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A Germanic–Tai Linguistic Puzzle

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Arne Østmoe

A Germanic - Tai Linguistic Puzzle

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1. THE HYPOTHESIS

The hypothesis is that the old core of Tai language has been influenced from Indo-European, most strongly from Germanic (GM).

As will be seen from other chapters this influence must also have been on Tai-Kadai, the language family to which Tai belongs.

The borrowings from Indic mostly did not occur early enough to have influenced Tai-Kadai, or even Proto-Tai.

Early and important influences on Tai-Kadai are from languages in the region, first of all Han-Chinese. Prapin Manomaivibool presented in 1975 a study containing 621 Thai words as related to Chinese. This Sino-Thai common vocabulary bristles with Indo-European stems. Tsung-tung Chang believes that Proto-Indo-European vocabulary became dominant in Old-Chinese, caused by contact with IE peoples in the third millennium B.C. It is suggested that IE-people had the leadership in the Old Chinese main language center. He presents 200 words, but claims to have registered 1500 .

A possible influence from IE on Chinese has later transferred IE word stems to Tai along with the influence Chinese had on Tai.

The reason for believing in a direct influence from GM on Tai is that Grimm's Law seems to have acted before the transfer.

Partly, however Grimm's Law also seems to have acted through the IE to Chinese transfer (as by sound changes *k-* to *h-*). This could be coincidental or from a transformation state of IE. However, this study only examines the word transfer of GM to Tai, since systems to explain the sound changes are more easy to develop for GM to Tai than for IE to Tai, or for other IE languages to Tai for that matter. The case might have been as follows:

People of Austronesian and/or Austro-Asian origin merged with Germanic people who came to their area.

This resulted in a common language which contained a Germanic word stock, transformed to the usual simplified forms of the area, with tones and without Germanic grammar.

This common language was an important part of Proto-Tai-Kadai.

The area was most probably within what today is Southern China, or perhaps farther to the north.

North of this area lived the Han-Chinese, from whose language words were adopted both before and after the common language was developed. Words adapted in those oldest periods are not normally regarded as borrowings.

2. GERMANIC/INDO-EUROPEAN

- Germanic is one of the large families in IE, and consists of 3 main branches;
- West Germanic (High and Low German, English, Dutch etc.)
 - North Germanic (West Norse: Icelandic, Norwegian, etc and East Norse: Danish, Swedish)
 - East Germanic (Gothic) (no longer a spoken language).

The oldest written Germanic is the translation of the bible to Gothic around A.D. 300. For the preceding centuries, only runic inscriptions of simple letters cut in stone exist. In addition, comparative linguistics on GM and other IE languages have generated Germanic roots.

From the beginning, one question has to be asked: Why does Tai seem to come from GM, and not from the IE roots or from other IE languages?

In this context one should keep in mind Grimm's Law:

IE to GM	IE to GM	IE to GM
p, ph - f	bh - b	b - p
t, th - q	dh - ð	d - t
k, kh - h	gh - q, g	g - k

Verner's change in Grimm's Law occurs where stress originally not was on the preceding vowel:

IE to GM

p - b	t - ð	k - q, g
-------	-------	----------

In Tai the words show up with GM consonants, for instance:

Gloss	IE	GM	Tai
fire	peur-	feur	fai
side	pag-	fak	fâak
valley	keubh-	hōp	hùp
line	deuk-	tug	thěeu

(see further chapter 4.1)

If these Tai borrowings had come from IE directly that would mean the sound changes from IE to Tai were the same as those from IE to GM and that is not probable.

Further, the large majority of the Tai words in question generally fit better to GM than to IE roots or to any other IE language branch.

There can, however, be more than one stage of influence, as for instance some older items directly from IE roots, from other IE languages or from IE via Chinese influence.

This is too complicated and time consuming to deal with here so it is chosen to stick to the tangible context of a GM to Tai influence.

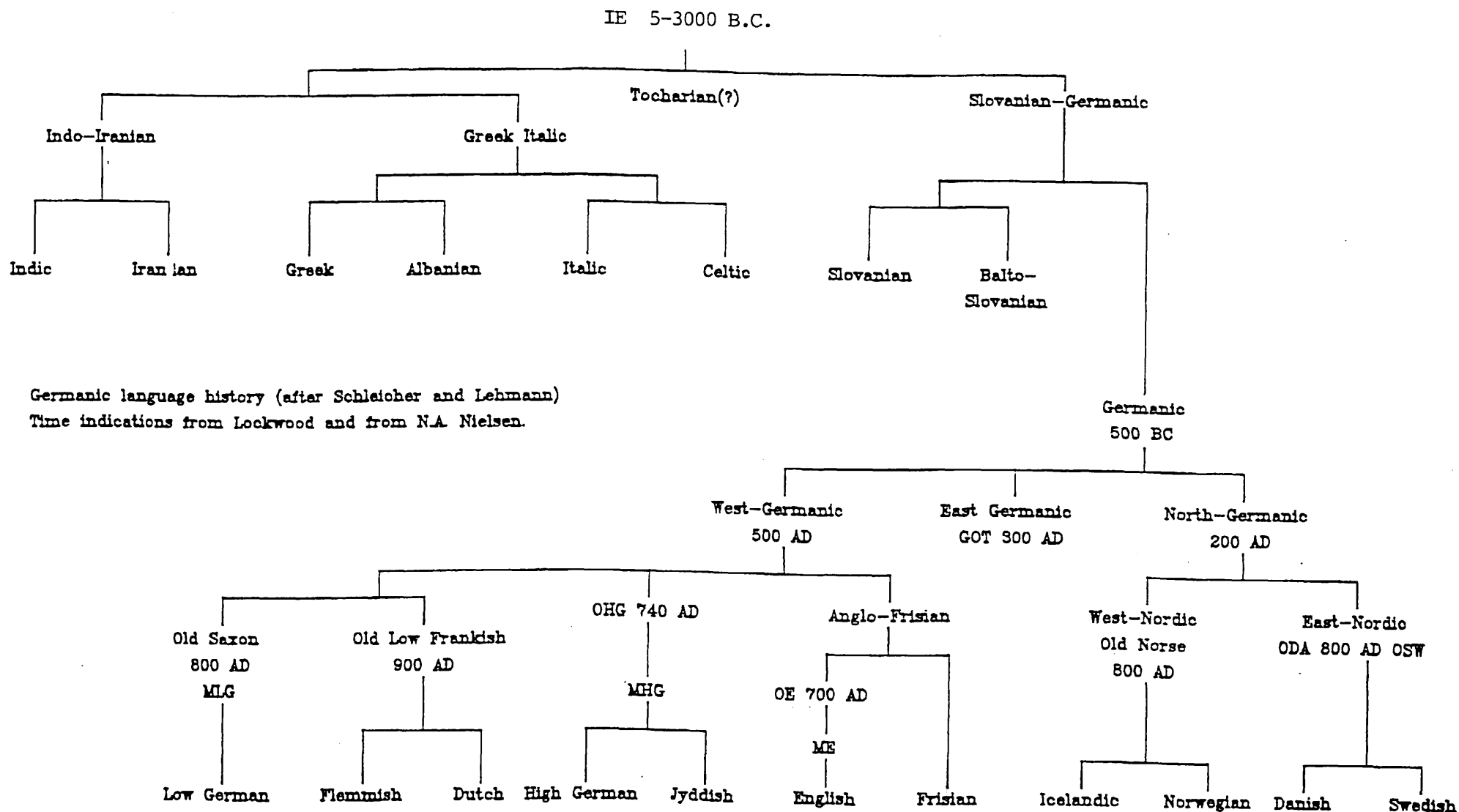
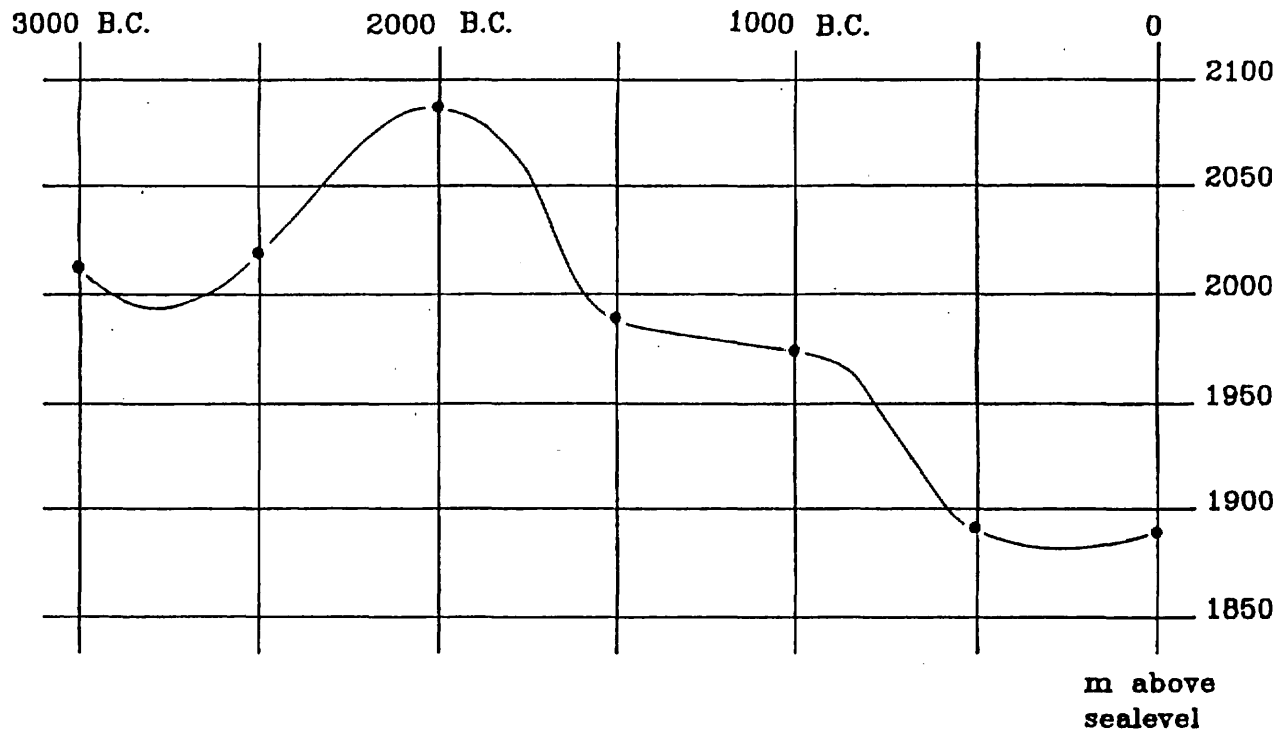


