,000-word level, 3.99 at 3,000-word level, 3.73 at 5,000-word level, 3.05 at university word level and 3.54 at 10,000-word level.

Table 6 indicates the mean scores of the third semester students’ vocabulary knowledge. Generally, their English vocabulary knowledge pattern was also found to be similar to the first and second semester students’ results.

On average, 142 second semester students understood the meaning of slightly higher than two-third with mean score of 13.79 or 77% of the words at 2,000 level and mean score of 13.06 or 73% of words at 3,000 word level. The other figures were gradually lower with mean score of 10.87 or 60% at 5,000-word level, mean score of 9.66 or 54% at the university word level and mean score of 4.36 or 24% at 10,000-word level. The result also indicates that averagely the students’ total mean score for all five levels test was around 52.

Besides the mean scores, the standard deviation of each word level for the third semester students seems to increase starting from 3.02 at 2,000-word level, 3.86 at 3,000-word level, 3.94 at 5,000-word level, 3.61 at university word level and 3.25 at 10,000-word level.

The results in table 4, 5 and 6 show a similar trend of the students’ performance in the passive VLT. The mean scores decrease with decreasing word frequency (Laufer and Paribakht, 1998). However, they do not occur at the same rate. Most of the students
understood about two-third or slightly higher of the 2,000 and 3,000-word levels and gradually found low frequency words at 5,000, University and 10,000-word levels.

The results revealed that on the average the students were far below the university threshold level in terms of vocabulary knowledge. According to Guttman Scalogram’s analysis (Hatch and Farhady, 1982 as cited in Read, 1988) a score of 16 was taken as the criterion for mastery of the vocabulary at a particular level.

Correspondingly, the findings are potentially useful in the implementation of functional classroom instructional practice. Students should somehow be guided in vocabulary learning especially in mastering the other one-third of the high-frequency words such as 2,000 and 3,000-word levels. Nevertheless, it is also worth to spend more time on teaching the 5,000-word level since this would enable the students to have sufficient vocabulary in order to operate academically using the English language. Implications of the findings for promoting explicit vocabulary instruction and developing independent vocabulary enhancement skills in a language classroom were considered. The researchers would therefore suggest effective strategies of vocabulary interventions in the effort to enrich the students’ vocabulary knowledge.

Vocabulary interventions
In order to upgrade learners’ vocabulary knowledge, having explicit vocabulary instruction and developing independent vocabulary enhancement skills in a language classroom is crucial. This would mainly benefit the UiTMPP learners in enabling them to operate in their academic studies where English is the medium of instruction. However, the researchers deem that there are issues to be considered prior to the implementation of the functional classroom instructional practice.

According to Nation (1990) vocabulary learning can be carried out from the most indirect to the most direct. Indirect vocabulary learning activities require much more time in a language-learning course than the direct learning activities.

Moreover, a language teacher should also consider the way learners learn vocabulary. For receptive vocabulary, the classroom activities should focus on the quantity of vocabulary. On the contrary, for the development of productive vocabulary, language teacher should focus on the development of the quality of learning small vocabulary.

Finally, for learning and teaching purposes, Nation (1990, as cited in Read, 2001-pg 158) classified vocabulary into high frequency vocabulary, low frequency vocabulary and classified vocabulary (academic and technical vocabulary) (Refer Table 7). By having the various vocabulary types, language teachers can then decide on the type of vocabulary to teach their learners in terms of time and strategies for each word group.

The considerations mentioned are vital in ensuring the success of teaching and learning vocabulary among the language learners. Since the results in this study revealed that on the average the students were far below the university threshold level in terms of vocabulary knowledge, bearing the considerations in mind, immediate implementation of functional classroom instructional practice is considered to aid the teaching and learning of vocabulary among the language learners.

This study focuses on the language learners’ passive vocabulary. Therefore, the goals set for the practical functional classroom instructional practice would prioritize the teaching of vocabulary concerning their reading and listening. However, for a real vocabulary learning to emerge, both receptive and productive learning will have to take
place. In addition, as there are 15 weeks per semester, it permits more direct than indirect teaching approach of vocabulary in the classroom.

Table 8 as summarizes by Nation (1990), provides useful information on direct learning approach required to increase vocabulary knowledge at each vocabulary level. This can also be a useful guideline to the researchers in implementing their classroom instructional practice.

<table>
<thead>
<tr>
<th>Vocabulary Level</th>
<th>Type of Vocabulary</th>
<th>Learning required to increase vocabulary knowledge at each level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000-word level</td>
<td>The General Service List; the vocabulary of the simplified reading books</td>
<td>1. Learning list of words based on the Longman Structural Reader's List or the General Service List; 2. Intensive and extensive reading of simplified reading books; 3. Advanced English Vocabulary, workbook 1 (Barnard, 1972).</td>
</tr>
<tr>
<td>3,000-word level</td>
<td>A basis for beginning to read unsimplified text</td>
<td>1. Intensive reading of a variety of texts; 2. Extensive reading of the Bridge Series</td>
</tr>
<tr>
<td>5,000-word level</td>
<td>A wide vocabulary</td>
<td>1. Training in guessing words in context; 2. Wide general reading—novels, newspapers, university texts, etc; 3. Intensive reading of a variety of texts; 4. Advanced English Vocabulary, Workbooks 1 and 2.</td>
</tr>
<tr>
<td>The university word level</td>
<td>The specialized vocabulary of university texts</td>
<td>1. Learning words in the University Word List; 2. Intensive reading of university texts; 3. Advanced English Vocabulary, Workbooks 2 and 3; 4. Learning prefixes and roots.</td>
</tr>
<tr>
<td>10,000-word level</td>
<td>A large wide vocabulary</td>
<td>Activities similar to the 5,000-word level, combined with learning prefixes and roots.</td>
</tr>
</tbody>
</table>

Table 9 listed the summary of the functional classroom instructional practice activities designed according to the vocabulary levels and the language skills using the direct learning approach for promoting explicit vocabulary instruction and developing independent vocabulary enhancement skills in a language classroom. It is important to emphasize here that the teaching varies according to students’ word levels and not according to the proficiency programmes which students enrolled.

Following the above summary, the researchers present two samples of vocabulary activities to be implemented in the language classroom (Refer Appendix 1). These activities were adapted from a few sources and would focus on direct vocabulary teaching and are designed according to word levels and the various language skills.
Conclusion
This research has examined the vocabulary levels of UiTMPP students, which allows the language lecturers to understand at what vocabulary levels their students are functioning. This information is pivotal in helping them plan classroom instruction. Moreover, it assists the learners to gain greater awareness about the importance of developing their vocabulary to enhance their learning experience.

Vocabulary is central to language acquisition. The present study has shown with empirical evidence that the vocabulary levels of the majority of the students are not up to the University World Level. The findings from the present study have implications for classroom vocabulary instruction. The importance of recognizing the vocabulary levels of students on the onset proves to be valuable for placement purposes.

The results point to the need to develop vocabulary development strategies. The direct teaching and learning of vocabulary, although seems like a feasible proposition, requires a great deal of classroom time. There is a wide range of vocabulary learning strategies and activities, which has demonstrated its value as an effective means for improving direct vocabulary learning. These strategies combined with extensive reading activities, would allow UiTMPP students to develop their vocabulary levels to meet the demands of university teaching and learning in particular.

References
Appendix 1
Reading - Guessing the meaning of words from the context.

Last week a total of 10 students were found ‘missing’ in Penang island. 5 cases were reported each from both public university and prominent private colleges around the island. Police report showed that many of these students went ‘missing’ due to working at night in many major hotels for extra income purposes. As a result many tend to ‘hide’ themselves during the daytime instead of attending their classes. The report also mentioned that these students were given high daily salary especially during the peak season. Some are paid as much as RM 80 per night and double during the weekend. The volume of tourists coming to the island was reported doubled which in turn causing a shortage of workers in the hotel industry especially during September to December. Many of the tourists decided to prolong their stay in the island to enjoy the tropical weather and moderate temperature such as 34° to 36° as compared to 2° or below 0° Celsius back in their countries…..

Multiple choice exercise
Choose the correct meaning of the following words

1. total (line 1)
   a. half                                b. double                          c. sum
2. private (line 3)
   a. common                          b. particular                      c. local
3. hide (line 6)
   a. withdraw                        b. attend                           c. present
4. salary (line 9)
   a. tips                                 b. tax                                 c. pay
5. temperature (line 14)
   a. season                            b. situation                          c. heat

The Keyword Approach
The first word in each group is the keyword and the words followed are the related words which have the similar meaning. Read, familiarize and try to remember each group.
**Exercise 2**
Write the keyword for each related words group.

**KEYWORDS**

<table>
<thead>
<tr>
<th>Total</th>
<th>Private</th>
<th>Hide</th>
<th>Salary</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>Particular</td>
<td>Withdraw</td>
<td>Pay</td>
<td>Hotness</td>
</tr>
<tr>
<td>Entire</td>
<td>Personal</td>
<td>Veil</td>
<td>Income</td>
<td>Heat</td>
</tr>
<tr>
<td>Add up</td>
<td>Unrevealed</td>
<td>Put out of sight</td>
<td>Wages</td>
<td>Warmth</td>
</tr>
<tr>
<td>Amount to</td>
<td>Classified</td>
<td>Hide from view</td>
<td>Earnings</td>
<td>Fever</td>
</tr>
<tr>
<td>Complete</td>
<td>Confidential</td>
<td>Concealed</td>
<td>Money</td>
<td></td>
</tr>
</tbody>
</table>

**Exercise 3**
Write the keyword for each related words group. Find and cross a word, which does not belong to the related words group. Replace it with the correct one from other related words group. The first one is done for you.

