The Prai of Northern Thailand: A sociolinguistic survey of a Mon-Khmer language

Kari JORDAN-DILLER and Jason DILLER^{*} Arizona State University and SIL

1. Introduction

This paper presents the results of a sociolinguistic survey conducted February through June of 2001 concerning the Prai language spoken in the Thung Chang, Chalerm Prakiat, Chiang Klang, Bo Klua, and Pua districts of the Nan Province of Thailand. The purpose of the survey was to gather data that would help members of the Prai language project team determine whether there is a need for an adaptation of the current Prai literacy materials and, if so, the strategy for such a project.

Kari Jordan-Diller and Jason Diller of SIL and David Jordan of NTM (New Tribes Mission) conducted the research. David Jordan and Frances Jordan have spent over 20 years living and working with the Prai people and their language. Dee Pao Paa, Shai Pao Paa, Chin Paeng Ut, Wan Paeng Ut, Tee Sri Wan, and Naay Pao Paa (native speakers of Prai) also assisted in research, translation of texts, recording of texts, and interpretation of data.

In the following sections, background information of the language area will be presented. Some of this information was gathered from personal interviews with David and Frances Jordan, from government offices in Nan province, and from Prai community interviews.

1.1 Language and people group name

According to Jordan, Prai is used as the name of the language and of the people (2001). Lua is sometimes used as an alternate general name for the Prai, but this title also encompasses the Mal language and people (Filbeck, 2001). The 14^{th} edition of the *Ethnologue* lists the language name as Phai with

^{*}Acknowledgements: Many thanks are due to David Jordan for providing Prai cultural and linguistic expertise as well as many hours of interpretation for us throughout the survey. We are thankful for Fran Jordan's indefatigable energy and enthusiasm. We also thank Dr. Karen Adams (Arizona State University) for her careful editing and Noel Mann for his helpful suggestions. Lastly, we thank Dee Pao Paa, Shai Pao Paa, Chin Paeng Ut, Wan Paeng Ut, Tee Sri Wan, and Naay Pao Paa for giving us an inside perspective on the Prai language situation.

the following alternative names: Prai, Phay, Thung Chan Pray, Kha Phay, Pray 1 (Grimes 2000). *The Peoples of Laos* lists the language name as Plrai with alternate names of Phai, Lao, May, and Htin (Chazée 1999). *Asian Minorities Outreach* calls the language Phai with alternate names of Htin (derogatory) and Kha Phai (derogatory¹) (Asian Minorities Outreach - AMO 1999). The term Htin is alternately spelled as T'in, Tin, and H'tin. The term Lua', or Lawa has also been used for a Palaungic language in Maehongson and Chiangmai provinces (Deepadun and Ratanakul 1997).

When asked the questions, "What do you call yourselves?" and "What do you call your language?" the Prai people responded that they refer to themselves as either Prai or Lua depending on the village. They most often refer to their language and their people as Lua. However, to distinguish them from the Mal and from other groups in Thailand who call themselves Lua, we will refer to the language and people as Prai.

1.2 Language classification

The following language classification for Prai is taken from the Ethnologue 14^{th} edition (Grimes 2000).

Austro-Asiatic, Mon-Khmer, Northern Mon-Khmer, Khmuic, Mal-Khmu', Mal-Phrai.

The Indigenous Peoples Profile, Lao PDR classifies Prai as follows (Chamberlain 1995): Austro-Asiatic, Mon-Khmer, North, Khmuic, Phray-Pram, Phay/Mal/T'in.

1.3 Varieties of Prai speech

Prior research has demonstrated that there are two main speech varieties within the Prai language. In this report we refer to them as the 'R' variety and the 'Y' variety because one variety uses a medial 'R' and the other a medial 'Y'. For example, the Prai word for person is pronounced "khram" by the 'R' variety and "khyam" by the 'Y' variety. According to Jordan, there are some vocabulary differences that seem to characterize 'R' and 'Y' in addition to phonetic differences. However, there is no consistent 'R' or consistent 'Y' speech style since villages borrow different words from Northern Thai. In addition, there is a lot of variation due to small circles of acquaintances and no dominant attitudes or opinions on differences. When looking at word lists from 'R' and 'Y' villages there are lexical items that vary, but the variations are as likely to be found between two 'R' villages as between an 'R' village and a 'Y' village (Jordan 2001).

¹The Prai consider the names 'Kha Phai' and 'Htin' as derogatory according to Jordan (2001).

There are a few small villages where another variation of Prai is spoken. This group of Prai pronounces their words mostly like the 'R' variety, but their many vocabulary differences separate them from either 'R' or 'Y' varieties. These Prai maintain slightly different customs. For example, in Prai culture when the daughter of a family is married her new husband moves into the family house and extends their dwelling by adding additional rooms. In family units with multiple daughters, only one daughter and son-in-law stay with the family at one time always moving out for the following married daughter. This additional set of rooms is usually reserved for the youngest married daughter who remains with her parents and inherits the house. However, for this distinct group, as more daughters marry the house is continually extended to accommodate each new family. Due to this cultural difference we will refer to the Prai who speak this variety as the 'Longhouse' Prai in this paper. More information on Prai speech varieties will be discussed in greater detail in section 3.2.

1.4 Language area

Thailand

The Prai are located in the Nan province of Thailand along the border of Laos and Thailand. (See Appendix A: Map of Prai Villages in Thailand).

Laos

There are also Prai (referred to as Phai or Lao Phai) in Laos. Most are located directly across the border from the Prai in Thailand in the Xaignabouri and Phiang districts of Xaignabouri Province (AMO 1999).

According to Chazée, the Prai in Laos are also located in Phongsali (the northernmost province of Laos). Chazée writes that there are Prai in Boun-Tai, Boun-Nua, Samphan, and Phongsali districts of Phongsali Province although he does not cite any specific villages as Prai or Lao-Phai in these subdistricts (1999).

After a two-week journey throughout Phongsali and Samphan district and many informal discussions with Lao residents of Samphan, Phongsali, and Boun-Tai districts of Laos, we believe that it is very unlikely that there are any villages in these districts similar to the Prai found in Northern Thailand and Xaignabouri.

However, there are possibly three villages where the people are referred to as 'Lao Phai' in the districts of Boun-Tai, and Phongsali. These are the villages of Ban Sin Sai and Ban Sen Saway in Phongsali district (located East of the Nam Ou river reportedly more than a two day hike from Hat Saa) and the village of Juaho in the district of Boun-Tai (a five hour hike to the northeast of the district capital Boun-Tai). It is important to note that these three villages were classified as Lao-Phai by people who are not Prai. According to Phongsali residents that we talked to, these villages are referred to as Lao Phai, but residents live like the Phu Noi people who surround them.

