Tone Change and Language Contact: 
A Case Study of Mien-Yao and Thai

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INTRODUCTION

Languages spoken in the same geographical area are likely to share typological features, even though they may be related only remotely or not at all (Lehiste, 1988, p. 59). The languages of Southeast Asia have been in contact with each other for such a long time. This has led, over the millennia, to massive bi- and multi-lingualism, and thus to homogenization of lexical, grammatical and semantic features (Matisoff, 1983, p. 69). I have noticed that Matisoff does not include phonological features among other linguistic features. This has made me doubt whether it is possible for some phonological features in Southeast Asian languages to be homogenized. Fortunately, I have found some convincing evidence in the Mien-Yao spoken in the village of Huai Mae Sai (HMS) in support of the homogenizing of such phonological features.

THEORETICAL BACKGROUND

Weinreich, Labov, and Herzog (1968) divide the problem of understanding linguistic change into five distinct areas: locating universal constraints, determining the mechanism of change, measuring the effects of structural embedding, estimating social evaluation, and searching for causes of the actuation of sound changes. Labov (1986, p. 535) points out the social origins of sound changes. He states that one of the most striking results of the sociolinguistic studies carried out since 1961 indicates that new sound changes are emerging and old ones proceeding to completion at a rapid rate in all of the speech communities that have been studied. Linguistic change is an inherent factor of natural language. Fundamental to Labov’s theory of language change is the basic assumption as stated by Goyvaerts (1975, p. 171) that “language is best viewed as a differentiated or heterogeneous system; a product of combinations, alternations or mosaics of distinct jointly available system.” Language change is, then, a continuous process and the inevitable by-product of linguistic interaction; it depends upon the entire sociolinguistic structure of the whole speech community. Gradual nondistinctive changes can make the leap into a new distinctive category.

Campbell (1976) drew our attention to the important implications of language contact for a theory of sound change. The causes of change are divided into two major categories, i.e., the internal and external causes. The internal factors are: physical explanations (e.g., speech organs), psychological explanations (e.g., perception and learnability), and naturalness. The external factors comprise social and stylistic

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variations, expressive and communicative needs, positive and negative social
evaluation, linguistic play, literacy and mass communication, political decree, size and
complexity of the speech community, remedial innovation (e.g., avoidance of
homophony), and language contact. Linguistic changes that are motivated by external
factors are termed "contact-induced changes." Linguistic borrowings, areal linguistics,
language shift, etc., are examples of language contact phenomena. The heterogeneous
life situations of a speech community usually lead to bi-and multi-lingualism (Lehiste,
1988).

In the rest of this paper, I will give an illustration of some contact-induced tonal
variations and changes in Mien-Yao. These spontaneous variations and changes are
subtle adaptations to the phonetic and phonological features of the nationally dominant
language, Thai.

SETTING OF THE MIEN-YAO VILLAGE1 AT HUAI MAE SAI
(HMS)

HMS village is in Doi Yaw sub-district, Muang district, Chiangrai province. It is
located in the hills, 650–700 meters above sea-level. This Mien-Yao village comprises
58 households with a population of 379. From the city of Chiangrai, it takes about 45
minutes by car via a route consisting of a section of asphaltic-concrete road (15
kilometers) and a section of dirt road (8 kilometers). The dirt road splits HMS in half
and continues about 4 kilometers until it reaches the HMS waterfalls. As a result, HMS
village has become a tourist attraction. Besides cultivating cash crops and raising
livestock, the villagers earn extra income by selling handicrafts and conducting elephant
tours to the waterfalls. Thus, they have an opportunity to be in contact with both Thai
and foreign tourists daily. Minibuses are available during the day.