<table>
<thead>
<tr>
<th>Total</th>
<th>Salary</th>
<th>Hide</th>
<th>Private</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>Pay</td>
<td>Withdraw</td>
<td>Particular</td>
<td>Hotness</td>
</tr>
<tr>
<td>Entire</td>
<td>Income</td>
<td>Veil</td>
<td>Personal</td>
<td>Heat</td>
</tr>
<tr>
<td>Add up</td>
<td>Wages</td>
<td>Put out of sight</td>
<td>Unrevealed</td>
<td>Warmth</td>
</tr>
<tr>
<td>Amount to</td>
<td>Earnings</td>
<td>Hide from view</td>
<td>Classified</td>
<td>Fever</td>
</tr>
<tr>
<td>Complete</td>
<td>Money</td>
<td>Classified</td>
<td>Confidential</td>
<td></td>
</tr>
<tr>
<td>Entire</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Correction**: The word "Concealed" in the "Total" column should be replaced with "Money" to correct the related words group.
Listening and writing activities using the crossword puzzle

DIRECTIONS: Use the clues below to fill in the crossword puzzle

Across

1. A fixed amount of money / pay you earn each month or year from your job
2. Become liquid / disappear / become kinder / gradually combine
3. First / new / interesting / different from anything else
4. To choose someone from voting so that he/she represents you
5. An amount of money or something that you owe

Down

2. To make goods in large quantities in a factory
1. To say or think that someone or something is responsible for an accident / problem / bad situation
2. To ask someone to come and see you or spend time with you socially
3. With all the numbers or things added together / final / overall / complete / sum
10. To put something in place so that no one can find or see it / withdraw
11. Used / controlled / owned by individual people or company
Speaking:

Exercise 1
Arrange the correct sequence of the dialogue below

B : Good morning
A : The one and only Selangor Royal family private ancient manuscripts Collection.
B : Thank You.
A : They are my dear.
B : This is totally unbelievable!!
A : Welcome to MARA Technology University. We cordially invite all our guests this morning to the main hall for this special exhibition.
A : Good morning everyone.
B : On your right are the original ancient Arabic manuscripts. They were kept for nearly 100 years...

Exercise 2
Now practise the dialogue with your partner.

Exercise 3
Interview your partner

1. What is the exhibition all about?
2. Are you invited to the main hall?
3. How do you like this exhibition?
4. Are those ancient Arabic manuscripts original?

Exercise 4.
Tell the class about the interview
Appendix 2

A big joke

I am in my mid-20s, and planning to get married next year but far from what people expect, I won’t be a pretty, blushing bride. You see, I am large and slightly over-weight and about twice the size of my darling fiancé whom I love most. It does not help that I am dark (I am Chindian, but look like a Malay), and my fiancé is fair. So you can imagine what a picture we make!

I have tried to lose weight, but always ended up losing discipline and willpower. I also suffer from low self-esteem and inferiority complex due to the way I am for almost all my life. Things, however, improved when I met my fiancé, who helped me gain confidence in myself.

But lately he has been asking me to lose weight and saying how sexy and pretty I would be if I were of a “super-model” size. This has somehow affected me. The word “Super-model” size keeps haunting me and becomes an echo to my ears every time I started to eat… which at last I tend to suffer from gastric due to not eating anything. He hinted about hating overweight people and how they disgust him.

Now, I’m definitely confused. Before this he had told me he loved me the way I was, and how beautiful I looked, and there is nothing he’d change about me. Does he find me disgusting already?

At a wedding recently, I encountered a sad moment when I realized that he did not introduce me to his relatives. When asked when is his turn to get married, he just brushed off the queries with some witty remarks. To add to my heartbreak, his mom was proudly showing off her daughter-in-law to their relatives and friends but ignored me completely.

His siblings make rude jokes about my size and weight. At a time, while waiting and sitting on a bench during the wedding, I begin to dislike the surrounding. I normally laugh it off but this time deep down, it hurts, worse, my fiancé does not defend my honour, and even tells joke or two at my expense.

I don’t understand why his mom does not acknowledge me although she has given her blessings for the marriage, and we are engaged. Is she ashamed of me? She always makes statements like “You are so big-sized” and “it’s troublesome to buy some clothes
for you as people don’t make them huge”. To me, these statements do not illustrate a good heart in her since they hurt me deeply!!

It may be small matter to most people but it’s not helping my self-worth. My fiancé has always complained that my inferiority complex is holding me back from a lot of things, but how do I tell him that he together with his family is one of those things that help my insecurities grow? He is fiercely loyal to his family so it would be hard talking to him about this.

Sometimes I felt like calling the whole thing off. But I love him too much, and I try to accept whatever rude jokes and crude statements or treatment that come my way. But once it becomes too much for me to take it, I will break down. Nasty name-calling does not break bones, but it sure breaks the spirit.

Please let me know what you think.

Emotional
Kuala Lumpur

Adapted from: Readers’ Column, Dear Thelma The Sunday Star, 29 Dec 2002

Reading:

1. Match the words used in the above passage (Column A) to their correct meaning (Column B). The first one is done

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Echo</td>
<td>Meet</td>
</tr>
<tr>
<td>Illustrate</td>
<td>Long seat</td>
</tr>
<tr>
<td>Definite</td>
<td>Certain</td>
</tr>
<tr>
<td>Darling</td>
<td>Sound reflected back to you</td>
</tr>
<tr>
<td>Bench</td>
<td>Use example to show the meaning</td>
</tr>
<tr>
<td>Encounter</td>
<td>A person who is loved very much</td>
</tr>
</tbody>
</table>

In a group of 2 or 3, discuss the real problems faced by Miss Emotional from Kuala Lumpur and the possible solutions. Select a representative and present the task to the class.
### Teaching Goals: Reading, Listening, Speaking and Writing

1. **FOR EACH WORD:**
   - A. Write what it means using the online dictionary,
   - B. Draw a picture with it,
   - C. Answer the question about it.

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning and Example</th>
<th>What to draw</th>
<th>Question to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparatus</td>
<td></td>
<td>![Microscope and Syringe]</td>
<td>What are two important apparatus a scientist need in a lab?</td>
</tr>
</tbody>
</table>

---

**Appendix 3**

Teaching goals: Reading, Listening, Speaking and Writing

---

**5000-word level**

---

*A Big Joke: Miss Emotional*
<table>
<thead>
<tr>
<th>Sermon</th>
<th>What is delivered in a church?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trumpet</td>
<td>What is the musical instrument used for patriotic songs?</td>
</tr>
<tr>
<td>Hug</td>
<td>What kind of physical act parents do to show they love their children?</td>
</tr>
<tr>
<td>Blend</td>
<td>What fruits do people blend in order to get the juice for drinking?</td>
</tr>
<tr>
<td>Phase</td>
<td>How many phases are there in your residential area? And which phase are you staying in now?</td>
</tr>
<tr>
<td>Mess</td>
<td>How would you imagine a room filled with a lot of things?</td>
</tr>
<tr>
<td>Apron</td>
<td>Why does a cook wear an apron while cooking?</td>
</tr>
<tr>
<td>Stool</td>
<td>When and where do you usually use a stool?</td>
</tr>
<tr>
<td>Revenue</td>
<td>How much do you have to pay for the tax revenue based on your current salary now?</td>
</tr>
<tr>
<td>Compliment</td>
<td>Someone complementing somebody for her beautiful dress</td>
</tr>
<tr>
<td>Mortgage</td>
<td>What is the common property people mortgage to get some extra money?</td>
</tr>
</tbody>
</table>
**Teacher’s Notes – 5000 word level**

**Exercise 1**
Teaching goals: Reading, Listening, Speaking and Writing

The instructional practice in the 5000 group words is based on the interactive online dictionary called ‘Genie’. The rationale of using the online dictionary is to speed up the learning process and to vary the learning with the computer technology. Students are to read the clues by answering the questions for each word in the last column. Then they will try to find out the meanings of the words using the online dictionary and write them in the respective boxes including example. Later, they will fill in the third column boxes by drawing pictures to . However not all the words can be drawn if they reflect certain concept. Therefore, some of the words will have ‘X’ symbols. Below are the samples on how they should fill in the boxes.

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning and Example</th>
<th>What to draw</th>
<th>Question to Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparatus</td>
<td>Machinery, Equipment, or Instrument used for specific work. Eg: Microscope and syringe are two important apparatus a scientist need in a lab.</td>
<td><img src="image.png" alt="Image" /></td>
<td>What are two important apparatus a scientist need in a lab?</td>
</tr>
<tr>
<td>Sermon</td>
<td>A serious talk given by a priest in a church Eg: Everyone in the church is listening attentively to the sermon.</td>
<td><img src="image.png" alt="Image" /></td>
<td>What is delivered in a church?</td>
</tr>
</tbody>
</table>
Teaching goal: Writing

Write a short paragraph using the words listed below.