Instead of being related to the Prai of Thailand, it is more likely that the residents of these villages are related to the Phu Noi. This conclusion is based on conversations with people in the Phongsali district. Inhabitants of these three villages are also referred to as 'Lao Phai Phu Noi'. The full name of the Phu Noi people located in Phongsali Province in Laos is Kha Phai Phu Noi (Lebar, et al. 1964:126). The confusion of names could be the reason Chazée writes that there are Prai located in Phongsali province. We elicited a few words from a young girl who reportedly was Lao Phai Phu Noi, and the words were not at all related to the Prai equivalents.

Neither the Prai people from Thailand nor the Prai that we talked to who had walked from Laos to Thailand had ever heard of any Prai people from the Phongsali Province in Laos. However, they are separated by approximately 300 kilometers making it unlikely that they would have had any contact with people from Phongsali.

1.5 Origin and migration history

According to Minkwan Malapol (1989) there is general disagreement among historians concerning the history of the Prai people. Filbeck (1978) believes that they migrated from North of Nan province to their current location because there are no languages that resemble them south of Nan. According to Lebar (1964) the T'in (the Prai and the Mal) moved to their current location 75-100 years ago. Personal histories of several old people in Phae Klang village confirm this theory as many of them say their parents or grandparents lived in Laos. However, Filbeck (1978) says that this is not likely true of the villages located farther to the west because personal histories reveal that villages have been in their current location for at least four generations. Some researchers believe that the T'in were the first inhabitants of northern Laos and Thailand, and that the name 'T'in' actually means "local". Schliesinger agrees with Filbeck that the T'in may have been the original inhabitants of the northeast of Nan province, but claims that they later moved to Laos. He says that many of them returned to Thailand following the communist take-over in 1975 (2000).

Concerning the historical locations of Prai villages in Nan province, many villages were established in recent history because they were displaced during the communist conflict that occurred in Northern Thailand between 1960 and 1981. The villages of Huay Kaeo, Phae Klang (originally five separate villages), and Nam Lat are villages that were moved to their present location in 1967. Nam Sot village was part of Phae Klang village, and was established soon after Phae Klang. Kiao Chan, Nam Ree, Huay Kan are villages that were resettled in 1982. A group of people from Nam Ree village moved and formed the village of Huai Sai Khao. Maniphruek village was established by people from Nam Ree village. The village of Nong Nan moved to their current location about 15 years ago. They believed their previous village location was cursed because everyone was becoming ill.

Nok Pim, Huay Put, Buak Ya, Pa Rai, Nam Chang, Nok Pun, Nam Phae, Chalaeng Luang, Nam Phi and Nam Pho are believed to be in their approximate original location.

1.6 Population

Reports vary widely as to the population of the Prai people. In Thailand, the Department of Public Welfare Census of Hill Tribe Peoples in Thailand reports as many as 48,025 Htin, but this includes the Mal as well (Schliesinger 2000). Other sources claim there are 30,000 (Johnstone 1993). Jordan thinks that these population figures are inflated and believes that there are actually closer to 20,000 Prai in Thailand (2001).

In Laos, current population figures vary between 15,000 (AMO 1999) and 22,800 (Chazée 1999). Chazée also cites a Lao government census figure of 23,193 from 1995. For the Lao Census of 1995, 'Thin' was one of the 47 possible ethnic group official entries. The 'Thin' classification included Pray, Phray, Phay, and Lava as possible sub groups (Chamberlain 1995:28).

1.7 Language development

The Prai alphabet (developed by Jordan) is based on the Thai script. There is a set of five primers for use in teaching literacy. Other materials include, a book of folk tales, a short history of the Prai in Phae Klang, a Thai/English/Prai picture dictionary, a Prai dictionary, a book of stories written by Prai people, portions of the Old and New Testament of the Bible, and Bible teaching materials.

2. The survey

The overall goal of this survey was to provide the Prai language project team with additional information about the language and location of Prai speakers. The focus of this survey centered on Prai language emphasis comprehension and relatedness with an on the written standardization of Prai. We were looking specifically at comprehension of the 'R' variety (which had been chosen for written standardization), as well as perceived comprehension among Prai varieties. Part of the motivation of the survey was to evaluate the differences among the different varieties of Prai in a more concrete way, and to obtain input from the Prai people on these differences after they had the chance to listen to the Phae Klang variety.

There were two possible logical outcomes depending on the level of comprehension of the Prai 'R' variety.

- 1) The prospect of all of the Prai using existing Prai written materials without any adaptation.
- 2) The possible adaptation of the current Prai literacy materials and orthography to include more features from different varieties if comprehension of the Prai 'R' variety is less than high.

The possibility of developing new written materials in a different Prai speech variety was not included as a logical outcome because previous research showed a degree of mutual intelligibility and positive attitudes between the known Prai speech varieties (Jordan 2001).

The factors involved for choosing between the two different outcomes will be addressed in the following section.

2.1 Research questions

To meet the overall survey goal we focused on the following areas of investigation:

- How many varieties of speech does Prai have? Are there villages that share consistent grammatical differences and a set of isoglosses that more or less coincide?
- Do the Prai acknowledge different varieties by groupings other than differences by village? And if so, how different do the Prai perceive the varieties to be from each other?
- How well do Prai from other villages understand written 'R' Prai?
- Is one way of speaking considered more or less prestigious than another? If so, where is the most prestigious and least prestigious Prai spoken?
- What are Prai attitudes toward the 'R' variety that has been chosen for written standardization and toward other varieties?
- Which speech variety has the most speakers?

The answers to these questions will be viewed in light of the two possible outcomes for the survey mentioned in the previous section. The following is a list of the possible outcomes with a combination of features based on the research questions that would best suit each outcome:

1) The prospect of all of the Prai using written materials as they are.

- The Prai report no or only a few comprehension problems with the 'R' Prai variety chosen for written standardization.
- The Prai have 'high' comprehension of the written 'R' Prai texts.
- Prai attitudes indicate that the 'R' Prai variety has prestige (or does not have low prestige) among Prai speakers.
- Prai attitudes are positive toward the 'R' Prai variety.

2) The possible standardization of the Prai speech varieties, which could mean an eventual adaptation of the current Prai literacy materials to include more features to aid in comprehension.

- The Prai report some or many comprehension problems of the 'R' Prai variety chosen for written standardization.
- The Prai have a 'mixed' level of comprehension of the written 'R' Prai texts.
- Prai attitudes indicate that the 'R' Prai variety has low prestige among Prai speakers and another Prai variety has higher prestige.
- Prai attitudes are negative toward the development of the 'R' Prai variety and positive toward the development of another Prai variety.

