

Sociolinguistic Survey of the Chin Speech Varieties Spoken along the Dalet Stream, Ann Township, Rakhine State, Myanmar

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Abstract

This report presents the results of a sociolinguistic survey fieldwork trip to the language groups along the Dalet Stream in Ann Township, Rakhine State, Myanmar. The primary purpose of this survey was to determine the need for additional language development among these speakers. A secondary purpose was to investigate how ready these groups are for language development and how unified they are. The third purpose was to determine how many and which varieties might best be selected for additional literature development among these groups. The survey team investigated these questions through wordlists, questionnaires, participatory tools, and recorded text testing (RTT). The team learned that the Dalet Stream people are not adequately served by Burmese literature. There is a need and desire for additional vernacular language development. The Dalet Stream people are interested in literature development; however, promotion is needed. Language vitality is robust among most speech varieties, and there is a sizable population of speakers. Some educated people are interested in helping develop literature to maintain their people group's culture and language. However, interest in language development and literacy must still be built in the broader community.

Keywords: Language, Sociolinguistics, Survey, Vitality, Literature Development, Literacy

Introduction

This report presents the results of a sociolinguistic survey fieldwork trip to the language groups along the Dalet Stream in Ann Township, Rakhine State, Myanmar. The Dalet Stream area was selected for research due to its high degree of linguistic diversity and the fact that no one has surveyed or documented the languages of this area in almost one hundred years. The main purpose of this survey was to assess the need for additional vernacular literature development among the Chin groups along the Dalet Stream, specifically by investigating whether these speakers can use existing materials in related varieties (including Asho [csh],

Sumtu [csv], Laitu [clj], Uppu [cnb] or Songlai [csj]). If additional vernacular literature development is needed, the second purpose was to investigate how ready these groups are for language development and how unified they are, specifically by investigating the language vitality, population size, community unity, and interest in literature development. If additional vernacular literature development is needed, the third purpose was to determine how many and which varieties might best be selected for additional literature development among these groups.

The team found several undocumented or lesser-known language groups living along the Dalet Stream. It is essential to document these unknown or lesser-known language varieties. This truly is a significant contribution to social sciences and humanities in Asia. Language development is a significant social issue in a region with so much linguistic diversity. The varieties found include the Läoktü varieties of Ekai, Daitu, Khamaw, and Khulai, as well as the Asho variety of Saingbaung. During this survey trip, the team visited two Ekai villages, two Daitu villages, two Saingbaung villages, one Khamaw village, and one Khulai village. In each village, the survey team collected a wordlist, tested comprehension using recorded text testing (RTT), conducted many interviews, and facilitated a dialect perceptions participatory discussion.

Context and literature review

This section will include information about the geography, exonyms and endonyms, linguistic classification, language vitality, and education in the Dalet Stream area.

The Dalet Stream region is in Ann Township, central Rakhine State, Myanmar. The landscape of the region includes rivers and mountains. The Ekai live in the central portion, and the Daitu live in the upper portion along the Dalet Stream. The Khulai live along Aye Stream. The Khamaw live along the Dalet Thu Nge Stream. The Saingbaung live in the lower portion of Dalet Stream and along Ann Stream to the south. The following figure shows this region in Ann Township, Rakhine State, Myanmar. Ekai villages are shown with red squares, Daitu villages with blue triangles, Saingbaung villages with green circles, and Khamaw villages are shown with blue hexagons.

The language varieties along the Dalet Stream are undocumented in the literature. The only possible mention is in the Linguistic Survey of Burma (1917, p.26). This source mentions 200 M'hang people living in the upper parts of Dalet Stream. The M'hang group is included in the 1911 Census (1912, p.270), but no one described themselves as M'hang in the 1921 or 1931 Census. Perhaps they called themselves Ledu or Settu since the “Ledu” (Laitu) and “Settu” (Sumtu) groups appeared in the 1921 and 1931 Census. However, the Dalet Stream groups do not identify as M'hang today.

The Ethnologue (Eberhard et al., 2023) currently lists three of these speech varieties as Lawktu [which is currently spelled Läoktü in their orthography] [ISO 639-3: cey], with a population of about 6,000 speakers and including the dialects of Ekai, Daitu, and Khulai. The Ethnologue currently includes Saingbaung and Khamaw as alternate names of Asho Chin [ISO

639-3: csh], which has a combined population of 170,000 in Myanmar. The Ethnologue also lists *Doitu* as a dialect of both Uppu Chin [ISO 639-3: cnb] and Songlai Chin [ISO 639-3: csj] (Eberhard et al., 2023).



Figure 1 Dalet stream area map

According to interviews during this survey, most of these people groups reported living in their current villages between 25 and 50 years. The government had the more remote villages moved closer to the main stream in 1974.

Regarding exonyms and endonyms, the Ekai people call their dialect and people group “Ekai” [ʔe kai]. Nearby groups call them Lăoktū [Lawktu] (“stream people”) [lɔk.tu]. The term Lawktu [which is spelled Lăoktū in their orthography] is a general name that can refer to all the Dalet Stream people generically.

The older Daitu subjects said that Daitu [dai tu] (“bamboo forest people”) is the name used by others for their group. However, all the other subjects interviewed by the team called themselves Daitu. Thus, because most people call themselves Daitu today, they are called Daitu in this report. An older name for their language and people group is Nat Gyi Chin (Chin people from Nat Gyi Stream). According to the subjects, the Daitu people originally came from the Nat Gyi Stream area in Sidoktaya Township, Magway Region. Uppu/Chinbon people still live there today. The Daitu do not remember when they moved from there. The Chinbon people the team interviewed along the Nat Gyi Stream do not remember people leaving there to go to Ann and Dalet Streams, so this move happened a long time ago.

The Khamaw call their dialect name and people group name Khamaw [k^{hə}.mə]. According to the subjects, the Khamaw people originally came from Sidoktaya Township, Magway Region. Uppu/Chinbon and Asho live in this township. According to Salai Aung Thaik, Asho Chin, Khamaw, and Saingbaung are alternate names for the same group (2001, p.174).

The Khulai call their dialect name and people group name Khulai [k^{hə}.lai]. The Khulai subjects reported that they originally came from Sidoktaya Township, Magway Region. Then, they moved to Sen Kya (location unknown) before moving to Dalet Stream. In 1974, when the government had the remote villages move closer to the main stream, the Khulai people mostly moved into villages with other people groups. The only Khulai-only village was Kwanwa village. However, many Ekai people have moved into Kwanwa village, and today, there are only a few people left there who still identify as Khulai. Even these Khulai mainly speak Ekai now.