- Apron
- Phase
- Mess
- Sermon
- Stool
- Trumpet
- Apparatus
- Revenue
- Compliment
- Mortgage
- Ledge
- Bruise
- Hug
- Devise
- Blend
- Wholesome
- Fragrant
- Gloomy
Tones in the Tai Languages of Northeast India

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Research Centre for Linguistic Typology
La Trobe University
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1. Introduction
This paper presents phonetic details of the tonal systems of four Tai languages spoken in Assam State, North-east India: Aiton, Khamti, Khamyang and Phake. The paper will also present a reconstruction of the tonal system of Khamti as reported by Robinson (1849), using the methodology established by Gedney (1972). This reconstruction will then be compared with the tonal systems of the living varieties.

Tai speaking peoples have entered northeast India in several waves over the past eight centuries. The first group of Tais to arrive in India were the Ahoms, led by a prince of Mau Lung, Sukhapha (‘tiger-equal-sky) who crossed the mountains from Burma into Assam in 1228 and set up the Ahom kingdom.

The ethnonym of this group is the same as the name Assam, pronounced [ahom] in Assamese. Although the Ahoms remain a distinct ethnic group in Assam, they all speak Assamese (Indo-European) as their first language and none of them speak a Tai language as a mother tongue.

In the last 300 years, 6 other groups of Tais have settled in India. These are the Khamti, Phake, Aiton, Khamyang, Tairong or Turung and Nora (Diller 1992:5). Of these, the Turung now speak a variety of Singpho (Tibeto-Burman). Because Aitons and Turungs are intermarried, Tai speakers are still to be found in Turung villages. The Nora are believed by some to be the same as the Khamyang (see Diller 1992 and Morey 2005).

The present location and population of the Tai speaking groups in Assam is given in Table 1:

<table>
<thead>
<tr>
<th>Community</th>
<th>Number of speakers</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aiton</td>
<td>1500 speakers</td>
<td>Dhonsiri Valley, south bank of the Brahmaputra</td>
</tr>
<tr>
<td>Khamti</td>
<td>500 speakers in Assam, several thousand in Arunachal Pradesh &amp; also in Burma</td>
<td>Dikrong Valley, Narayanpur, north bank of the Brahmaputra</td>
</tr>
<tr>
<td>Khamyang</td>
<td>50 speakers in Pawaimukh village</td>
<td>Buri Dihing Valley</td>
</tr>
<tr>
<td>Phake</td>
<td>2000 speakers</td>
<td>Buri Dihing Valley</td>
</tr>
</tbody>
</table>

1 I particularly want to acknowledge my informants, Bidya Thoumoung (Aiton), Rajat Namsoom (Khamti), Deben Chowlik (Khamyang) and Ee Nyan Khet (Phake). I am also very grateful to A.Y. Aikhenvald, Anthony Diller, Jerold Edmondson, Paul Sidwell and Sheena Van Der Mark.

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2. The tonal systems in India today

2.1 Phake

The first comprehensive study of Phake was undertaken by Dr. Banchob Bandhumedha, who published a *Phake-Thai-English dictionary* (1987) with phonological notes. Most of her research was done in the village of Namphakey, Dibrugarh District. Based on Banchob (1987), the tone chart in Table 2 is presented, employing the methodology in Gedney (1972).

**Table 2: Tones in Phake (after Banchob 1987)**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>DL</th>
<th>DS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. even tone with a slight rising at the end, mā¹ ‘shoulder’
2. high tone, mā² ‘to come’
3. grave tone, with a glottal stop, mā³ ‘mad’
4. falling tone, mit⁴ ‘seeds, knife’
5. grave tone, mā⁵ ‘not’
6. high rising tone, mā⁶ ‘dog’

After working in Namphakey and in several other Phake villages between 1996 and 2004, I found that the distribution of the tones was exactly as Banchob described. However the phonetic details of some tones differs slightly as shown in Table 3.

**Table 3: Phake Tones (after Morey 2005)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>high level</td>
</tr>
<tr>
<td>2</td>
<td>high rising then sharply falling</td>
</tr>
<tr>
<td>3</td>
<td>low, falling creaky tone</td>
</tr>
<tr>
<td>4</td>
<td>low falling</td>
</tr>
<tr>
<td>5</td>
<td>low</td>
</tr>
<tr>
<td>6</td>
<td>rising</td>
</tr>
</tbody>
</table>

Table 4 presents a wave image and pitch diagram for five of the Phake tones as pronounced by Ee Nyan Khet of Namphakey village, for the words listed mā⁶ ‘dog’, mā⁴ ‘horse’, mā³ ‘crazy’, mā¹ ‘shoulder’ and mā² ‘come’. (There is no word mā⁵)
2.2 Aiton
The Aitons themselves recognise that today they speak a language with three tones, but believe that at some time in the past there were more tones. This suggests that the Aiton tonal system has undergone tone mergers. Rather than eliciting a short list of words following the methodology in Gedney (1972), it was decided to first establish what the possible tones were, and then what contrasts might be present. Five tones were recognised and named as shown in Table 5:

Table 5: Tones in Aiton

A word list was elicited from Bidya Thoumoung who was then asked to assign a tone for each word. Tone 5 was only assigned to dead or checked syllables, and Tone 3 to syllables with final nasals or final vowels. It thus appeared that Tones 3 & 5 were allotones. Tone 4 was rarely assigned, and was not assigned to the word for ‘dog’ when it was encountered. It therefore appeared that tone 4 was a sporadic allotone of Tone 1. Table 6 represents the tones of contemporary Aiton:
2.3 Khamti

Khamti tones have been studied by several scholars. One of these, Robinson (1849), will be discussed below in detail. More recently, Harris (1976), Weidert (1977) and Chau Khouk Manpoong (1993) have published information about Khamti tones. The tone box for Khamti, as reported by Harris (1976) and confirmed by Chau Khouk Manpoong (1993), appears in Table 7, which uses the tone numbers from Chau Khouk.

Table 7: *Tones in Khamti (Arunachal Pradesh and Assam) after Harris (1976) and Chau Khouk Manpoong (1993)*

| A B C DL DS |  |
|---|---|---|---|---|---|
| 1 | 3 | 6 | 3 | 1 |  |
| 2 | 4 |  |  |  |  |
| 3 | 7 | 4 | 5 | 4 |  |

Description of Tone

- **Tone number**
  - high level: 3
  - mid falling: 4
  - low falling with glottal constriction: 5
  - mid rising with glottal constriction: 6
  - high falling: 7

Chau Khouk Manpoong (1993) also created the revised Khamti alphabet, which uses nine tone marks. Only Tone marks 3 to 7 are used for the citation tones presented in Table 7, where Tone 3 is unmarked and tones 4 - 7 are shown by small marks at the right of the word. Tone marks 1, 2, 8 and 9 are used for unstressed tones in borrowed multi-syllabic words, or for prosodic emphasis. Chau Khouk Manpoong’s system of notating tone is demonstrated in (1):

1) \[ \text{ho}^3 \text{pii}^4 \text{yaa}^3 \text{loi}^7 \text{nam}^5 \text{...} \]
   head year don’t swim water ...
   ‘Do not swim in the first flood of the year …’
This system has not achieved widespread acceptance among the Khamti, who prefer the more traditional script which does not mark tone as exemplified in (2):

2) \[ \text{ho}^3 \quad \text{pii}^4 \quad \text{yaa}^3 \quad \text{lo}^7 \quad \text{nam}^5 \quad \ldots \]

In March 2004 I was able to visit the Khamti village of Borkhamti at Narayanpur, Lakhimpur district on the north bank of the Brahmaputra. The tonal splits in the Khamti of Lakhimpur are the same as those described in Table 7 above. Table 8 presents wave file and pitch diagrams for the five Khamti tones, for the words kaa^3 ‘go’, kaa^4 ‘crow’, kaa^5 ‘business’, kaa^6 ‘dance’ and kaa^7 ‘separate’.

Table 8: Wave file and pitch diagram for Khamti tones on /kaa/

![Wave file and pitch diagram for Khamti tones on /kaa/]

The C123 tone is a clearly rising tone, or even falling and then rising, with final glottal closure. In connected speech, this final glottal is sometimes lost or diminished in prominence, so that perceptually the most salient feature of the tone is the rise. Among the Tai languages, rising tones are most often found with A1, but because A1 in Khamti has merged with B123 and become level, C123 is able to adopt rise as its key feature.

The C4 tone, on the other hand, is very short and has creaky phonation throughout. This is an interesting contrast to Phake where C123 has creaky phonation throughout and C4 is a falling tone.

2.4 Khamyang

The Khamyang tone box in Table 9 is based on elicitation from Chaw Deben Chowlik. This tone box differs from Phake, where A23 is merged with A4, and B4 is a separate tone. It also differs from Khamti where A1 is merged with B123.
Table 9: Tones in Khamyang

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>DL</th>
<th>DS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Description of Tones:
1 mid level with slight fall  
2 high level then falling  
3 low, falling and creaky  
4 level then falling with final glottal  
5 low falling  
6 level, with possible rise at the end

Table 10 presents a wave image and pitch diagram for five of the Khamyang tones as pronounced by Deben Chowlik, for the words listed in maa₁ ‘shoulder’, maa₆ ‘dog’, maa₃ ‘crazy’, maa₂ ‘come’, and maa₄ ‘horse’ (There is no word maa₅).

Table 10: Wave file and pitch diagram for 5 Khamyang tones.