2.2 Scope of the survey

It is important to note that recorded text tests (RTT) are one of the research tools normally used for assessing comprehension among dialects. RTTs use an elicited 'natural' text that is usually a narrative. For this survey we did not use a standard RTT, but adapted the methodology using recordings of translated texts. The reason for this was two-fold. We were attempting to see if the translated texts would be equally understood by different varieties and to aid in our understanding of the differences between varieties. Since the focus of the survey was on the comprehension of written Prai, we wanted to test Prai who have had no exposure to Prai literacy by using Prai written materials. Most Prai written materials at this point in time are translated texts.

Because we did not use a standard RTT, one could argue that the use of translated texts affects the validity of our results. However, the presence of Jordan and other Prai co-researchers, who were able to interact with the subjects and assess the similarity among dialects adds to the validity of the test. In addition, the testing results correlate with the interview and wordlist data. Finally, the homogeneity of Prai communities where we tested is another factor that increases the reliability of the results.

3. Methodology

The survey involved interviewing community leaders and villagers in six villages. We collected four word lists for comparisons of Prai speech variation. In addition, an important part of the survey involved recording and testing of written texts for comprehension testing among the different Prai speech varieties. We administered the comprehension test in three different locations and subsequently interviewed the individuals who took the test. To clarify inconsistencies in community interviews, a short questionnaire was administered in seven additional villages

Community Interviews	Word Lists	Comprehension Testing
Nam Chang	Nam Chang	Nam Chang
Nok Pun	Nok Pun	Nok Pun
Nam Phae	Nam Phae	Nam Phae
Phae Klang	Phae Klang	
Chalaeng Luang		
Nam Meet		

Figure 1. Summary of villages where primary data were collected

We chose the village of Nam Chang for comprehension testing because community interviews showed that it is a village that has been in the same area as long as residents can remember, and it is near other villages that are also close to their original locations. Another reason for testing in Nam Chang is that many of the relocated villages were originally from this area. If there is a distinct 'Y variety' it is most likely spoken here because it is the most stable 'Y' Prai community in Thailand. Finally, the residents of Nam Chang are in a fairly remote location making contact with Phae Klang residents unlikely. We hoped that the test results would be more valid since they would not be based on a prior familiarity with the variety of Prai on the recording we used for comprehension testing.

The reason we chose to test comprehension in Nok Pun is because the residents are in close contact with the Prai in Laos and reportedly speak like the Prai in Laos. We assumed that their results would be similar to those of the Prai from Laos. While in Nok Pun, we also tested the comprehension of two Prai people who were visiting from Laos.

We attempted to test residents from Nam Phae village since it is the biggest 'Longhouse' village, but were only able to find one person who was willing to participate in the comprehension test.

No other villages were included because community interviews indicated that there were no other villages that have any significant differences in accent or vocabulary. Most of them were somewhere along the continuum between the Phae Klang 'R variety' and the Nam Chang 'Y variety' and seemed to identify with one or the other.

3.1 Interviews with community leaders

The purpose of the community questionnaire was to gather new information and to verify existing information concerning: names, history, geographical boundaries of Prai speakers, possible differences within Prai, perceived comprehension among villages, contact among villages, and attitudes toward Prai. The team administered the community questionnaire in the villages of Phae Klang, Nam Phae, Chalaeng Luang, Nok Pun, Nam Chang, and Nam Meet. We chose Phae Klang because it is the largest village that speaks the 'R' variety, and is the variety in which literacy materials are written. The village of Nam Phae was chosen because it is the biggest known Longhouse village. We interviewed people from Nok Pun village because they reportedly speak a different variety of Prai that is possibly more similar to the Prai spoken in Laos. We interviewed people from Nam Chang village because the village is located geographically far from where 'R' Prai speech is heard. Finally, Nam Meet village was chosen because it is a 'Y' village with a number of people who are literate in Prai.

The number of people present for each interview varied, but there were between 7-15 people for every interview with the exception of the Nam Phae (Longhouse) village interview where only 3 people were present. There was a person with representative status (headman or assistant headman) at every interview. They discussed each answer in Prai until they reached a consensus, and then Jordan translated the answers into English. The answers were subsequently recorded by the researchers on the questionnaire sheet.

Short questionnaire

Conflicting information was given in the community interviews regarding the variety of Prai spoken in the following seven villages: Buak Ya, Huai Don, Nong Khum, Nam Lat, Nam Pho, Nong Nan, and Pa Rai. To obtain a clearer picture of the variety of Prai spoken in these villages a short questionnaire was administered. The questionnaire included a short word list with vocabulary items that typically differ between 'R' and 'Y' varieties. The questionnaires in Buak Ya and Huay Don villages were administered by Jordan-Diller in Northern Thai and translated into Prai by Jordan. The responses were translated from Prai back to English where they were recorded on the questionnaire sheet. Dee Pao Paa and Shai Pao Paa, administered questionnaires in the remaining villages. The responses were recorded in Prai and translated back to English.

3.2 Word lists

We took word lists in every area where the speech style was indicated as slightly different by the community questionnaires. This included the Longhouse area, the village of Nok Pun, and the 'Y' language area. We had access to a recent word list taken in Phae Klang, by Jordan so we did not retake the 'R' word list.

We elicited the 'Y' word list in Nam Chang village because many of the relocated 'Y' villages are originally from the Nam Chang area. We also thought that because it is geographically quite far from the 'R' variety as spoken in Thung Chang, it is unlikely to be strongly influenced by the 'R' variety. For more information on the location of 'R', 'Y' and 'Longhouse' speech varieties refer to Appendix A: Map of Prai Villages in Thailand. We also took a word list from residents of Nok Pun village because according to the community interviews, they most likely speak like the Prai in Laos. In the Longhouse area, we took the word list in Nam Phae village because it is the largest of all of the Longhouse villages.

At least two people were present for every word list, and one of them was always an elder. If there was a question concerning a word, they discussed which word best fit the definition before coming to a consensus although the younger person deferred most often to the elder. We elicited a standard Mon-Khmer wordlist as described in 'Evaluation of the wordlist used in a Mon-Khmer research project in Northeast Thailand' (Miller 1994). The only changes we made to the list were to eliminate the elicitation of the terms 'younger sister', 'younger brother', 'older sister', and 'older brother' as Prai does not use gender specific words for siblings. Instead we elicited 'younger sibling' and 'older sibling'. We also eliminated the numbers 4-20 since the Prai use Northern Thai for their numbers. The list we used has 183 words. The lists were elicited by Jordan-Diller in Northern Thai. Each word was recorded twice and transcribed in IPA by Jordan and Jordan-Diller.