The Saingbaung subjects call themselves Saingbaung [sain baun]. They reported that some people call their people group Anntu (“Ann Stream people”). There are two main Saingbaung villages along the Dalet Stream. Ayo Taung village is in the mountains, so the Ayo Taung people are called *Taungtha* (Burmese: “hill people”). Hpo Thaung Kwin village is lower down; thus, these people are called *Auktha* (Burmese: “lower land people”).

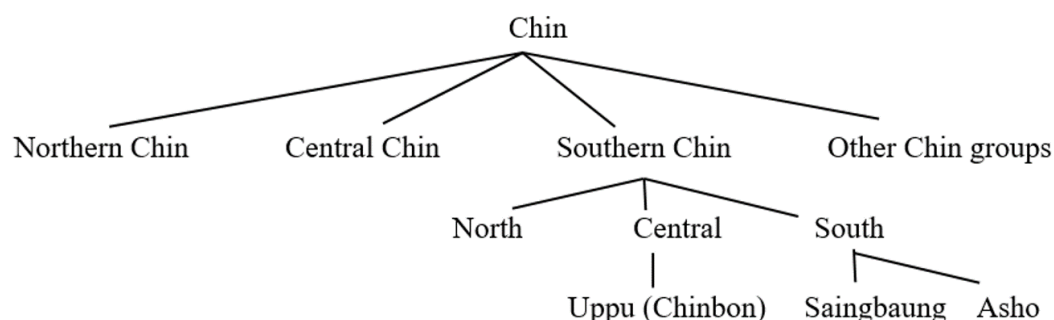


Figure 2 Classification of Chin languages

Source: Bradley (1997, pp. 29-30)

The Saingbaung subjects said that their people originally came from Nga Phe Township in Magway Region, where A sho people still live today. They later lived at the source of the Ann Stream (where A sho people still live), then at the source of the Dalet Stream, and finally at the source of the Aye Stream before they came to their current villages.

Regarding linguistic classification, the L ä o k t ü speech varieties are part of the A sho sub-branch of Southern Chin with the Tibeto-Burman language family. Bradley (1997, p.29-30) classifies the A sho sub-branch of Southern Chin as shown in the following figure.

Regarding population size, the dialect mapping tool subjects reported that Ekai is the largest group along the Dalet Stream, with 22 villages, 730 households, and 3,700 people. Daitu is the second largest group, with 13 villages, 355 households, and 1,800 people.

The Khamaw have 6 villages with 180 households and 900 people. The Saingbaung have about 9 villages, 200 households and 1,000 people. The smallest people group is Khulai; they live mixed with other groups in 7 villages with 25 households, and an estimated population of 125 people. The Khulai people do not have separate villages like the other people groups but live mixed with other people in other people group's villages.

Regarding language vitality, except for the Khulai, all of the other Dalet Stream Chin people groups (Ekai, Daitu, Khamaw, and Saingbaung) have good language maintenance. Their children speak their language when they play, when they communicate with each other, and also with their parents. However, the Khulai children speak only Ekai, and adults use Khulai only rarely. The Ekai group is the majority people group in the villages where the Khulai live. Thus, the language vitality among the Ekai, Daitu, Khamaw, and Saingbaung in this region seems very strong (EGIDS 6a – children speak the language). However, the Khulai variety has low language vitality (EGIDS 7 – only the parents' generation speak the language) and is in danger of disappearing (see Lewis & Simons, 2015). For more about the EGIDS scale, see Fishman (1990) and Simons & Lewis (2011). According to Feng & Areerungruang (2023, p.4), a community must take active action, or the next generation may not speak their dialect anymore.

Regarding bilingualism, the visited villages use Burmese as a language of wider communication (LWC). According to the team's observations, the people from these villages use Burmese with people from other villages and when speaking with people outside the home. The team also observed that the people from the visited villages in Dalet Stream can speak Burmese well.

Regarding ethnoarts and maintaining their traditional culture, according to the knowledgeable interview subjects, all the visited villages use gongs, and most villages also use traditional drums and spears as their instruments. Daitu people from Mingalardon village also use the gun as a traditional instrument. However, most of the young people from the visited villages can play only the gong or only the traditional drum.

Regarding education and literacy, in general, the Dalet Stream area has a low level of education: two-thirds of the subjects had only primary education or less. All of the visited villages have a school, but six have only a primary school, and two villages (Dalet Ywa Haung

and Nyaung Stream) have a middle school. Dalet West Village has a high school. Among the visited villages, only the village of Dalet Ywa Haung has a preschool. All these schools use Burmese as the language of instruction. In most villages, children complete only primary school. According to the knowledgeable subjects, only half or less of the children from each village go to other places for higher education. Children usually attend Dalet West (a cluster of three mainly Rakhine villages with a high school) for higher education. However, some children go to Ann Town as well.

Methodology

This section will explain how the surveyors selected the eight research sites and also describe the five data collection tools that were used in each site (see Bouwer & Bergman, 2017, for more details about language survey tools).

The surveyors aimed to visit as many distinct speech varieties as possible along the Dalet Stream, with at least 2-3 sites per variety. Factors in selecting sites included population size, dialect areas, locations reported to speak the “purest/best” variety, locations reported to speak differently, locations with strong language vitality, historical centers, trade centers, and remote locations (see Nahhas, 2017). Consideration was also given to ease of access for the surveyors to visit the sites. Altogether, eight villages were visited.

462-item wordlists were included to compare linguistic similarity between the varieties along the Dalet Stream and other related varieties. An effort was made to collect a 462-item wordlist from each village visited. Wordlist elicitation took place in Burmese. When collecting a wordlist for a particular speech variety in a particular village, it is important to ensure that the person selected to give the wordlist is representative. This was formalized by using the following criteria for the wordlist subject. If the subject did not meet all three criteria, then he/she was not representative of that speech variety spoken in that village and thus was not used for the wordlist.

1. The subject is “from the village.” This is defined as growing up in the village, living in the village at present, and, if they have lived elsewhere, their time elsewhere is not more than five years.
2. The subject speaks the variety first *and* best.
3. Both of the subject’s parents are from the interview village and are mother-tongue speakers of the variety, and both parents spoke the variety with him/her when he/she was a child.

Furthermore, since lexical variation is not uncommon based on gender or age, a specific gender and age combination was targeted to ensure wordlist comparability between locations. According to the recommendations in Nahhas & Mann (2007), a 40-50-year-old male was targeted.

Another data collection tool was individual interviewing. At every village visited, 12 individual villagers were selected using quota sampling, with age and gender as the stratification variables, and interviewed using a sociolinguistic questionnaire. Interviews took

place in Burmese (questions were based on those described in Karan, 2000, and Walker, 2001). The stratification variables of age and gender were chosen because it is thought that the answers to the research questions might differ by these variables and so that no segment of the population should be excluded (see Nahhas, 2007 and Bergman, 2017). The sample size was limited to only 12 per village due to the time constraints of the research team members (see Wetherill & South, 2001), as shown in the following table.