The contour of the 2nd tone and 4th tone are almost exactly the same. Both are high level and falling, but the 4th tone has an abrupt glottal coda and is generally shorter. The contour of these two tones differs significantly from the 5th tone, which is low falling.

3. Description of Tai Khamti in Robinson (1849)
William Robinson’s short paper (1849) about Khamti spoken in Sadiya, Assam, indicates that he had the considerable insight that Khamti is a tonal language and tones need to be marked. Robinson’s was the only paper about Tai languages in Assam written before the 1960s, in which tone was marked.

It is not clear whether the tonal notation was done by Robinson himself or by Rev. Nathan Brown. Robinson stated that Brown provided him with the list of 282 Khamti words which he later published (1849:342–349). Since these are marked for tone, it is possible that it was Brown who did the original work.

Robinson’s description of the tones was as follows:
By its finely modulated intonations, sounds organically the same are often made to express different ideas. Thus má, for instance (with the rising tone) signifies a *dog*; má (the Italic *m* denoting the falling tone) signifies *to come*; while the same syllable, with an abrupt termination, or a sudden cessation of the voice at the end of it, mà, denotes a *horse.*” (1849:312)

Elsewhere in the text Robinson notated another tone where italics were used for the vowel rather than the consonant. Robinson did not describe this tone, but Grierson (1904:144) later described it as a ‘straightforward tone, of an even pitch’.

### 3.1 Reconstruction of a tone box for Khamti as reported by Robinson (1849).

Table 11 details the four tones described by Robinson and exemplifies them. The tones are here numbered from 1 to 4:

**Table 11: Tones and notation of tones in Robinson (1849)**

<table>
<thead>
<tr>
<th>Tone No.</th>
<th>Description (Robinson 1849 &amp; Grierson 1904)</th>
<th>Notation (in Robinson 1849)</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>rising normal font</td>
<td>má</td>
<td>dog</td>
</tr>
<tr>
<td>2.</td>
<td>falling initial consonant in italics</td>
<td>má</td>
<td>come</td>
</tr>
<tr>
<td>3.</td>
<td>abrupt termination dot under vowel</td>
<td>mà</td>
<td>horse</td>
</tr>
<tr>
<td>4.</td>
<td>straightforward, even pitch vowel in italics</td>
<td>sì</td>
<td>four</td>
</tr>
</tbody>
</table>

To reconstruct the tone box for Robinson’s Khamti, each of the words in the word list was assigned to one of the tones boxes, following Gedney (1972). This was done by establishing cognates in other Tai languages or by comparison with reconstructions of proto Southwestern Tai (Li 1977, Brown 1985, Jonsson (1991). The number of tokens for each box are presented in Table 12:

**Table 12: Number of tokens of each tone box in the word list in Robinson (1849)**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>DL</th>
<th>DS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>7</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>36</td>
<td>10</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>

As an example of the process, followed Table 13 presents all the words that Robinson listed for C1, with their cognates from some other Khamti sources. All the words in Table 13 have the same tone in each of the modern Khamti sources.
Table 13: Tokens of C1 compared with other Khamti sources. ²

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bee Phung</td>
<td>phun⁵ bee; beeswax</td>
<td>.phûn⁵ Bee C1</td>
</tr>
<tr>
<td>Cloth Phá</td>
<td>phaa⁵ cloth</td>
<td>.pha Cloth C1</td>
</tr>
<tr>
<td>Cry Hāf</td>
<td>hay⁵ to weep</td>
<td>.hAIc to cry, weep C1</td>
</tr>
<tr>
<td>Dry (adj) Heng</td>
<td>hêŋ⁵ dried up</td>
<td>.hêŋ to be dry C1</td>
</tr>
<tr>
<td>Face Nā²</td>
<td>naa⁵ face</td>
<td>.na The face C1</td>
</tr>
<tr>
<td>Five Hā²</td>
<td>haa⁵ five</td>
<td>.ha 5 C1</td>
</tr>
<tr>
<td>Give Haü</td>
<td>hay⁵ to give</td>
<td>.hAIc to give, to offer C1</td>
</tr>
<tr>
<td>Hot Māf</td>
<td>may⁵ to burn (intr.)</td>
<td>.maIc To burn C1</td>
</tr>
<tr>
<td>Kill Khä</td>
<td>khaa⁵ to kill</td>
<td>C1</td>
</tr>
<tr>
<td>Old Thu²</td>
<td>thaw⁵ old</td>
<td>.thAUc To be old C1</td>
</tr>
<tr>
<td>Rice Khäu² sán</td>
<td>khaw⁵ rice</td>
<td>.khAUc Rice C1</td>
</tr>
<tr>
<td>Sour Sôm</td>
<td>som⁵ sour</td>
<td>.su₉ To be sour C1</td>
</tr>
<tr>
<td>Tooth Khiu²</td>
<td>khew⁵ tooth</td>
<td>.khiUc Tooth C1</td>
</tr>
</tbody>
</table>

As can be seen in Table 13, the marking in Robinson in not consistent. The C1 words are marked in three different ways: with a dot under the vowel, as in {Hāf} ‘cry’, {Nā} ‘face’, {Hā} ‘five’, {Māf} ‘hot’, {Thu} ‘old’, {Khäu} ‘rice’ and {Khiu} ‘tooth’, with a final italic consonant, as in {Sôm} ‘sour’, and with no marking as in the case of the other words.

Table 14 details the findings for each of the 20 tones boxes.

Table 14: Tokens in each of the 20 tone boxes.

<table>
<thead>
<tr>
<th>A1</th>
<th>No mark 35</th>
<th>B1</th>
<th>Ital vowel 2</th>
<th>No mark 5</th>
<th>C1</th>
<th>Dot 7</th>
<th>No mark 5</th>
<th>Ital final C1</th>
<th>DL1</th>
<th>No mark 6</th>
<th>DS1</th>
<th>No mark 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>Ital cons 8</td>
<td>No mark 6</td>
<td>B2</td>
<td>Ital vowel 1</td>
<td>No mark 2</td>
<td>C2</td>
<td>Dot 1</td>
<td>No mark 5</td>
<td></td>
<td>DL2</td>
<td>No mark 4</td>
<td>DS2</td>
</tr>
<tr>
<td>A3</td>
<td>Ital cons 7</td>
<td>No mark 3</td>
<td>B3</td>
<td>Ital vowel</td>
<td>No mark 1</td>
<td>C3</td>
<td>Dot</td>
<td>No mark 2</td>
<td></td>
<td>DL3</td>
<td>No mark 4</td>
<td>DS3</td>
</tr>
<tr>
<td>A4</td>
<td>Ital cons 21</td>
<td>No mark 15</td>
<td>B4</td>
<td>Ital vowel 4</td>
<td>No mark 6</td>
<td>C4</td>
<td>Dot 7</td>
<td>No mark 5</td>
<td>Ital Cons 5</td>
<td>Dot + Ital Cons 1</td>
<td>DL1</td>
<td>Ital cons 1</td>
</tr>
</tbody>
</table>

As can be seen in Table 14, all 35 tokens of words known to be A1 were notated in the normal font and consequently we can reconstruct a rising tone for box A1. This is unsurprising, with both Phake and Khamyang having rising tones for A1.

² Prof. Jerold Edmondson (p.c.), who has also investigated Khamti speakers, observed that he heard both tones as having final glottal constriction, with the constriction stronger in C4. The Khamti investigated by Edmondson is quite geographically distant from Narayanpur.
However, for most of the tone boxes in Table 14, there were words marked in more than one way. Of the 14 words that are A2, 8, for example \{\textit{pi}\} ‘year’, were marked with an italic initial consonant (Tone 2, falling tone, in Table 11), while 6, for example \{\textit{pa}\} ‘fish’, were in normal font. If we were to assume that the word \{\textit{pi}\} was a falling tone and \{\textit{pa}\} was a rising tone, as the notation suggests, then there would a mixing of tones within the A2 box, a mixing not found in any other Tai varieties in the Southwestern branch of the Tai family.

This inconsistency is explicable if we account for some of the tokens of Tone 1 – the unmarked tone – as being errors. It is easy to imagine the typesetters of Robinson’s article in far-away Calcutta leaving out an italicisation. They can hardly have grasped the importance of tonal marking.

For all three boxes making up A234, there was a mixture between notating an italic initial consonant and normal type. Assuming that the notation of normal type is an error, we can reconstruct the tone of A234 as Tone 2, a falling tone. This is exactly what is found in both Phake and Aiton.

By following similar reasoning for all the other boxes, a reconstruction of the whole tonal system can be derived, and is here presented as Table 15.

**Table 15: Reconstructed Tone Box for Khamti, after Robinson (1849)**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>DL</th>
<th>DS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 (rising)</td>
<td>4 (level)</td>
<td>3 (glottal)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2 (falling)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>?? falling, glottalised</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With the B tones, it is interesting to note that there is variation between marking with italic vowels and normal type, whereas with A234 the only variation was between italic initial consonants and normal type. Although the italic vowel was marked in only about a third of the cases of B tones, italic vowels were only found with words having a B tone.

This might suggest that Robinson was less confident about the B tones, or that perhaps he did not regard in the same way as the other tones, given that they are level rather than contour tones. Furthermore, the tone associated with and the marking with initial italic vowels is not mentioned in the article. The explanation for the inconsistency, however, is assumed to be that an italic vowel would be even easier to mistake in typesetting than an initial italic consonant. Thus we surmise that B1234 words were realised with a level tone.