Fig 1

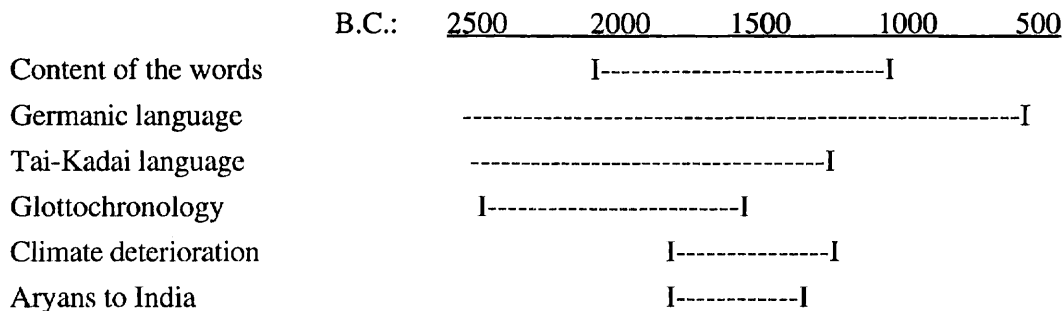
Upper tree limit variations in the Alps etc.



After Markgraf (1974), from H.H. Lamb

Fig 2

From the chart below a rational time assumption would be "within the second millenium B.C.":



Just as an example, the author will mention that at the great archaeological site of Ban Chiang in North-East Thailand, there is found pottery from 1600-700 B.C. similar to pottery from former Czechoslovakia from the time 2500 B C - 1700 B.C. (Chin You-di; page 18). In other sites (Ban Sang Da, Sakon Nakhon and Ban Waeng) is found pottery from 1600-300 B.C. similar to pottery from Romania and former Yugoslavia dated there to 3-2000 B.C. (A. J. Labbé, pages 52, 53).

In China, comprehensive archaeological investigations are being carried out. Perhaps more work on those could throw light on our subject. The most significant findings in China are the over 110 well preserved mummies of Europoid people found in Sinkiang over the last decades, revealed for the world outside China only a couple of years ago.

Let us quote the American professor Victor H. Mair of the University of Pennsylvania who is in charge of a scientific investigation of the bodies (Mair, "Bronze Age and Iron Age Caucasian Corpses of the Tarim Basin", pages 8, 9, 12-13):

Page 8:

"It is a 'two over two' diagonal twill weave, with Z-spun single ply thread, very similar to those found in Hallstatt period Europe (beginning ca. 1100 BCE and ending around 500 BCE). Thus the find from Hami roughly corresponds with the earliest twills from the Hallstatt salt mines of Germany and Austria. From what is presently understood in the history of textiles, this kind of weave is *characteristically European*. Twill weaves are common in Hallstatt period Europe but prior to that are very rare anywhere."

Page 9:

"Some of the Late Bronze Age Scandinavian 'bog' finds are also relevant to this discussion; there is an example from Gerumsberg in southern Sweden with a very sophisticated 'pointed' twill (a checkered 'goose-eye' twill design, looking like a houndstooth), with problematic dates but perhaps lying somewhere between 1800 and 1000 BCE. Although most textiles from Scandinavia from this period are of plain weave, there are few other early examples of twills, for example from Haastруп

in Denmark, dating to the Late Bronze VI Period, ca. early first millennium BCE. This sample is also like the one from Hami, i.e., a diagonal two over two twill."

Pages 12-13:

"Although they do not speak, we know exactly what the Caucasian corpses of the Tarim Basin look like because their bodies and clothes they wear have been preserved for us. Fortunately, we also know what the Tocharians looked like, because they were vividly portrayed in wall paintings at Kizil (also spelled Qizil) and Kumtura (also spelled Qumtura), Buddhist cave sites near Kucha. There we find aristocratic donors with red or blond hair parted neatly in the middle, long noses, blue or green eyes set in narrow faces, and tall slim bodies. Like European knights, they wear long broadswords inserted in scabbards hung from their waists. The swords are of early gothic type, with disk-like pommels and cross-shaped grip-guards." End of quotations from Victor H. Mair.

Dr. Tsung-tung Chang in his book "Indo-European Vocabulary in Old Chinese" writes (p. 32):

"Among Indo-European dialects, Germanic languages seem to have been mostly akin to Old Chinese in consideration of the following points:

- a. Among Indo-European dialects, Germanic preserved the largest number of cognate words also to be found in Chinese.
- b. Germanic and Chinese belong to the group of so-called *centum* languages, in which all Proto-Indo-European velars remain velars (with only a few exceptional variants in Chinese.)

The initial /h/ in Germanic corresponds mostly to /h/ and /fi/ in old Chinese. Though Germanic /h/ has hitherto been interpreted as a shift from Indo-European /k/, it must have existed already in Proto-Indo-European, since interrogatives both in Germanic and Chinese have laryngeal initials." End of quotation from Dr. Chang.

The China expert and linguist, E. G. Pulleyblank, gives some interesting information regarding Chinese conditions at that time (see Bibliography). He claims there is good historical evidence that South China and the Yangtze region were then non-Chinese in language, and was only drawn into the circle of Chinese culture during the first millennium B.C.

3. TAI/TAI-KADAI

Thai is the name of the official language of Thailand.

Tai is the name of the Tai language family (as described by Fang Kuei Li in his book).

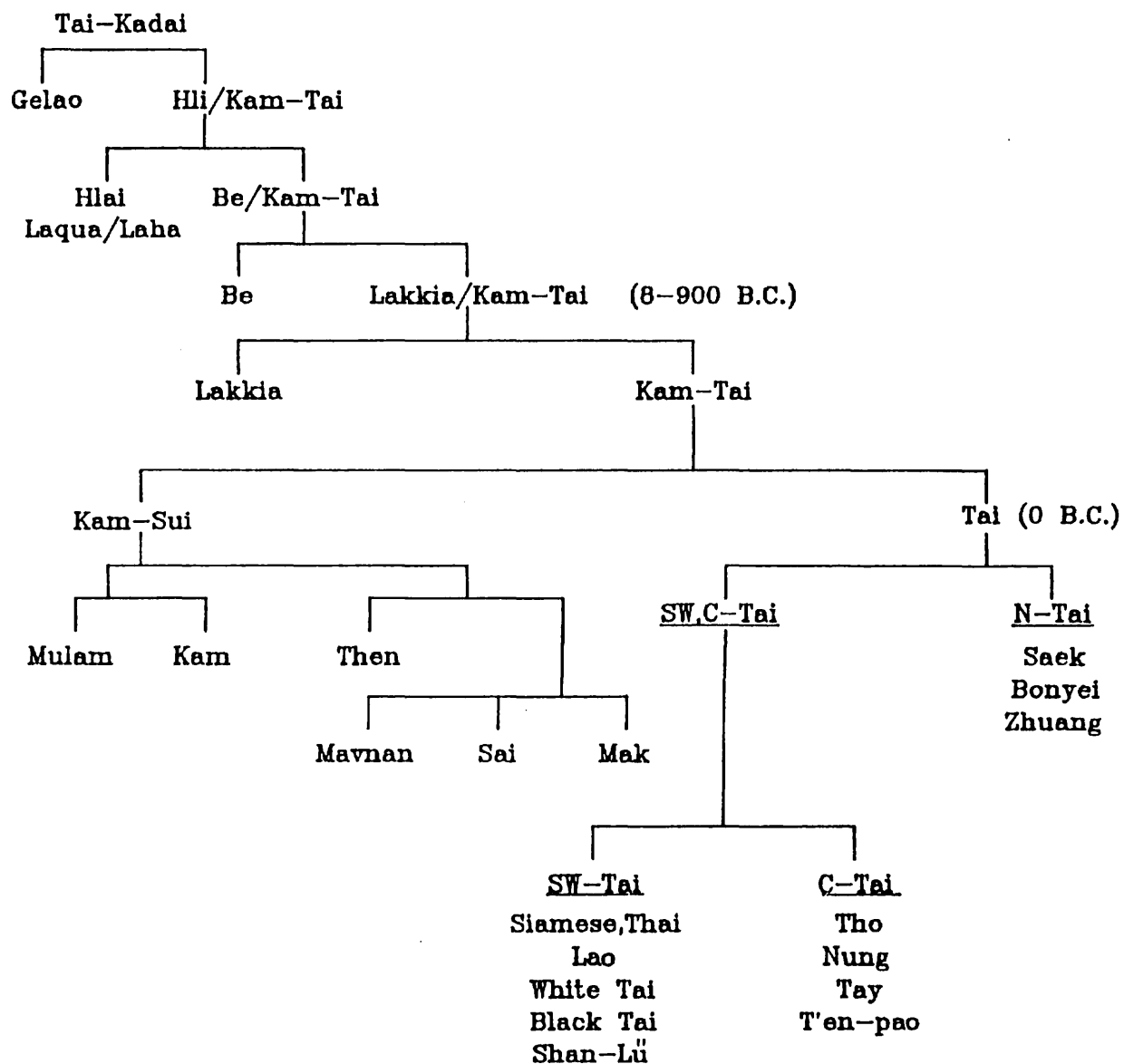
Siamese is the Tai dialect of most of Thailand, being nearly the same as Thai.

SWT are the South Western Tai dialects which comprise Siamese and Thai, Shan and many more.

Tai-Kadai is the family name of all Tai-related languages, see figs. 3 and 4.