Another tool for data collection was knowledgeable interviews. At every village visited 2- 3 village leaders who are knowledgeable about the village situation were interviewed regarding the people and language of that village (questions were based on those described in Showalter, 1991). Interviews took place in Burmese.

Table 1 Sample size by age and gender

Gender	Age 17-29	Age 30+	Total
Male	3	3	6
Female	3	3	6
Total	6	6	12

In addition, the survey team noted any observations relevant to the research questions, particularly about the LWC proficiency of the villagers and language vitality (see Hilty & Mitchell, 2014).

Another data collection tool was a focus group discussion (see Mack et al., 2005) about dialect perceptions using a participatory tool called the Dialect Mapping Tool with village leaders in each village. The leaders listed villages and speech varieties living around them. They sorted them by how similar they are to their variety, how well they can understand them, how much contact they have with them, and how they communicate with them. These discussions took place in Burmese and the local speech variety. See Hasselbring (2011), Kumar (2002), and Hasselbring (2008) for more details about this participatory tool.

The final data collection tool was comprehension testing. According to the definition of comprehension as the ability to understand and interpret spoken language, as found in Crystal (2008), the team used a modified form of comprehension testing called recorded text testing (RTT) to discover how well the people in the various villages understand the Ekai, Asho and Sumtu varieties. Participants listened to a short recording of Ekai, Asho, and Sumtu, and then answered a few comprehension questions to assess how well they understood each of those varieties. See Casad (1974), O'Leary (1994), Nahhas (2007), and Bergman (2017) for more details about this comprehension testing methodology.

When administering individual questionnaires and conducting RTT testing, the target population for each variety in a village consisted of people from that village who were mother-tongue speakers of that variety. This was formalized by using the same three criteria as listed

above for the wordlist subjects. If a subject did not meet all three criteria for any one variety, then he/she was not part of the target population for that variety and, thus, was not tested.

Findings

RTT results

The RTT results were analyzed according to the methodology described in Casad (1974). The researchers used a short practice story in Burmese to help prepare the subjects for the Recorded Text Testing procedures. It was the Snake Story followed by 3 questions asked orally. This practice test was designed to help explain the test-taking procedures to the subjects and to screen out poor test takers. All subjects from the Dalet Stream varieties answered all the questions of the Burmese practice story correctly.

After playing the practice story, the team began the RTT testing. In each village, 3 RTT stories were tested: The Ekai dialect of Lăoktū [cey] from Dalet Ywa Haung village, Ann Township, Rakhine State; Sumtu [csv] from Myebon Town; and A sho [csh] from Mindon Town, Magway Region.

In order to interpret RTT results, three types of information are necessary. The first is the average percentage, as shown in Table 2, which is the average percentage of questions answered correctly by each subject. Thus, on average, the Kwanwa subjects answered 31% of the questions correctly on the A sho RTT. The second important type of information is the standard deviation, a measure of how many individual scores vary from the community average. The third important piece of data is the number of subjects tested. The table below shows the relationship between the average score and standard deviation of test scores, adapted from Blair (1990, p.25).

Table 2 Relationship between test averages and standard deviation (Blair, 1990, p.25)

		Standard Deviation	
		Low (<12%)	High (12%+)
Average percentage	High (90%+)	The subjects understand the story well.	Most subjects understand the story well, but some do not.
	Medium (80% - 90%)	It is not clear how well the subjects understand the story.	
	Low (<80%)	The subjects do not understand the story adequately.	

High average RTT percentages with low standard deviations indicate that the subjects adequately comprehend the variety represented by the recording. Low average RTT percentages indicate inadequate comprehension. If the RTT percentages are between 80% and 90%, how well the subjects understand the tested variety needs to be clarified. If the average

score is high and the standard deviation is high, some subjects have extensive contact with the tested speech variety, while others have little. Thus, those with low contact may not be able to understand that variety very well.

The following table shows the results from the Ekai dialect of Läoktü RTT tested in the visited villages along the Dalet Stream. The villages that adequately understand the tested variety are labeled as such.

The average score of the Ekai subjects (Dalet Ywa Haung, Nanyar Kone, and Kwanwa villages) and the Daitu subjects (Mingalardon and Nyaung Stream villages) subjects on the Ekai RTT story was 91%-100%, and the standard deviation was less than 10%. Thus, the Ekai and Daitu subjects from these villages understand the Ekai variety well.

However, the average score of the Saingbaung subjects (Ayo Taung and Hpo Thaung Kwin villages) and the Khamaw subjects (Lake Kone village) on the Ekai RTT story was only 73%-79%, and the standard deviation was 12%-24%. Thus, the Saingbaung and Khamaw subjects do not understand the Ekai variety adequately.

After listening to the Ekai story, subjects were asked questions about their attitudes toward the story's dialect. All subjects from each village correctly identified that the storyteller they listened to was from the Ekai people group. Almost all subjects (97%) reported that they liked how the storyteller spoke, mainly because they could understand it or because it was interesting.

Table 3 RTT Scores for Ekai Test

Variety Tested	Variety (Village) Tested	Conclusion	Average Score	Standard Deviation	Number of Subjects
Ekai dialect of Läoktü (Dalet Ywa Haung village)	Ekai (Dalet Ywa Haung)	Understand	100%	1%	12
	Ekai (Kwanwa)	Understand	99%	2%	12
	Daitu (Mingalardon)	Understand	99%	3%	12
	Ekai (Nanyar Kone)	Understand	97%	6%	12
	Daitu (Nyaung Stream)	Understand	91%	10%	12
	Saingbaung (Ayo Taung)	Do not understand	79%	15%	12
	Saingbaung (Hpo Thaung Kwin)	Do not understand	75%	12%	12
	Khamaw (Lake Kone)	Do not understand	73%	24%	12

The Ekai and Daitu subjects reported understanding everything in the Ekai RTT story. However, many Saingbaung subjects from Hpo Thaung Kwin and Ayo Taung reported that they understood most of the Ekai RTT; they all scored less than 85% on the Ekai RTT. One-third of the Khamaw subjects from Lake Kone (all older subjects) reported understanding half or less of the Ekai story; they all scored less than 60% on the Ekai RTT.

The Ekai subjects from Dalet Ywa Haung, Nanyar Kone, and Kwanwa villages reported that they speak the same as the storyteller. However, all the Daitu, Khamaw, and Saingbaung subjects reported that the storyteller speaks differently from them, especially different in tones and vocabulary. Most of the subjects, including all the Ekai subjects, reported that they thought their children could understand Ekai. However, many Saingbaung, Khamaw, and Daitu subjects reported that their children would not understand that variety.