With the C tones, there is marking with an under dot, described by Robinson as indicating “abrupt termination”. This surely refers to some kind of glottalisation, a feature often associated with C tones in the Tai varieties of Assam today. This dot, used to mark “abrupt termination”, is only ever found with C tones.

With box C4, we see the widest variety of marking, including one case of a dot and an initial italic consonant. This may suggest that C4 was a glottal tone with a different contour from C123, perhaps a clearly falling one.
Finally, we must consider the D tones. There is never any marking of the words for DL123 or DS123, and this suggests a merger and a tone that similar to the tone of A1. Both DL4 and DS4 mix unmarked words (Tone 1) with initial italic consonants (Tone 2). This suggests the split between rows 123 and row 4 for the dead tones, a split found in all the Tai varieties in Northeast India today.

3.2 Comparing Robinson’s data with present day Khamti

The tonal system that emerges in our reconstruction of Robinson’s Khamti is quite different from that in modern Khamti. For example, in modern Khamti tone A4 is distinguished from A23, whilst A23 are merged with the tone of B4. The Robinson data does not reflect this, but shows a clear difference between A23 and B4.

This reconstruction is close to the tonal system of Phake, differing only in the apparent merger between B123 and B4 in Robinson’s Khamti that is not found in Phake. Since both B123 and B4 tones in Phake are level tones, differing in pitch, it may be that Robinson could not distinguish them.

Apart from the word list, Robinson gave several examples of the grammar of the language, here listed in Table 16.

Table 16: Sentence examples from Robinson (1849:313)

<table>
<thead>
<tr>
<th>2 3 1</th>
<th>1 2 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hang man haü da.</td>
<td>Give (it) to him.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3 1 2</th>
<th>1 2 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hang man maü po.</td>
<td>You beat him.</td>
</tr>
</tbody>
</table>

When Robinson’s paper was discussed with the Khamti scholar, Rajat Namsoom of Borkhamti village, he said that he regarded these two sentences as being Phake, for two reasons. In the case of the first sentence in Table 16, the word {da} was a Phake sentence particle expressing command (actually *ta*), and that in Khamti a particle *laa* would be used, as in (3):

Even stronger evidence was the use of the very common Phake preposition *haN*, which marks animate arguments that are not agents (Morey 2005). In Khamti, such arguments are usually marked by a postposition, *mai*, as in (3). From this we might conclude that Robinson was actually recording a form of Phake rather than Khamti. However there are certain features of Robinson’s Khamti that are not found in modern Phake. Some of these are listed below:
• The emphatic pronouns given are not found in Phake, as for example {Kau eng} ‘I myself’.
• The classifiers (called ‘numeral affixes’ by Robinson) include {Bai} ‘applied to such nouns as leaf, paper, umbrella.’ In Phake this word is \( m\text{ai}^2 \). Initial /b/ is not found in Phake or Khamti, but is found in Aiton (and Ahom), where this word is realised as \( b\text{au}^2 \).
• In the body of the text, Robinson mentions the word {Bán} ‘villages’, which is akin to the Aiton form \( baan^3 \) rather than Phake \( m\text{an}^3 \) or Khamti \( maan^6 \). In the word list attached to the article, the form is given as {Mán}.

In light of the findings of the tonal analysis below, it may be that the data in Robinson’s article do not represent an earlier stage of what is accepted as Khamti today, and that Robinson and Brown collected their material from Phakes or similar groups who were all living in the same districts of Upper Assam in the first half of the nineteenth century.

References
Banchob Bandhumedha, 1987, Phake-Thai-English Dictionary Published by the Author. (In English and Thai).
Banchob Bandhumedha, MS, Aiton-Thai-English Dictionary. (In English and Thai).
THAI CHINESE UNDERGRADUATES’ USE OF AND ATTITUDES TOWARDS THE CHINESE LANGUAGE

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This study, based on interviews with Thai Chinese undergraduates, supports the view that the Thai Chinese have experienced language shift from Chinese to Thai. Most of the young people in the study do not speak Chinese and the majority of those who do speak it poorly. Few are literate in Chinese and the language is used infrequently. The shift is unlikely to be reversed although attitudes towards the Chinese language are positive. Young Thai Chinese are interested in the language as a business language, not as a home language.

1. Introduction
The Chinese in Thailand deserve our attention because of their sheer number. 20% of the population (or 35% of the people living in Bangkok) are of Chinese ancestry (Smalley 1994:3). In as early as the reign of King Thai Sa (1709-1733), there was a Chinese presence in the government. King Taksin (r. 1768-1782), King Ramathibodi or Rama I (r. 1782-1809) and many others were part Chinese. Even ordinary Chinese people made a significant contribution to the country. They dug canals, constructed railways, buildings and bridges, and played important roles in the rice-export economy.

If 91% of the people of Thailand today speak Thai as a native language (Smalley 1994:3), then the Thai Chinese must have experienced language shift from Chinese to Thai. The shift is largely the result of assimilation.

The decline of Chinese education was possibly the most important factor that caused the shift. From 1919, Chinese schools faced numerous rules and regulations aimed at suppressing Chinese education. The number of schools and students fell sharply as a result and the quality of education was also affected. Chinese education was moribund by the middle of the twentieth century.

Pressure to assimilate also came from the government’s pro-Thai campaigns. Commercial interests of alien Chinese were hurt by measures aimed at transferring control over the Thai economy from Chinese to Thai hands. Many Chinese foreign nationals lost their jobs and were banned from numerous occupations so that Thai nationals might find employment. In addition, Chinese aliens faced heavier taxes and fees and were prohibited from purchasing land. They suffered great hardship when ‘prohibited areas’ policies came into existence and were forced to leave their homes.

Positive attitudes towards Thai society aided language shift. The Chinese elite recognised the fact that the pathway to higher status and greater wealth pointed towards identification with the Thai upper crust. There was evidence that many Thai-born Chinese and part Chinese were not accepted by China-born Chinese and therefore turned to Thailand and set their hearts on becoming Thai. Chinese parents realised that a Thai

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1 I would like to express my gratitude to Assumption University (Thailand) for reducing my teaching load to enable me to write this paper.


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education was crucial to their children’s future in Thailand and were prompted to send their children to Thai schools.

The contributing factors to language shift as well as the rationale behind the government’s pro-assimilation policies are discussed in detail in Morita 2003.

2. The study
It is obvious even to the most casual observer that the Thai Chinese have shifted from Chinese to Thai. Having lived and taught in Thailand for over a year, I became curious about the shift in Chinese and part Chinese families. In early 2003, I conducted a survey into my Chinese and part Chinese students’ use of and attitudes towards the Chinese language. For a period of 6 weeks, I interviewed a group of 5 students at the end of each class for 10-15 minutes. (The list of questions asked is provided in the Appendix.) As a result of intermarriage between Chinese and Thai, so-called pure-Chinese are relatively few in Bangkok. The only practicable course of action was to include part Chinese students in my sample. In total, 43 Chinese (5) and part Chinese (38) students were interviewed. I do not claim that the sample is representative of the Thai Chinese community but I hope it will provide directions for future research. I hope this pilot study will be a step towards a comprehensive study of language shift among the Thai Chinese.

The interviewees are Assumption University (Bangkok) arts faculty students taking GL3102 Linguistics, a compulsory course for arts students. They are mostly in their third or fourth year and aged about 20. 33 of them are female and 10, male. This reflects the predominance of females in the faculty. Being a private institution, Assumption charges higher fees than its government counterparts and students here are mostly from middle-class backgrounds.

By the time I started interviewing, I had taught my students for a few months and had become acquainted with them. They were divided into groups for the interviews based on where they sat in class, which means that those in a group were usually friendly and therefore comfortable with each other. All of them seemed at ease when being interviewed.

3. The findings

3.1. Who is Chinese?
At the beginning of each interview, the students were asked whether they were of Chinese ancestry. It was up to them to identify themselves as Chinese or part Chinese.

Table 1: 1. Do you think you are Chinese or partly Chinese?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Chinese’</td>
<td>5</td>
<td>9.3</td>
</tr>
<tr>
<td>‘partly Chinese’</td>
<td>38</td>
<td>70.4</td>
</tr>
<tr>
<td>‘no’</td>
<td>11</td>
<td>20.4</td>
</tr>
<tr>
<td>total</td>
<td>54</td>
<td>100</td>
</tr>
</tbody>
</table>

38 answered that they were part Chinese, 5 said they were Chinese and 11 responded in the negative. Whenever a student answered ‘no’ to question 1, he/she was released from the interview.
It is not surprising that those of Chinese ancestry are overrepresented at this private university (cf. Smalley’s estimate of 35%). The Chinese were traditionally the wealthier in Thailand.

The next question was why the interviewees thought they were Chinese or part Chinese.

