

# USING GIS FOR DISPLAYING AN ETHNOLINGUISTIC MAP OF THAILAND

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Southeast Asia is one of the most linguistically diverse area of the world. Thailand which is situated right at the heart of SEA represents one of the most complex areas of languages and ethnicities. In the present age of globalization, the modern economic development, the powerful mass media, and a new urban culture have a vital role in destroying indigenous languages and cultures. The languages of wider communication heavily influence the small vernacular languages. The Mahidol research project on the Ethnolinguistic Map of Thailand at this stage, aims at providing a language database as the point of reference for mapping the distributions of ethnolinguistic groups in Thailand.

## **I. Research methodology**

The data was collected at the village level by the use of questionnaires. There are altogether about 70,000 villages all over the country. The questionnaires were sent out to key local personnel such as village headmen, teachers, health workers, development workers, district and sub-district officials, etc. to get the information about the language spoken in the home and the number of the speakers of each language. Field work was conducted at certain places and on certain ethnic groups for data rechecking by the researchers of this project and in cooperation with the linguists and specialists who work on each ethnolinguistic group. The data was then computerized. The enormous language data cannot be easily handled by the normal dBase program. After trials and errors, the Shoebox program and Microsoft Access, etc. are used initially for organizing the ethnolinguistic database. For mapping, the GIS program (Geographical Information System) such as Arc/Info, ArcView, etc. is later used for joining the ethnolinguistic data to the geographical data. Problems and limitations are in the

quality of the base map available and accuracy of the latitude and longitude coordinates provided by the Ministry of Interior. Apart from that some discrepancies rising from the data collection by questionnaire at the village level was unavoidable.

## II. Research result

Thailand is illustrated as a complex area of languages and ethnicities. More than 60 languages classified by ethnonyms are presented. By the use of GIS the maps of various scales showing the distributions of each individual language as well as the co-occurrence of various languages in different geographical areas can be produced. The distributions of the ethnolinguistic groups in different administrative areas such as village, district, provincial, regional and national can be displayed as well as those distributed in the river basins or mountain ranges. In this paper the genetic and social relationship of ethnolinguistic groups in Thailand are discussed and displayed with special attention on the distribution of endangered languages.

### 1. *Genetic relationship of languages in Thailand*

All languages belong to five language families: Tai-Kadai, Austroasiatic, Austronesian, Sino-Tibetan and Hmong-Mien. Maps displaying languages in each language family are provided.

1. The majority of the population in Thailand speak Tai-Kadai languages. There are 24 Tai dialects and languages.
2. The more numerous and smaller groups which are scattered all over the country are speakers of Austroasiatic languages, the indigenous languages of SEA. There are altogether 23 languages.
3. The Sino-Tibetan and Hmong-Mien speakers are mainly concentrated in the north and northwest. There are 15 Sino-Tibetan languages and two Hmong-Mien languages.
4. The Austronesian speakers are mainly found in the south. There are only three languages.

## 2. *Social relationship of languages in Thailand*

The co-existence of languages in Thailand is justified by the fact that they are related in a hierarchical way. Each language belongs to different level of language hierarchy in Thai society. There is no fighting and no competition. Each language has a role and function in the society.

Here is the language hierarchy proposed by Smalley (1988 and 1994)

1. Standard Thai
2. Regional Language:
  - Kammuang, Thaiklang, Lao, Paktay
3. Minority language
  - 3.1 Displaced Language
  - 3.2 Town Language
  - 3.3 Marginal Language
  - 3.4 Enclave Language

1. At the top of the hierarchy is standard Thai which is a prestigious official and national language used in education and mass media all over the country. Even though it is based on Central Thai, it is not a vernacular language of any particular ethnolinguistic group so it is not displayed on the map. The distributions of the languages at the lower levels of the language hierarchy (major regional, marginal, displaced and enclave languages) are displayed.

2. The second level of the hierarchy is the major regional languages. They are the four major Thai dialects which are spoken by the majority of the people in various parts of the country: northern Thai or Kammuang in the north, northeastern Thai or Lao Isan in the northeast, southern Thai or Paktay in the south and central Thai in the central part of Thailand. Each language is spoken by the majority of the population in the region. It is a vernacular language as well as a lingua franca of minority languages in the region.

