

Thesaurus and Dictionary Series of Khmu Dialects in Southeast Asia

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1. Research background and objectives

Southeast Asia is home to more than 1,000 ethnolinguistic groups belonging to five major language families: Austroasiatic, Austronesian, Sino-Tibetan, Tai-Kadai and Hmong-Mien. Khmu is an ethnic minority language belonging to the Austroasiatic language family which is considered to be indigenous and a substratum of languages on mainland Southeast Asia. Although there had been a number of scholarly works on Khmu such as those of William Smalley, Svantesson, Damrong, Suksavang, myself, and others, yet the fully unified pictures of the Khmu language in all its interesting details has still not been drawn. The *Thesaurus and Dictionary Series of Khmu Dialects in Southeast Asia* is a field dictionary. It is a result of the multi-national field research carried out on seven Khmu dialects spoken across northern Southeast Asia including parts of Thailand, Laos, Vietnam and China (Yunnan)¹ The main objectives of this research were to document the Khmu dialects as thoroughly and as completely as possible in order to form a complete picture of Khmu language and to present the research results using the thesaurus (semantic) format of grouping words by related meanings. The words belonging to twenty-nine semantic domains were collected and presented so that the Khmu worldview could be revealed and it would be useful for people trying to speak or write the Khmu language. Apart from that the lexicon of the major Khmu dialects spoken in each of the four countries where the Khmu people live are also alphabetically arranged using the dictionary format so that it would be convenient for further language development including orthography development.

2. Research methodology

The linguistic field research was conducted in the Khmu speaking areas of Thailand, Laos, Vietnam and China.

① Since I had already done extensive work on the Khmu spoken in Thailand, the survey focused on the Khmu spoken in Vietnam, Laos, and the Yunnan province in China. The survey was conducted by using certain pairs of contrastive words in Khmu prepared on the hypothesis that Khmu dialects could be differentiated by suprasegmental features such as tone, register, or consonant voicing contrast.

	1	2	3	4
'rice wine'	bu:c	p̄u:c	p̄u:c	p̄u:c
'to take off cloth'	pu:c	pu:c	p̄u:c	p ^h ú:c
'flower'	ra:ŋ	ra:ŋ	ra:ŋ	
'tooth'	^h ra:ŋ	ra:ŋ	rá:ŋ	

¹The research and the publication of research results were sponsored by Southeast Asian Studies Regional Exchange Program (SEASREP) during 1997-2000.

② The detailed field research in linguistics was conducted on selected Khmu dialects. The seven Khmu dialects selected are one from Chiengrai province, Thailand (tw), three from Udomsai and Huaphan, Laos PDR (ls, lk, lb), two from Sipsong Panna, Yunnan, China (cl, ct) and one from Nge-An, Vietnam (vt). The field research consists of data collection, data verification and data analysis.

③ Data collection by semantic domains is a natural and effective way for collecting data in the field. The corpus of 5,000 Khmu basic and culture words belonging to 29 semantic domains were investigated so that the Khmu worldview could be revealed and the dialectal variation in phonology and vocabulary could be obtained (see Appendix 1).

④ In addition to direct elicitation various kinds of discourse were collected such as modern narratives, folktales, dialogues, procedural methods, parental advice, etc. so that grammatical mechanisms in Khmu could be revealed and word meaning verified.

The cooperation of local academics in various countries greatly contributed to the field research management and to the translation of Khmu into the official language of each country (Thai, Lao, Vietnamese and Chinese) as well as into English producing a wide application for further work to the benefit of the Khmu themselves and linguistic study in each country.

Apart from that computer experts provided valuable assistance to our research team in the use of the appropriate computer software which facilitated the dictionary data entry process and in designing the format of the series².

3. Research results

The research results provided in Part I (Introductory part) of the Thesaurus consist of

- 1.1 brief ethnographic information about the Khmu people (see Appendix 2)
- 1.2 detailed information of Khmu language composed of:
 - Two major Khmu dialects: Eastern Khmu (Ek) and Western Khmu (Wk) (phonologically conservative/innovative) (see Appendix 3)
 - Khmu prosodic characteristics: register complex/tonogenesis (see Appendix 4)
 - Khmu lexical and syntactic characteristics (see Appendix 5)
 - Khmu contacts and influences from neighboring and official languages (see Appendix 6)
 - Khmu language variation among speakers of different age groups (see Appendix 7)

The main body of the *Thesaurus of Khmu Dialects in Southeast Asia* provided in Part II is a grouping of words by related meanings. To a certain extent it can reveal how Khmu people see and give the meaning to the world around them. Words within semantic domains are alphabetically arranged. There are 7,739 entries in the thesaurus. The majority of the main entries are single words and a few are compound words or phrases. The subentries are mainly compound words and phrases (or a few sentences) which are semantically related to the main entries. The 29 semantic domains are as follows:

1. Geographical features, natural phenomena (432)
2. Flora, parts, and relationships with human beings (546)
3. Fauna, parts, actions and relationships with human beings (871)
4. Agriculture, trapping, fishing, and tools (247)

²Mr. Greg Lyons of SIL International provided valuable assistance to our research team in the use of the computer software program "SIL Shoebox" which facilitated the data entry process and in designing the format of the Series. Martin Hosken provided valuable help in adding the Chinese characters to appear along with other Southeast Asian scripts in the Thesaurus.