Table 4 RTT Scores for Asho Test

Variety Tested	Variety (Village) Tested	Conclusion	Average Score	Standard Deviation	Number of Subjects
Asho (Mindon Township)	Saingbaung (Hpo Thaung Kwin)	Understand	97%	6%	12
	Saingbaung (Ayo Taung)	Understand	91%	8%	12
	Khamaw (Lake Kone)	Do not understand	62%	33%	12
	Ekai (Dalet Ywa Haung)	Do not understand	38%	37%	12
	Ekai (Kwanwa)	Do not understand	31%	33%	12
	Daitu (Nyaung Stream)	Do not understand	14%	25%	12
	Daitu (Mingalardon)	Do not understand	7%	16%	12
	Ekai (Nanyar Kone)	Do not understand	7%	16%	12

All the subjects said they would agree with intermarriage with the Ekai people. Reasons for agreeing about intermarriage included: it is the same people group (most of the Ekai subjects gave this answer), the Ekai are also Chin, they live nearby, there has already been intermarriage with Ekai people, and they have no problem with it.

The following table shows the results from the Asho RTT tested in the visited villages along the Dalet Stream. The villages that adequately understand the tested variety are labeled as such.

The average score of the Saingbaung subjects (Ayo Taung and Hpo Thaung Kwin villages) on the Asho RTT story was over 91%, and the standard deviation was below 8%. Thus, the Saingbaung subjects understand the Asho variety well.

However, the average score of the Khamaw subjects (Lake Kone village) on the Asho RTT story was 62%, and the standard deviation was 33%. The average score of the Ekai and Daitu subjects (Dalet Ywa Haung, Nanyar Kone, Kwanwa, Mingalardon, and Nyaung Stream villages) on the Asho RTT story was only 38% or less; the standard deviation was 16%-37%. Thus, the Khamaw, Ekai, and Daitu subjects do not understand the Asho variety adequately.

Most of the Khamaw subjects and the Saingbaung subjects from Ayo Taung correctly identified the storyteller they listened to as being Asho. The Saingbaung subjects from Hpo Thaung Kwin described the storyteller as Saingbaung, like them. About half of the subjects from two of the Ekai villages also correctly identified the storyteller's dialect. However, most of the Daitu subjects and most of the Ekai subjects from Nanyar Kone said that they did not know where the storyteller came from.

Most of the Ekai and Daitu subjects did not like the Asho storyteller's speaking because they did not understand it. However, all of the Saingbaung subjects and most of the Khamaw subjects liked the Asho storyteller's speech, mainly because it was clear or because they could understand it.

The Saingbaung and most Khamaw subjects reported understanding the Asho RTT completely. However, almost all the Ekai and Daitu subjects reported that they could understand the Asho RTT only half or less.

Almost all of the Ekai, Daitu, and Khamaw subjects reported that they speak very differently from the storyteller in tones, words, and everything. However, almost all Saingbaung subjects reported speaking the same as the storyteller.

Almost all Daitu and Ekai subjects reported that their children do not understand Asho. However, all Saingbaung subjects reported that their children can understand Asho. The Khamaw subjects were divided; some thought the children could understand, some thought they would understand just some, and some thought the children would not understand.

Most subjects (84%) reported agreeing with Asho intermarriage, mainly because they are the same people group (all the Saingbaung and most of the Khamaw subjects gave this answer), or because they all are Chin. However, some of the Daitu and Ekai subjects did not know whether they would agree or not, and a few would not agree because they are not able to communicate.

The following table shows the results from the Sumtu RTT tested in the visited villages along the Dalet Stream.

Table 5 RTT Scores for the Sumtu Test

Variety Tested	Variety (Village) Tested	Conclusion	Average Score	Standard Deviation	Number of Subjects
Sumtu (Myebon Township)	Ekai (Dalet Ywa Haung)	Do not understand	66%	25%	12
	Daitu (Mingalardon)	Do not understand	37%	30%	12
	Ekai (Nanyar Kone)	Do not understand	36%	30%	12
	Ekai (Kwanwa)	Do not understand	35%	23%	12
	Daitu (Nyaung Stream)	Do not understand	28%	26%	12
	Saingbaung (Hpo Thaung Kwin)	Do not understand	14%	12%	12
	Khamaw (Lake Kone)	Do not understand	11%	17%	12
	Saingbaung (Ayo Taung)	Do not understand	5%	10%	12

The average score of the Ekai subjects from Dalet Ywa Haung village on the Sumtu RTT story was 66%, and the standard deviation was 25%. This village is closer to the Sumtu area than the other villages. However, the average score of the other Ekai villages, as well as the Daitu, Saingbaung, and Khamaw villages, on the Sumtu RTT story was 37% or less; the standard deviation was also 10%-30%. Thus, none of the Dalet Stream groups can understand the Sumtu variety adequately.

Less than half of the subjects could identify that the storyteller they listened to was Sumtu. However, all of the Ekai subjects from Dalet Ywa Haung knew where the storyteller was from because their village is close to the Sumtu area. They reported that they sometimes visit Sumtu villages for buying and selling.

In general, most of the subjects (84%) reported that they did not like the storyteller's speaking, mainly because they could not understand it or they could understand it only a little. However, most Dalet Ywa Haung subjects reported that they liked the storyteller's speaking because they could understand it. This is probably because the subjects from Dalet Ywa Haung communicate more regularly with the Sumtu people. After all, they live in a neighboring village. However, many of these subjects scored less than 80% on the RTT. In the Ekai village of Dalet Ywa Haung, most subjects reported understanding all or most of the Sumtu RTT; their scores ranged from 54% to 100% on the Sumtu RTT. However, most or all of the subjects from all the other villages (85% of the individual subjects) reported understanding half or less of the story. More than half of the subjects reported that they could not understand the Sumtu story at all.

All of the subjects reported that the way the Sumtu storyteller spoke was very different from the way they spoke. They reported that their language is different in every way. Almost all subjects (98%) from every village reported that the children in their villages could not understand Sumtu at all.

Most of the subjects (84%) reported that they would agree with intermarriage with the Sumtu, mainly because they are also Chin people or because they have no problem with it. However, most of the subjects from the Saingbaung village of Ayo Taung were unsure or disagreed, mainly because they spoke a different language or because it was the couple's issue.

In conclusion, the RTT results of testing Ekai comprehension show that the Ekai and Daitu subjects from the visited villages understand the Ekai variety well. However, the Saingbaung and Khamaw subjects do not understand the Ekai variety adequately. The RTT results of testing Asho comprehension show that the Saingbaung subjects understand the Asho variety well. However, the Khamaw, Ekai, and Daitu subjects do not understand the Asho variety adequately. The RTT results of testing Sumtu comprehension show that none of the Dalet Stream groups can understand the Sumtu variety adequately.