As of today, two theories dominate regarding the parentage of Tai-Kadai (Edmondson & Solnit, page 6):

Tai-Kadai relationship

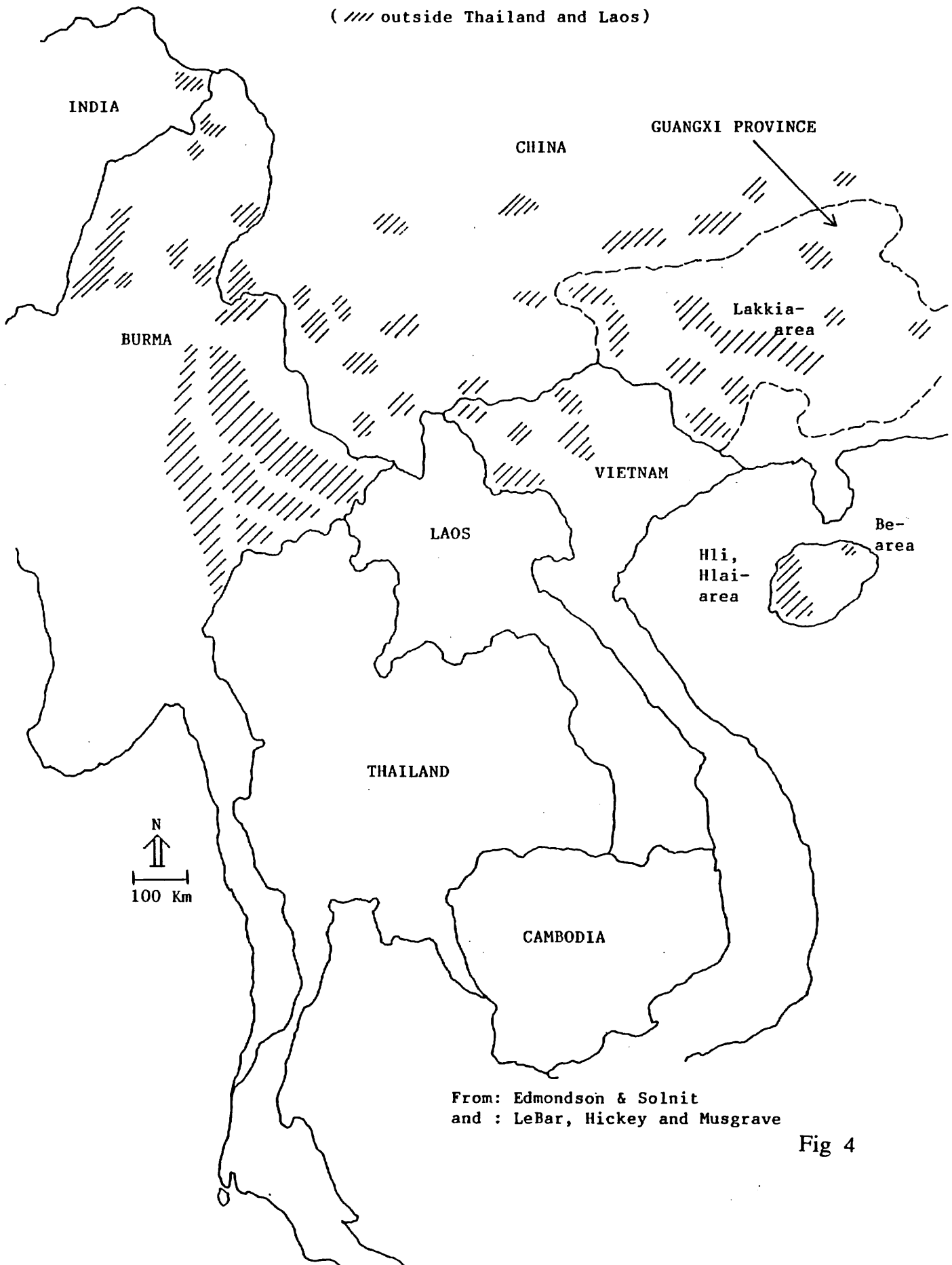


After Edmondson & Solnit
Time assumption by Dr. J. Chamberlain.

Fig 3

Tai-Kadai speaking world

(/// outside Thailand and Laos)



From: Edmondson & Solnit
and : LeBar, Hickey and Musgrave

Fig 4

Review of the two languages in the past

(Time scale uncertain)

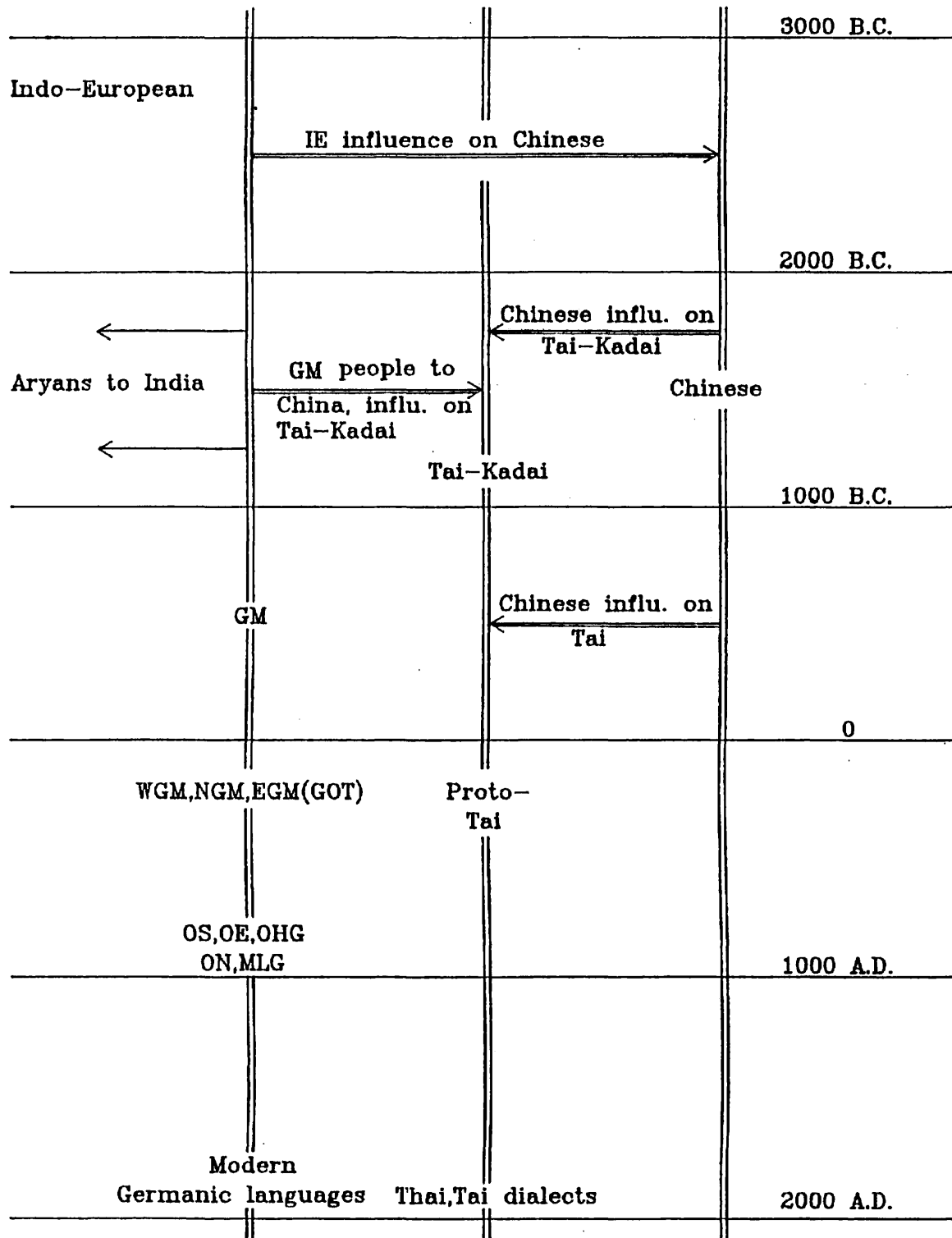


Fig 5

1. An Austro-Tai Hypothesis, which claims that Kadai, Austronesian, Miao-Yao, and recently Japanese, are all sister stocks of a higher family called Austro-Tai.
2. A Sino-Tibetan Hypothesis that Kadai and Kam-Tai constitute one group of a (Grand) Sino-Tibetan Asian Mainland family that includes, besides Kam-Tai, Sinitic, Tibeto-Burman and Miao-Yao. (This theory has more or less been abandoned by now.)

The Han Chinese languages are Sinitic. Miao-Yao is a Sino-Tibetan language used by large groups inside China. The Miao-Yao people are living more or less in the same area of China as Tai/Kadai.

In this book, the lists of similar words will be presented without dealing with where the original people of the region came from before the GM influence, or who they were. Let us quote Paul A. Benedict. He gives 4 "rules" when researching ProtoTai-Kadai (Edmondson & Solnit, *ibid.* page 324):

- "1. Do make use of the early (Chinese) loan word evidence but proceed only with extreme caution.
2. Do consider the possibility that forms/roots presenting problems if given an AT (AustroTai) etymology may in fact represent well-disguised early loans from Chinese.
3. Do seek outside help whenever possible in the assignment of proto-glosses to polysemic Kadai roots, with Austronesian in general the best bet.
4. Do keep in mind the same outside help when setting up reconstructions, even at lower levels such as ProtoTai and Proto Kam Sui."

Can GM be "an outside help"?

Let us further quote Paul K. Benedict:

"Proto-Austro-Tai (PAT), spoken along the shores of the South China Sea and extending well inland, was a nice (largely disyllabic) language with an interesting morphological apparatus of prefixes, infixes, and suffixes. It boasted a symmetrical six-vowel system (u, o, ə, a, i, e), a rich consonantal system (with both palatals and alveolo-palatals as well as postvelars), and, in all probability, a pitch-accent system. It did, however, have one big problem - location. Early on, one group of PAT speakers fell under the hegemony of the ancestral Chinese and succumbed to an ukase delivered by their new masters: reduce all your vocables to monosyllables and try to forget about your affixes. And while we're at it, let's convert your miserable tone accent to REAL tones. What's more, you won't have far to look for these; it so happens that we Chinese have a neat three-tone system and we'll give it to you. Perhaps better: we'll exchange for it; we'll spruce up your

language and in return you can send some things our way, like those beautiful bronzes that you have a way with." (Edmondson & Solnit, page 324)

As we see, the Benedict description of Proto-Austro-Tai agrees rather well with a description of Germanic, although Benedict drew another conclusion about the origin (an Eastern and Pacific origin).