5. Rice (97)
6. Food (382)
7. Houses, utensils, and useful articles (299)
8. Human body adornments (207)
9. Human body (333)
10. Life cycle, drugs and sickness (391)
11. Traditions, beliefs, and ceremonies (187)
12. Music and entertainment (74)
13. Pronouns, terms of address, and names (264)
14. Education, and communication (202)
15. Directions and places (75)
16. Time (125)
17. Actions associated with the mouth (162)
18. Actions associated with the head, face, and body (76)
19. Sitting and sleeping (104)
20. Actions associated with the hands (464)
21. Actions associated with leg (266)
22. General actions and states of being or changing (112)
23. Carrying (48)
24. Color, shape, size, and appearance (321)
25. Quantities and numbers (97)
26. Mental activities, states, and emotions (140)
27. Sensations (98)
28. Sounds and sound symbolism (onomatopoea) (254)
29. Grammatical words (258)

(See sub semantic domains in the Appendix 1)

This work attempts to document in an understandable and useful form the general range of dialectal variation in phonology and vocabulary. Each entry includes the phonemic form of the Khmu word of *ls*, which is phonologically conservative, followed by the phonetic transcription in brackets. Then the part of speech is given, followed by its English gloss, as well as the Lao, Thai, Vietnamese, and Chinese glosses in the national languages of the countries where Khmu is spoken. Each item is separated from the other by a semicolon ‘;’ and followed by the word in *vt*, *cl*, *lk*, *tw*, *ct*, and *lb* dialects, respectively. For clarification of some entries, such as verbs or grammatical words, example phrases or sentences are given.

kma? [kəma?] *n.* rain; ฝົມ; 雨; ฝน. **vt:** kma? [kəma?]; **cl:** kma? [kəmə́?]; **lk:** kma? [kəma?]; **tw:** kma? [kəma?]; **ct:** kma? [kəmə́?]; **lb:** k^hma? [k^himá?].

kma? brɔːj [kəma? brɔːj] *n.* showering; ฝົມໂຮຍ, ฝົມຜ່ອຍ; mưa lát phát; 阵雨; ฝนตกปรอยๆ. **vt:** kma? muj ɲe? [kəma? muj ɲé?]; **cl:** kma? brɔːj [kəmə́? brɔːj]; **lk:** kma? prɔːj [kəma? prɔːj]; **tw:** kma? prəːj [kəma? prəːj]; **ct:** kma? prəːj [kəma? prəːj]; **lb:** k^hma? p^hrəːj [k^himá? p^hrêːj].

kma? brɔŋ [kəma? brɔŋ] *n.* pouring; ฝົມຕົກໜັກ, ฝົມຕົກແຮງ, ฝົມຕົກຢູ່ຕະລອດ; mưa to, mưa xối xả, mưa như trút; 倾盆大雨; ฝนตกหนัก. **vt:** kma? brɔŋ [kəma? brɔŋ]; **cl:** kma? brɔŋ [kəmə́? brɔŋ]; **lk:** kma? prɔŋ [kəma? prɔŋ]; **tw:** kma? prɔŋ [kəma? prɔŋ]; **ct:** kma? prɔŋ [kəma? prɔŋ]; **lb:** k^hma? p^hbrɔŋ [k^himá? p^hbrɔŋ].

Pictures of Khmu people and their daily life in different countries as well as maps are provided whereas in Part I, pictures of baskets and tools, an index of Khmu words alphabetically arranged, and an English finder list are also provided in Part II.

Apart from the thesaurus, a lexicon of the major Khmu dialects spoken in each of the four countries where Khmu people live is included using alphabetical order in the dictionary format so as to be convenient for further language development including orthography and literature development (the writing of oral tradition).

For the main body of these Khmu dictionaries, an example presented is given from the *Dictionary of Khmu in Vietnam*. The arrangement of the entries follows the consonant order of alphabet. The consonant sounds that do not exist in English ʔ , ʔj , ʰj , j , ʰl , ʔm , ʰm , ʔn , ʰn , j , ʰj , ŋ , ʰŋ and ʰw are inserted next to the related English sounds. Aspirated stops follow the unaspirated stops, that is c^{h} follows c , k^{h} follows k , p^{h} follows p and t^{h} follows t . Consonant clusters follow the basic consonant alphabetical order of the initial stops such as k , kl , kr , and kw

2.1 Alphabetical order of consonants

ʔ	k	ʰŋ
b	k^{h}	ŋ
c	l	ʰŋ
c^{h}	ʰl	p
d	m	p^{h}
f	ʔm	r
g	ʰm	ʰr
h	n	s
j	ʔn	t
ʔj	ʰn	t^{h}
ʰj	j	w
ʃ	ʔj	ʰw

The alphabetical order of vowels is arranged according to the vowel position, with front vowels i , e , ɛ (high, mid and low) followed by central vowels i , ə , ʌ , a and back vowels u , o , ɔ , respectively. The diphthongs iə , iə , uə then follow the single vowels. For each vowel, the long vowel follows the short vowel, for example i : follows i .

2.2 Alphabetical order of vowels

i	$\text{i}:$	u	$\text{u}:$
e	$\text{e}:$	o	$\text{o}:$
ɛ	$\text{ɛ}:$	ɔ	$\text{ɔ}:$
i	$\text{i}:$	iə	
ə	$\text{ə}:$	iə	
	$\text{ʌ}:$	uə	
a	$\text{a}:$		

See *The Thesaurus and Dictionary Series of Khmu Dialects in Southeast Asia*. Mon-Khmer Studies-Mahidol University Special Publication No. 1, Bangkok 2002.