**Table 2: Why do you think you are Chinese or partly Chinese?**

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘my grandparent(s) came from China’</td>
<td>32</td>
<td>74.4</td>
</tr>
<tr>
<td>‘my parent(s) came from China’</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>‘my ancestors came from China’</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>‘my parents and grandparents came from China’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>‘my grandparents came from China and my mother speaks to my grandmother in Chinese’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>‘my parent(s) use(s) Chinese words’</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>‘my family and I speak Chinese’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>‘my grandfather came from China and we hold Chinese ceremonies at home’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

An overwhelming majority (88.4%) cited origins of older family member(s) as the reason for considering themselves Chinese. In Boonsanong’s (1971) study of the Chinese in Bangkok, he emphasised that ‘a Chinese person in Thai society is defined as “a person born and raised in a family in which both of his parents speak (any dialect of) Chinese as their native language”’ (p.3). The young people in my study seem to think otherwise. Only 7% said they thought they were Chinese because their family or they themselves spoke Chinese. At least for the subjects of this study, origins appear to be a more important defining characteristic of being Chinese than language is.

**3.2. Language shift**

Although 86% of the interviewees have family members who speak Chinese, only 34.9% speak the language themselves. This suggests language shift in progress.

**Table 3: Do you speak Chinese?**

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘yes’</td>
<td>15</td>
<td>34.9</td>
</tr>
<tr>
<td>‘no’</td>
<td>27</td>
<td>62.8</td>
</tr>
<tr>
<td>no response</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4: 4. Is there anyone in your family who speaks Chinese?

<table>
<thead>
<tr>
<th>response</th>
<th>parent(s)</th>
<th>parent(s) and grandparent(s)</th>
<th>grandparent(s)</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘yes’</td>
<td>20 (46.7%)</td>
<td>9 (20.9%)</td>
<td>8 (18.6%)</td>
<td>37 (86.0%)</td>
</tr>
<tr>
<td>‘no’</td>
<td></td>
<td></td>
<td></td>
<td>4 (9.3%)</td>
</tr>
<tr>
<td>no response</td>
<td>2 (4.7%)</td>
<td></td>
<td></td>
<td>2 (4.7%)</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td></td>
<td></td>
<td>43 (100%)</td>
</tr>
</tbody>
</table>

Teochew is the most common variety spoken by the interviewees and their family. Mandarin, Cantonese, Hakka, Hokkein and Hainanese are also used. This supports numerous reports of Teochew speakers forming the largest Chinese linguistic group in Thailand.

Table 5: 5./6. What type of Chinese do(es) you/your family member(s) speak?

<table>
<thead>
<tr>
<th>response</th>
<th>interviewees</th>
<th>family members</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Teochew’</td>
<td>6 (40.4%)</td>
<td>18 (48.6%)</td>
</tr>
<tr>
<td>‘Teochew and Mandarin’</td>
<td>4 (26.7%)</td>
<td>5 (13.5%)</td>
</tr>
<tr>
<td>‘Teochew, Mandarin and Cantonese’</td>
<td>1 (6.7%)</td>
<td>3 (8.1%)</td>
</tr>
<tr>
<td>‘Teochew and Cantonese’</td>
<td>0</td>
<td>2 (5.4%)</td>
</tr>
<tr>
<td>‘Teochew, Mandarin and Hakka’</td>
<td>0</td>
<td>1 (2.7%)</td>
</tr>
<tr>
<td>‘Teochew and Hokkien’</td>
<td>1 (6.7%)</td>
<td>0</td>
</tr>
<tr>
<td>‘Mandarin’</td>
<td>2 (13.3%)</td>
<td>1 (2.7%)</td>
</tr>
<tr>
<td>‘Mandarin, Cantonese and Hakka’</td>
<td>0</td>
<td>1 (2.7%)</td>
</tr>
<tr>
<td>‘Hainanese’</td>
<td>1 (6.7%)</td>
<td>2 (5.4%)</td>
</tr>
<tr>
<td>‘Hokkien’</td>
<td>0</td>
<td>1 (2.7%)</td>
</tr>
<tr>
<td>‘I don’t know’</td>
<td>0</td>
<td>3 (8.1%)</td>
</tr>
<tr>
<td>total</td>
<td>15 (100%)</td>
<td>37 (100%)</td>
</tr>
</tbody>
</table>

Out of the 15 interviewees who claimed to speak Chinese (see table 3), most (10) said their Chinese was poor. Only 5 are literate in Chinese and 3 use the language daily. Many told me they knew only a few words and those for addressing family members.

Table 6: 7. How good is your Chinese?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘native speaker proficiency’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>‘fluent’</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>‘fair’</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>‘poor’</td>
<td>10</td>
<td>66.7</td>
</tr>
<tr>
<td>total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 7: 9. Can you read and write Chinese?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘yes’</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>‘no’</td>
<td>10</td>
<td>66.7</td>
</tr>
<tr>
<td>total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 8: 11. How often do you speak Chinese?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘daily’</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>‘frequently’</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>‘infrequently’</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>‘occasionally’</td>
<td>6</td>
<td>40.0</td>
</tr>
<tr>
<td>no response</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

Ideally, I would have liked to include the interviewees’ parents and grandparents in the sample as well. Unfortunately, it is impractical to do so for a small study of this nature. I hope to be able to speak with older Thai Chinese in future research. Until then, I will have to rely on the young people in this study to tell me about their parents and grandparents. In their answers to questions 8, 10 and 12, almost everyone ranked their grandparents highest in Chinese proficiency, literacy and frequency of use. Parents came second and the interviewees themselves last. The interviewees often described their grandparents and some of their parents as having native speaker proficiency in Chinese, something which none of the young people claimed for themselves. They also reported that many grandparents and some parents spoke Chinese daily with family, friends and workmates.

Although 15 interviewees said they spoke Chinese (see table 3), only 3 used Teochew as a home language alongside Thai.

Table 9. 13: What language(s) do you speak at home?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Thai’</td>
<td>40</td>
<td>93.0</td>
</tr>
<tr>
<td>‘Thai and Teochew’</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

The importance of speaking a language in the home should not be underestimated. It is possibly the most crucial factor in the maintenance of a language. Fishman (1991) emphasises the significance of intergenerational transmission. Only when a language is being passed on in the home is there some chance of long-term survival.

3.3. Attitudes

2 of the interviewees are Business Chinese students. Arts faculty students at the university are registered at one these departments: Business English, Business Chinese, Business Japanese or Business French. One of the Business Chinese students (henceforth T) speaks
Chinese along with Thai at home while the other (henceforth P) uses Thai only. I asked them why they chose Business Chinese. T said he loved the language and had prior knowledge of it from high school. P answered that her mother made her choose Business Chinese. Reasons similar to P’s for studying Chinese are common and can be found in tables 11 and 13. I believe this reflects some parents’ desire for the maintenance of Chinese.

34.9% of the interviewees had studied Chinese previously.

**Table 10: 16. Have you studied Chinese before?**

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘yes’</td>
<td>15</td>
<td>34.9</td>
</tr>
<tr>
<td>‘no’</td>
<td>27</td>
<td>62.8</td>
</tr>
<tr>
<td>no response</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

They gave a variety of reasons for having wanted to learn the language:

**Table 11: 17. Why did you study Chinese?**

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘my father/mother forced me’</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>‘Chinese is important for business’</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>‘Chinese was a compulsory subject’</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>‘my friends were learning Chinese’</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>‘my friends said Chinese was very easy’</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>‘I wanted to understand difficult languages’</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>‘I wanted to read Chinese’</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>‘I was bored of English and was looking for something new’</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

Judging by the responses to questions 17 and 19, few studied or want to learn Chinese for language maintenance purposes. Many interviewees would like to learn the language and their reasons for wanting to do so are provided in table 13.

**Table 12: 18. Would you like to study Chinese in the future?**

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘yes’</td>
<td>16</td>
<td>37.2</td>
</tr>
<tr>
<td>‘no’</td>
<td>14</td>
<td>32.6</td>
</tr>
<tr>
<td>‘maybe’</td>
<td>8</td>
<td>18.6</td>
</tr>
<tr>
<td>no response</td>
<td>5</td>
<td>11.6</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 13: 19. Why do you want to study Chinese in the future?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Chinese is important for business’</td>
<td>11</td>
<td>44.0</td>
</tr>
<tr>
<td>‘Chinese is popular’</td>
<td>3</td>
<td>12.0</td>
</tr>
<tr>
<td>‘Chinese is important for business and I want to watch Chinese films’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘Chinese is important for business and I want to talk to my Chinese friends’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘I want to watch Chinese films’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘I want to learn more about Chinese culture and watch Chinese films’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘there are many Chinese people in Thailand’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘my mother is forcing me’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘Chinese is interesting’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘it is important to use our language’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>‘I want to be unique’</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>no response</td>
<td>2</td>
<td>8.0</td>
</tr>
<tr>
<td>total</td>
<td>25</td>
<td>100</td>
</tr>
</tbody>
</table>

There are 25 responses in the table above because in addition to the interviewees who answered ‘yes’ and ‘maybe’ to question 18, one interviewee who said ‘no’ also responded to question 19. Many interviewees were keen to talk about how important Chinese was in the business world and how much business was being done with China. This reflects the close economic ties between the two countries. China is one of Thailand’s largest trading partners and the Thai economy benefits from Chinese business networks.

Attitudes towards the Chinese language are very positive. Most of the interviewees (62.8%) said they would feel proud if they could speak the language. Most of the other adjectives used (e.g. cool and good) were equally positive.