3. The next lower level or under each regional language is for minority languages which are classified into four groups.

3.1 Displaced languages are Tai languages that have the history of people moving from their homeland to settle in Thailand. Wars, famine and work opportunities are the main reasons of immigration. Some have their ancestors as prisoners

of wars from the neighbouring countries in the early years of Rattanakosin period, examples are Phuan, Song, Phuthai, Lao Wiang, Lao Khrang, Nyoh, Yooy, Kaloeng, etc. They are found concentrated mostly in central Thailand.

3.2 Town languages such as Chinese and Vietnamese are spoken in the town area. They are not displayed.

3.3 Marginal languages are mainly non-Tai minority languages found near the border with a majority of speakers living on the other side of the border. They are Tibeto-Burman and Hmong-Mien languages in the north and northwest such as Karen, Lisu, Lahu, Akha, Hmong, and Mien, etc., Austroasiatic languages such as Khmu and Praj-Mal in the north, Northern Khmer and Kuy in the northeast, and Mon in the northwest, etc. and Austronesian languages such as Malay in the south. Some are indigenous to the area. They are found across the countries such as Khmer which is found in Thailand as well as in Cambodia and South Vietnam or the Khmu which is found in Thailand, Laos, Vietnam and South China. Northern Khmer, Khmu and also Malay are called marginal regional languages because they are large ethnolinguistic groups and their languages are used as a lingua franca of other smaller groups in the region.

3.4 Enclave languages are at the lowest level of the language hierarchy. They are languages spoken by small isolated ethnolinguistic groups such as those living in the mountainous area and those who are surrounded by totally unrelated languages and wholly contained in the country. There is no access to communicate with relatives outside. Some are the descendents of people in the ancient empires who lived here before the Tai-speaking people, such as the Nyah Kur who settled right at the center of Thailand. They are believed to be decendants of old Mon in Dhavarvadi kingdom. The Chong, Kasong and Samre are in the east near the Cambodian border which was a part of the Khmer kingdom. Other enclave languages are the So (Thavuong) on the upper Korat plateau who migrated from Laos about one hundred years ago, Guong in the central plain, Bisu and Mpi in the north and Moklen and Urak Lawoi in the south.

The role and function of these minority languages in Thailand differs from those of standard Thai and the regional languages. Many people are bilinguals or multilinguals especially the minorities. The displaced, marginal and enclave languages are the languages spoken at home with family members and neighbors in the same community. However, when speakers of these languages are out of their community, they speak a regional or national language depending on the place and the people they are speaking to. This hierarchical relationship of languages is accepted by most people because it parallels the social hierarchy in Thai society. People can change their identity and social status if they can speak the language and have the education or economic status of people in a higher level.

### 3. *Endangered languages in Thailand*

Even though Smalley may be right that all languages in Thailand have different roles and functions in the society so they can co-exist from the past until now. Even with current pressures for changes, the small indigenous enclave language communities are still viable. At the present moment, if we look closely into the enclave language communities we can see that they are being threatened in varying ways. It would be difficult for them to survive with dignity through this century. Elderly Nyah Kur people told me that the Thai Korat kept coming to the village and settled there more and more. The Nyah Kur kept moving further back to be away from them, until there was no where to go. They therefore have to turn back and stay with the intruders. Apart from Thai Korat speakers, there are also Lao Isan and central Thai speakers from Lopburi that also moved into the Nyah Kur villages. The result is that the number of the Nyah Kur speakers in Nakhon Ratchasima which was once numerous have been decreased quite a lot. Those who can speak do not speak accurately. Apart from that, the speakers of enclave languages which was once untouched are now being threatened to varying degrees by several socio-economic factors and modern mass media such as radio and television which gets right into the home of the people in almost every village even in the remote areas. The government