The GM languages were of course also monosyllable as far as the roots are concerned. Prefixes, suffixes etc. made up the other syllables.

The best choice would have been a comparison with all Tai-Kadai languages. To a certain degree those languages can be studied thanks to the book *Comparative Kadai* by Edmondson and Solnit. It can briefly be said about the other Tai-Kadai branches that in the Sui, Kam, Lakkia and Be branches the words are clearly related to Tai. See the table below. From other information in Edmondson and Solnit, Hlai is said to be somewhat less related to Tai than are the others. The Gelao languages, placed as a separate main branch under Tai-Kadai, are even more different. A large part of Hlai vocabulary is not in PT. This might point to a sister relationship under partly other linguistic influence, as for instance Han-Chinese. (See Edmondson and Solnit page 285 and Matisoff's study in the same book).

Where can Germanic come in?

If Germanic had an influence upon ProtoTai, it clearly also had an influence upon Be/Kam-Tai. The development before that is still very uncertain. In Hlai a lot of words are similar to those in the Kam-Tai "main" branch. About Gelao nothing can be said for sure. Germanic must also have had an influence at least upon Hlai. This means GM could have been involved in the formation of ProtoTai-Kadai, instead of, or in addition to, Benedict's "Austro-Tai".

There are possibilities for an influence on Tai-Kadai from other IE languages or from the IE-base language. There might well have been more than one level of influence, as for instance an older one directly from IE roots, and a younger one from GM. Being so far back in time covered in the dark by lack of evidence it is chosen not to elaborate more on these options.

From the material it seems that the most probable influence is from GM, and from GM to Tai, not the other way.

Here it is chosen to stick to this most tangible subject: the influence which seems to have taken place from GM on Tai. The comparison of these two well-documented languages is done in a comprehensive way.

To bring in the other Tai-Kadai branches directly is not efficient. They are less well documented, and the task would have been too large at this stage.

See the table as examples of words in different languages. It seems that the influence from GM can have been on an ancestor language on Tai and on the other Tai/Kadai branches as well.

For the most, GM- Tai sound changes are quite regular. For some influences there are discrepancies. See further chapter 4.

This could have stemmed from inconsistent material, but could also have come from unknown, irregular developments over the many centuries between a possible GM influence on ProtoTai-Kadai and when the ProtoTai language was established as it appears in Fang Kuei Li's book.

Examples of words from Tai-Kadai Languages:

(Tone codes are left out here.)

E.Gloss	SWT	Sui	Kam	Lakkia	Be	Hlai	GM
rain	fon	fən	pjən	fen	pfun	fun	furs
forget	līm	laam	laam	phlem	-	līm (t)	glaum
day, sun	wan	wan	man	wan	vən	van	(dag)waz
water	nam	nam	nam	num	nam	nam	nebl
knee	khau	qu	kwaau	kou	kau	rou (t)	knef
many	laai	kuŋ	kyuŋ	loŋ	-	laai	likalik
male	chaai	-	-	kei	-	-	kerl
he,it	man	baan	paan	-	-	maan	mann
star	daau	ʔdaau	-	tau-blet	-	raau	stairno
room	suam	fum	-	tōom	-	-	timb
tooth	fan	wjan	pjan	wan	tin	fan	fang-zahn
laundry	sak	lak	sak	wak	dak	tooʔ	sak,θwah
fire	fai	vi	pui	pui	-	fei	feur
thatch	khaa	ja	ta	ja	tia	za	halm
finger nail	lep	ʔdjap	nep	pliip	-	liip	klew
excrement	khii	qi	e	kwei	kai	haai	skit
pond	thum	dam	tam	tam	-	-	stam
frog	kop	-	-	-	op	-	gop
pillar	sau	-	-	-	hou	-	saul
cook	tom	-	-	-	tom	-	toum
slow, late	saai	-	-	-	səi	-	sain

From

Edmondson and Solnit "*Comparative Kadai*":

The articles are:

- Matisoff: "Proto-Hlai Initials and Tones"
- Solnit: "The Position of Lakkia within Kadai"
- Hansell: "The Relation of Be to Tai"
- Thurgood: "Proto Kam Sui. A Reconstruction of the Six Kam-Sui languages."

4. INFLUENCES/SOUND CHANGES GM-TAI

4.1 Initial consonants

Table of Proto-Tai Initial Consonants (from Li)

	Lab- ials	Den- tals	Velars	Sibi- lants	Laryn- geals	Liquids and semivowels	
<u>Stops</u>							
Unaspirated	p-	t-	k-	č-			
Aspirated	ph-	th-	kh-	čh-			
Glottalised	ʔb-	ʔd-			ʔ-	ʔj-	ʔw ?
Voiced	b-	d-	g-	j-			
<u>Nasals</u>							
Voiced	m-	n-	ŋ-	ñ-		l-	r-
Voiceless	hm-	hn-	hŋ-	hñ-		hl-	hr-
<u>Fricatives</u>							
Voiceless	f-		x-	s-	h-		
Voiced	v-		ɣ-	z-		j-	w-

Comments on the transfer of initial consonants:

- The Tai-Kadai stage(s) between GM and PT were open to many changes.
- GM had numerous prefixes. A much-used prefix *ga-* in GM is the most frequent supposed additional sound. The meaning of *ga-* is "together with" or only "with". The prefix is also used by verbs to signify "the start and finish of an action".

In the lists *ga-* is used also where the consonant sound is supposed to have been unvoiced, while *g* usually is regarded as voiced. The reason is that the GM *g*-sound in relation to Thai in short, unstressed syllables is heard as unvoiced *kh-* (according to Banya), as *d-* and *b-* also, and the same might have been the case then.

However, in some cases what is here supposed to have been the *ga*-prefix might well have been another of the many GM-prefixes, like the unvoiced OHG *fir*, GOT *faúr*, representing a "removing, hindering, negative or destroying meaning", GOT *faúr* "in front of, by, past" or GOT *fair* "away, off".

Thus, the *ga-* that is placed in brackets might in some cases only represent a prefix more generally, and preferably one with an unvoiced initial consonant.

- The transfer being auditive, depending of pronunciation, hearing, memory and new pronunciation makes possible many mistakes and irregularities. As for instance, an unvoiced sound today, like 4,8 GM *feur, fak* might have been pronounced voiced *veur, vak*.

To make it easy to trace the words in the book of Fang Kuei Li, *A Handbook of Comparative Tai*, the words are here placed as in the group number of his book.

Patterns for change of the initial consonants:

IE	GM	Tai/Kadai	PT	Cpt. no.
p-	f-	?	f-,v-	4.7, 4.8
t-	θ-		d-	6.3
k-	h-		h-	13.2
b-	p-		ph-.p-	4.2, 4.1
d-	t-		th-,t	6.2, 6.1
g-	ki/e-		č-	9.3
	k-,sk-		k-,kh-ǰ	10.1, 10.2, 9.5
bh-	b-		b-	4.3
	[]b-		ʔb-	4.4
dh-	[]d-,θ-		ʔd-	6.4
gh-	g-		g-,k-	10.3, 10.1
	[]g-		ŋ-	10.4

The rest of the groups are in the following table.

4.2 Table of initial consonants

The table below is a table for the initial consonant sound changes but is also the table in which all the words used in this article are presented.

The GM words are mostly GM roots or else a root from the three main branches WGM, EGM or NGM or from an old GM language.

In the context of initial consonant it does not matter if a GM language is used, and not only GM roots, because the initial consonant is mostly the same in the different languages as in the GM root.

To obtain uniform etymologies one book has been the chief guide, N. Å. Nielsen 1990. Also consulted are J. Pokorny, J. de Vries, and a few others.

Parentheses () are letter/s supposed to have fallen away. Brackets [] are for letter/s supposed to have been in the word before. The notation "v" after a word in the first column indicates that it is a verb. The notation "clf." indicates a classifier.

	GM	PT	Siam.	Tone code
4.1	sp-	p		
spin v	spin	p-	pàn	B1
be sick v	speiw (vomit)		pùai	B1
4.2	p-	ph-		
split v	spalt	ph-	phàa	B1
clothing	plag		phâa	C1
4.3	b-	b-		
carry v	ber	b-	phaa	A2
elder sibl	bew (grow)		phîi	B2
blow (wind) v	blāst		phát	D2S
bunch	bunk		phuay	A2
floor	bunī		phîn	C2
4.4	[]b-	?b-		
village	[]būwan	?b-	bâan	B1
fish hook	[]bit		bèt	D1S
water recedes	[]brōk		bòk	D1S
above	óban		bon	A1
site	[]boθl		bòon	B1
blind	[]blund		bòot	D1L
4.5	m-	m-		
horse	marh	m-	maá	C2
come v	quemjan		maa	A2
he, it	man (a man)		man	A2
wife	maqwir		mia	A2
knife	mait		mîit	D2L
round	mond		mon	A2
ant	motte		mót	D2S
weevil	motte		môot	D2L
die (lose life)	murθa		môot	D2L
dark	merk		mîit	D2L
feel stiff v	meθig		miâi	B2
some	maniq		maŋ	A2