In 1859, nine Mien-Yao families migrated from Muang Sing, PDR Laos, to the
northern part of Thailand. When they arrived in Thailand, they stayed for a short period
of time at Huai Kaw village, Mae Suai district, Chiangrai province; then they moved on
to Huai Mae Mung, Muang district. Later on they moved again and settled at Hai Chum
Phu, Muang district, Chiangrai province. In 1945, twenty households moved to Doi
Bo where they lived about 15 years. Finally, this group split up; one group moved to
Nong Waen village, Mae Chan district, and the other group to Doi Yaw, Muang
district; both places are in Chiangrai province. In 1971, the Mien-Yao village at Doi
Yaw was given an official name, Ban Huai Mai Sai, by the local government. A year
later, the Mien-Yao living at HMS were granted Thai citizenship, and a temporary
primary school was built (Kao Fong, personal communication).

Since 1978, the government's primary school has been in full-scale operation. Thai
is the medium of instruction. In addition, there are other units under the control of the
local government: a field station of the Tribal Welfare Department and a health center.
The other tokens of modernization are two rice mills, three noodle shops, three grocery
stores, and a few gift shops. The presence of a Protestant Christian church may be
taken as a probable sign of other modernizing factors brought in by missionaries. Some
households can afford luxuries, such as running water, electricity, motorcycles, pick-
up trucks, and so on. A few modern-looking houses are recent additions to the village.

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1 In the North of Thailand, 204 Mien-Yao villages are scattered in nine provinces. The total population
of this ethnic minority is 36,140 (Tribal Social Welfare Division, 1986).
One-third of the HMS inhabitants were converted to Christianity, a means of avoiding expensive Taoist ceremonies and obtaining extra support from Christian organizations. The rest of the villagers still have strong links to the practice of their traditional religion, a form of Taoism. A dual system of administration has been practiced at HMS, i.e., a mixture of the traditional system and the modern one that complies with the rest of the country. It is a joint effort of the council of elders, which has the major Taoist priest or the Master of Knowledge and Ceremonies as the leader, and a committee of younger men chaired by the village headman, who is appointed by the local government. Well-off families like to send their children, both boys and girls, to the city of Chiangrai and other places, e.g., Chiangmai, Phitsanulok, Bangkok, etc., for their post-primary education after finishing their elementary education at the village school.

HMS is a bilingual community; people are fluent both in Thai and Mien-Yao, especially the younger generation. These two languages have different functions. Mien is used at home and among the Mien-Yao themselves both inside and outside the village. Older people can speak Northern Thai and understand Central Thai, whereas younger people can speak both Northern and Central Thai. Central Thai (Standard Thai) is used at school and for official purposes. Northern Thai is for daily activities that involve outsiders, e.g., interaction at market places.

**PHONOLOGICAL SKETCH**

The phonological sketch given here is based on the Mien-Yao dialect spoken in HMS village.\(^3\) The Mien-Yao sound system consists of the following consonants, vowels and tones:

**Consonants**

- Initials: p ph b t th d k kh g ? m
- h m n hn n hŋ n hŋ l hl f
- s h w hw j hj ts tsh dz tc
- tch dz pj bj sj tcj tchj mts
- mq mh mn mj mp mk nh kw
- khw gw

**Finals:** p t k ? m n n w j

**Vowels**

- Monophthongs: i e ε a aa u o o
- Diphthongs: iε uε

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\(^2\) Old men (above 60) can speak Yunnanese Chinese, and a small group of men who have been involved in performing Taoist rituals are literate in Chinese.

\(^3\) My first visit to the HMS village was in March 1986, and the second one was in March 1987, about ten days each time. The major purposes of the two visits were to get acquainted with the villagers and the tribal-welfare officials, and to make preliminary studies of Mien-Yao as background for the preparation of my research proposal on “A Comparative Study of Thailand Yao and Guangxi Yao.”
Tones

Open syllable:
T1: Mid level [33] (<*A1)
T2: Mid-falling [31] (<*A2)
T3: High-rising-falling [453] (<*B1)
T4: Low-rising-falling [232] (<*B2)
T5: Mid-rising [34] (<*C1)
T6: Low-falling [21] (<*C2)