policy to integrate all the people in Thailand to be “Thai” and to speak “standard Thai” has strengthened the importance of standard Thai as the national language. The language policy to use only standard Thai in schools, government offices and mass media does not encourage the use of a minority vernacular language, especially among the younger generation. Besides this, job prospects outside the village and marriage patterns, especially exogamy, are the main cause of language shift. The people’s negative attitude toward their own ethnic language is another reason for language shift. Often these groups are surrounded by different ethnolinguistic groups whose languages and cultures are more prestigious and influential, and many ethnic minority groups are looked down on as being poor, primitive, and different. Because of this the people, especially the young, do not see the value of their vernacular language in the modern world of communication. Some of them have a strong desire to escape from such a low, stigmatized status and would like to shift from using their vernacular language to the official language, regional language or other more prestigious languages. At the same time, there are changes even in the use of the vernacular itself.

From my own experience working on Mon-Khmer languages (Austroasiatic family), I have witnessed the processes of language loss, language shift and language change in many language communities. If nothing is done, about half will face language loss, and one fourth will be at the stage of extinction in a few generations. About 80% of the younger generation is now moving away from using their ethnic language to languages of wider communication. The majority of endangered languages are small enclave Mon-Khmer languages which are in various stages of endangerment. They are Chong, Kasong, Samre, Sa-oc, Mlabri, Sakai, Lavue, So (Thaveung) and Nyah Kur. Other endangered languages are Tibeto-Burman languages, such as Bisu, Mpi, and Guong and Austronesian languages, such as Urak Lawoi and Moklen. The speaking ability of the people in each language varies. In general only elderly people are good speakers. The younger generation speak more and more the language of wider communication such as national or regional language. Detailed

field research is needed for the studying of each endangered language. In this paper Nyah Kur, So (Thaveung), Chong, Kasong, Samre and Guong are discussed and maps of these language groups are displayed.

1. Nyah Kur, a Monic subbranch of Mon-Khmer language, is believed to be the descendents of Old Mon Davaravadi of about 2,000 years ago. (Diffloth, 1984). It is now found spoken in 23 villages in 3 provinces. The majority are in Chaiyaphum. Only a few are found in Nakhorn Ratchasima and Phetchabun; which were once reported to be more numerous. All of them are mixed villages, consisting of Nyah Kur as well as Thai Korat, Lao Isan and Central Thai speakers. Even though there still are a substantial number of Nyah Kur speakers, the ability of the speakers in different age groups varies a great deal. The younger generation speak their ethnic language less and speak Thai more. Even the Nyah Kur language they speak is heavily influenced by the Thai phonological and lexical system. (Suwilai, 2001).

2. So (Thaveung), is a Vietic subbranch of Mon-Khmer languages spoken in Northeast Thailand. The ancestors of these speakers migrated from Kammuan in Laos and settled in Thailand more than 100 years ago. Initially, they were mistaken as speaking a So (Katuic) language which is more widely spoken in the nearby area. In 1993, John and Carolyn Miller came across this language during their survey in the So-Bru villages and found that it is not in fact a So (Katuic) language, but rather a Vietic language (Miller and Miller 1996 and Suwilai 1996). From Laos, the So (Thaveung) people settled in various places in Northeast Thailand, such as Ban Nongwaeng in Sakon Nakhorn province, Ban Dongbang, Ban Nongmajtaj, etc. in Kalasin and Ban Nonghai in Udon Thani. From my last field trip to these villages in 1995, I found that the So (Thaveung) speakers in the villages in Kalasin and Udon Thani have already lost their proficiency in speaking their ethnic language. Some people can understand well, but most cannot. They are more fluent in Lao (the regional language) and speak Lao in the home and in their daily life. However, So (Thaveung) is still spoken by a number of people in Ban Nongwaeng and the two adjacent villages, Ban

Nongjaroen and Ban Nongmuang (which were resettled by the So (Thaveung) from Ban Nongwaeng). These three villages are in Pathumwapi subdistrict, Songdao district, Sakon Nakhorn province. The So (Thaveung) villages consists of half So and half Nyoh speakers. Their villages are surrounded by Phu Thai and Lao Isan speaking villages. There are altogether little more than 1,000 So (Thaveung) speakers in this area, but their knowledge and use of the language vary. Fluent speakers should not be more than 100 speakers. There are not more than 200 Thavueng in Laos (Ferlus, personal com.).