4.5.1	mw/f-	mw-		
wood	maiwið	mw-	mái	C2
hand	mundfing		m#	A2
meals,clf	mēltið		m̥i	C2
4.6	gm-	hm-		
soak v	[ga]mat	hm-	māa	B1
mark	[ga]mark		māai	A1
widow(cr)	gamak		māai	C1
doctor	gamōt		mōɔ	A1
group	[ga]mūhōn		mūu	B1
damp	[ga]mat		māat	D1L
empty	āmōtida		mōt	D1S
	sm-	hm-		
stink v	smel	hm-	měn	A1
cooking pot	smor (to steam)		mōɔ	C1
fog	smōk		mōɔk	D1L
cover v	smeuq		mōk	D1S
sad	[s]mornen		mōn	B1
4.7	f-	f-		
palm, hand	folm	f	fāa	B1
scabbard	fak		fāk	D1S
bury v	ferg		fāɲ	A1
rain	furs		fon	A1
sticky	fast		fīt	D1L
dust	fun		fùn	B1
4.8	f-	v-		
fire	feur	v	fai	A2
side	fak		fāak	D2L
teeth	fanh		fan	A2
deer	fēnaðr		faan	A2
firewood	feurwið		fīn	A2
hear v	fang (catch sound)		fāɲ	A2
scum	faim		faâ	B2
4.9	w-	w		

say v	swar	w-	waâ	B2
fan (air)	wîb		wîi	A2
discard water	wet		wît	D2S
throw water in face	wask		wák	D2S
kite	wab (float in the air)		wâau	B2
4.10	k/h/g w-	hw-		
quake v	kwik	hw-	wăi	A1
sweet	hwann (sweet plant)		wăan	A1
hope v	[ga]wenj		wăŋ	A1
	s/θw-	hw-		
swim v	swim	hw/	wâai	C1
comb	swîf		wîi	A1
sow v	sāwan		wāan	B1
slit v	θwer		wè	B1
5.2	p/br-	pl-		
spread out v	spraið	pl-	plài	B1
bark, on trees	bark		pliàk	D1L
5.3	b/pr-	pr-		
break	brek	pr-	tèek	D1L
5.4	b/pr-	phl/r-		
forehead	brag		phàak	D1L
burn v	brenw		phău	A1
split open v	spring	phr-	phèèk	D1L
5.6	[]bl-	?bl/r-		
whitish	[]blank	?bl/r-	dàaŋ	B1
flower	[]blō(s)k		dòok	D1L
moon	mēn		dian	A1
dregs of wine	[]bilaib		dîi (Lch)	B1
5.7	ml-	ml/r-		
much	mekila	ml/r-	mâak	D2L
love v	[mit]alisk		mák, ma-lák	D2S

5.8	w/fr-	fr-, vr-, vl-		
sword	swerða	f/vr-	phráa	C2
tomorrow	frodaq		phrúk	D2L
6.1	(s)t	t-		
pound v	stamp	t-	tam	A1
strike v	striik		tii	A1
foot	stal		tiin	A1
hammer in	stuk		tòok	D1L
boil v	toum (steam)		tôm	C1
collapse v	tum		tum (Lch)	B1
earth	tumf		tom	A1
tree trunk	stabn		tôn	C1
peck	tut		tòot	D1L
door	turi, dur	(prà)	tuu	A1
animals, clf.	tior,deut		tua	A1
hit v	stek		tik (Lch)	D1S
draw up v	taikn		tèŋ	B1
stop v	standis		tâan	C1
6.2	t-	th-		
line	tug	th-	thěeu	A1
cup	teuq (utility article)		thûai	C1
flood	stuwian		thûam	C1
wild	stur		thian	B1
young male animal	tik		thik	D1S
team up v	taum		thiam	A1
bars, clf.	stang		thêŋ	C1
woman, young	taus		thəə	A1
	θ-	th-		
thick	θek		thii	B1
noon	θing	th-	thiân	C1
wash v	θwah		thũu	A1
6.3	θ-	d-		
dare v	θur	d-	tháa	C2
Tai people	θegn (free man)		thai	A2
group	θeuð		thuai A2	B2

throughhout	θurh		thûa	B2
then	θeg		thâa	B2
	st-	d-		
stick n	stab	d-	tháu	C2
place	stað		thîi	B2
single	stuk		thôok	D2L
6.4	[]d-	?d-		
idle	[]dæs	?d-	daai	A1
extinguish v	[]drep		dàp	D1S
white spot	[]dílí		dèen	B1
border	[]dail		dèen	A1
tap v	[]dent		điit	D1L
smell n	[]dám		dom	A1
high land	[] deun		dɔɔn	A1
together with	gadur		dûai	C1
hot	hait		diàt	D1L
	θ-	?d-		
thread	θreð	?d-	dâai	C1
get v	moθ-tak		dâi	C1
good	θiq		dii	A1
6.5	n-	n-		
take v	nēm	n-	nam	A2
this	neh-der		núi	C2
finger	fengur		niú	C2
younger sibling	anjung		nóɔŋ	C2
soft	num		nûm	B2
meat	naut		nîá	C2
here	nēh-hēr		nîi	B2
next	nēh-wista		nâa	B2
there	nēh-θar		nân	B2
over there	nēh-obar		nóon	C2
6.6	k/gr/n	hn-		
morning	greuj	hn-	nai (Lch)	A1
pinch v	knīp		nîp	D1L

7.2	tr/l-	tl-		
full	tēm	tl-	tem	A1
get up v	trin		t̃in	B1
7.3	tr-	tr-		
eye	tar	tr-	taa	A1
die (lose life)	streuk (leave,pass)		taai	A1
7.4	θl/r-	thl-		
wait v	θul	thl-	thâa	C1
plough	arθra-		thâi	A1
7.5	t/θr-	thr-		
carry	θreif-	thr-	hiû	C1
pig trough	θrō		luu (Po-ai)	A1
stone	stein		hiñ	A1
cook v	trunk (put under water)		hũŋ	A1
see v	tar-sehwan		hẽn	A1
7.6	d/tr-	dl-		
drag v	drag	dl-	lâak	D2L
drought	draug		léεŋ	C2
wind (blow)	sturm		lom	A2
	()/sl-	dl-		
sharpen v	slip	dl-	láp	D2S
small	lēk		lék	D2S
nail	klēw		lép	D2S
lick v	slik		lia	A2
wheel	hwelwula		lôo	C2
skin v	flah		lôok	D2L
stroke v	slup		lûup	D2L
bald	flain		lâan	C2
7.7	θr-	dr-		
boat	roθra	dr-	ria	A2
7.8	t/dlr-	?dl/r-		

star	stairn	ʔdl/r-	daau	A1
sunlight	d(aq)leuhs		dɛ̃ɛt	D1L
which	h(wa)t-lik		dai	A1
bone	knuk		krà-dùuk, nook(Po-ai)	D1L
7.9	()l	nl/r		
water	nebla	nl-	nám	C2
bird	fluqla		nók	D2S
8.1	l-	l-		
leave v	lib	l-	laa	A2
grease	libar		laau (Lch)	A2
lure v	lur		lôo	B2
choose v	wellig		fiak	D2L
blood	bloð		fiât	D2L
forget v	glaum		liim	A2
alive	leb		lii (Po-ai)	C2
grounds	land		laan	A2
flaming	luq		lúk	D2S
8.2	[]l-	hl-		
late	[ga]lat	hl-	lâa	C1
below	bilēq		lâa	C1
many	likalik		lăai	A1
grandchild	anilan		lăan	A1
behind	hlenk (hip)		lăŋ	A1
close one's eyes	slap		lâp	D1S
sharpen with knife	kliob		lău	A1
play v	gaŋksam		lên	C1
incline sharply	brink		liŋ (Po-ai)	B1
mud	[ga]lōm		lòm	B1
loose	[]leum		lũam	A1
brilliant shining	glim		fiâm	C1
glance	glip		liâp	D1L
overflow	flaum		lăam	A1
shoulder	agslā[]		lài	B1
be left over	[]lib		liā	A1
lure v	[ga]lok		lòok	D1L
support v	hleun		nŭn	A1

wedge	klimp		līm	A1
8.3	r-	r-		
strength	strang	r-	ræŋ	A2
quick	rip		reu	A2
call v	skrik		riâk	D2L
join together	rum		rûam	B2
detach v	raut		rûut	D2L
fence	raho		rúa	C2
house	razn		rian	A2
hole	roub		ruu	A2
beam	ruot		rôot	D2L
building, clf.	rong,wrunh (beam)		rooŋ	A2
rim	rem		rim	A2
house	razn		ráan	C2
beam	rong,wrunh		rooŋ	A2
press v	kreist		rûit	D2L
wealthy	rik		ruai	A2
stripe	streip		riú	C2
sprinkle v	sprut		rót	D2S
bran	ham		ram	A2
know v	knaw		rúu	C2
learn v	laiz		rian	A2
8.4	[]r-	hr-		
room	uranho	hr-	hóoŋ	C1
9.1	s-	s-		
late	sain	s-	săai	A1
back of blade	sér		săn	A1
pillar	saul		său	A1
tell v	saq		sòo	B1
pronounce v	sing		săaŋ	A1
rope	sidhl		sên	C1
suck v	sup		sùup	D1L
sad	sur		sâu	C1
	θ/t-	s-		

rib n	tind		sûi	C1
you (pl.)	θu (singl)		suu	A1
garden	tūn		sŭan	A1
room	timb		sûam	C1
9.2	[]s-	z-		
sand	sand	z-	saai	A2
wash clothes	(niθ)sak		sák	D2S
who	(hwat)sīnalik		sīŋ	B2
9.3	k(i/e)	č		
cup	kaz, ker	č	čaan A1	C1
be painful v	kipp		čèp	D1S
dip into v	kim		čim	B1,C1
insipid	kiwǝ		čit	D1L
tickle v	ket		čii	C1
mirror	sk[]uwqa		čòk	D1S
stop up v	lukj		čùk	D1S
light	leuht		čùt	D1S
master	haub		čaju	C1
9.4	s()-	čh-		
I, me	selb,sjalfr	čh-	čhǎn	A1
shine	skīn		čhǎai	A1
9.5	(s)k-	ǵ-		
be so v	skeh (happen)	ǵ-	čhâi	B2
slant v	skaif		čháai	C2
veranda	skawal		čhaan	A2
artisan	skalk (servant)		čhâaŋ	B2
taste v	keim		čhim	A2
male,men	kerl		čhaai	A2
trash	skal		čhaan	A2
sore v	skamp		čhám	C2
coast	skarj		čhaai	A2
9.6	()n-	ň-		
not yet	ne-anθiqin	ň-	jaŋ	A2