Lexical similarity results

The lexical similarity results of comparing the wordlists provide data about the linguistic similarity between the varieties based on production, not perception. This data confirms and triangulates the data from the other tools, mainly based on the participants' perceptions. For example, high lexicostatistical percentages between speech varieties, confirmed by interview data where most people say they understand the other variety, would hint that speakers of those varieties could share literature (Decker & Grummit, 2012, p.189).

Wordlists for the lexical similarity section of this report were taken from the Dalet Stream survey trip conducted in Ann Township, Rakhine State. This trip covered the Ekai villages of Dalet Ywa Haung, Nanyar Kone, and Kwanwa; the Daitu villages of Mingalardon and Nyaung Stream; the Saingbaung villages of Hpo Thaung Kwin and Ayo Taung; and the Khamaw village of Lake Kone. In addition, several other wordlists previously collected by the authors are also compared, including Laitu [clj], Uppu [cnb], Laisaw, Sumtu [csv], Asho [csh], and Songlai [csj]. These wordlists from related varieties are included to clarify their lexical similarity with the Dalet Stream varieties.

The 462-item wordlists collected were entered into Excel and double-checked using the recordings; then, they were imported into the Cog wordlist analysis program to be analyzed (Daspit, 2015). According to the methodology described by Blair (1990) and Brye (2012), a selection of 100 core items of essential, everyday vocabulary from each variety was compared to see how many of the words are similar. The 100 core items used for comparison were selected from the 462-item wordlist using the method described by Mann (2004), which is based on the Swadesh lists of 100- and 200-item wordlists for lexicostatic comparison (Swadesh, 1952 and Swadesh, 1955) and Matisoff's CALMSEA wordlist which was developed

for comparative studies among Tibeto-Burman languages in Southeast Asia (Matisoff, 1978, p.283-296).

Chin languages are Tibeto-Burman languages. Tibeto-Burman languages have monosyllabic and polysyllabic roots. Polysyllabic forms may include non-root syllables. These non-root syllables are supplemental information. For a lexical comparison attempting to approximate cognate percentages between speech varieties, it is often misleading to include non-root syllables in the comparison. Thus, in this study, only the root syllables are considered; non-root syllables are ignored. Segments were considered phonetically similar if either (1) they were shown connected on the charts of phonetically-similar segments or (2) they appeared in three or more words within the 462-item wordlist. The percentages of similar words out of 100 (called the *lexical similarity*¹ percentage) are calculated based on the number of phones and certain conditions the word forms must meet to be considered lexically similar. These percentages represent the lexically similar items shared between the two speech varieties. This lexicostatistic approach approximates the percentage of cognates shared by two or more speech varieties (Downey, 1986 and Hymes, 1960).

Varieties that share less than 70% lexical similarity can be concluded to be not understandable to each other and thus should be considered separate languages (see Grimes, 1995 and Casad, 1992). Varieties that share more than 70% lexical similarity may or may not be understandable to each other (see Kindell, 1991, p.128). However, varieties with higher lexical similarity are more likely to understand each other.

Percentages below the 70% threshold are shown in bold in the table below. The names of the Dalet Stream speech varieties gathered during this fieldwork trip are also shown in bold.

¹ Note that lexically similar items may still vary in pronunciation.

Table 6 Lexical similarity of Asho-related varieties

Laitu (Kawngtu) (Theinpin)	Laitu (Daitu) (Kaiki)	Laitu (Ahongdong)	Songlai - Doitu (Maunggywa)	Songlai - Lai (Sangkai)	Songlai - Lai (Pyilonkyi)	Songlai - Song (Maung Om) (Thanhtaung)	Songlai - Hettui (Ka Stream)	Sumtu (Dookkan)	Uppu (Khaici)	Uppu (Cintwe)	Uppu (Saw)	Laisaw (Mrauk U Town)	Laisaw (Thu Htay Kung)	Asho (Aung Lan Tsp)	Dalet Stream Varieties										
65%	76%	74%	70%	67%	67%	65%	70%	79%	73%	76%	73%	72%	75%	73%						Khulai (Aye Stream Kwanwa)					
64%	73%	72%	69%	67%	65%	64%	69%	76%	72%	73%	71%	70%	73%	76%						95%	Ekai (Dalet Ywa Haung)				
68%	73%	78%	68%	71%	63%	64%	63%	75%	69%	69%	68%	78%	77%	81%						86%	81%	Saingbaung (Ann Stream)			
68%	72%	73%	70%	68%	65%	60%	61%	76%	69%	68%	67%	72%	73%	78%						79%	78%	93%	Saingbaung (Ayo Taung)		
67%	75%	75%	67%	65%	63%	59%	63%	75%	70%	68%	69%	78%	78%	76%						82%	82%	88%	90%	Khamaw (Lake Kone)	
76%	85%	81%	78%	73%	71%	69%	70%	81%	81%	78%	78%	72%	73%	73%						84%	85%	78%	81%	82%	Daitu (Nyaung Stream)

Dalet Stream Varieties

Based on these lexical similarity percentages, the team has drawn some initial conclusions about which varieties are different from each other and less likely to be able to understand each other.

The Dalet Stream variety wordlists all share at least 70% lexical similarity. All of these varieties also share at least 70% lexical similarity with Sumtu [csv], Laitu [clj] (except for the Theinpin village variety), and Laisaw. Thus, few conclusions can be made about these varieties from wordlists alone.

Most of the varieties of Songlai [csj] share less than 70% lexical similarity with most of the varieties along the Dalet Stream. Thus, Songlai [csj] should be considered a separate language from these Dalet Stream varieties. The main exception among the Dalet Stream varieties is the Daitu variety, which shares at least 70% lexical similarity with almost all of the varieties of Songlai.

Except for one comparison at precisely 70%, the Uppu [cnb] varieties share less than 70% lexical similarity with the Saingbaung and Khamaw varieties along the Dalet Stream. Thus, Uppu [cnb] should be considered a separate language from Saingbaung and Khamaw.

Finally, the Theinpin village variety of Laitu [clj] shares less than 70% lexical similarity with all Dalet Stream varieties except Daitu. Thus, this variety of Laitu should be considered a separate language from Daitu.

Interview results

Frequency tables were used to summarize the results from the questionnaires. The observations and information from informal conversations that the survey team noted were also summarized. The results concerning the research questions were then interpreted qualitatively. Twelve subjects for the individual questionnaire were interviewed in each village. Two Daitu villages were visited, for a total of 24 Daitu subjects. Two Ekai villages and one Khulai village (Kwanwa) were visited. However, it turned out that very few people in Kwanwa village are Khulai; most are Ekai. Therefore, the individual subjects interviewed in Kwanwa village are Ekai people. Thus, there were a total of 36 Ekai subjects. Two Saingbaung villages were visited for a total of 24 Saingbaung subjects. A total of 12 subjects were interviewed in one Khamaw village.