3.3 Comprehension testing

The purpose of the comprehension test was to see how well Prai speakers from the 'Y' speech variety understand the written style of Prai in the 'R' variety. Previous research indicated that there is a high degree of mutual comprehension between varieties, but we wanted to ensure that the written texts were equally understood by both varieties. The test consists of recorded texts in the test variety with questions in the subject's variety. We can make inferences to the subject's general comprehension of the text based on the evaluation of the subject's answers to comprehension questions in their own language inserted into the recorded text. By looking at the profile of all the subjects' answers, we can obtain an idea of their comprehension of the test preparation, selecting, screening, contacting of subjects, and the scoring and testing procedure.

Test preparation

To prepare our test, we chose three written texts—two narrative texts (the story of Abram and Lot dividing the land found in Genesis 13:1, 5-12 and the first half of the parable of the sower found in Mark 4:3-9) and one hortatory text (God's command for Noah to fill the earth with children found in Genesis 9:1-4). Our intent was to choose texts that would be thematically familiar and logical. We interviewed three Prai people to obtain feedback on the texts and asked questions as to what could be difficult in each text. The themes in each of the texts are culturally relevant (taboos, farming, and traveling). The parable, although thematically familiar, has one part of the story that does not fit the cultural schema of the Prai people. The main

character in the story 'sows' grain. The Prai verb 'to sow' is never used in the context of grain since they always plant grain in holes that are dug into the ground. The answers show this cultural difference as some of the subjects changed the verb from 'sow' to 'plant' in their responses. According to a study conducted by Harris et al., subjects are more likely to have difficulty comprehending texts that do not fit their cultural schema (1992). In retrospect the last text, although thematically easy, was somewhat confusing because of the unfamiliar names.

In addition to the recorded texts, Naay Pao Paa, who is a mother tongue Prai speaker, wrote a simple short story about going to the market to serve as a practice text.

Our testing methodology was similar to dialect intelligibility tests as described by Casad (1974, reprinted 1987). The texts were recorded by a Prai speaker. We composed questions covering different semantic domains for each text—that is questions that addressed different parts of sentences such as the noun part or the verb part and covered categories such as objects, time, numbers, possessors, and pronouns. Then the questions were translated into Prai by Jordan and recorded by a Prai speaker and inserted into the text directly after the portion pertaining to the question.

We made a pre-testing tape starting with the market story followed by the Genesis hortatory text, the Mark narrative, and finally the Genesis narrative. We had an idea of the range of difficulty of the texts, and we ordered them from easiest to most difficult.

We administered the test to five individuals in Phae Klang to verify that the questions were appropriate, correctly translated, and well placed in the text. Casad recommends 10 subjects for the hometown test, but we had difficulty finding subjects who were willing to participate (1974, reprinted 1987). Jordan translated the answers for us, and they were recorded word-forword onto a score sheet. After testing the questions, we evaluated them and decided to keep all but one of the questions. We eliminated the first question of the Genesis narrative because the answers to the question were inconsistent.

The average score of the participants in the hometown test was 92%. Although the results may seem low for a hometown test, we were expecting somewhat lower scores because of the unfamiliar testing format and because we were testing translated texts rather than oral narratives. Three of the five subjects missed $\frac{1}{2}$ of a question. They only recalled one of two items in a series. Three subjects missed a question pertaining to how the planting was accomplished and used the verb for planting by placing a seed into the soil rather than planting by sowing seeds. This question was most likely missed because of the unfamiliar context of planting grain. The Prai never plant by sowing and so they inferred the correct method of planting grain and answered accordingly. One subject missed a question in the Genesis narrative because he found the names confusing.

The next step was to record the Market story and all questions in the 'Y' speech variety. The subject always heard the questions in his/her own speech variety. The Market story was used to help screen our subjects, as anyone who did not score well on this text did not continue the test. It was assumed that the testing style was too foreign and that the subjects' scores would be adversely affected.

Taking these steps resulted in the final test tape, with the market story and questions in the 'Y' Prai variety and the other texts in the 'R' variety. Each story was played one time without the questions followed by the same story with the questions. The following table presents the different recorded test sections and their length.

Recorded Story Title	Play Length in Minutes:
Market	0:35
Noah : Genesis 9:1-4	1:00
Sower : Mark 4:3-9	1:00
Abram & Lot : Gen. 13:1, 5-12	2:00

Selecting subjects

Before testing, we decided on the criteria we wanted our subjects to meet. Jordan did not think that men and women would test differently, but he thought that age could be an important factor. He hypothesized that either the older subjects would test better than the young people because they are more immersed in the Prai language and culture, or that the young people would test better because of their higher confidence in taking tests. We decided to divide the population into two groups – old and young. For the purpose of our test, anyone between the ages of 15 and 35 would be considered 'young' and anyone over 35 would be considered 'old'. This division of the population allows us to determine if there are significant differences between the comprehension levels of young and old resulting from the amount of contact and language use or other factors. We wanted to test a sample size of five old people and five young people in the 'Y' variety of Prai. Even though men and women were not specific categories, we wanted to make sure both men and women participated in our test.

In order to find subjects who speak Prai well and who identify themselves ethnically with the Prai, we asked for subjects who speak Prai as a first language, whose parents speak Prai, and who have spent most of their lives in the village.

Contacting subjects

In Nam Chang, we contacted our subjects through the village headman. He allowed us to work at his house and helped us by finding people

who were available to be tested. Wan Paeng Ut from Nam Meet village also helped us in finding subjects.

In Nok Pun, we found most of the subjects ourselves by walking around the village and seeing who was available and willing to be tested.

Screening subjects

We decided to screen for contact with 'R' speakers since we thought that would be the factor most likely to influence scores. If participants who had little contact with the test variety scored well on the test, then it seemed predictable that those with frequent contact would perform even better. For this reason, we chose to test people who had very little contact with 'R' variety speakers. We did not test people who have lived in or travel frequently to 'R' variety villages, or who have close relatives in a Prai village where they speak another variety of Prai. Screening for contact also insures that the high scores can be interpreted as an indication of inherent intelligibility. Inherent intelligibility refers to comprehension between two language varieties due to linguistic similarity as opposed to acquired intelligibility where comprehension is due to contact with the other language.