mosquito	muwju[nk]		juŋ	A2
9.7	g/kr-, hr-	hñ-		
grass	gras	hñ-	jâa	C1
ridicule v	haun		jăn	A1
woman	kerlîn		jŋ	A1
9.8	g,gi-	j-		
cover v	gawon,giem		jaa	A2
take a step v	gang,gjeng		jâaŋ	B2
lift up v	habja		jɔɔ	A2
9.9	g/h/k-	ʔj-		
prohibitive	ne-eigi	ʔj-	jâa	B1
visit v	haim		jiâm C1	A1
house	hus		jâu	C1
cool	kalð		jen	A1
stay v	hjo		jùu	B1
kink	ke(n)k		jìk	D1S
want v	kerski		jàak	D1L
10.1	k-	k-		
chicken	keuk (little clump)	k-	kài	B1
hold in the hand v	kam		kam	A1
cut v	ket		kaat (Lch)	D1L
cut w. a sickle v	kerf		kiâu	B1
eat v	kefal		kin	A1
I, me	ekan		kuu	A1
shoe	skōuh		kiàk	D1L
skillful	kwik		kèŋ	B1
	g-	k-		
together	gadur	k-	kan	A1
collect v	gab, kep		kèp	D1S
branch	grinqa		kìŋ	B1
beforehand	gjez, igoor		kɔɔn	B1
frog	gop		kòp	D1S
give birth v	geut		kèət	D1L
step, walk v	gab,gaa		kâau	C1

10.2	sk/k-	kh-		
thigh	skink	kh-	khăa	A1
horn	knuf		khău	A1
muddy water	skul		khùn	B1
write v	sker (shear)		khĩan	A1
race n	skeiðgang		khèeŋ	B1
10.3	g-	g-		
choke v	gagin	g-	khéen	C2
tongs	gem		khiim	A2
think v	get		khít	D2S
odd	gert		khûi	B2
	k-	g-		
chew v	kew	g-	khiáu	C2
sickle n	knif		khiau	A2
narrow	knap		khêep	D2L
crooked	krok		koo (Lch)	A2
carry on shoulder	skulter		khooŋ	A2
10.4	[ɰ]g-	ŋ-		
fork	[ɰ]gabal	ŋ-	ŋâa	B2
easy	[ɰ]garaiði		ŋâai	B2
open mouth v	[ɰ]gap		ŋâap	D2L
beautiful	[an]genehm		ŋaam	A2
have a nap v	[ɰ]glip		ŋiip	D2L
	sk-	ŋ-		
shadow	skuw	ŋ	ŋau	A2
	nk-	ŋ-		
myth. sea monster	nikwes	ŋ-	niâk	D2L
10.5	[ɰ]ng/k-	hŋ-		
yawn v	anagiw	hŋ-	hăau, ŋaau (Lch)	A1
gum (tooth)	[an]keuk		ŋiâk	D1L
10.6	k()	x-		

knee	knew	x-	khàu	B1
hook	hōk		khǎo	A1
knot	knut		khòot	D1L
scrape off v	krot		khòot	D1L
rice	kurn (grain)		khâu	C1
excrement	skīt		khîi	C1
joint	skaut		khôo	C1
young (chicken)	keuklīn		khiaŋ	B1

10.7	g-	γ-		
dike, ricefield	garð	γ-	khan	A2
praise v	gal		kan (Lch)	B2
gird v	gerd		khâat	D2L
span betw. thumb and midl. finger	grip		khîip	D2L

	k-	γ-		
lower leg	skank	γ-	khêeŋ	B2
hammer n	kul		khóon	C2
brag v	skrut		khui	A2
	h-	γ-		
thatch grass	halm	γ-	khaa	A2
throat	hals		khoo	A2
chin	hak		khaaŋ	A2

11.1	kl-	kl-		
tube	klank (hollow obj)	kl-	klaŋ	A1
cold (water)	kalð		kat (Lch)	D1S
charcoal	kul		čoo (Po-ai)	B1

11.2	kr-	kr-		
afraid	skraum	kr-	klua	A1

11.3	k(l)-	khl		
spider	kang	khl	khjaan (Lch)	A1
herd n	klung		khlōon	A1

11.4	k(r)-	chr-		
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egg	ajja, aggja	kh-	khài	B1
ask v	askōj		khǎo	A1
scrape v	krat		khàt	D1S
11.5	gl-	gl-		
burn v	glowka	gl-	khlôok	D2L
11.6	gr-	gr-		
kitchen	grōbō (hollow in gr.)	gr-	khrua	A2
11.8	[]r	xr-		
shower	[]req	xr-	hàa	B1
ear	auzan, eyra		hǎu	A1
mountain stream	streuk		húi	C1
road	garuns		hǒn	A1
12.1	kw-	kw-		
sweep v	kwast	kw-	kwàat	D1L
12.4	qw-	ŋw-		
day	daqwaz	ŋw-	wan	A2
yesterday	daqwaz-gjez		wan kòon Æ waan	A2
12.5	()kw-	xw-		
axe	akwez	xw-	khwǎan	A1
12.6	kw-	ɣw-		
buffalo	kwikfé	ɣw-	khwaai	A2
13.1	g/k/h-	ʔ-		
open (mouth)	gap	ʔ-	ʔaa	C1
vapor	[ga]ai-ma		ʔai	A1
cough v	kik		ʔai	A1
one	eitt		ʔèt	D1S
full	kim		ʔim	B1
warm	hleu, hlyr		ʔùn	B1
other	hinn		ʔin	B1
13.2	h-	h-		

morning	unh[]twōn	h-	hat (Po-ai)	D1S
hips	hupiz		hiit (Po-ai)	D1L
valley	hōp		hùp	D1S
parade	harj (army)		hèe	B1
forbid v	hamp		hâam	C1
dry	(ar)heigētun		hêeŋ	C1
hungry	hip (longing for)		hǐu	A1
wart	huðwart		hùut	D1L

4.3 Vowels

Vowels in GM and PT are:

	GM	Not Front-rounded		Front-rounded	
		Front	Back	Front	Back
High		i		y,ü	u
		e		ö,ø	o
		æ,ä,ε			
Low			a		ɔ,ǎ,á
TAI					
High		i	ɨ		u
		e	ə		o
		ε			
Low			a		ɔ

A front-rounded vowel in GM is nearly always front-rounded in Tai and vice versa.

A final vowel in GM is usually lengthened in Tai, in combination with a dropping of the final consonant. The middle vowels e, and o, however, are not lengthened in the few cases where they occur.

In some North European languages the u and o are very high, higher than u/o in Tai. This may have had an impact on the resulting tone (see chp. 4.6).

The patterns for vowel change from GM to Tai could have been scrutinized in greater detail. According to Dr. Chamberlain, the vowels in PT do not appear to be as well mapped as the consonants. In addition there has been a vowel evaluation from Tai-Kadai to Proto-Tai. More time consuming vowel analysis is left out at this stage, also because the study so far shows a satisfactory amount of conformity at large. See below:

A large part of the words follow Fang Kuei Li, (see cpt. 14 in his book)

GM	Thai/Kadai	PT	Siamese/Thai	Occurrences
i		i̯	i, ii, ĩ	19
u		u	u, uu	18
e		e	e	6
a		a	a, aa	69
a		ɛ	ɛɛ	11
u		o	o	10
o		ɔ	ɔɔ	12

(As within the GM mainbranch there are many umlauts, regular though numerous. In our vowel study we have therefore used GM roots as the basis, and not roots identified only by an old language).

Other umlauts on vowels and diphthongs are presented below with examples:

GM	Thai	Gloss	GM	Thai/ Kadai	PT	Siamese/ Thai	Occurrences
i	ia call	noon skrik	θing			thi̯aŋ r̥i̯ak	6
i	ia	brilliant sea monster	glim nik (wes)			li̯aŋ ŋi̯ak	5
i	ua	wealthy	r̥ik			ruai	3

		room	timb		suam	
u	ua	together	rum		rûam	3
		garden	tun	ui (15.4.1)	sũan	
i	a, aa	shine	skĩn		čhăai	12
		bid farewell	lib		laa	
ai	a,aa	late	sain		săai	5
		bald	flain		lăan	
e	a, aa	gird	gerd		khâat	21
		axe	akwezi	a (14.10)	khwăan	
e	i, ii	thick	θek		thi	6
		tongs	gem	i ə(14.3.4)	khiim	
a	ia, ia	bark	bark		phliàk	6
		house	razn		rian	
eu	ua, ia	cup	teuq	uai (17.3)	thûai	5
		animals	deuz	ue (15.4)	tua	
u	ɔɔ	lure	lur		lôɔ	11
		hammer	kul		khóɔn	
a	ɔɔ	indicate	sag		sôɔ	6
		room	uranho		hóɔŋ	

4.4 Final consonant

The final consonant system in PT consists of only two series:

Nasal	-m	-n	-ŋ
Stops	-p	-t	-k

Germanic endings are softened to these, or to vowels.

The final consonant never changes to a consonant of a different class in the transfer from GM to Tai. In the cases where it does not remain it is dropped or softened.

In nearly one third of the words it is dropped, usually compensated for by a lengthened vowel. Final clusters usually lose one letter, except final *-ŋ* which is kept in Tai. *-ŋ* also includes GM *-lg*, *-lk*, *-rg*, *-rk*, *-nk*. Final *-n* and *-m* remain in many words.

The regular softenings are:

Velars and laryngeals	-k, -h, -g,	to	i
Liquids	-r, -l	to	n
Labials	-w, -v, -f, -b, -p	to	u

In addition, *-s* and *-z* change to *-n* a few times, as does *-t* once or twice (as part of a lost *-z*?). The explanation may be a stage of development in between, with *-rs*, *-rz*, *-rt*.

The spelling of *w* and *j* is according to Li. When a Tai word occurs in the list with a final *u*, the reader should keep in mind that the *u* is a semi-vowel in Thai, written as a consonant ("w") but pronounced as an *u* in final position.