3. Chong, Kasong, and Samre are in Pearic subbranch of Mon-Khmer languages. They are believed to be indigenous people in eastern Thailand and the adjacent area in Cambodia which was a part of the Ancient Khmer Empire. Now the Chong (5,000 people) are found in many villages in Canthaburi. The majority are found in Khaokhitchakut district and Pongnamron District. Not more than 2,000 people still speak Chong but the ability among people of different age groups varies a lot. Only elderly people still speak the language in most areas. Only few young Chong people can speak the language. Good Chong speakers may not be more than 100 speakers. As for Kasong, and Samre, the situations are worse. According to our last linguistic field work, Kasong speakers are found in only three villages even though there was a record of more than 3,000 speakers all over the Borai subdistrict. Now there are about 60 Kasong speakers and there are not more than 10 good Kasong speakers. The Samre are found in two villages with about 30 speakers and only a few good speakers are found. It is expected to be extinct in the near future (Pornsawan 2001). Samre was also recorded as spoken in Sanamchaikhet, in Chachoengsaw province. However from my last trip to this area about nine years ago, I found the people have already lost their ethnic language. They could recall only a few words. The abbot in a Buddhist temple who was more than 80 years old said that he used to hear people speak the language when he was young but had not heard it for a long time. There might be some Samre speakers in the Cambodian forest but no investigation has yet been undertaken. Both Kasong and Samre are known by Thai people as Chong.



4. Guong is a Tibeto-Berman language found in Central Thailand: Kancanaburi, Uthaithani, and Suphanburi. Now there are about 500 Guong speakers and found only in one village in Uthaithani, and two villages in Suphanburi. They are surrounded by Thai-Lao villages. Even in their village the population is mixed. Half of them are Guong and another half are Lao Khrang speakers in two villages in Suphanburi whereas a village in Uthaithani consist of Quong, Lao Khrang and Pwo Karen.

### III. Conclusion

GIS is a useful tool for handling the huge ethno-linguistic database and displaying the language situations in the country. The Mahidol ethnolinguistic map project represents *the first step of investigation. It can be used as a resource for selecting locations for doing field linguistic research in specific areas of interest, such as dialectology, language contact, language change, and others.* The data base is very flexible, therefore other information can be added to expand the maps potential for varied uses. If the data base is updated from time to time, it would display developmental trends in all of the reporting areas. As a general base for longitudinal studies, it will reveal trends toward language shift involving both the national language and minority languages. It would thus be a helpful tool for educational planning and language planning. It might also reveal historical patterns of migration as well as diffusion and change of dialects and language contact features.

Only some maps are presented (not in color) here. The colorful ethnolinguistics maps of Thailand are available at the Institute of Language and Culture for Rural Development, Mahidol University, Salaya, Phuttha Monthon, Nakhon Pathom, Thailand.

### Note

This paper is a part of the Mahidol research project on the Ethnolinguistic Map of Thailand. The project is carried out by a research team headed by Suwilai Premsirat.