Volume 1. *Thesaurus of Khmu Dialects in Southeast Asia*

Volume 2. *Dictionary of Khmu in China*

Volume 3. *Dictionary of Khmu in Laos*

Volume 4. *Dictionary of Khmu in Vietnam*

Volume 5. *Dictionary of Khmu in Thailand*

m

mbir [ʔəmbir] v. moving (leaves) because of the wind; ផ្លាស់លាស់ (សំបកឈើ); bay xào xào.
mbəʔ [ʔəmbəʔ] v. stop bleeding, staunch bleeding; កំណើត (ដំបៅឈើឈាម); cầm máu.
mpəc [ʔəmpəc] n. kind of bee; អ៊ែរណូម៉ា; tổ ong.
mì cɨp [mì: tɨp] n. monosodium glutamate; អ៊ែរ៉ា; mì chính. *T*
mit [mi:t] n. knife; dao; 刀. *T*
mit^hnam [mi:t^hnam] n. big knife; dao ថ្មោល/dao ធំ; 刀 厚. *TK*
mit^sjeʔ [mi:t^sjeʔ] n. small knife with pointed tip; dao ត្រី. *TK*
mit^th'e: [mi:t^th'e:] n. razor; 剃刀; 刀 剃. *TT*
mec [mec] v. hear, feel; ឆ្លើយ, ឺត; cảm thấy, cảm nhận. v: mec củ?
mec ʔis [mec ʔis] v(s). hear the thunder sound; ឆ្លើយ/ឆ្លើយ/ឆ្លើយ; nghe tiếng. v: ʔi? mec km^hmu? rət ʔis.
mec ʔam rə: [mec ʔam rə:] v(s). hear in the distance; ឆ្លើយ/ឆ្លើយ; nghe vắng vắng.
mec klin [mec klin] vp. sense, perceive scent; ឆ្លើយ; nghe mùi.
met [met] v. grope in water; វាវាវា; lặn mò. v: met sək k^hriəp.
met ʔom [met ʔom] v. dive; វាវាវា; ngụp, lặn.
pnmet [pənmət] v. dip; ចុះ, nhúng.
me: [me:] *pro.* you (male); អ្នក (មុខ); anh (đại từ nhân xưng số ít).
me:p [me:p] v. crouch, prostrate oneself; រាប; phủ phục.
me: zɨŋ [me: zɨŋ] n. emblic myrobalan; ឈើ ឈើ; me rừng (Euphorbiaceae). *V*
me:n₁ [me:n] n. kind of trap; គុក/គុក/គុក; គុក; một loại bẫy.
me:n₂ [me:n] *qv.* correct; ត្រឹម, đúng.
me:w [me:w] n. cat; ឃា; mèo.
me:w hiəŋ [me:w hiəŋ] n. black cat; ឃា ខ្មៅ; mèo đen, mèo mun.
me:w^hja:ŋ [me:w^hja:ŋ] n. female cat;

ឃា ភ្នែកខ្មៅ; mèo cái.
me:w klək [me:w klək] white cat; ឃា ខ្មៅ; mèo trắng.
me:w^hnam [me:w^hnam] n. big cat; ឃា ធំ; mèo to.
me:w ɣa:c [me:w ɣa:c] n. striped or spotted cat; ឃា ខ្មៅ, ឃា ខ្មៅ; mèo khoang, mèo đốm.
me:w ɣa:c [me:w ɣa:c] n. striped or spotted cat; ឃា ខ្មៅ, ឃា ខ្មៅ; mèo khoang, mèo đốm.
me:w toh [me:w toh] n. male cat; ឃា កណ្ត; mèo đực.
me:w wək [me:w wək] n. cat with spots in the eyes; ឃា ភ្នែក/ឃា ភ្នែក; mèo đốm mắt.
mik₁ [mik] v. not feel like to, reluctant; ឃា ឃា (ឃា ឃា, ឃា), ឃា; không muốn.
mik₂ [mik] *qv.* abstain, dread (to do something); ឃា ឃា; ឃា. v: nja? ʔoʔ jəh la? mo:ŋ go:n ʔoʔ^hloŋ ɣə:ʔ, ʔə:ʔ ʔam baj jəh. mic ski: ʔam baj jəh mik ʔoʔ deʔ rəm ʔoʔ deʔ.
mit [mit] v. take something along; ឃា ឃា (ឃា ឃា); đem theo, đem theo người.
mit mah [mit mah] v(s). wrap up rice and bring to eat; ឃា ឃា ឃា; gói cơm đi ăn.
mì: [mì:] n. *me.* day; ថ្ងៃ; ngày.
mì ɣə: məʔ [mì: ɣə: məʔ] *q.* which day; ថ្ងៃ ណា; ngày nào.
mì: sɔ:gi: [mì: sɔ:gi:] *me.* today; ថ្ងៃ ថ្ងៃ; hôm nay.
məʔ [məʔ] *q.* who; តើ; ai (ai đến đây vậy). v: məʔ rət.
məʔ hak jəh ɣə: de: [məʔ hak jəh ɣə: de:] *x.* go one's own way; ឃា ឃា ឃា ឃា; mỗi người mỗi ngã.
məh₁ [məh] *q.* where; ឃា; ở đâu (đi đâu, đi đâu về, đi ở đâu). v: bə: ci jəh məh.
məh₂ [məh] v. correct, be; ត្រឹម (ឃា); đúng, phải.
mə:c [mə:c] v. crawl; រាប; bò.
mə:c ɣa: [mə:c ɣa:] vp. climb; ឃា, ឃា; trèo.
mə:c jəh [mə:c jəh] vp. creep (old people);