Checked syllable:
T3: High-rising [45] (<*D1)
T6: Low-falling [21] (<*D2)

DATA

I have observed for many years that the younger generations of the Mien-Yao do not speak exactly the same way as the older generations. The most prominent phonological features for which differences can be heard quite often are T3 (<*B1) and T4 (<*B2). To do a systematic investigation into the nature of tonal variation and tonal change, nineteen Mien-Yao speakers (10–43 years old) inhabitants of HMS village, were interviewed informally from April 8th to the 17th, 1993. Since I have no intention to quantify the results as sociolinguists normally do, I did not strictly divide the age levels or control the number of informants within each age level, i.e., I used a qualitative approach, not a quantitative one. A wordlist had been prepared in advance for eliciting tones. (See Table 1.)

Table 1. Tone checklist

<table>
<thead>
<tr>
<th>Item</th>
<th>Tone 1</th>
<th>Tone 2</th>
<th>Tone 3</th>
<th>Tone 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>dog</td>
<td>(tɕu³)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bee</td>
<td>(muaj⁴)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>axe</td>
<td>(pow³)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bone</td>
<td>(buŋ³)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hand</td>
<td>(puə⁴)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fire</td>
<td>(tow⁴)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>old</td>
<td>(ko⁵)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wood</td>
<td>(dıŋ⁵)</td>
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<td></td>
</tr>
<tr>
<td>chicken</td>
<td>(tɕaj¹)</td>
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<td></td>
<td></td>
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<tr>
<td>nine</td>
<td>(duə²)</td>
<td></td>
<td></td>
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<tr>
<td>blow</td>
<td>(pjom³)</td>
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<td></td>
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<tr>
<td>excrement</td>
<td>(qaj³)</td>
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<tr>
<td>fish</td>
<td>(bjaw⁴)</td>
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<td></td>
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<tr>
<td>horse</td>
<td>(maa⁴)</td>
<td></td>
<td></td>
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<tr>
<td>egg</td>
<td>(tɕaw⁵)</td>
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<tr>
<td>seven</td>
<td>(sio⁶)</td>
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<td></td>
<td></td>
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<tr>
<td>elder brother</td>
<td>(ko⁵)</td>
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<td></td>
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<tr>
<td>board</td>
<td>(pen³)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frog</td>
<td>(ker³)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>village</td>
<td>(laŋ⁴)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pig</td>
<td>(tuŋ⁴)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>name</td>
<td>(buə⁵)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>wind</td>
<td>(dzaaw⁵)</td>
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</tbody>
</table>

During the conversation in Thai with each informant, once in a while, I asked these questions: “How do you say the word ‘.........’ in Mien?” “Could you teach me how to say the word ‘.........’ in Mien?” “Could you give me the Mien word for ‘.........’?” In some instances, when there was an appropriate context, the target words occurred automatically without any leading questions. All of the target words elicited were transcribed to be used for detailed analysis later.
RESULTS

The results of this investigation strongly support my previous observations. Tone 3 has two groups of phonetic variants, i.e., Group A: High-rising-falling [453]~[454]~[452], and Group B: High-rising [45]; the former occurs in the speech of the informants who are above 25 years old and the latter in the speech of those below 25. The phonetic value of Group B’s tone sounds more like Standard Thai (ST) High-tone [45]; the falling portion of the contour becomes less prominent or sometimes disappears. (See the F0 curves of T3 in Figure 1.)

![Figure 1. The F0 curves of Mien-Yao T3 (B1) (female speakers adapted from L-Thongkum, 1988).](image)

Regarding the change of the Mien-Yao tonal system, T4 [232]~[233]~[231] has merged with T5 [34]. This is because the phonetic qualities of the two tones are similar, i.e., they share the low-rising characteristic (Figure 2). The 6-tone system then becomes a 5-tone system, just like Standard Thai, in the speech of young speakers. The phonetic value of T5 has been kept in Mien-Yao because it is similar to that of ST Rising-tone [15]. The merger of T4 with T5 and the adaptation of the phonetic shape of T3 make Mien-Yao tones sound more like Standard Thai tones (Tables 2 and 3).