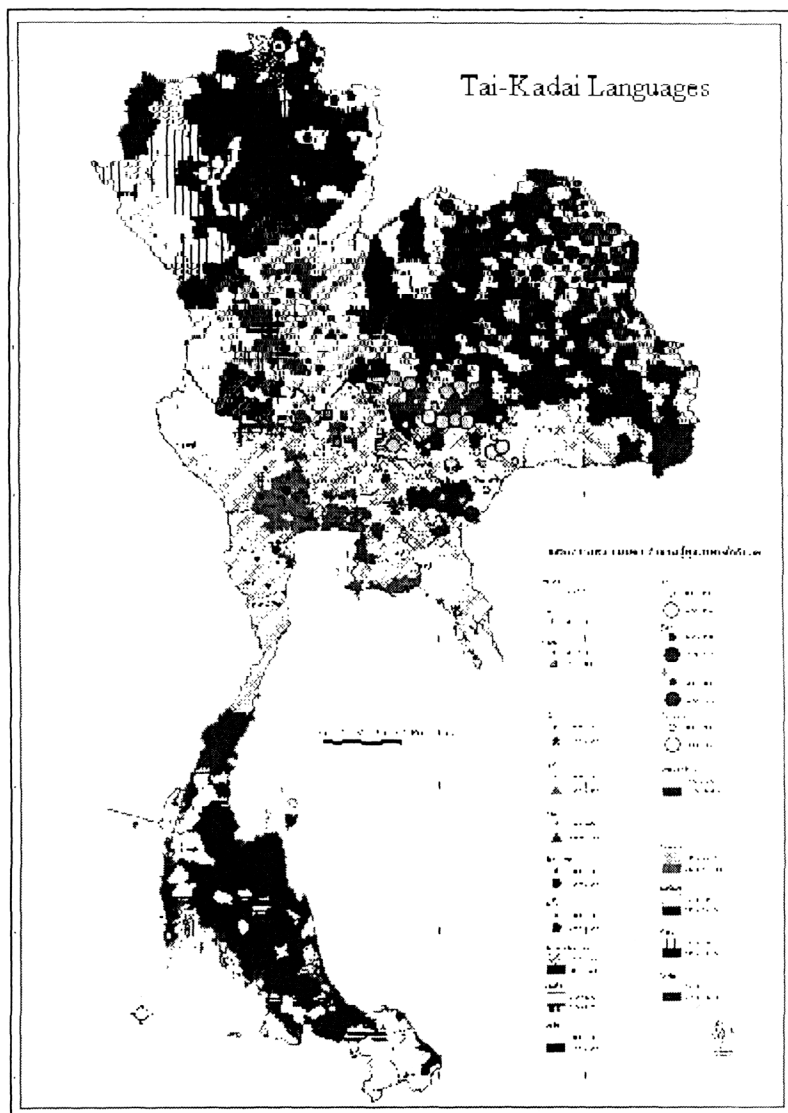
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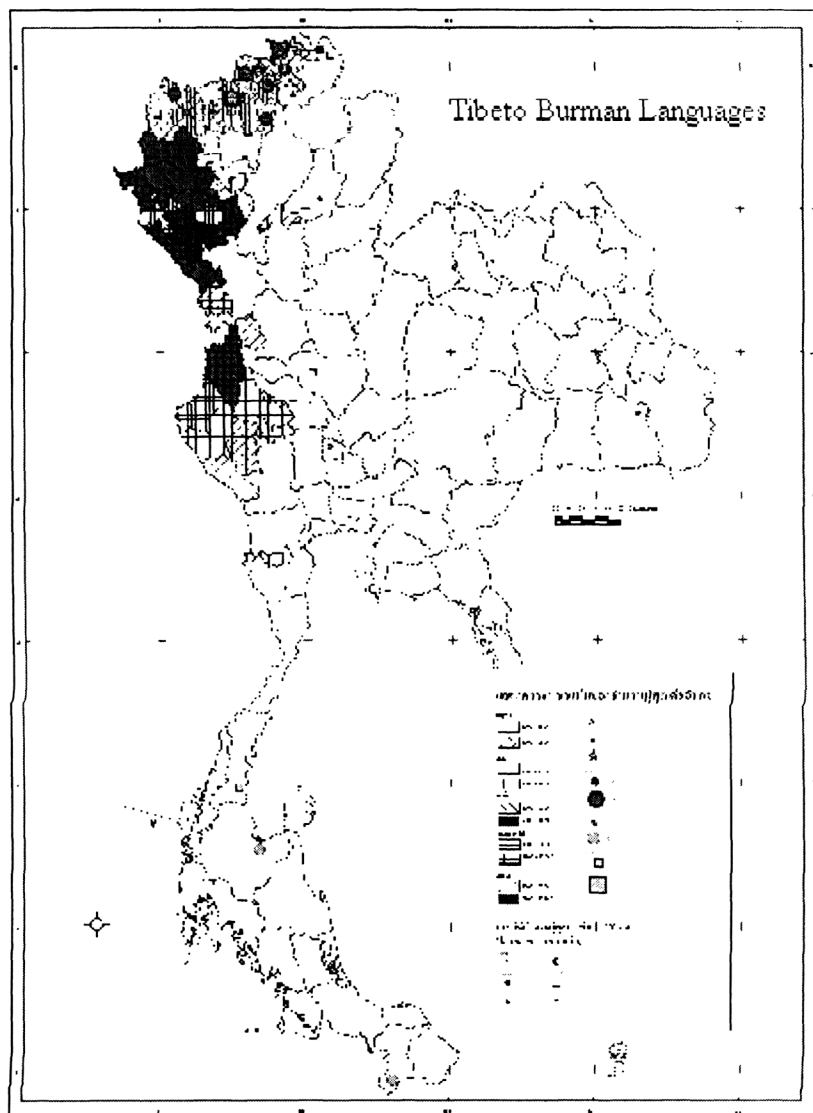