When a Tai word occurs with a final *i*, this is also a semi-vowel, written as *-j* in Thai. When forming part of a diphthong in Tai, the position of final *-i* in the list will depend of the preceding vowel length.

4.5 Tones

It is assumed that tones were taken up in Tai in stages over some hundreds of years, mainly in the first millenium B.C. But one does not know this for sure and when it took place. In Old Chinese tones were unknown. Chinese tones are first mentioned in the 5th century A. D. by Shen Yüeh (441-513) (Tsung-tung Chang, p. 3).

All the Tai/Kadai languages, supposed to have separated by 8-900 B. C., today have tones (Lakkia, Kam-Tai, Kam-Sui etc.)

The use of tones in Tai/Kadai might have started in the second millenium B.C.

Speaking of tone classification, one must be aware of whether the tones under discussion are the tones in Thai, in another Tai dialect, or the tones of Proto-Tai (PT). The different Tai tone systems are, however, connected as the Proto-Tai tone code shows. The most important thing to note is that the PT tone system is fixed, but the actual tones differ from dialect to dialect. There is also not the same number of tones in all dialects. Thai has five (4 + even), but there are dialects with as many as nine tones.

The PT tone code consists of a number, 1 or 2, and a character, A, B, C or D (e.g., A1, B2, C1, ...). The initial consonant determines the tone code 1 or 2: Voiceless initial consonant gives 1, and voiced gives 2.

The Proto-Tai Tone Code (chart) adapted from F K Li:

	Initial consonant		Vowel length
	<u>Voiceless</u> : p t k h hm hl hr hn f kh č čh ph s th x ?	<u>Voiced</u> : b d g ǰ j l m n ŋ ñ r v w z ʁ	
even	A1	A2	
low (˘)	B1, DIS		short
	B1, DIL		long
falling (^)	C1	B2	short
	C1	B2, D2L	long
high (ˊ)		C2, D2S	short
		C2	long
rising (ˇ)	A1		

4.6 Tone character system

When the final consonant is a stop, tone class will be D for all vowels. Class D is further divided into two: DS and DL according to vowel length, short or long. According to F.K. Li, the D class occurs only in a certain type of syllable, in which the distinction of tones may be said to be neutralised (Li, chapter 2.2).

Then what about the classes A, B and C?

Let us quote Fang Kuei Li: *A Handbook of Comparative Tai*, chapter 2.1:

"It is not known how the tone system originated in the proto-language, although it has been suggested that the system might have evolved, for instance, from the dropping of certain final consonants. (Karlgren, Haudricourt).

If such a hypothesis is tenable, it must refer to a stage of the language prior to Proto-Tai, and we are not yet ready to specify in detail the phonological system of such an early stage."

But with the findings of this study we might be close to that, because it introduces such a proto-language--Germanic.

The combination of vowel type and final consonant type (both in GM) seems to have determined the tone of words with A, B or C tone character:

The A-tone:

Two distinct word groups have A-tone:

- The GM roots with relatively low vowels (a, ɛ, e, ɔ) and voiced nasal final consonants (m, n, l, r).
- The GM roots with higher vowels (i, ü, u, o) and final stop consonants (p, t, k, b, d, g) or other consonants different from l, m, n, r.

A third group also has A-tone: words with final -ŋ. However, -ŋ words occur just as frequently with classes B and C, and possible rules governing tone class for -ŋ words are not found.

The B and C-tone

As for tone classes B and C, they must cover the vowel/final consonant combinations not grouped under tone class A, for B C then being low vowel + p, t, k, etc. and high vowel + l, m, n, r-.

A review of the tone character system. See the following chart:

		Low vowel	High vowel
Final consonant -l, -m, -n, -r	Group	1	4
		A-tone	B or C tone
"Other" final consonant	Group	3	2
		B or C tone	A-tone

For examples, see below.

Group 1, A-tone:

smell bad	smel	mě̃n	4.6.14 (Number as in Li)
sweet	hwann	wẵan	4.10.4

Group 2, A-tone:

shadow	skuw	ŋau	10.4.9
buffalo	kwik	khwaai	12.6.1

Group 3, B or C tone:

slant	skaif	cháai	9.5.4
stick	stab	tháu	6.3.13

Group 4, B or C tone:

lure	lur	lỗ	8.1.17
brilliant	glim	liâm	8.2.34

When the vowel is a diphthong the first vowel decides for the tone.

Some additional notes:

- A few words might seem to show irregularity in vowel/tone correspondence, e.g.:

GM *tun*-(garden), T *sŭan*, see 9.1.40, where the high, front-rounded *u* should give B- or C-tone. The A-tone may stem from a diphthong *au* (cfr HG *Zaun*):

- Sometimes the GM final consonant does not quite correspond to the resulting tone in Tai, this phenomenon might depend on when a change took place.

- It seems that the introduction of tones serves the purpose of telling the listener what kind of consonant the speaker has left out or softened. One cannot tell *which one* -- the tonal system is not that advanced -- but can tell *what kind* of consonant has been dropped. This information may even be sufficient, as there are not so many options for each pair of vowel + final consonant. When the people of Southern China adapted the GM words and wanted to replace their ugly sounds with tones, they presumably used the following "Directions for Use":

Arne Østmo; "A Germanic-Tai Linguistic Puzzle". *Sino-Platonic Papers*, 64 (January 1995)

GM low vowel + l, m, n, r gives A-tone

GM high vowel + other consonant gives A-tone

GM low vowel + other consonant gives B or C-tone

GM high vowel + l, m, n, r gives B or C-tone.

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6. ABBREVIATIONS

ch	changed
DA	Danish
dial	dialect
DU	Dutch
E	English
EGM	East Germanic
f	from
GM	Germanic
GOT	Gothic
HG	High German
IE	Indo-European
ICEL	Icelandic
Lch	Lungchow
LG	Low German
MDA	Older New Danish
ME	Mid English
MHG	Mid High German
MLG	Mid Low German
MN	Mid Norwegian
N	Norwegian
NGM	North Germanic
n	noun
ODA	Old Danish
OE	Old English
OHG	Old High German
ON	Old Norse
OS	Old Saxon
OSW	Old Swedish
PT	Proto-Tai
rel	related
SW	Swedish
T	Tai
TH	Thai
ts	the same
v	verb
WGM	West Germanic

7. THE MATERIAL

(for explanatory notes, see last page)

						4.1
8	GOT	sp	i	n	IE spenu-	
turn around	B1	p				Nie 407
spin v		p	à	n	pan pan	
X1	GOT	sp	ei	w	IE (s)p(h)iēu-(vomit)	
be sick	B1	p				Nie 411
		p	ùai			b)
						4.2
1	WGM	sp	a	lt	IE speltos	
split , hew	B1	ph				Nie 404-5, 408
v		ph	àa	-	paa	
9	MLG	pl	a	gge	(clothing) GM pleg IE blek-(beat) MLG palte	
cloth,	C1	ph			(clothing)Fal599, 601	Vri 425
clothing		ph	âa	-	pîi B2	
						4.3
1		b	e	r	IE bher-	
carry, take	A2	b				Nie 77
along		ph	aa	-	paa C2	
10		bl	ā	st	(blowing) IE bhlē -	Nie 58
blow (wind)	D2S	b				
v		ph	á	t	- pat DIS	
14		b	e	w	(build,grow)E big IE bheu-(grow,increase)	
elder	B2	b	i		14.3.2	Hov 85-6 ,
siebling		ph	îi	pîi	pîiC2	Pok 146,149 b)

22	ON	b	u	nki	(stewed shipload) ODA bunke (bunch)	
bunch,	A2				IE bhongh-(tight etc)	Pok 128
bundle		ph	ua	ŋ	puuŋ	-
X1		b	u	nī	IE bhudh-m (e)n	
floor	C2	b				Pok 174
		ph	ii	n		
<hr/>						
4.4						
7	[ga]	b	uw	an	(dwell) ON byr(village) IE bhū-	
village	B1	ʔb				Nie 75,58
		b	âa	n	baan	maan
20	[]	b	i	t	(bite) IE bheid	Nie 51
fish hook	D1S	ʔb				
		b	è	t	bit	-
26	MLG	[] br	ō	k	OHG bruoh (swamp) IE merg - (tear, break) f erosion	
water reced-	D1S	ʔb			by receding water	Pok 740
es, dry land		b	ò	k	buk	mok
28	OHG	ob	a	n	(above) IE upó - (on)	
above, sky	A1	ʔb	ɔ		14.8.1	Nie 317,313
		b	o	n	-	min
29	[ga]	b	o	θl	IE bhō - tlo -	
place, site	B1	ʔb				Nie 60
		b	ðɔ	n	-	moon
33	[ga]	bl	u	nd	(blind) Ib hlendh-	Nie 55,57
blind	D1L	ʔb				
		b	ðɔ	t	boot	-

4.5

1		m	a	rh	IE marko		
horse	C2	m			Proto Kam Sui mar (Edm& Solnit P.213)		
		m	áa		maa? maa	Nie 293	
2		quem	ja	n	GOT qiman ON koma IE guem-Nie 233		
come v	A2	m	a		14.10	Pok 464	
		m	aa		maa maa A1 (indicates hm-, que-)		
5		m	a	n	(man) IE manu-s OHG man (one)		
he, it	A2	m				Nie 379	
		m	a	n	min	-	
14		m	a	qwir	NGM mawiR (young woman)		
wife	A2	m				Nie 294,296	
		m	ia		- -	b)	
15		m	ai	t	(cut) IE mai-d-	Pok 697	
knife	D2L	m	iə		14.3.4	Nie 282	
		m	ii	t	-	mit D2S	
17	ON	m	o	ndull	HG Mandel (round p.o wood) IE menth-(rotate)		
round, adj	A2	m	ui		14.8.1	Pok 732	
		m	o	n	min mon		
18	MLG	m	o	tte	(moth) IE mel-(meal)		
ant	D2S	m				Pok 717	
		m	ó	t	mit mot	Oxf 659	
19	MLG	m	o	tte	(moth) IE mel-(meal)		
termite	D2L	m				Pok 717	
weevil		m	ôo	t	- -	Oxf 659	