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4 In fact, the Mien-Yao High-tone is also similar to the High-tone in Northern Thai. For example, the Chiangmai dialect has six tones: Low-rising [14], Mid-level [33], Low-level [22], High-falling [42], Mid-falling with glottal constriction [31'], and High-rising [45] (Boonphan et al., 1981).
Figure 2. The F0 curves of Mien-Yao T5 (<*C1) and T4 (<*B2). A female speaker adapted from L-Thongkum (1988).

Table 2. Comparison of Mien-Yao Tones (L-Thongkum, 1993) and Standard Thai Tones (Abramson, 1962) after Phonetic and Phonological Adaptation

<table>
<thead>
<tr>
<th>Mien-Yao</th>
<th>Standard Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid: 33 (T1)</td>
<td>33 (săaman)</td>
</tr>
<tr>
<td>Falling: 31 (T2)</td>
<td>51 (thoo)</td>
</tr>
<tr>
<td>High: 45 (T3)</td>
<td>45 (tri)</td>
</tr>
<tr>
<td>Rising: 34 (T4)</td>
<td>15 (tçattawaa)</td>
</tr>
<tr>
<td>Low: 21 (T5)</td>
<td>21 (?èek)</td>
</tr>
</tbody>
</table>

Table 3. Co-existent tonal systems in Mien-Yao

<table>
<thead>
<tr>
<th></th>
<th>*A</th>
<th>*B</th>
<th>*C</th>
<th></th>
<th>*A</th>
<th>*B</th>
<th>*C</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>33</td>
<td>453</td>
<td>34</td>
<td>High</td>
<td>33</td>
<td>45</td>
<td>34</td>
</tr>
<tr>
<td>Series</td>
<td></td>
<td></td>
<td></td>
<td>Series</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>31</td>
<td>232</td>
<td>21</td>
<td>Low</td>
<td>31</td>
<td>34</td>
<td>21</td>
</tr>
</tbody>
</table>

6 Tones (older speaker)  5 Tones (younger speaker)

Standard Thai is the official language of Thailand and is used all over the country as the medium of instruction in school at all levels, and also for mass communication, e.g., newspapers, radio, and television. This helps increase the ability of the ethnic minority children in general to speak Thai; furthermore, as for the Mien-Yao living at Huai Mae Sai, the setting of the village even encourages bilingualism. An adaptation to
the phonetic characteristics of ST segments and prosodies, which are considered more prestigious, seems natural and likely.

CONCLUSION

Due to language contact with Thai, Mien-Yao as a natural language cannot avoid change. It has been in the process of acquiring new tonal features. This study is an example of contact-induced phonological change. The contact of Mien-Yao and Thai is a casual sort of contact situation. It is a by-product of modernization. Language contact can be a cause of sound change and phonological innovations. Aspects of linguistic diffusion and convergence should be taken into account when languages are compared for subgrouping. Labov (1986, p. 254) comments:

The past century of phonetic research has illuminated our understanding of the production of sound, the properties of the acoustic signals, and to a certain extent, the perception of speech sounds. But the search for the originating causes of sound change itself remains one of the most recalcitrant problems of phonetic science.

My findings reflect some causes and types of sound change that have taken place in SEA languages. I hope that they will help predict the areal tendencies toward phonological changes that might take place in the future, and that they will contribute more or less to the theory of sound change in general. For the sociolinguists, I would like to recommend that Tone 3 (<*B1) and Tone 4 (<*B2) be treated as linguistic variables, and age levels (10–20, 30–40, 50–60) as social variables.

ACKNOWLEDGMENT

A grant from the Toyota Foundation enabled me to do my research from December 1988 to September 1991. Since HMS was one of my research sites, the grant gave me the opportunity to visit the village several times.
REFERENCES