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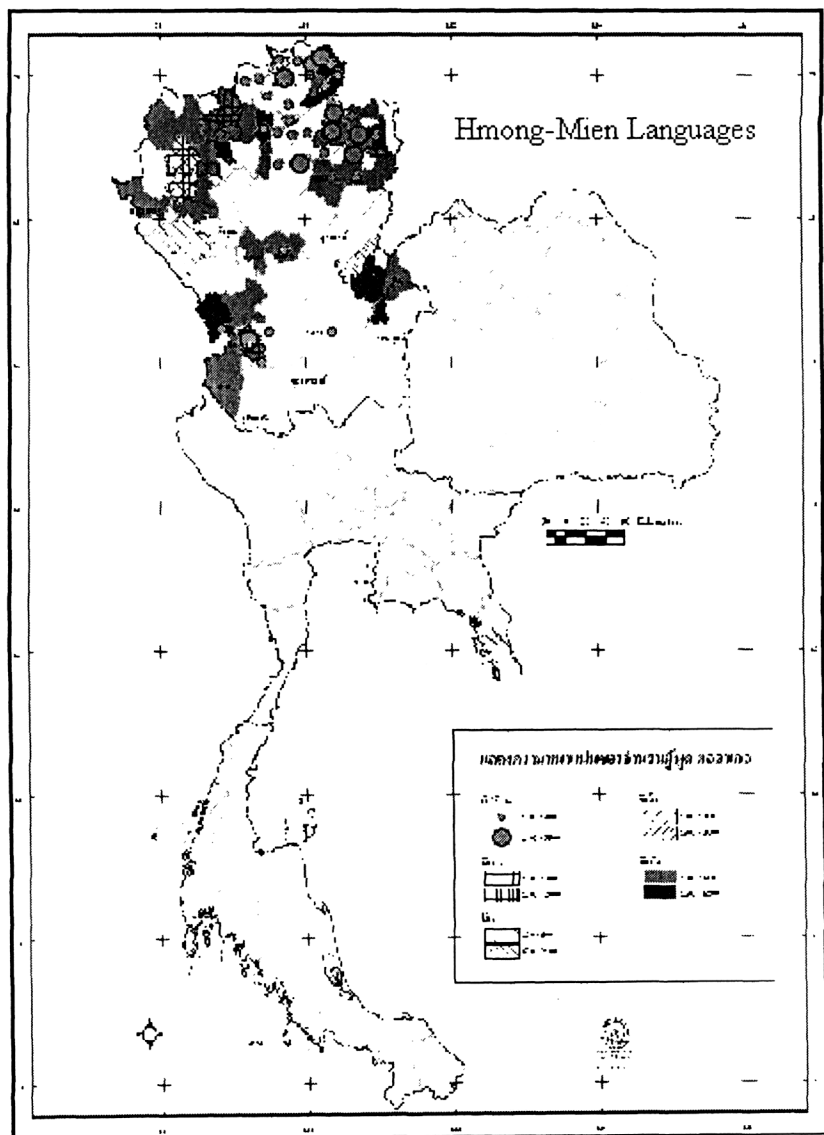