Testing procedure

After screening potential subjects to see if they fit our criteria, we began our test. Jordan introduced the test in Prai, and we played the tape either through speakers or through headphones. After testing four subjects, we used only headphones as it became apparent that subjects with headphones were less distracted and more focused on the test. If the subjects' results on the Market Story (at least 3 of 4 correct) demonstrated that they understood the testing procedure, we continued with the comprehension test. Jordan translated their answers, and we wrote their answers verbatim on the test response sheet. If a subject answered incorrectly, we replayed the pertinent portion of the tape with the question and noted this accordingly on the score sheet. The reason we replayed sections that were not understood the first time was because the testing environment was often distracting. If it appeared that they did not understand the question, Jordan rephrased the question. There was very little need for such rephrasing during our testing. Although rephrasing does perhaps affect the validity of the test, it was done as a form of reassurance. If the subjects had any doubt as to whether they understood a question or not, they were likely to indicate that they did not understand the question. Many of the subjects were very uncomfortable with the testing procedure and acknowledged their fear of failure to perform well.

Scoring

Before testing in Nam Chang, we examined the pre-test results from Phae Klang, and decided which answers were acceptable for full credit. Any response that matched with this answer key was marked with full credit. All other answers were re-evaluated with the help of Jordan according to possible interpretations of the text and marked as one of the following: correct, halfcorrect, or incorrect. For example, in the first text (Genesis 9:1-4) the correct response to the question 'What did God give Noah to eat?' the correct response is, 'All plants and animals'. If a subject responded with only all plants, their response was considered half-correct. The final score for each subject was then calculated as a percentage.

3.4 Individual questionnaires

Following the comprehension testing, we administered an individual questionnaire to all 10 subjects tested. We asked questions about their perceived comprehension of the text and their types of contact with speakers of the 'R' speech variety. Jordan or Jordan-Diller administered the questionnaire.

4. Results

The following section explains the results of the survey. The information presented is derived from the comprehension test results, community questionnaires, individual interviews with Prai speakers, interviews with Jordan, and observation.

4.1 Comprehension test results

In order to better define levels of comprehension for the basis of this paper, we have defined 'high' comprehension as an overall test average of over 90% by all segments of the population (old and young in this study). 'Mixed' comprehension is defined by a situation in which no segment of the population scores below 80%, but some segments score below 90%. 'Low' comprehension is defined as an overall average below 70%.

Scores by category and village

The following figure presents the comprehension scores of the texts tested in Nam Chang and Nok Pun villages. 2

Category	Number of subjects	% Correct	Range	SD^3
Young	3	98	93-100	
Old	3	91	83-100	
Total & Averages	6	95	83-100	6.9

Nam Chang village ('Y' variety)

²The market pre-test results were not calculated as part of a subject's final score.

³SD is the standard deviation of the scores.

Category	Number of subjects	% Correct	Range	SD
Young	3	94	90-100	
Old	1	87		
Total & Averages	4	91	87-100	5.7

Nok Pun village (variety reportedly similar to Prai from Laos)

Summary of total scores

Category	Number of subjects	% Correct	Range	SD
Young	6	96	90-100	
Old	4	90	83-100	
Total & Averages	10	93	83-100	6.2

Figure 2. Comprehension scores for Prai text test by category for Nam Chang and Nok Pun villages.

We did not have enough subjects to look for statistical significance between the scores of the old subjects and the young subjects; therefore, we present only a summary of what we noticed from the outcome. However, our primary objective was to compare the scores of villages that speak a variety different from Phae Klang Prai to the Phae Klang variety. For this comparison, we had enough subjects to see if the results were statistically significant and to calculate the standard deviation.

The average scores are over 90%, in all categories except for the old age category in Nok Pun (where we tested only one person). The older man's score of 87 is well within range of tabulated scores for his category. The narrow range of all scores (83-100) is reflected in the standard deviation of 6.2, which is far below the 12-15% "rule of thumb" used as a guideline to help determine whether the scores are an indication of inherent intelligibility or acquired intelligibility (Blair 1990).

According to our previous definition, the average scores correspond to the 'high' comprehension classification where 'high' is defined as an overall test average of over 90% by all segments of the population. There is a slight difference between the average scores of the young and of the old subjects. However this difference is not statistically significant and both overall averages are higher than 90%.

In addition to comprehension testing in Nam Chang and Nok Pun villages, we were able to gain a possible indication of comprehension in the Longhouse Prai area by testing one subject in Ban Nam Phae village. We also tested two Prai speakers from Laos who had traveled to Thailand to sell rice baskets. These subjects would not normally be tested because of their contact with other Prai dialects, and it is possible that their scores are inflated due to their exposure to different Prai speech varieties. It is important to note that in testing these subjects we did not record the questions into their speech variety but kept the questions in the 'Y' Prai variety, and this may have impeded their comprehension to some degree.

Category	Number of subjects	% Correct
Young	1	87
Total & Averages	1	

Ban Nam Phae village (Longhouse Prai)

Prai speakers from Laos in Thailand

Category	Number of subjects	% Correct	
Young	1	93	
Old	1	77	
Total & Averages	2	85	

Figure 3. Preliminary comprehension scores for Prai text test by category for Nam Phae village and Prai speaker from Laos.

It is interesting to note that the average scores are within the range of scores tabulated in Nam Chang and Nok Pun. The older subject from Laos scored 77% correct, which was the lowest score recorded during our testing, but the younger subject score of 93% is equal to the average of scores for both Nam Chang and Nok Pun. Further testing needs to be done to accurately draw conclusions about the comprehension of 'R' Prai variety by the 'Longhouse' Prai and the Prai from Laos.

Overall, the average scores of the villages of Nam Chang and Nok Pun were very close to the average scores of the hometown test in Phae Klang.

4.2 Wordlist comparison results

The following figure represents the percentage of shared cognates between Prai language varieties. The comparisons are based on a word list of 183 words elicited in four different Prai villages, representing four different speech varieties. A complete review of wordlist methodology is discussed in section 3.2.

Village	Phae Klang	Nok Pun	Nam Chang
Nam Phae (Longhouse)	82%	84%	82%
Nam Chang 'Y' variety	91%	93%	100%
Nok Pun (Laos-Prai)	92%	100%	
Phae Klang 'R' variety	100%		

Figure 4. Prai wordlist comparisons

4.3 Contact patterns

Our reasons for looking at contact patterns were to find out what kind of social network exists among the Prai to get a better idea of the relationship within and between different speech varieties, and to find out what kind of ties the Prai in Thailand have with the Prai in Laos.

We found that the Prai in general do not have a very large social network. Most villages only have regular contact with one of two other villages in the area. Most people we interviewed were not even aware of Prai villages farther than 20 km away unless their village was originally from that area. Some people from the Nam Chang area know of Phae Klang village because it is close to the Thung Chang hospital, which is the closest hospital to their village.