All of the subjects reported that they speak their mother tongue variety (Ekai, Daitu, Khamaw, or Saingbaung) as their first and best language. Most subjects (79%) reported that they speak Burmese as either their second- or third-best language. In addition, most of the Daitu subjects (79%) and about half of the Khamaw and Saingbaung subjects reported speaking Ekai as their second- or third-best language.

The subjects mentioned six groups in the Dalet Stream area: Ekai, Daitu, Khamaw, Saingbaung, Sumtu, and Khulai. All but Sumtu were researched during this trip.

According to all the individual subjects (from the Ekai, Daitu, Khamaw, and Saingbaung groups), all the people in their families can speak and understand their language well. All of the subjects from each visited village reported that the children in their village speak their own language first and when they play together. In addition, all subjects reported that they thought the young people and all the children from their people group in their village

could speak their language well. Almost all subjects (96%) reported that they thought their children would still be speaking their language twenty years from now.

In general, almost half of the subjects (47%) reported that they are very interested in reading their language, mainly because it is their literature and they want to be able to read it. Most subjects (74%) are interested in attending a literacy class for Lăoktū if one is started.

Participatory Tool Dialect Mapping Discussion Results

The results of the Dialect Mapping Participatory Tool were summarized qualitatively concerning the research questions. The Dialect Mapping Tool was conducted with about 8 to 10 leaders and villagers from each village during the survey fieldwork trip to the Dalet Stream area.

The following table shows the dialect mapping tool subjects' opinions about slightly different varieties, more different, and most different varieties from their variety.

Table 7 Different Varieties

Visited Variety	Visited Village	A little different varieties	More different varieties	Most different	Totally different
Ekai	Dalet Ywa Haung	Sumtu and Khamaw	Khulai and Daitu	Saingbaung	Laitu
Ekai	Nanyar Kone	Khulai and Khamaw	Sumtu	Daitu and Saingbaung	Laitu
Khulai	Kwanwa	Ekai and Khamaw	Saingbaung, Daitu and Sumtu	-	Laitu
Daitu	Mingalardon	Ekai and Saingbaung	Sumtu and Khamaw	-	-
Daitu	Nyaung Stream	Ekai, Khamaw, Khulai, Saingbaung and Sumtu	-	-	-
Khamaw	Lake Kone	Saingbaung and Ekai	Daitu and Sumtu	-	-
Saingbaung	Ayo Taung	Khamaw and Ekai	Daitu and Sumtu	-	-
Saingbaung	Hpo Thaung Kwin	Ekai and Daitu	Khamaw and Sumtu	-	-

The Ekai subjects from Dalet Ywa Haung and Nanyar Kone villages reported that Ekai is also spoken in the 16 villages of Mayan Taw, Mingalar U, Thet Ka Net Aing, Arbauk, Nyaung Pin Kwin, Shan Kone, Dalet Ale Ywa, Kan Let Ywa, Ann Pya, Ngu Ywa Ywa, Nanyar Kone, San Thi, Khwa Sung, Maw Sung, Surngen, and Sentung.

The Khulai subjects from Kwanwa reported that Khulai is also spoken in the 6 villages of The Ka Net Aing, San Kone, Kan Let, Hlaing Wa, Ya Pyin, and Kan Thau Kyi.

The Daitu subjects from Mingalardon and Nyaung Stream villages reported that Daitu is also spoken in the 12 villages of Paung Kut, Nyaung Che Thau, Lay Inn Su, Boi Wa, Ne Pa Che, Wa Maw, Nyaung Stream, Wong Wa, Thet Myaung, Paung Wa, Thet Stream, and Lungtung.

The subjects from Lake Kone reported that Khamaw is also spoken in the 5 villages of Pyin Kone, Kwanwa, Zayet Kwin, Thet Ka Net Aing, and Tin Baw Mou.

The Saingbaung subjects from Ayo Taung and Hpo Thaung Kwin villages reported that Saingbaung is also spoken in the 7 villages of Kyauk Kyi, Ayo Taung Stream, Ann Pya, Sen Stream, Pyin Phya, Dalet Thungay Stream, and Taung Kyait.

In general, the subjects from the Dalet Stream varieties see other Dalet Stream varieties as being a little different from themselves. However, they see Laitu [clj] as being totally different from them.

The following table shows the subjects' opinions about their comprehension of the Ekai dialect of Läoktü [cey], communication style with Ekai speakers, contact with Ekai people, and attitudes toward the Ekai dialect of Läoktü.

Table 8 Comprehension, communication, and contact with Ekai people

Variety	Visited Village	Comprehension of Ekai dialect	Communication with Ekai speakers	Contact with Ekai people	Attitudes toward Ekai dialect
Ekai	Dalet Ywa Haung	All	use own dialects	weekly	best
	Nanyar Kone	All	use own dialects	weekly	best
Khulai	Kwanwa	All	use own dialects	weekly	best
Daitu	Mingalardon	Most	use own dialects	weekly	second best
	Nyaung Stream	Most	use own dialects	weekly	second best
Saingbaung	Hpo Thaung Kwin	Most	use own dialects with some people, but use Burmese with some people	weekly	second best
	Ayo Taung	Half	use own dialects	weekly	second best
Khamaw	Lake Kone	Half	use own dialects	weekly	best

In general, the Ekai, Khulai, and Daitu subjects from the visited villages reported that they understand Ekai mostly. However, the Khamaw and Saingbaung subjects reported that

they understand Ekai only half. All of the visited villages reported that they can use their dialects when they communicate with the Ekai people. However, the Saingbaung subjects from Hpo Thaung Kwin have to use Burmese when they communicate with some Ekai people. All of these villages have weekly or regular contact with Ekai people. In addition, the visited villages have very positive attitudes toward the Ekai dialect of Läoktü. Half of the villages chose Ekai as their first choice dialect for developing Läoktü literature. In addition, the Daitu subjects from Mingalardon and Nyaung Stream and the Saingbaung subjects from Ayo Taung and Hpo Thaung Kwin villages chose Ekai as their second best choice for basing Läoktü literature on, after their variety.

The following table shows the subjects' opinions about their comprehension of Sumtu [csv], communication style with Sumtu, contact with Sumtu people, and attitudes toward Sumtu.