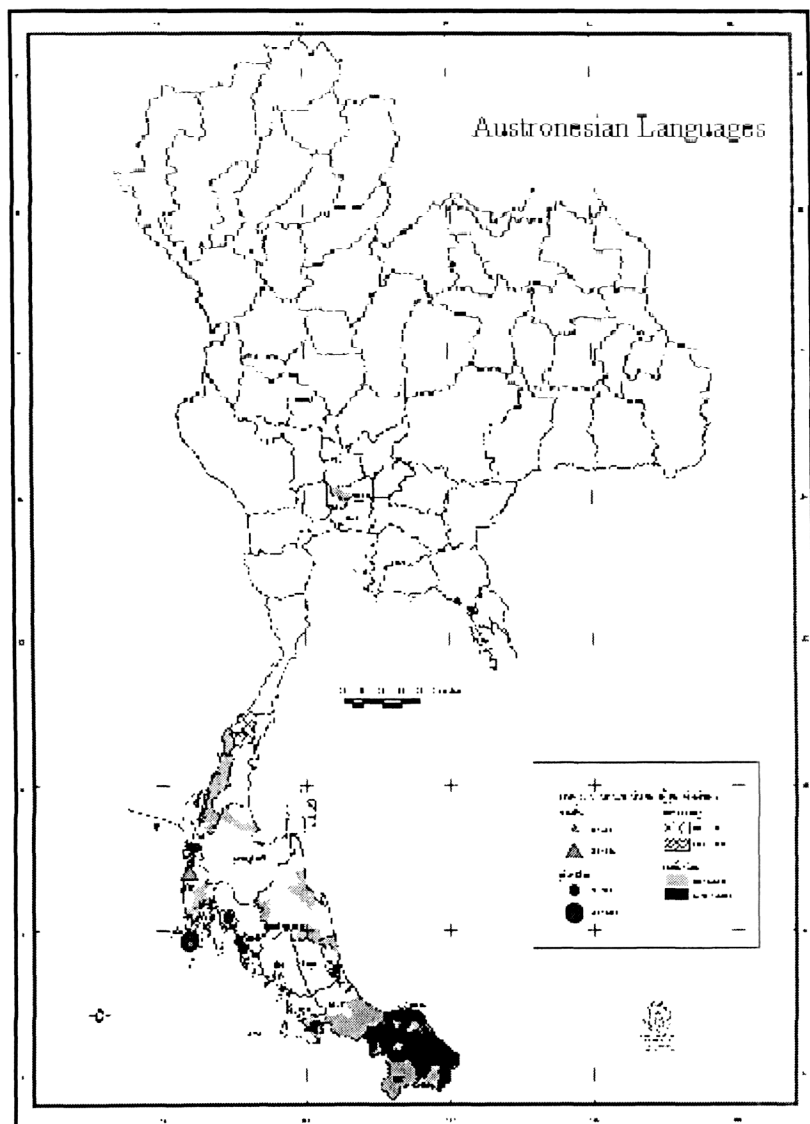




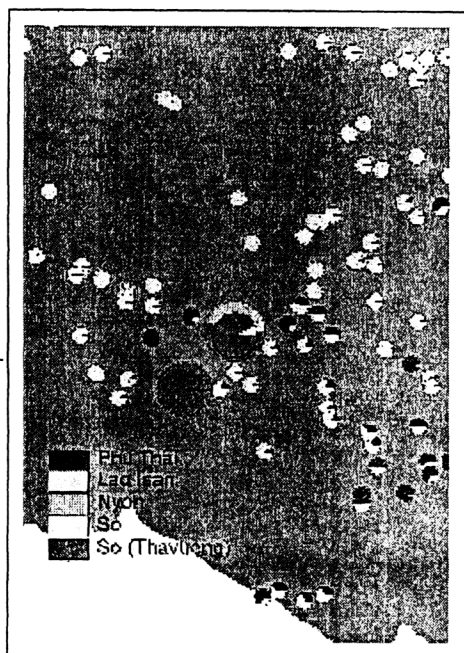








So (Thaveung)



Nyahkur

