and minority languages can be one cause of such difference between the tones in

Thus it is suggested that the influence between the tones in the local systems which are part of the Thai language. The study found that the tones in the local systems are influenced by the national Thai language, which has a different tone system. The study also highlighted the importance of understanding the influence of the local systems on the national language, and how this can affect the learning and usage of the language.

In northeastern Thailand, generally known as the Lao region, Lao is spoken by a large number of people. The language is used in various activities such as communication within the community and in business transactions. However, the language is not well understood by the general population, and efforts are being made to improve education and promote the language.
Then, I have examined the earlier available literature, concerning the tonal systems of Lao and minority languages, mostly spoken in northern Isan, Nyo as well as Phuthai, and it is noticeable that while most of tonal systems in each language are distinctly different, there also appears no clear-cut difference between them. In other words, some tonal systems in the three languages show the same or similar patterns of tone mergers and splits (see the appendix 2 for the pairs of the same or similar tonal systems in Lao, Nyo, and Phuthai, for example Lao no. 45 ~ Nyo no.9&10, Lao no.51 ~ Nyo no.1&2 = Phuthai no.6 ~ Phuthai no.7, Lao no.53 = Nyo no.4, Lao no.54 = Nyo no.3, Lao no.55&56 ~ Nyo no.5&6).

In addition to confirming the migration of each ethnic group, such similarity of tone mergers and splits between Lao, Nyo, and Phuthai leads to the question about the influence between the tonal languages which might have taken place for a very long time. Therefore, it is worthwhile to investigate to what extent their tonal systems and tonal characteristics have influenced each other when tonal languages belonging to the same language family are spoken in an area with the respective speakers in constant contact.

The Lao tonal systems in the That Phanom district of Nakhon Phanom province had been investigated in my pilot study and it was found that the tonal system of Lao spoken in the northern area of the district was noticeably different from that spoken in the southern area. Based on my background, I strongly suspected that the accent of Lao spoken in the northern area was influenced by some minority languages spoken in the same locale. Therefore, the northern area of the That Phanom district was selected as the field site for investigating the influence between the tonal languages, since three Tai languages, Lao, Nyo, and Phuthai, are spoken there. In the northern part of the That Phanom district, there are a few villages of Phuthai and very few of Nyo, therefore, we can infer that Lao is the majority in that area.

Twenty “Lao”, fifteen “Nyo”, and ten “Phuthai” were selected to be the informants, according to the ethnic name they call themselves and their languages. Based on information from village headmen and villagers, each study location selected must have been inhabited only by a single group, and people from those villages have been in contact with each other for a very long time.

From studying the earlier literature as mentioned above, it can be claimed that most of the tone merger and split patterns in these three languages are different as well as most of the tonal characteristics. But after studying the tones in these three languages used in a language mixture area, an unexpected phenomenon was found: the “Lao” and the “Nyo” tonal systems overlap while the ones of the “Phuthai” do not. Also, concerning the tonal characteristics, it was found that these three languages share several similar tone shapes. It was also found that the “Phuthai” is the only group which is consistent in using their own ethnic name, the name of their language as well as the linguistic characteristics of their speech. Conversely, the “Lao” and the “Nyo” use their own respective names for themselves and their languages but the linguistic characteristics of their speech show a considerable amount of mixture. This paper aims to show the tonal variations and changes in the languages of the “Lao”, the “Nyo”, as well as the “Phuthai”, and also to show the patterns of tonal mixture in these languages. Furthermore, there will be further discussion about the hypotheses of tone changes in Lao and Nyo languages.

3 From Brown (1965), Chamberlain (1975&1984), Koowatthanasi (1981), and Simmonds (1965)
4 From Brown (1965), Chamberlain (1984), Khanittanan (1977), and Sritararat (1983)
5 The symbol ~ is used in stead of the words “is the same as”, and the symbol ~ as “is similar to”
Appendix 2

To determine how well these prototypical languages have been preserved in a region of high

Phylist, the "Nylo" and the "Phylist"

languages. These prototypical words were compared to the ones in the languages of the

"Nylo" and the "Phylist"

column. A similar pattern is seen in columns B and C, and some in Nylo look similar

intersections, especially the rising tone in columns A and B, and some in Nylo look similar

outstanding the prototypical languages. Some losses in the three languages share similar

these patterns were then used to indicate the differences between the three languages.

in Nylo and DL cohesive, and the ones in Nylo are column B, C, and Lao. The most in Lao are B1234, C1=DL123, and B=DL. The ones in Nylo are columns B, C.