4. Research benefits

- *Benefits for the academics*

- ① This research provides a unified picture of the Khmu language and speakers of Khmu.
- ② This research helps to understand from the varieties of Khmu they speak the migratory movement of the Khmu people from their original homeland to Thailand.
- ③ Contacts with and influences from the neighboring languages such as Tai languages and national languages of Thailand, Vietnam, China and Laos explain well the differentiation of Khmu in the different countries of the Southeast Asian region.
- ④ This research can facilitate an understanding of how a group of Khmu people in one location speak or act the way they do and how their speech and customs are related to the Khmu in other locations.
- ⑤ As another benefit this research provides a basis for further studies on how ethnic minorities can maintain their language, culture, and ethnic identity in mainland Southeast Asia, one of the most complex and diverse areas of linguistic and ethnicity in the world. In case of the Khmu people, with appropriate adaptation, their language, culture and ethnic identity can be maintained.
- ⑥ The trends of tonogenesis in Southeast Asian languages can be clearly seen by looking at the different prosodic features found in different Khmu dialects. This research records how innovations have come about in Southeast Asian languages, such as tone development in languages of Southeast Asia and China, by looking at the prosodic characteristics of Khmu in all areas.
- ⑦ In addition this research has presented a research methodology for ethnolinguistic groups in Southeast Asia including field linguistic techniques, techniques for filing and computerizing data, and a format for presentation of research results.
- ⑧ As part of a continuous study of an ethnolinguistic group, this research brings an understanding and insights regarding the language, culture, and society of the Khmu people.
- ⑨ This research provides detailed and comprehensive lexical material that is a major contribution to mainland Southeast Asian linguistics as well as to the academic community of historical comparative linguists, semanticists, lexicographers, ethnographers, anthropologists, and dialectologists.
- ⑩ This research shows that networking between linguists, local academics, native speakers, etc. is essential to the success of field data collection, analysis, presentation, and also publication. At the same time it will have a wide application for the benefit of the Khmu themselves and also for linguistic study in each countries.

- *Direct benefits for the Khmu*

- ① With the thesaurus and dictionaries, the Khmu have a written record of their oral language. A physical document will help preserve Khmu language as well as promote public awareness and understanding through dissemination.
- ② These resources contribute to the Khmu people's pride in their language and culture and to their sense of personal dignity as members of their respective countries.
- ③ As a source of pride for the Khmu and information about the Khmu for academics, the planning, development and implementation of community projects will be facilitated by this research.
- ④ This research is a basis for further applied work such as community development projects for the betterment of the people's quality of life, bilingual education for Khmu children, etc. It provides a basis of information for the Khmu to create school curricula and social programs for their local communities.

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APPENDIX 1

Semantic domains in the Khmu Thesaurus

1. *Geographical features, natural phenomena* (432)
 - 1.1 Sky (weather phenomena) (96)
 - 1.2 Forest and mountain (76)
 - 1.3 Water and water sources (71)
 - 1.4 Soil and minerals (46)
 - 1.5 Fire (77)
 - 1.6 Human interaction with the natural world (66)
2. *Flora, parts, and relationship with human beings* (546)
 - 2.1 Parts of plants and verbs or states associated with plants (148)
 - 2.2 Names of plants (77)
 - 2.3 Names of flowers (15)
 - 2.4 Fruits (45)
 - 2.5 Vegetables (50)
 - 2.6 Herbs and spices (30)
 - 2.7 Cereals (14)
 - 2.8 Mushrooms (13)
 - 2.9 Bamboo (35)
 - 2.10 Weeds (19)
3. *Fauna, parts, actions and relationship with human beings* (871)
 - 3.1 Domestic animals and wild animals (128)
 - 3.2 Fowls (84)
 - 3.3 Insects and spiders (99)
 - 3.4 Reptiles (67)
 - 3.5 Fish and amphibians (66)
 - 3.6 Parts of animals (197)
 - 3.7 Verbs associated with animals (102)
 - 3.8 Utensils and words associated with animals (45)
 - 3.9 Human beings' actions toward animals (83)
4. *Agriculture, trapping, fishing, and tools* (247)
 - 4.1 Agriculture and tools (122)
 - 4.2 Traps and tools (87)
 - 4.3 Fishing and tools (38)
5. *Rice* (93)
6. *Food* (382)
 - 6.1 Food (80)
 - 6.2 Methods of cooking and preparing food and eating (65)
 - 6.3 Wine (44)
 - 6.4 Drugs and smoking (39)
 - 6.5 Chewing betel (19)
 - 6.6 Verbs associated with eating (61)
 - 6.7 Kitchen utensils (74)
7. *Houses, utensils, and useful articles* (299)
 - 7.1 House and their parts (95)
 - 7.2 Basketry (35)
 - 7.3 Utensils and things in daily life (70)
 - 7.4 Tools (99)
8. *Human body adornments* (207)
 - 8.1 Ornaments (23)
 - 8.2 Clothing (63)
 - 8.3 Verbs associated with wearing apparel (60)
 - 8.4 Body-care and clothes-making (61)
9. *Human body* (333)
 - 9.1 Head and face (39)
 - 9.2 Eye, ear, throat and nose (50)
 - 9.3 Mouth and teeth (51)
 - 9.4 Body (48)