When the Prai travel to other villages, they most often go to visit relatives. In the more traditional villages, young men also travel in groups to other villages to court young women.

Five out of the nine villages where we interviewed keep their networks within their own speech variety and tend to marry within this same group. However, the networking can be attributed to the geographical proximity of villages that speak their own variety rather than because of a bias toward their own group. Four of the nine villages have regular contact with the other speech variety. Again, this seems to be due to geographical proximity of villages. Most of the villages in this category are villages that have been displaced and are now located close to Prai villages that speak another variety. These villages from where they originated. Nam Meet village is an exception. Despite being surrounded by 'R' variety speaking village people from Nam Meet continue to visit the villages of Huai Sai Khao, Kiao Chan, and Huai Phan, which are over 50 km from where they live.

Very few of the villages we visited have contact with Prai people from Laos. Nok Pun is the only village that reported frequent contact with Prai from Laos. They own fields and spend most of their time in a village by the border of Laos. Until recently the border was not tightly controlled, and they traveled frequently across the border. People from Nok Pun said they regularly visit seven different Lao villages. Their reasons for traveling to Laos are to attend weddings, to visit friends, and to buy cows and buffalos. They intermarry with the Prai from Laos, although less frequently than in the past because the official paperwork is presently more costly and complicated.

4.4 Individual questionnaires

All of the subjects except one reported that they understood either 'everything' or 'almost everything' on the text. This could indicate that they do not have a negative attitude toward the sound of the variety tested. One subject stated he understood about half of what was said, but he only missed one response. Another subject said that he understood only 'a little', but he received a perfect score. The perceived comprehension of these two subjects may reflect a lack of self-confidence in test taking rather than a negative attitude toward the variety spoken on the tape.

Nam Chang village

The young people from Nam Chang village had nearly perfect scores on the comprehension test. Two of the three tested said they understood everything and one said he understood about half of what he heard. They thought the majority of the people in the village would understand the stories with little difficulty. Two of the three subjects thought the young people would most likely understand the texts better than the older people. Their reason for thinking this could be that they believe education is a factor in comprehension. Their opinion could also be attributed to the fact that they feel more technically competent.

When we asked, "Where do you think people who speak like this are from?" one young woman guessed that the speaker was from Phae Klang. Another young woman guessed Nam Meet (perhaps because Wan, who was helping with the testing, is from Nam Meet), and one young man did not know. None of them expressed any negative attitudes toward the speech variety. According to Jordan, negative attitudes would normally be expressed by saying that the speech was unclear or funny sounding.

The older people from Nam Chang also scored very well on the test, but not as well as the young people. However, their perceived comprehension more accurately reflected their comprehension test score. Two of the three tested said they understood everything on the test and one person said he understood almost everything. Two of them thought that the old men and women would understand better than the young people. They perceive the older people as being the language 'experts'. One of the subjects thought the young people would understand as well as the older people.

When we asked, "Where do you think that people who speak like this are from?" two people said the speaker on the tape was from Phae Klang village, and one person said he did not know. Two people said they thought the variety of Prai on their tape was really no different from their own. There were no negative attitudes expressed toward the different speech variety.

Nok Pun village

Of the four people tested, only one person said he had difficulty understanding the test. However, he had a perfect score. The other three people said they understood either all of the test or almost all of the test. Everyone thought that other people in the village would have no trouble understanding the recorded texts. When we asked the question, "Where do you think people who speak like this are from?" one woman replied that the speaker talks like she does. Most of the others guessed the name of a village where people speak the 'R' variety while one person did not know.

No one expressed any negative attitudes toward the variety of Prai ('R' from Phae Klang village) used for the comprehension test.

Lao from Nok Kham village

We were only able to test two people from Laos—an old man and a young woman. The young woman scored better than the old man. The young woman said that she understood everything on the tape. The old man did not think he understood everything. They both thought that everyone in their village would understand the texts on the tape.

When we asked, "Where do you think people who speak like this are from?" the young woman did not know, but thought the speech was similar to Nam Meet village. The old man did not know either, but he said, "They speak the same as we do." Neither of them expressed any negative attitudes. The old man said he liked the accent of the speaker. They both seemed very positive toward the 'R' variety of Prai speech and said it was nearly identical to their own way of speaking.

Nam Phae village

We tested one individual from Nam Phae. The subject did well on the test (he missed two out of fifteen), but it is difficult to know whether his scores are representative of his village as he was the only one tested. He thought that other people in his village would understand some but not all of the recorded texts. When we asked where he thought the speaker was from, he responded that the speaker speaks the same language as he does, but he did not know where the speaker lives. He also said the speech style was a little bit difficult, but he could still understand the stories.

4.5 Analysis of comprehension and Intelligibility factors

The main purpose of the comprehension test was to evaluate how well Prai speakers of the 'Y' variety of speech understand the 'R' variety. Most of our testing was focused on evaluating the 'Y' speakers' comprehension of the 'R' variety. We included people from Nok Pun village because they most likely speak like a segment of the Prai population in Laos. Even though we found in taking our word list that they are very similar to the 'R' variety (sharing 90% of cognates on our wordlist comparison), we felt that it was important to test them because of reported differences in their speech.

Based on the comprehension test results and the information given during community interviews, speakers of the 'Y' variety understand the 'R' variety very well. Their comprehension of the 'R' variety is due to inherent intelligibility. The very high scores on the comprehension test can be attributed to inherent intelligibility because we only tested individuals who have never lived in a village where the 'R' variety (as chosen for written development) is spoken, who do not travel frequently to 'R' villages, and who have no close relatives in a Prai village where they speak the another variety of Prai. The average score of the subjects tested is 95% showing no significant difference between age groups.

We found that people from Nok Pun village also understand the standard 'R' variety very well. Their comprehension is also most likely due to inherent intelligibility because we screened our subjects for contact with the 'R' variety. The average score of the subjects tested is 91%. After analysis we would classify Nok Pun village as an 'R' village.

During the community interviews, we asked the question, "In which villages do people speak Prai differently than you do, but you still understand them?" In every village people responded that they have no difficulty understanding villages that speak the other Prai variety. A few individuals said, "They do not speak exactly like we do, but we still understand them." Others said that they are aware that there are differences in accent and vocabulary between villages, but as long as they understand what is being said, they consider it correct. Some people focused on the vocabulary differences between varieties of Prai speech. However, there are not many differences, and most people seem to know the meanings of the different words.

The only villages where people seemed unsure of comprehension were the village of Ban Wen, those villages in close proximity to Ban Wen, and the villages that speak the 'Longhouse' variety. Upon further questioning, people indicated that Ban Wen village and those in the area speak more like the Mal people than the Prai people. The Prai who were aware of these groups felt that a young child would have difficulty understanding their speech, and they were not confident that they themselves could understand everything. Comprehension testing in these villages could help to clarify the situation.