The conclusions from earlier studies would lead me to assume that the patterns which

Figure 1. The prototypicalional systems of Lao, Nylo, and Phylist languages

Appendix 2

As mentioned above, there is more than one prototypical system in Lao, Nylo, and Phylist.
METHODOLOGY

To study the tones in the “Lao”, the “Nyo”, and the “Phuthai” languages, the concept of Gedney’s tone boxes (see the detail in Gedney, 1972) was adopted but lexically modified for the languages in question. In order for the tonal systems to be judged by both listening analysis and the instrumental analysis of the tonal characteristics, fifteen monosyllabic words from the analogous set were selected from a minimal set which had been used in earlier tone studies (L-Thongkum et al. 1978, Tingsabadh 1980&1990, Nuanchansang 1992, Banditkun 1993, Kritsanapan 1995). To get the fundamental frequency of test vowels word, without the perturbation of prevocalic and postvocalic consonants, as well as the vowel height, voiceless (aspired) stop initial consonants were followed by the long mid vowel /aa/. The voiceless stop final consonants were also controlled in the test words. Some of the words from the analogous set were then used besides some of Gedney’s words (/khāa/ ขำ ‘leg’, /pāa/ ป้า ‘forest’, /pāa/ ป้า ‘aunt’, /khāat/ ข้าท ‘to be torn’) as shown below,7

*A3: -  *B3: -  *C3: -
*A4: ค่ำ /khāa/  *A4: ค่ำ /khāa/ ‘value’  *C4: ค่ำ /khāa/ ‘to trade’

‘to get stuck in’

*DL1: ขำ /khāat/ ‘to be torn’  *DS1: ขำ /khāt/ ‘to rub’
*DL2: ป้า /pāat/ ‘to cut across’  *DS2: ป้า /pāt/ ‘to push away’
*DL3: -  *DS3: -
*DL4: ค่ำ /khāat/ ‘harrow’  *DS4: ค่ำ /khāt/ ‘to copy’

In order to get accurate results, the word list consisted of 5 tokens of each test word arranged in random order: 1,500 test words of the “Lao” (15 words X 5 tokens X 20 informants), 1,125 words of the “Nyo” (15 words X 5 tokens X 15 informants); and 750 words of the “Phuthai” (15 words X 5 tokens X 10 informants).

The tonal systems were first evaluated by listening, based on a system from the concept of Proto-Tai tonal systems of Li (1977) and Gedney (1972). Then, the instrumental analysis (the SIL CECIL programme -- Summer Institution of Linguistics’s Computerized Extraction of Intonation in Language), was used for examining the tonal characteristics and confirming the tonal systems.

RESULTS

When comparing the various tonal systems in the languages of the “Lao”, the “Nyo”, and the “Phuthai” in the That Phanom district with the prototypical tonal systems, it has been found, surprisingly, that there were five tonal system patterns: the Lao pattern, the Non-Lao pattern (Nyo?), the Nyo pattern, the Non-Nyo pattern (Lao?) and the Phuthai pattern (A/B).

7 There is no test word in the 3rd row as there has never been 2-3 split in each column in Lao, Nyo, and Phuthai tonal systems. And in the 2nd row, the [paa] set was selected in place of the [kaa] one so as to suit with the three languages, i.e. some words in the [kaa] are meaningless in the three languages. And actually, in Central Thai, the word in A2 and DL4 should be pronounced /plāa/ ผ้า and /khāat/ ข้าท respectively but there is no cluster in Lao, Nyo, and Phuthai, thus they are spelled ผ้า /pāa/ and ข้าท /khāat/ respectively.