- 9.5 Limbs and bones (77)
- 9.6 Skin (29)
- 9.7 Blood and bodily excretions (39)
- 10. *Life cycle, drug and sickness* (391)
 - 10.1 Life cycle (83)
 - 10.2 Diseases, sickness, and symptoms of diseases (65)
 - 10.2a Diseases of head and face (18)
 - 10.2b Diseases of eyes, ear, throat and nose (37)
 - 10.2c Diseases of mouth and teeth (13)
 - 10.2d Skin diseases (44)
 - 10.2e Diseases of muscles and bones (19)
 - 10.2f Diseases of lungs and heart (19)
 - 10.2g Diseases of stomach and digestive system (40)
 - 10.3 Treatments and medications for diseases (53)
- 11. *Traditions, beliefs and ceremonies* (187)
 - 11.1 Beliefs and spirits (120)
 - 11.2 Traditions and ceremonies (67)
- 12. *Music and entertainment* (74)
- 13. *Pernoun, terms of address, and names* (264)
 - 13.1 Pronouns, terms of address, and names (13)
 - 13.2 Kinship terms (54)
 - 13.3 Administrative areas (13)
 - 13.4 People in society (ethnicity, occupation and condition) (72)
 - 13.5 People in society (characteristics and behavior) (35)
 - 13.6 People and their social interactions (77)
- 14. *Education, and communication* (202)
 - 14.1 Language, education and work (84)
 - 14.2 Money (68)
 - 14.3 Transportation (50)
- 15. *Directions and places* (75)
- 16. *Time* (125)
 - 16.1 Day, month and year (60)
 - 16.2 Time divisions of the day (65)
- 17. *Actions associated with mouth* (162)
 - 17.1 Speak and call (94)
 - 17.2 Laugh and cry (23)
 - 17.3 Suck, spit, yawn, etc. (32)
 - 17.4 Bite (13)
- 18. *Actions associated with head, face and body* (76)
- 19. *Sitting and sleeping* (104)
- 20. *Actions associated with hand* (564)
 - 20.1 Hand movements and hand-arm actions (56)
 - 20.2 Hand actions such as drawing, writing, painting, applying, etc. (31)
 - 20.3 Hand actions such as taking, touching, stroking, scratching, etc. (37)
 - 20.4 Hand actions such as placing, putting, piling, etc. (35)
 - 20.5 Hand actions such as tying, wrapping, rolling, pleating, etc. (32)
 - 20.6 Hand actions such as stirring, shaking, waving, etc. (19)
 - 20.7 Hand actions such as scooping, sweeping, washing, etc. (9)
 - 20.8 Hand actions such as pressing, squeezing, pinching, etc. (13)
 - 20.9 Hand actions such as hitting, beating, etc. (28)
 - 20.10 Hand actions such as pouring, dropping, etc. (51)
 - 20.11 Hand actions such as pulling, dragging, etc. (31)
 - 20.12 Hand actions such as pushing, throwing, etc. (35)
 - 20.13 Hand actions such as tearing, peeling, breaking, etc. (36)
 - 20.14 Hand actions such as cutting, splitting, slicing, etc. (76)
- 21. *Actions associated with leg* (266)
 - 21.1 Actions associated with foot and leg without moving away (31)
 - 21.2 Actions of foot and leg moving away (52)
 - 21.3 Actions such as falling, stumbling, turning, flowing, splashing, etc. (68)
 - 21.4 Actions such as walking, going, returning, etc. (115)

- 22. *General actions or states of being or changing* (112)
 - 22.1 Exist, stay, alive, lost, etc. (36)
 - 22.2 Enter, leave, go out, go through, etc. (20)
 - 22.3 Tear, torn, pull, fall, lose, etc. (39)
 - 22.4 Open, turn up, release, etc. (34)
 - 22.5 Close, obstruct, cover, fold, etc. (39)
- 23. *Carrying* (48)
- 24. *Color, shape, size and appearance* (321)
 - 24.1 Color (50)
 - 24.2 Shapes and states of non-animate things (106)
 - 24.3 Shapes and characteristics of animate things (119)
 - 24.4 Abnormal physical states (46)
- 25. *Quantities and Numbers* (97)
 - 25.1 Numerals and ordinal numbers (38)
 - 25.2 Quantifiers and measurements (59)
- 26. *Mental activities, states, and emotions* (140)
 - 26.1 Think, remember, understand, decide, believe, determine, etc. (43)
 - 26.2 Pleased, angry, disappointed, frightened, shy, worried, etc. (97)
- 27. *Sensations* (98)
 - 27.1 Seeing (37)
 - 27.2 Listening (17)
 - 27.3 Smelling (23)
 - 27.4 Tasting (21)
- 28. *Sound and sound symbolism (onomatopoeia)* (204)
- 29. *Grammatical words* (208)
 - 29.1 Question words (16)
 - 29.2 Negative words (28)
 - 29.3 Exclamatives, initial and final particles (10)
 - 29.4 Demonstratives (25)
 - 29.5 Preverbs and postverbs (58)
 - 29.6 Prepositions (6)
 - 29.7 Conjunctions (10)
 - 29.8 Classifiers (55)

The data from different Khmu varieties belonging to different semantic domains are presented in understandable and useful from the general range of dialectal variation in phonology and vocabulary.

APPENDIX 2

The Khmu have normally settled in the same areas as various Tai speaking groups. For example, the majority of the Khmu in Thailand live in the same area as the northern Thai speakers. In Laos, the Khmu live among the Tai Lue, Tai Daeng, Phuen and Lao people. The Khmu in Vietnam live in the same area as the Tai Dam and Tai Siang. The Khmu in China live with the Tai Lue. The Khmu and the Tai, therefore, have exerted a lot of linguistic and cultural influences on each other. The Khmu have been influenced by the Tai culture in many aspects, such as styles of dress and housing. The Khmu women normally dress themselves similarly to the Tai women who live in the same area. The outside structure of their houses looks similar, although the use and function of various parts of the house may be different. Khmu people in all countries can normally speak the Tai varieties of the area. On the other hand, the Tai and other small ethnic groups in some areas can also speak some Khmu. Inter-marriage occurs among these groups. Apart from Tai languages, the Khmu can also speak the national language of the country in which they have settled. Because of the close contacts between Khmu and Tai and between Khmu and the national languages, the Khmu language reflects the influences of Tai and the national languages, especially in the lexicon and certain phonological and grammatical patterns. As for the life style, in general, the Khmu still maintain their Khmuness. Khmu people in all areas still maintain the hand-tying ceremony for good fortune, spirit sacrificing ceremonies for healing sick people, jar wine drinking, bronze drum beating, traditional singing Khmu *tá:m*, and telling folktales and stories.