According to the wordlist comparison showing the percentage of shared cognates, Nok Pun speech variety is the closest to all of the other Prai speech varieties, but Phae Klang Prai only differs by one or two percentage points. Because the wordlist is very short, it is difficult to say which of these two varieties actually shares the most cognates with the other varieties; but for the basis of this report we will focus on the Phae Klang 'R' speech variety and evaluate its percentage of similarity to other Prai speech varieties.

Phae Klang 'R' speech variety is closest to the Nok Pun speech variety sharing 92% of cognates from the list of 183 words, and also very similar to Nam Chang 'Y' variety with 91% similar cognates. These results of 92% and 91% are high and indicate a good possibility for sharing of written materials, however even with medium to high vocabulary similarity levels (60-

85%) it is impossible to accurately predict the degree of comprehension between speech varieties (Grimes 1988; Kroeger 1986). Phae Klang 'R' speech is least similar to Nam Phae or Longhouse Prai with an 82% similarity of cognates from the word list elicited. It is important to note that Nam Phae is least similar to all other Prai speech varieties with cognate similarity percentages of 82% to Phae Klang and Nam Chang and 84% to Nok Pun.

4.6 Dialectology

Before starting the survey, we knew that there were at least two varieties of Prai that we refer to as the 'Y' variety and the 'R' variety (see Section 1.3 Varieties of Prai). However, we were unsure if there were additional varieties as well. We wanted to investigate the attitudes among varieties to see how different the speakers of one variety consider themselves from the speakers of another variety. We also wanted to see if one way of speaking has a higher prestige than the others. Finding out the relative sizes of the groups was also one of our research questions, as we wanted to see if one group was significantly larger than the others.

Prior to this study, we expected to find consistent vocabulary differences between the 'R' and 'Y' varieties, but this was not the case. All the Prai speech communities (with the exception of the Longhouse Prai) seem to have no difficulty understanding each other or communicating with each other. This makes it nearly impossible to even talk about Prai as having dialects. Rather several villages may share a common accent and set of isoglosses. There are small variations in nearly every village we visited.

The recent migration patterns could perhaps account for the lack of distinct dialects. The Prai are no longer able to maintain their former contact patterns and many villages have been moved to areas where they are closer to villages they formerly had no contact with. This could explain the absence of consistent vocabulary changes between dialects. In the past there may have been more of a language chain with adjacent villages having greater similarities in speech style and villages farther away having more differences. The current situation could be described more as a language conglomerate or network where there is a web of multidirectional changes and convoluted dialect distinctions. This makes it difficult to draw boundaries since the distinctions are not consistent.

Variations of Prai

Despite the lack of easily distinguishable dialects, villages tended to be either more like 'Y' or more like 'R'. The main difference between these varieties is that the 'Y' group uses a medial [j] while the 'R' variety pronounces the same word with a medial [r]. There are a few consistent vocabulary variations between groups as well. It must be noted that the Prai themselves did not focus on the [r] vs. [j] difference. However, they did tend to identify with the villages that spoke the variety in which we classified them. The Prai from the villages of Nam Phae, Ko Kuang, Nong Nan, Pa Bong, Pa Yun, and possibly Pak Kam speak the most distinct 'dialect' of Prai, which we have referred to as the 'Longhouse' variety. Chin Paeng Ut, a Prai man from Nam Meet village who accompanied us on one of our survey trips, said that he could understand most of what speakers from 'Longhouse' villages said, but not everything they said. He said that people from Nam Phae village were the most difficult to understand. Not every village interviewed has had contact with speakers from 'Longhouse' villages. Those who have heard their language said they had little difficulty communicating in their own variety, but some were doubtful as to whether a small child could understand speakers of the 'Longhouse' variety.

Prai villages near Ban Wen village speak a variety that may be closer to Mal than to Prai as all Prai villages interviewed report difficulty understanding them and some stated that their way of speaking is like the Mal people.

Attitudes between varieties of Prai

Generally speaking, each village feels that they speak the best Prai. However, we did not find any negative attitudes toward other varieties. When we asked the question, "Of the villages where Prai is spoken where do they speak exactly like you do?" every village listed villages of the same variety. This indicates that there is a sense of identity among speakers of the same variety.

When we asked the question, "Where is your language spoken the worst?" most villages we interviewed either listed Ban Wen village or a Mal village. Only one man from Nam Phae village indicated other Prai villages. He stated that the villages around Nam Chang are difficult to understand. We have reason to think that his statement is influenced by negative attitudes toward that particular village rather than toward their way of speaking since he made disparaging remarks about the fact that they were former communists. He later stated that he could understand people from Nam Ree where people speak exactly like Nam Chang.

People from the villages of Nok Pun and Phae Klang said that there is no best or worst Prai since they all understand each other. People from nearly every other village where we conducted interviews made positive remarks concerning the variety. We frequently heard people say, "They are Prai just like we are," or, "We understand everything they say." In general, people did not want to make distinctions between varieties.

Size of Prai speech varieties

From our current research, we found that there are five more villages of 'Y' speakers in Thailand than there are 'R' speakers. However, from the little information we have, it seems as if most of the Prai speakers in Laos just across the border from Thailand speak the 'R' variety. Many villages remain unclassified both in Thailand and in Laos.

'R' Variety	'Y' Variety	'Longhouse' Variety	Undetermined
Phae Klang	Nam Meet	Pa Bong	Huai Phan
Huai Kaeo	Nam Phi	Nong Nan	Wang Sao
Nam Lat	Nam Pho	Ko Kuang/ Nok Kun	Nam Sot
Sok O	Nong Kham/ Lai Trong	Nam Phae	Huai Fong
Sop Piun	Maniphruek	Pa Yiun	Ban Wen
Huai Dong	Huai Sai Khao	Pak Kam	Piang So
Huai Po	Kiao Chan		Pa Du
Chalaeng Luang	Nam Chang		Huai Yuak
Pa Rai	Nam Ree		Nam Chun
Nam Yo Khun Sin	Huai Khan		Huai Mee
Chalaeng	Buak Ya		Huai Thon
Nok Pun	Piang Ko		Khun Nam Chon
	Huai Pim		Huai Pon
	Huai Put		Sop Mang
	Buak Om		
	Nok Chaek		
	Na Khu		

The following is a chart of Prai villages in Thailand and their speech style as classified by 'R', 'Y', 'Long house', or 'undetermined'.