Table 14: 20. How do you feel about speaking Chinese?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘proud’</td>
<td>27</td>
<td>62.8</td>
</tr>
<tr>
<td>‘cool’</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>‘good’</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>‘happy’</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>‘funny’</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>‘strange’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>‘clever’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>‘interesting’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>‘fun’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>‘charming’</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

It is understandable that the interviewees take great pride in Chinese. Chinese is after all the language of one of the oldest and largest countries and now boasts of having the fastest-growing economy in the world.
The language shift experienced by the Thai Chinese appears to be accompanied by positive attitudes towards the ancestral language. Not every case of language shift in Thailand is so. Some Mon-Khmer language communities of Northeast Thailand, for instance, expressed embarrassment about their language and were shifting to Lao and/or Thai (Miller 1994).

I noticed during the course of interviews that the interviewees expressed no embarrassment about the use of so-called Chinese dialects, i.e. Chinese varieties other than Mandarin. This is in stark contrast to the Singaporean Chinese’s negative attitude towards Hokkien, Teochew, Cantonese and other dialects. I have been informed that Chinese dialects come in handy when the Thai Chinese do business with Chinese companies. In addition, the Speak Mandarin Campaign responsible for elevating the status of Mandarin above all other Chinese varieties in Singapore never took place in Thailand.

3.4. Language and identity
The final question was whether the interviewees thought speaking Chinese was an important part of being Chinese. Most of them (74.4%) said it was important.

Table 15: 21. Do you think speaking Chinese is an important part of being Chinese?

<table>
<thead>
<tr>
<th>response</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘yes’</td>
<td>32</td>
<td>74.4</td>
</tr>
<tr>
<td>‘no’</td>
<td>9</td>
<td>20.9</td>
</tr>
<tr>
<td>no response</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

At first glance, it may appear contradictory that on one hand, most of the interviewees professed that the Chinese language was important to being Chinese and on the other hand, they had all claimed Chinese ancestry but few spoke the language well. My attempts to explain this contradiction may seem speculative at the moment but I believe they are worth investigating in future research.

In my experience, students at the university generally think of themselves as Thai regardless of ancestry. They typically refer to themselves as ‘Thai students’ as opposed to ‘Chinese students’ (those from China). It is only when they are asked specific questions about their ancestry (such as in question 1) or when talking about Chinese festivals such as the Chinese New Year that they make references to their Chinese ancestry. Assimilation appears to be complete for these young people. The interviewees answered question 21 in an impersonal way, i.e. they felt it did not apply to them.

Perhaps there are interviewees who maintain their Chinese identity and feel that their language is important but are not committed to any action. Personal non-commitment towards Irish was noted by Baker (1988:131). One Irish person said to an investigator (Hindley 1990) ‘Although we are all FOR Irish as we are for cheaper bus fares, heaven and the good life, nobody of the masses is willing to make the effort.’ I believe that similar passivity exists among my interviewees. One of them stressed that it was important to use one’s language but at the same time spoke poor Teochew and had not attempted to learn the language.
References

Appendix: The interview
Who is Chinese?
1. Do you think you are Chinese or partly Chinese?
2. Why do you think you are Chinese or partly Chinese?

Language shift
3. Do you speak Chinese?
4. Is there anyone in your family who speaks Chinese? (If the answer is ‘no’, skip questions 6, 8, 10 and 12.)
5. What type of Chinese do you speak?
6. What type of Chinese do(es) your family member(s) speak?
7. How good is your Chinese?
8. How good is your family member(’)(s)(’)(s) Chinese?
9. Can you read and write Chinese?
10. Can your family member(s) read and write Chinese?
11. How often do you speak Chinese?
12. How often do(es) your family member(s) speak Chinese?
13. What language(s) do you speak at home?

Attitudes
14. Are you a Business Chinese student? (If the answer is ‘no’, skip question 15.)
15. Why did you want to study Business Chinese?
16. Have you studied Chinese before? (If the answer is ‘no’, skip question 17.)
17. Why did you want to study Chinese?
18. Would you like to study Chinese in the future? (If the answer is ‘no’, skip question 19.)
19. Why do you want to study Chinese?
20. How do you feel about speaking Chinese?

Identity
21. Do you think speaking Chinese is an important part of being Chinese?
ON THE SOURCES OF LOANS IN THE PROTO-CHAMIC LEXICON

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The Chamic languages are a Malayo-Polynesian sub-grouping that underwent a remarkable typological and lexical transformation through prolonged contact with Mon-Khmer (and possibly other) languages. This historical process was analyzed in great detail by Thurgood (1999) (henceforth ‘Thurgood’), achieving a great step forward in our understanding of Chamic prehistory. However, that study more or less presumes that the earliest stages of this contact involved mainly Bahnaric-speaking peoples undergoing a shift to Cham, occurring once Chamic dominance had been established on the Vietnam central coast. My ongoing analysis finds no particular evidence for early Bahnaric-Chamic contact, and instead suggests that Proto-Chamic (PC) formed in conditions of contact with a language or languages unknown, only later coming into contact with Bahnaric and other languages of the Vietnamese highlands, where the direction of borrowing was almost entirely from Chamic into those languages. On the other hand, there are indications of first millennium contact with at least Khmer, Mon and Vietic, and there remains a very early stratum of quite mysterious lexicon.

During the first millennium CE the Chamic peoples succeeded in building one of the great civilisations of Southeast Asia (see: Hall 1955, Coedès 1968, Hall 1985, Tarling 1999). At times a great rival to Angkor, Champa went into decline in the face of Vietnamese expansion, ultimately reduced to a rump state that persisted into the 1830s. As for the origins of the Chamic languages, Thurgood sees Austronesian settlers arriving on the Indo-Chinese coast some hundreds of years before the beginning of the Common Era, and mixing with the autochronous Mon-Khmer population. Many Mon-Khmer words displaced Austronesian forms, and sound changes remodeled word structure and phonology towards the Mon-Khmer (sesquisyllabic) type, as shifting speakers tended to learn an imperfect Chamic. The ultimate result was the restructured Proto-Chamic (PC), presumably the language of ordinary Chams for much of the first Millennium. Champa the political entity first appears in the historical record around 190 CE as the Lin-yi of Chinese sources (although see Vickery 1998 for a contrary view on the identity of Lin-yi), and its ascendancy in SEAsia develops especially from the middle of the first Millennium. But Champa’s glory was checked by growing conflict with the assertively independent Vietnam from the 10th century, seriously weekend by Cambodian occupation 1200-1220 CE, and finally humiliated with the fall of the southern capital Vijaya in 1471. The

I would like to thank William Foley and Gerard Diffloth for useful feedback they provided at the SEALXIV meeting and afterwards. I would also like to thank the Australian Research Council and the Max Planck Institute for Evolutionary Anthropology (Leipzig) for financial support that made my research into Chamic-Mon-Khmer language contact possible. The first, and more ambitious, draft of this paper was presented under the clumsy title: “The origins of the Chamic lexicon: evidence for ancient lexification and subsequent back-borrowing into MK language”


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conflicts over territory saw many migrations (to Hainan, to Cambodia, to the Central Highlands, perhaps even to Aceh in Sumatra), so we should date the linguistic disintegration of Chamic to some time no later than the 10th century, or perhaps even somewhat earlier.

Thurgood’s PC reconstruction includes a lexicon that he stratifies as follows: 285 items of direct Austronesian origin, 20 from Indic, 3 from Arabic, 277 borrowed from Mon-Khmer into PC, 179 words of unknown origin, plus some 173 items borrowed after the breakup of PC. Among the words of Mon-Khmer and unknown origin there are many, in fact hundreds, of corresponding forms in Bahnaric (and to a much lesser extent Katuic) languages, which Thurgood identifies chiefly by citing forms from various published comparative studies. The identification of so many Bahnaric-Chamic isoglosses underlies Thurgood’s tentative conclusion that:

The early arriving pre-Chamic people most likely landed south of Danang and thus probably encountered Bahnarics. Given the major restructuring of the arriving Austronesian language that took place, these pre-Chamic people must have become socially dominant, with the dominance leading many most probably Bahnaric-speaking people to shift to Cham, but bringing with them many MK characteristics. (Thurgood 1999:251)

The obvious and potentially testable consequence of such a history would be the finding of a significant lexical correlation between the foreign strata within PC and either the Proto-Bahnaric lexicon, or the lexicon of one or more Bahnaric sub-groups. Unfortunately not Thurgood nor anyone else has, as far as I am aware, access to a reliable Proto Bahnaric lexicon. The main Bahnaric sources Thurgood did utilize (Smith 1972, Blood 1966, and Aymonier & Cabaton 1906) are not especially representative of the diversity of the Bahnaric family, but in fact are skewed towards languages that have undergone strong Chamic influence. Thurgood did also consult two Katuic reconstructions (Thomas 1967 and Peiros 1966), but unfortunately did not refer to Khmer, Vietnamese or Mon in his lexical comparisons. This is a significant lacuna given that Angkor, Dvaravati and Dai Viet were important MK speaking powers of the region during and after the PC era. Reference to these languages would serve at least two purposes: 1) to identify specific borrowings from these languages, and 2) to indicate deeper MK etymology in the absence of specific Proto Bahnaric or Proto Mon-Khmer reconstructions. Utilizing sources for these and other MK languages I have attempted to etymologize Thurgood’s PC lexicon, and my efforts have produced some useful preliminary results, although the origins of much of the non-Austronesian lexicon in Chamic remain a mystery.