APPENDIX 3

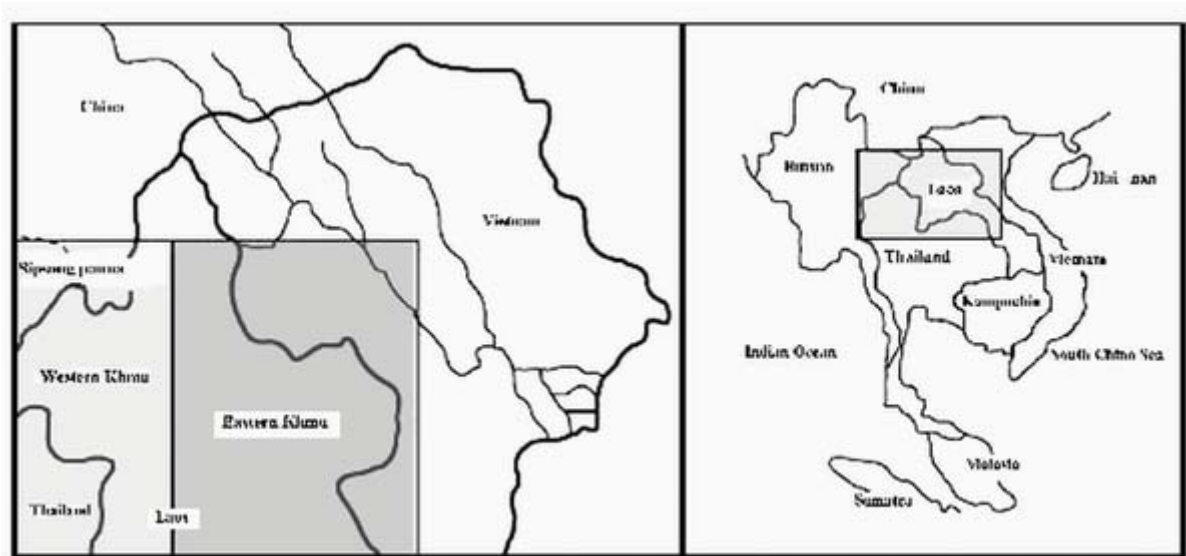


Figure 1. Maps show the Khmu speaking area including the Western and Eastern Khmu area.

Initial consonants

The Western dialects have 22 initial consonants, whereas the Eastern dialects all have the same set of 36 initial consonants. The difference between the two sets of initial consonants is related to the suprasegmental system of the Western Khmu dialects.

A: Western Khmu consonant phonemes

p	t	c	k	ʔ
p ^h	t ^h	c ^h	k ^h	
(f)*	s			h
m	n	ɲ	ŋ	
ʔm/ʔb	ʔn/ʔd			
	l			
	r			
w		j		

B: Eastern Khmu consonant phonemes

p	t	c	k	ʔ
p ^h	t ^h	c ^h	k ^h	
b	d	ʃ	g	
(f)*	s			h
m	n	ɲ	ŋ	
^h m	^h n	^h ɲ	^h ŋ	
ʔm	ʔn	ʔɲ		
	l			
	h _l			
	r			
	h _r			
w		j		
^h w		^h j		
		ʔj		

*f is a borrowed phoneme from Tai-Lao or Vietnamese

APPENDIX 4

Khmu dialects reflect different stages of tonogenesis. As a language Khmu shows different stages of tone development, from the conservative to the innovative stage. The eastern Khmu dialects represent the conservative stage. It has the voiced/voiceless distinction in the syllable-initial consonants. The development of tones in western Khmu originated when the voiced/voiceless contrast in the consonantal system in eastern Khmu broke down and the languages were forced to exploit prosodic differences for contrastive purposes.

Table 1. Words with an initial stop.

English gloss	<i>ls, vt, cl</i> Voicing contrast	<i>lk, tw</i> Register contrast	<i>lb</i> Tone contrast with asp.initial	<i>ct</i> Tone contrast
‘rice vine’	bu:c [bu:c]	pu:c [pɯ:c]	p ^h u:c [p ^h ù:c]	pu:c [pù:c]
‘to take off clothes’	pu:c [pu:c]	pú:c [pû:c]	pú:c [pú:c]	pu:c [pû:c]
‘to cut down a tree’	bok [bók]	pok [pɔk]	p ^h ok [p ^h òk]	pok [pòk]
‘to take a bite’	pok [pók]	pók [pók]	pók [pók]	pók [pók]
‘to chew’	bu:m [bu:m]	pu:m [pɯ:m]	p ^h u:m [p ^h ù:m]	pu:m [pù:m]
‘to fart’	pu:m [pu:m]	pú:m [pû:m]	pú:m [pú:m]	pu:m [pû:m]
‘to weigh’	ɟaŋ [jáŋ]	caŋ [cəŋ]	c ^h aŋ [c ^h àŋ]	caŋ [càŋ]
‘astringent’	caŋ [cáŋ]	cáŋ [câŋ]	cáŋ [cáŋ]	caŋ [câŋ]
‘eagle’	gla:ŋ [gla:ŋ]	kla:ŋ [kla:ŋ]	k ^h la:ŋ [k ^h là:ŋ]	kla:ŋ [klà:ŋ]
‘stone’	kla:ŋ [gla:ŋ]	klá:ŋ [klâ:ŋ]	klá:ŋ [klá:ŋ]	klá:ŋ [klâ:ŋ]

Table 2. Words with syllable-initial sonorant.