Summary

At this point in time we are very hesitant to make strong distinctions between the two varieties. The Prai view themselves as one group and perceive their differences in speech to be minimal. People in every village said that they understand speakers of the other variety without difficulty. This makes it difficult to know how to label the variations between groups. We have settled on 'R' and 'Y', but it is important to note that Prai speakers never focused on the [r] versus [j] difference in describing the speech style of the other group. Instead, they focused on the few vocabulary words that are different. The 'R' and 'Y' varieties are more similar to each other than the 'Long house' variety is to 'R' even though 'Longhouse' speakers use the medial [r].

5. Conclusion

As we stated at the beginning of the paper, the overall goal of the survey was to gather additional information that would help in making decisions about current Prai literacy materials to determine if they could be shared by all Prai speakers.

Results from community interviews, wordlists, and comprehension testing show that the Prai language has two primary varieties in speech: the 'Y' variety and the 'R' variety. In addition there are possibly 4 villages in Thailand where a different variety of Prai is spoken that we refer to as the 'Longhouse' variety. There are more speakers of the 'Y' variety in Thailand than there are of the 'R' variety. Most of the 'Y' speakers are located along the Laos border in the northeast of the Chalerm Prakiat district and the north of the Buak Ya district while 'R' speakers are located in the Thung Chang, Chiang Klang, Pua, Phu Kha, and Bo Klua districts west and south of 'Y' speakers. Speakers of the 'Longhouse' variety are in the Bo Klua district. We are unsure of the linguistic situation in Laos, but we know that some of the Prai who live in the province of Xaignabouri speak the 'R' variety. We found that there is a lot of variation with Prai speech on a small scale due to the fact that the Prai people are accepting of differences in speech and tend to have a small circle of acquaintances.

'Y' and 'R' varieties are linguistically very close and share a high degree of mutual intelligibility. They have no trouble communicating to each other in their own variety and seem to know the meanings of words that are different. Speakers of 'Y' and 'R' are more similar to each other than to the 'Longhouse' variety. Both groups can communicate with 'Longhouse' speakers, but with some difficulty. Wordsurv comparisons show that speakers of 'Y' and 'R' share 91% of cognates with each other while 'Y' and 'R' share 82% of cognates with the 'Longhouse' variety.

The amount of contact between different groups depends on geographical proximity rather than on speech similarity. The Prai tend to visit and intermarry with the villages that are close to them regardless of what variety is spoken. The Prai in Laos and the Prai in Thailand have little contact with each other now that the border between Laos and Thailand is more tightly controlled. The Prai from Nok Pun village are an exception; they live very close to the border and still have consistent contact with Prai people from Laos.

Neither variety expressed strong attitudes toward the other variety. In general, as long as a speaker from one variety understands a speaker from another variety, there is no negative attitude. We heard people from many villages say that they consider both groups to be equally Prai, and that they all speak the same language. However, some people did report negative attitudes toward certain words that have different pronunciations in the two varieties.

Comprehension tests show an average of 93% (with a range of 83% to 100%). This indicates a 'high' level of comprehension of the 'R' variety. This means that neither young people nor old people averaged lower than 90%. The young men and woman had the highest scores with the lowest standard deviation, while the older men and women had the lowest scores with the highest standard deviation. However, the difference between the groups was not enough to be significantly different.

Most of the subjects' perceived comprehension correlated with their actual scores. All but two of those tested said they understood 'everything' or 'almost everything'. The two who responded otherwise could have been responding to their unfamiliarity with the type of test. It is difficult to say that this is indicative of positive attitudes toward the variety heard on the tape, but the responses do not indicate negative attitudes toward the Phae Klang variety.

Because the differences between 'Y' and 'R' varieties are minimal in terms of comprehension, and there are no negative attitudes toward the 'R' variety, there is no need to adapt the current literacy materials. It is likely that the Prai in Laos speak a variety that is very similar to the 'R' variety, which means that they will be able to understand the current written texts. More testing needs to be done to determine the comprehension levels of the 'Longhouse' variety, but because there are very few (perhaps less than 150) it is unlikely that their comprehension will impact the current literacy effort.

REFERENCES

- Asian Minorities Outreach (AMO). 1999. Faces of the Unreached in Laos. Palestine, Texas: AMO.
- Blair, F. 1990. Survey on a Shoestring. Dallas, Texas: Summer Institute of Linguistics and University of Texas at Arlington.
- Casad, E. 1974, reprinted 1987. Dialect Intelligibility Testing, Dallas, Texas:
- Chamberlain, James, R. 1995. The Indigenous Peoples Profile, Lao PDR, Parts I and II. Vientiane, Lao PDR: CARE International.
- Chazée, L. 1999. The People's of Laos: Rural and Ethnic Diversities. Bangkok: White Lotus Co. Ltd.
- Deepadun and Ratanakul 1997. "Final particles in conversational Mal (Thin)" MKS 27:81-89
- Filbeck, D. 1978. T'in: A Historical Study. Pacific Linguistics Series B Number 49.
- Filbeck, D. 2001. Personal Communication on March 3, 2001.
- Grimes, B. ed. 2000. Ethnologue Volume 1 Language of the World, 14th edition. Dallas: SIL International.
- Grimes, B. 1988. "How bilingual is bilingual?" *Notes on Linguistics* 40:3-23. Harris, Richard; Schoen, Lawrence M.; and Hensley, Deana L. 1992. "A crosscultural study of story memory." Journal of Cross-Cultural Psychology 23:133-147.

- Jordan, David and Jordan, Fran. 2001. Personal communication from January to June of 2001.
- Johnstone, Patrick 1993. Operation World. Grand Rapids, Michigan: Zondervan Publishing House.
- Kroeger, Paul. 1986. Intelligibility and the problem of prediction in Sabah. focal I: Proceedings from the Fourth Austronesian Conference, ed. by Paul Geraghty, Lois Worthington, and S. A. Wurm, 309-39.
- Lebar, Frank; Hickey, Gerald C; and Musgrave, John K. 1964. *Ethnic groups* of mainland Southeast Asia. New Haven, Human Relations Area Files Press
- Malapol, M. 1989. Pray Grammar at Ban Pae Klang, Thung Chang District, Nan Province. Faculty of Graduate Studies, Mahidol University
- Miller, John. 1994. "Evaluation of the wordlist used in a Mon-Khmer research project in Northeast Thailand." *MKS* 23:67-81.
- Schliesinger, Joachim. 2000. Ethnic Groups of Thailand: Non-Tai-Speaking Peoples. Bangkok, Thailand: White Lotus Press.

Received: 10 January 2003

• •

Arizona State University and SIL USA



Appendix A: Map of Prai Villages in Thailand