The PC lexicon of MK origins can be classified into two basic categories: 1) those words with phonological forms that are found in various languages and hence give no clue to their specific origins, and 2) those words with specific characteristics that indicate a known language. Words of the first type have forms that essentially correspond to what we would reconstruct for Proto-East MK, and effectively give us no indication of where or when they were borrowed, e.g.:

2 Frankly I would not even recommend my 1998 effort in that regard (PhD thesis: A Reconstruction of Proto-Bahnaric).
3 Please note that extensive lexical resources are now appearing on-line at: http://www.sealang.net/monkhmer/
PC forms of MK origin:

*ʔaak ‘crow’
*ʔadaa ‘duck’
*ʔahaa, *haa ‘open (mouth to say something)’
*ʔaw ‘clothing, shirt’
*klan ‘python’
*prɔɔk ‘squirrel’

On the other hand there are words that Thurgood reconstructed to PC that show agreements with specific languages or proto-languages, e.g.:

<table>
<thead>
<tr>
<th>PC</th>
<th>Khmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>*madɔh ‘awaken’</td>
<td>dɔh ‘awaken’</td>
</tr>
<tr>
<td>*padɔw ‘warm, hot’</td>
<td>kɗɔw ‘hot’</td>
</tr>
<tr>
<td>*cih ‘write, draw’</td>
<td>cih ‘learned’</td>
</tr>
<tr>
<td>*sɔnɔa ‘crossbow’</td>
<td>sɔnɔa ‘crossbow’</td>
</tr>
<tr>
<td>*ʔnam ‘vegetables, food, legumes’</td>
<td>nɔm ‘eat’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PC</th>
<th>Mon</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ʔɔʔ ‘vomit’</td>
<td>hɔʔ ‘vomit’</td>
</tr>
<tr>
<td>*klαh ‘lose’</td>
<td>klαh ‘cleared away’</td>
</tr>
<tr>
<td>*kleʔ ‘steal’</td>
<td>kleʔ ‘lose, disappear’</td>
</tr>
<tr>
<td>*pɔk ‘open’</td>
<td>pɔk ‘open’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PC</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>*luəj ‘reject, quit’</td>
<td>loai ‘eliminate, get rid of, weed’</td>
</tr>
<tr>
<td>*duc ‘to sting’</td>
<td>dɔt ‘to prick, sting’</td>
</tr>
<tr>
<td>*miəŋ ‘cheek, jaw’</td>
<td>P-Vietic *meef ‘mouth’</td>
</tr>
<tr>
<td></td>
<td>(.tell perhaps Khmu mian ‘chew’)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PC</th>
<th>Proto-Katuic (Sidwell 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ʔeh ‘excrement, defecate’</td>
<td>*ʔeh ‘excrement’</td>
</tr>
<tr>
<td>*ʔalee ‘medium bamboo’</td>
<td>*ʔalee ‘bamboo’</td>
</tr>
<tr>
<td>*hual ‘cloud, fog, mist’</td>
<td>*hual ‘steam, vapour’</td>
</tr>
<tr>
<td>*cuah ‘sand’</td>
<td>*cuah ‘sand’</td>
</tr>
</tbody>
</table>

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4 I have sought Aslian parallels with PC, but I have been unable to find unique Aslian-Chamic isoglosses, and no comparisons that show distinctively Aslian phonological or morphological features (such as hardened final nasals).
The Katuic comparisons are interesting – for the mass of comparisons I have examined I have found few if any unique Katuic - Proto-Chamic isoglosses. It appears that in many cases a Katuic isogloss is evident simply because Katuic, being Mon-Khmer, retains many of the same etyma that were loaned into Chamic from one or other Mon-Khmer language. For example, ʔɛh ‘excrement’ is also reconstructable to Proto-Vietic (Ferlus 1991), ʔalɛɛ ‘medium bamboo’ has cognates in Vietic and Bahnaric, and *cuah ‘sand’ has reflexes in Bahnaric. PC *hual ‘cloud, fog, mist’ may be derived from a reflex of PMK *[jmh]əl ‘cloud’.

The analysis of PC-Bahnaric comparisons also reveals little or no indication of borrowing from Bahnaric into PC. While there are some hundreds of PC-Bahnaric comparisons in Thurgood’s data, the bulk of the Bahnaric forms are restricted to Bahnar, South Bahnaric and North Bahnaric. Typically the forms are not reconstructable to Proto-Bahnaric as they lack West Bahnaric reflexes and/or wider MK etymologies. Some examples:

PC *balaa ‘tusk, ivory’ > Bahnar & North Bahnaric; West Bahnaric continues Proto-Bahnaric *blɔɔk, while South Bahnaric borrowed Khmer bhluk.

PC *haag ‘bank, shore’ > Bahnar & South Bahnaric; not found in West Bahnaric, North Bahnaric.

PC *pɔŋ ‘to hammer’ > Bahnar, South Bahnaric, North Bahnaric; Proto-West Bahnaric continues Proto-Bahnaric *tim, and in Bahnar as tɔm ‘to butt’

PC *khan ‘blanket’ > Bahnar & North Bahnaric; Proto-West Bahnaric *snap, cf. OKhmer snap ‘armor’.

PC *jaag ‘spirit, God’ > Bahnar, South Bahnaric, North Bahnaric (Malay hyang); Proto-West Bahnaric *brah, cf. OKhmer brah.

PC *phaa ‘different’ > Bahnar, South Bahnaric, North Bahnaric; Proto-West Bahnaric *dej, cf. OKhmer dej

In many cases where West Bahnaric differs lexically from the rest of Bahnaric, the West Bahnaric etyma are paralleled in Khmer. This can be the result of borrowing from Khmer, or it can be indicative of deeper Mon-Khmer etymology, such that West Bahnaric directly continues Proto-Bahnaric forms lost to Chamic loans elsewhere in Bahnaric.

However, Khmer, Mon and Vienamese parallels cannot be so readily dismissed. For example, the Khmer-Chamic parallels with imploded stops clearly indicate borrowing into Chamic from Khmer, as we know that there was a sound change in Old Khmer that saw prevocalic voiceless stops become imploded (see Ferlus 1992), while they remained

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5 In many languages metathesis of the initials (e.g. Bahnar [hɔmə] ‘cloud’) is evident, and Chamic sporadically lenited medial [m] to [ʃ̩ ~ w ~ u], e.g. Cham [kur] ‘Khmer’ < *kwir < *kmer (Ferlus 1977), therefore *hual < **hməl, making it potentially a back-borrowing into Katuic?
plain voiceless elsewhere in Mon-Khmer (there was a similar change much later in Vietnamese, but not generally in Vietic). There are also phonological clues that Khmer loans must have occurred fairly early; e.g. in the ‘awaken’ comparison above, we see that borrowing occurred before the shift of *a to /ə/ in Chamic.

The extent of Khmer as a source of loans into PC is difficult to establish, but my expectation now is that it was important indeed. Therefore, to properly assess Bahnaric-Chamic comparisons, we need to take Khmer into account as a possible common source, and see what is revealed when sets with Khmer members are put aside. Doing this I have counted only two possible West Bahnaric-Chamic comparisons that are not obviously shared with Khmer (see Sidwell & Jacq 2003 for a discussion of Khmer borrowings in West Bahnaric):

PC *ʔantɔw ‘ghost, corpse’ (Malay *hantu)
Proto-West Bahnaric *ʔətw ‘grave’, Bahnar *ʔətw ‘ghost, corpse’ (possibly connected with Khmer ʔɔndau ‘hole’ via ‘grave’?)

PC *raa ‘person’
Proto-West Bahnaric *raa ‘person classifier’.

Thurgood suggested that *raa ‘person’ derived it from Malayic *ʔuraŋ, invoking a unique radical phonological reduction. However, the ra is recorded for Mon as ‘person classifier’ by Huffman (1971),6 perhaps consistent with an ancient Mon presence in southern Laos?

But the really striking fact revealed by the detailed comparative-historical analysis of West Bahnaric languages is that while they share around 40% of vocabulary with other Bahnaric sub-groups, they show little or no evidence of direct contact with Chamic. Logically the many Bahnaric-Chamic comparisons adduced by Thurgood (and others previously such as: Lee 1966, Shorto 1975, Headly 1976) must be the result of borrowing from Chamic into Bahnaric, apparently after the separation of West Bahnaric, and after the typological restructuring of Chamic was already well under way.

So how are we to reconstruct Chamic linguistic history in the light of these observations? Of course we need to follow through with a much more extensive etymological treatment of the PC lexicon before we can reach any definitive conclusions, but a picture is emerging. The reconstruction of PC yields a lexicon that includes loan strata that can be identified with various Mon-Khmer languages, such as: Khmer, Mon, Vietic, Katuic and Bahnaric, plus many words that as yet lack a clear etymology. Those words which have the most obscure origins probably belong to the earliest phase of PC, and reflect assimilation of an unknown population that included some Mon-Khmers. In later phases of the PC period there was much contact with Khmer, Vietnamese and even Mon. Many of these borrowings could even have occurred after the 10th century and diffused throughout Chamic, making it difficult to distinguish pre- and post-PC loans. Yet so far as we can identify specific loans, no one particular language stands out as a dominant source of borrowed vocabulary in PC.

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6 Although I don’t find it in Shorto’s (1962) dictionary of Modern Spoken Mon.
References