English gloss	<i>ls, vt, cl</i> Voicing contrast	<i>lk, tw</i> Register contrast	<i>ct, lb</i> Tone contrast
‘to fear’	ŋɔʔ [ŋɔʔ]	ŋɔʔ [ŋɔʔ]	ŋɔʔ [ŋɔʔ]
‘paddy rice’	^h ŋɔʔ [^h ŋɔʔ]	ŋɔ́ʔ [ŋɔ́ʔ]	ŋɔ́ʔ [ŋɔ́ʔ]
‘to chase’	waʔ [waʔ]	waʔ [wəʔ]	waʔ [wàʔ]
‘monkey’	^h waʔ [^h waʔ]	wáʔ [wáʔ]	wáʔ [wáʔ]
‘flower’	ra:ŋ [ra:ŋ]	ra:ŋ [rə:ŋ]	ra:ŋ [rà:ŋ]
‘tooth’	^h ra:ŋ [^h ra:ŋ]	rá:ŋ [rá:ŋ]	rá:ŋ [rá:ŋ]

APPENDIX 5

Cutting words in Khmu

Khmu has a rich collection of words in the “cutting” semantic domain. ‘Cutting’ refers to the action of using an instrument to open or divide something into pieces. This is a basic activity in Khmu life. This study has collected 75 cutting verbs. The meaning of each word varies in some way from the others. The differences are determined by the following four categories of semantic features.

1. Characteristics of the cutting instruments, such as size, shape
2. Characteristics of the objects being cut, size, shape, use, texture, etc.
3. Characteristics of the cutting actions, such as direction, size of action, degree of care given to making the action.
4. Purpose or result of the cutting.

Differences among words depend on the combination of the particular semantic features in a word. That are combined together in a word. Some examples of the words in the cutting semantic domain are provided below.

- bla:** [bla:] v. mince (meat or fish); *vt:* bla:[bla:]; *cl:* bla: [bla:]; *lk:* pla: [pla:]; *tw:* pla: [pla:]; *ct:* pla: [pla:]; *lb:* p^hla: [p^hla:]
- bla:k** [bla:k] v. cut pieces on hand (bamboo shoot); *vt:* bla:k [bla:k]; *cl:* bla:k [blà:k]; *lk:* pla:k [plà:k]; *tw:* pla:k [plà:k]; *ct:* pla:k [pla:k]; *lb:* p^hla:k [p^hlā:k].
- bok** [bok] v. cut large planks of wood (for building house); *vt:* bok [bok]; *cl:* bok [bók]; *lk:* pok [pók]; *tw:* pok [pók]; *ct:* pok [pók]; *lb:* p^hok [p^hók].
- bət** [bət] v. cut open the skin or rind; *vt:* bət [bət]; *cl:* bət [bət]; *lk:* pət [pət]; *tw:* pət [pət]; *ct:* pət [pət]; *lb:* p^hət [p^hət].
- gləh** [gləh] v. chip off little by little (the flesh from bone); *vt:* gləh [gləh] *cl:* gləh [gléh]; *lk:* kles [klɛç]; *tw:* kləh [kləh]; *ct:* kləh [kléh].
- glah** [glah] v. split into thin pieces; *vt:* glah [glah]; *cl:* glah [gláh]; *lk:* klah [klah]; *tw:* klah [klah]; *ct:* klah [kláh]; *lb:* k^hlah [k^hlah].
- mək** [mək] v. chop into small pieces; *vt:* mək [mək]; *cl:* pla: [pla:]; *lk:* mək [mək]; *tw:* pla: [pla:], cáh cáh [təáh təáh]; *ct:* pla: [pla:]; *lb:* p^hla: [p^hla:].
- ɲe:l** [ɲe:l] v. cut or chisel surface of round objects as in carved banister; *vt:* ɲe:l [ɲe:l]; *cl:* ɲe:l [ɲe:l]; *lk:* ɲe:l [ɲe:l]; *tw:* ɲe:l [ɲe:l]; *ct:* ɲe:r [ɲe:r]; *lb:* ɲe:l [ɲe:l].
- ɲa:m** [ɲa:m] v. clear a path, cut weeds; *vt:* ɲa:m [ɲa:m]; *cl:* ɲa:m [ɲa:m]; *lk:* ɲa:m [ɲa:m]; *tw:* ɲa:m [ɲa:m]; *ct:* ɲa:m [ɲa:m]; *lb:* ɲa:m [ɲa:m].
- pliət** [pliət] v. cut into short pieces (of wood); *vt:* pliət [pliət]; *cl:* pliət [plíət]; *lk:* pliət [pliət]; *tw:* pliət [pliət]; *ct:* pliət [plíət]; *lb:* pliət [plíət].
- pəh** [pəh] v. break up little by little (by a chisel); *cl:* tɔh [tɔh]; *tw:* tɔh [tɔh]; *ct:* tɔh [tɔh]; *lb:* pés [pés].
- pɛŋ** [pɛŋ] v. cut down (a tree); *vt:* pɛ:ŋ [pɛ:ŋ]; *cl:* pɛŋ [pɛŋ]; *lk:* péŋ [pêŋ]; *tw:* péŋ [pêŋ]; *ct:* péŋ [pêŋ]; *lb:* péŋ [pêŋ].
- pɛ:r** [pɛ:r] v. slice into small pieces; *vt:* pɛ:r [pɛ:r]; *cl:* pɛ:r [pɛ:r]; *lk:* pɛ:r [pɛ:r]; *tw:* tá:l [tâ:l]; *ct:* pət pén pɛ:r [pət pên pɛ:r]; *lb:* p^hɛ:r [p^hɛ:r].
- pət** [pət] v. saw; *vt:* pət [pət]; *cl:* liə [liə]; *lk:* pát [pát]; *tw:* pát [pát]; *ct:* liə [liə]; *lb:* pát [pát].
- pa:w** [pa:w] v. plane; *vt:* pa:w [pa:w]; *cl:* le: [le:]; *lk:* t^hó: [t^hó:]; *tw:* t^hó: [t^hó:]; *ct:* t^hú:j [t^hú:j]; *lb:* pa:w [pa:w].
- p^hrɛh** [p^hrɛh] v. cut off leaves and small branches; *vt:* p^hrɛh [p^hrɛh]; *cl:* p^hrɛh [p^hrɛh]; *lk:* p^hrɛh [p^hrɛh]; *tw:* p^hrɛh [p^hrɛh], k^hrɛh [k^hrɛh]; *ct:* p^hrɛh [p^hrɛh]; *lb:* p^hrɛh [p^hrɛh].
- p^hroh** [p^hroh] v. cut open through the body; *vt:* p^hroh [p^hroh]; *cl:* p^hroh [p^hróh]; *lk:* p^hróh [p^hróh]; *tw:* p^hróh [p^hróh]; *ct:* p^hróh [p^hróh]; *lb:* p^hróh [p^hróh].