Table 9 Comprehension, communication, and contact with Sumtu people

Variety	Visited Village	Comprehension of Sumtu	Communication with Sumtu	Contact with Sumtu	Attitudes toward Sumtu
Ekai	Dalet Ywa Haung	Most	use own dialects	weekly	second best
	Nanyar Kone	Most	use own dialects	monthly	-
Khulai	Kwanwa	Half	use Sumtu	weekly	third best
Daitu	Mingalardon	Some	use Burmese	weekly	-
	Nyaung Stream	Some	use Burmese	yearly	-
Khamaw	Lake Kone	Some	use Burmese	yearly	-
Saingbaung	Hpo Thaung Kwin	Some	use their language with some people, but use Burmese with some people	monthly	-
	Ayo Taung	None	use Burmese	yearly	-

In general, the subjects reported low comprehension of Sumtu [csv]. However, the Ekai and Khulai subjects can understand Sumtu mostly or half. Burmese is mainly used to communicate with the Sumtu people. However, the Ekai subjects use their dialects, and the Khulai subjects switch to Sumtu to communicate with Sumtu people. There is little contact with the Sumtu people except in the villages of Dalet Ywa Haung, Mingalardon, and Kwanwa, which have contact with Sumtu weekly. Most of the groups did not mention Sumtu as one of their choices for literature. However, the Ekai subjects from Dalet Ywa Haung chose Sumtu as the second best for literature after their variety, and the Khulai subjects from Kwanwa also chose Sumtu as the third best for literature.

Regarding comprehension of and contact with Laitu [clj], the subjects reported that they cannot understand Laitu. They have to use Burmese to communicate with the Laitu people. They only have yearly contact or no contact at all with Laitu people. None of the subjects chose Laitu as an excellent variety on which to base their literature.

The following table shows the varieties the subjects from each Dalet Stream village recommended as their first, second, and third best choices for which dialect to base their Lăoktū literature development on.

Table 10 First, second and third best varieties for literature

Variety	Visited villages	Best variety	Second best variety	Third best variety
Ekai	Dalet Ywa Haung	Ekai	Sumtu	Khamaw
	Nanyar Kone	Ekai	Khamaw	Khulai
Khulai	Kwanwa	Ekai	Khamaw	Sumtu
Khamaw	Lake Kone	Ekai	Khamaw	-
Daitu	Mingalardon	Daitu	Ekai	-
	Nyaung Stream	Daitu	Ekai	-
Saingbaung	Hpo Thaung	Saingbaung	Ekai	Daitu
	Kwin			
	Ayo Taung	Khamaw	Ekai	-

Most subjects chose their variety as their first choice for literature. However, all the subjects from all the varieties chose the Ekai variety as best or second best. Khamaw was also chosen as one of the best varieties in all the Ekai villages and one Saingbaung village. The Daitu subjects, however, did not include Khamaw. Two of the three Ekai villages also chose Sumtu as a good variety for literature.

Table 11 Varieties that can share literature with us

Visited villages	Variety	Ekai	Daitu	Khamaw	Saingbaung	Khulai	Sumtu
Nanyar Kone	Ekai	Yes	Yes	Yes	Yes	Yes	Yes
Dalet Ywa Haung	Ekai	Yes	Yes	Yes	No	Yes	Yes
Hpo Thaung Kwin	Saingbaung	Yes	Yes	Yes	Yes	No	No
Ayo Taung	Saingbaung	Yes	Yes	Yes	Yes	No	No
Nyaung Stream	Daitu	Yes	Yes	Yes	No	Yes	No
Lake Kone	Khamaw	Yes	No	Yes	Yes	No	No
Kwanwa	Ekai	Yes	No	Yes	No	Yes	No
Mingalardon	Daitu	No	Yes	No	No	No	No

The following table shows the varieties that the subjects from each visited village mentioned as being able to share literature (shown with yes or no).

Most subjects thought that most Dalet Stream varieties could all share literature. However, most Ekai and Daitu subjects did not think Saingbaung people could share the same materials. Saingbaung people, on the other hand, felt that most people could use their materials. Most of the subjects agreed that they could not share materials with the Sumtu.

Conclusions and discussion

The first purpose of this survey was to determine whether the Dalet Stream groups are adequately reached by other related literature (in Asho [csh], Sumtu [csv], Laitu [clj], Uppu [cnb] or Songlai [csj]) or whether they need additional language development. Decisions about whether related groups can share literature are based on several factors. Some factors are linguistic, such as the degree of lexical or grammatical similarity or mutual intelligibility. Other factors involve various sociolinguistic issues (see Brown, 1998) , including attitudes, perceptions, views toward published literature, ethnic identity, geography, or political boundaries (see Bickford, 2016).

Based on comprehension testing and reported comprehension, the Saingbaung seem to understand Asho [csh] well; however, the other groups (Ekai, Daitu, and Khamaw) do not understand Asho. The Khamaw have higher comprehension than the Daitu and Ekai. The Saingbaung and Khamaw reported positive attitudes toward the Asho language, but the promotion of Asho literature is needed, since they have never seen it before. The Ekai and Daitu reported negative attitudes toward Asho, since they did not understand it. None of the Dalet Stream groups have contact with the Asho people. In summary, Asho [csh] literature would not effectively reach most of the people groups from Dalet Stream because they do not understand Asho adequately. The Khamaw have some comprehension but would likely have challenges using Asho literature. However, the Saingbaung have good comprehension of Asho and positive attitudes toward Asho. Promotion of Asho literature is needed among the Saingbaung people.

Based on comprehension testing and reported comprehension, the people groups of Daitu, Saingbaung, Khamaw, and Ekai from Dalet Stream do not understand Sumtu [csv] adequately. However, the Ekai people from Dalet Ywa Haung village understand Sumtu to some extent. Most of the subjects said they do not like the Sumtu language because they cannot understand it. However, groups from the Ekai villages of Dalet Ywa Haung and Kwanwa chose Sumtu as the second and third best varieties, respectively, for literature. A little over half the people interviewed in Dalet Ywa Haung reported liking the Sumtu language. The lower Dalet Stream villages have contact with Sumtu people because Sumtu people regularly come to the lower Dalet Stream villages to cut bamboo, buy and sell things, visit and discuss social issues. However, the upper Dalet Stream villages of Nyaung Stream and Kwanwa have little contact with the Sumtu people. In summary, although people in some of the lowest Dalet Stream

villages understand some Sumtu [csv], overall comprehension is low. Sumtu literature would not effectively reach the people groups from Dalet Stream.

The Ekai reported that they do not understand Laitu [clj] and that the language is very different. The other groups do not have contact with the Laitu, so they could not report about their comprehension. Given the low lexical similarity, it is likely that the Saingbaung, Khamaw, and Daitu also do not understand Laitu; they are less similar to Laitu than Ekai is. However, more research would be needed to confirm low comprehension. Most Dalet Stream people have little or no contact with the Laitu people, so they do not have strong attitudes about the Laitu language. The Ekai people in Dalet Ywa Haung, Kwanwa, and Nanyar Kone villages reported having some contact with the Laitu people. However, the other villages that were visited reported no contact with Laitu people. In summary, Laitu [clj] literature would not effectively reach the people groups from Dalet Stream.