- p^ha:** [p^ha:] v. split into pieces; **vt:** p^ha: [p^ha:]; **cl:** p^ha: [p^hâ:]; **lk:** p^há: [p^hâ:]; **tw:** wah [wah]; **ct:** p^há: [p^hâ:]; **lb:** p^há: [p^hâ:]. **p^ha: pnt^hɔ:ŋ^v** [p^ha: pnt^hɔ:ŋ] v. cut in half; **cl:** p^ha: grəŋ [p^hâ: grəŋ]; **tw:** wah krəŋ [wah krəŋ]; **ct:** p^ha: k^hrəŋ [p^hâ: k^hrəŋ]
- roh** [roh] v. cut by putting sharp side of knife upward; **vt:** roh [roh]; **cl:** roh [róh]; **lk:** roh [roh]; **tw:** roh [roh]; **ct:** roh [róh]; **lb:** roh [róh].
- smbat** [simbat] v. cut downward (one time); **vt:** smbat [səmbat]; **cl:** smbat [səmbát]; **lk:** smpat [sɪmpət]; **tw:** pat [pət]; **ct:** smpat [səmpát]; **lb:** smp^hat [sɪmp^hát].
- srɔ:j** [srɔ:j] v. clip or snip the hair; **vt:** srɔ:j [srɔ:j], k^hrə:c [k^hrə:c]; **cl:** srɔ:j [srɔ:j]; **lk:** sró:j [srô:j]; **tw:** sró:j [srô:j]; **ct:** sró:j [srô:j]; **lb:** c^hrɔ:j [tɕ^hrô:j].
- sək** [sək] v. cut (nail or rope); **vt:** sək [sək]; **cl:** sək [sék]; **lk:** sék [sék]; **tw:** sék [sék]; **ct:** sék [sék]; **lb:** sék [sék].
- su:j** [su:j] v. split up small pieces of firewood; **vt:** su:j [su:j]; **cl:** t^ha:k pnsu:n [t^hâ:k pənsû:n]; **lk:** sú:j [sú:j]; **tw:** sú:j [sû:j]; **ct:** c^hrú:j [tɕ^hrû:j]; **lb:** sú:j [sú:j].
- soh** [soh] v. chop until coming off; **vt:** koh [koh]; **cl:** soh [sóh]; **lk:** sóh [sóh]; **tw:** klók [klók]; **ct:** sóh [sóh]; **lb:** sóh [sóh].
- tleh** [taləh] v. cut off (knob, lump, young branches); **vt:** tleh [taləh]; **cl:** k^hreh [k^hréh]; **lk:** tleh [taləh]; **tw:** k^hréh [k^hréh], p^hréh [p^hréh]; **ct:** t^há:k [t^hâ:k]; **lb:** tleh [taléh].
- t^hrap** [t^hrap] v. chop (the tip of a stick to be even); **vt:** t^hrap [t^hrap]; **cl:** trəp [trəp]; **lk:** t^hrâp [t^hrâp]; **tw:** tréj [tréj]; **ct:** tréj [trêj]; **lb:** t^hrâp [t^hrâp].
- t^hɛ:** [t^hɛ:] v. shave; **vt:** t^hɛ: [t^hɛ:]; **cl:** k^hu:t [k^hú:t]; **lk:** t^hé: [t^hê:]; **tw:** kú:t [kú:t]; **ct:** k^hú:t [k^hú:t]; **lb:** t^hé: [t^hé:].
- t^ha:k** [t^ha:k] v. chip off lengthwise; **vt:** t^ha:k [t^ha:k]; **cl:** t^ha:k [t^hâ:k]; **lk:** t^há:k [t^hâ:k]; **tw:** t^há:k [t^hâ:k]; **ct:** t^há:k [t^hâ:k]; **lb:** t^há:k [t^hă:k].
- wΛ:k** [wΛ:k] v. whittle to make curve; **cl:** wΛ:k [wλ:k]; **lk:** wΛ:k [wΛ:k]; **tw:** wΛ:k [wΛ:k]; **ct:** smpΛ:k [səmpΛ:k]; **lb:** wΛ:k [wλ:k].