Based on reported comprehension and low lexical similarity, the Ekai, Saingbaung, and Khamaw do not understand Uppu [cnb]. The Daitu reported that they can understand Uppu; however, how well they understand the standard variety of Uppu needs to be clarified. More research is needed. The Daitu reported positive attitudes toward Uppu; however, the other Dalet Stream groups do not have strong attitudes about Uppu. They do not have contact with the Uppu people because the Uppu live so far away. Thus, Uppu [cnb] literature would not effectively reach most groups of people from Dalet Stream.

Based on low lexical similarity, it is likely that the Ekai, Saingbaung, and Khamaw do not understand Songlai [csj]. Based on informal comprehension testing, the Daitu have a limited understanding of Songlai. However, more research is needed. The Dalet Stream people do not have contact with the Songlai people. Thus, they do not have strong attitudes about Songlai. Thus, it seems that Songlai [csj] literature would not effectively reach the people groups from Dalet Stream.

In summary, the survey results show that most of the Dalet Stream people are not effectively reached by literature in the related varieties of Asho [csh], Sumtu [csv], Laitu [clj], Uppu [cnb] or Songlai [csj]. The Saingbaung have a strong comprehension of Asho, so Asho literature should meet their needs; however, literature promotion is needed. The Khamaw have some similarities to Asho and have positive attitudes toward Asho, but comprehension is low, and they have no contact.

The Daitu could possibly use Uppu literature; however, due to the lack of contact with the prestige Uppu variety, it is unlikely. Among the other Dalet Stream groups (Ekai, Daitu, Khamaw, and Khulai), there is a need for additional language development.

Since there is a need for additional language development, the second purpose of this survey was to consider priority and readiness for additional language development by examining factors of language vitality, population size, interest, unity, and available workers.

The survey results show that language vitality in the Ekai, Daitu, Saingbaung, and Khamaw villages is strong. All the Ekai, Daitu, Saingbaung, and Khamaw children can speak their language and use it in their daily lives. However, the Khulai language is endangered. The

government had the more remote villages moved closer to the main stream in 1974. At that time, the Khulai people mostly moved into villages with other people groups. Only in Kwanwa village did they live together. However, many Ekai people moved into Kwanwa village and, today, there are only a few Khulai people left there. They mainly speak Ekai today.

The Ekai, Daitu, Khamaw, and Khulai groups have a combined population of about 6,000. Regarding interest, only people with higher education are interested in literature development among the Dalet Stream groups. Others need more awareness about written materials to have interest. They also need to learn how to develop literature in their language.

There is good community unity throughout Dalet Stream, and there could be unity about literature development as well. However, it will be important to emphasize that literature is for all people.

In summary, the team found that the Dalet Stream people groups are almost ready for language development; however, promotion is needed. Language vitality is strong, and there is a sizeable population of speakers. There are some potential available workers for literature development among educated people who are interested in linguistics and in helping develop literature to maintain their people group's culture and language. However, interest in language development and literacy must still be built in the broader community.

Per the survey team's recommendations, the Dalet Stream people groups have been actively working on getting ready for literature development by building community unity throughout Dalet Stream so there can be unity about literature development. The Dalet Stream communities have formed a committee with representatives from each group. After organizing themselves, they have been choosing representatives to send for training.

Since there is a need and readiness for additional language development, the third purpose of this survey was to consider which varieties would be most effective to select for potential language development.

The survey results show that there is no single variety that all the Dalet Stream groups understand well. Based on comprehension testing and reported comprehension, the Ekai dialect is understood well by the Ekai, Khulai, and Daitu people. However, the Saingbaung and Khamaw (especially older people) do not understand Ekai as well.

Ekai was the most widespread choice for basing Lăoktū literature on. Almost all of the subjects from all of the groups reported liking the Ekai speech variety. Some Khamaw individuals reported neutral attitudes toward Ekai due to low comprehension; however, the Khamaw mapping tool subjects chose Ekai as their first choice for basing Lăoktū literature on. The Daitu also reported liking Ekai.

The Dalet Stream people groups frequently contact with each other, especially with Ekai speakers. The Khamaw also reported regular contact with the Saingbaung. All the villages reported having regular contact with the Ekai people. People reported having contact with each other for cutting bamboo, buying and selling, and visiting.

The following table summarizes the Dalet Stream people groups and the survey team's recommendations for their literature development.

Table 12 Recommendations for Literature Development

Dalet Stream Varieties	Village	Recommendation for literature development
Ekai	Dalet Ywa Haung	Läoktü literature based on the Ekai dialect
	Nanyar Kone	Läoktü literature based on the Ekai dialect
Daitu	Mingalardon	Läoktü literature based on the Ekai dialect
	Nyaung Stream	Läoktü literature based on the Ekai dialect
Khulai	Kwanwa	Läoktü literature based on the Ekai dialect
Khamaw	Lake Kone	Läoktü literature based on the Ekai dialect
Saingbaung	Ayo Taung	Asho literature
	Hpo Thaung	Asho literature
	Kwin	

Based on comprehension testing, reported comprehension, and the team's observations, most Dalet Stream people groups could understand Läoktü materials produced in the Ekai dialect. Thus, the Ekai dialect might be a good choice for basing Läoktü language development on.

For the Khamaw people, the Khamaw mapping tool subjects chose the Ekai dialect as their first choice for basing Läoktü literature development on. In addition, according to the individual subjects and the lexical analysis, the Khamaw people can understand most of what they hear in the Ekai dialect. Based on the comprehension testing, younger Khamaw subjects seem to understand Ekai adequately, although some older people do not. The Khamaw people have a small population (900 people), so the best option might be to join the Läoktü literature project instead of trying to develop separate literature.

The Saingbaung, however, understand Asho well and do not understand Ekai well, so it would be better for them to use Asho materials. The Saingbaung people may be able to share with Asho literature since they can understand Asho well and have positive attitudes toward the Asho people and language. However, promotion of Asho literature is needed.

Recommendations

Based on the survey team's recommendations, the Daitu, Ekai, Khulai, and Khamaw people met to discuss the development of Läoktü literature. They have chosen one variety (the Ekai dialect) on which to base their literature development. The Läoktü leaders are currently working to do more literacy awareness-raising and promotion among the Dalet Stream people groups.

In all of the visited villages among the Ekai, Daitu, Saingbaung, and Khamaw people, there is strong language maintenance, and the children speak their language very well. The team recommends that the whole community continue to promote their languages and

encourage their children to communicate with each other through their languages so that these varieties do not die out in the future.

In particular, the Khulai community needs to seriously promote the Khulai dialect if they do not want to see it disappear. Linguists interested in language documentation should visit the Khulai community to document their dialect soon.

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