X1		m	u	rθa	(dead) IE mor-to-m	Nie 288
die v	D2L	m				
(lose life)		m	ŕo	t		
X2		m	e	rkwia	DA,NO neutr mörkt IE mer (ə) gu-	
dark	D2L	m				Nie 295
		m	ŕi	t		
X3	OE	m	e	θig	MLG mūdich (feel stiff) GM moθion	
feel stiff	B2	m			(effort, pains) IE mōd-	Nie 294
v		m	îâ	i		
X4		m	a	niqa	(many) IE mon (e)gh-	
some	A2	m				Nie 279
		m	a	ŋ		
<hr/>						
						4.5.1
1		m	ai	-wiðu,	m(ai)wið IE moi-uidhu-	
tree, wood	C2	mw	əi	16.1		Pok 709
		m	ái	mai?	mai	Nie488
4	OHG mund-f	i		ng-	mu-fi IE mon-tā (hand) GM finger (finger)	
hand	A2	mw	i	14.4.2		Nie 118,292
		m	îi	mîi	fîŋ	
5		mēl-t	i	ð	ON mál-tið GM mēl (meal, measure) tið (time) IE mē-	
clf,f meals	C2	mw				
		m	îi	-	fîi	Nie 294,451

						4.6
2	[ga]	m	a	t	(wet, succulent) IE mad-	
soak,	B1	hm				Pok 694-5
pickle v		m	aa		- maa	Nie 277
6	[ga]	m	a	rk	IE markō -	
mark v	A1	hm				Nie 293
		m	ǎa	i	- maa	
7	[ab]	ga-m	a	k	(off-spoused) OHG gimahho (spouse) IE mag-(knead)	
widow	C1	hm	ai		16.5	Pok 696
widower		m	âa	i	maai maai B1	
14		sm	e	l	(smell) IE smel-(burn slowly)	
smell bad	A1	hm				Pok 969
stink v		m	ě	n		
19	GOT	ga-m	ō	t	(can, have permission to) IE mēd-(doctor)med-(measure)	
sorcerer,	A1	hm	ɔ		14.11	Pok 705-6
doctor		m	ǝɔ		moo moo	
20	MLG	sm	o	r	(to steam) ME smother (steam) IE smel-	
cooking pot	C1	hm			(burn slowly)	Pok 969
		m	âɔ		moo moo b)	
23	MLG	sm	ō	k	MHG smouch (vapour, smoke) IE (s) meug-	
fog	D1L	hm	ɔ		14.11	Pok 971
		m	ðɔ	k	mook mook	
22		sm	eu	q	(slip, creep, cover) smuq IE (s) meugh	
cover, hide	D1S	hm				Nie 396
v		m	ò	k	- mək	

24	OHG	[s] m	o	rn	(mourn) IE (s) mer-	Pok 969
dusty, gray,	B1	hm	ui		14.8.1	
sad		m	ò	n	min A2 mɔn	
26	[ga]	m	ūhō	n	IE muk-	
cluster,	B1	hm				Pok 752
group		m	ùu			Nie 27
X1	[ga]	m	a	t	(wet food) with damp IE mad-(damp)	
damp	D1L	hm				Nie 277
		m	àa	t		Pok 694-5
X2		ā-m	ō	tida	(leisure) OE æm(e) tig (empty)	
empty	D1S	hm			IE med-(measure)	Pok 706
		m	ò	t		

4.7

4	OE	f	o	lm	IE peləmā (the flat hand)	
palm of	B1	f				Pok 806
the hand		f	àa		phaa C1 -	
10		f	a	k	(case, enclosure) IE pak-(fasten)	
scabbard,	D1S	f				Pok 788
pod		f	à	k	- fak	
14	N	f	e	rgje	(bury under stones) GM fergunio (rock,mountain)	
bury v	A1	f			IE perk-	Pok 822
		f	ǎ	ŋ	phan -	Hov 160
24		f	u	rs	(water-gush, falling water) IE pers-(spurt)	
rain	A1	f	ui		14.8.1	Nie 138
		f	o	n	phin hin	

X1 sticky	D1L	f a st f f ð t	(stick to) IE pasto-	Nie 115
X2 dust	N B1	f jo n f f ù n	(dust, particle) ON fjuka(to dust) IE pu-(blow) GM probl fu-n	Pok 847
<hr/>				
				4.8
2 fire	A2	f eu r v ei f ai	IE peuōr - 16.3 fai fii	Nie 145 Pok 828
3 side river bank	WGM D2L	f a k v f âa k	IE pāg- faak -	Nie 112
9 teeth	A2	f a nh v f a n	(fang, tooth) IE pank- (catch) fan -	Nie 114,148 Oxf 350
10 deer, kind of	ON A2	f é naðr v f aa n	(cattle, sheep etc) IE pen-(food) - faan	Pok 807 Hov 158
18 fire-wood	A2	f eu r-wiðu v f ð n	IE peuōr-,ūidhu fīn fīn	Nie 488 Oxf 1239-40
X1 hear v	A2	f a ng v f a ŋ	(catch, catch sound) IE pank-N oppfange (hear) b)	Nie 114,148

X2	WGM	f	ai	m	foim	IE poimno-	
scum	B2	v					Pok 1001
		f	âa				Oxf 404
<hr/>							
4.9							
2		(s) w	a	r	(speak)	IE suer-	
say v	B2	w					Nie 435
		w	âa		vaa	-	
fan		w	ī	b	(fan)	IE ueip (to fan)	
(for air)	A2	w	i		14.3.2		Nie 494
		w	ii		vii	pii	
8	(sk)	w	e	t	IE kuēt -		
bail, discard	D2S	w					Nie 383
water v		w	ī	t	-	vit	
X1		w	a	sk	(wash) or wat(s)-akon (use water)		
throwing	D2s	w			IE uōdor (water)		Nie 488,485,218
water in face v		w	á	k			
X2		w	a	b	(move to and fro, flap, quiver)	ON vafa (float in the air)	
kite	B2	w			IE uebh-		Pok 1114-5
		w	âa	u		b)	
<hr/>							
4.10							
1		sw	i	m	IE suem (swim), or ON sveif (seals flipper)	IE sueip	
swim v	C1	hw					Pok 1042
		w	âa	i (nám)	vai	-	Hov 712
2		kw	i	k	IE guig-		
shake,	A1	hw					Nie 246
quake v		w	ă	i	-	-	

4		hw	a	nno	(edible plant w sweet taste) IE kuondhnā-	
sweet	A1	hw	a	14.10		Nie 245
		w	ăa	n	vaan	vaan b)
6	OE	sw	ī	fan	(to sweep) IE sueip-(swing etc) GM sweif	
comb	A1	hw	ei	16.2		Pok 1042
v,n		w	īi		vii	-
7	OE	sāw	a	n	GM sējan IE sē (i)-	
sow v	B1	hw				Nie 445
		w	àa	n	vaan	faan
X1	[ga]	w	e	nj	IE uen-	
hope v	A1	hw				Pok 1146-7
		w	ă	ŋ		
X2		θw	e	r	(stir, slit) IE tuer-(turn)	
slit v	B1	hw				Nie 468
		w	è			
						5.2
3		spr	ai	ð	(spread) IE spre-i-d	
open, extend,	B1	pl				Nie 409
spread out v		pl	ài		-	pii
17		b	a	rk	b() rak IE bher-(to cut)	
bark	D1L	pl				Nie 41
(on trees)		pl	ia	k	piik	-

						5.3
2		br	e	k	IE bhreg-	
break v	D1L	pl	ε		14.9	Nie 70
		t	èε	k	pheek teek	
						5.3
5	WGM	br	a	gna	(scull, brain) LG bregenpan (forehead) IE mregh-m(n)ō	
forehead	D1L	phr				Pok 750
		ph	àa	k	phjaak pjaak	Oxf 109
7		br	e	nw	IE bhre-n-u	
burn v	A1	phr	əu		16.10	Nie 70
		ph	ǎu		- pjau	
8		spr	i	ng	ODA sprakk f sprang, sproëkke IE spreng-	
split open,	D1L	phr				Nie 410
crack v		ph	èε	k	pheek -	
						5.6
2	WGM	bl	a	nk	IE bhleg-	
whitish,	B1	?bl/r				Nie 55
white spotted		d	aà	ŋ	- -	
4		bl	ō	(s)-ka	IE bhlō-(flower)	
flower	D1L	?bl/r				Nie 58
		d	òɔ	k	bjook -	Pok 122
6		m	ē	n	(moon) IE mēn(e)s	
moon	A1	?bl/r				Nie 296
month		d	ia	n	biin niin	
8	GOT	bil	ai	bjan	GM lib (remain) IE leip	

dregs of wine	B1	ʔbl/r	-	dii	-	Pok 670
<hr/>						
5.7						
9 much	D2L	m ml/r m	e âa	kila IE meg(h)- k	-	Nie 282
3 love cherish v	D2S	[mit]-al ml m	i á	ska (with love) IE al-(to grow, get growing) k, ma-lák, rák	-	Nie 106
<hr/>						
5.8						
2 sword	C2	sw vr phr	e áa	r-ðā sw() re-ðā (sword) IE suer- (cut, stab) pjaa?	šaa	Nie 438
5 tomorrow	D2L	fr fr phr	o ú	daq (early day) IE pro-(forward) dheguh- (burn) pjuk D2S šook D2L		Nie 141
<hr/>						
6.1						
9 pound in a mortar v	A1	st t t	a a	mp IE stemb(h)- m	-	Nie 415 tam
24 strike, beat v	WGM A1	str t t	i ii	k IE ster- -	tiiA2	Pok 1029 Oxf 1055
25 foot	A1	st t	a iə	l MLG stel (smth to stand on) IE stel- 14.3.4		Nie 420,417

			t	ii	n	-	tin	
29			st	u	k,	stauk, IE (s) teu-g-		
hammer in,	D1L		t				Nie 421,427	
insert v			t	ðo	k			
31		OHG	t	ou	m	(steam) IE dhem		
cook in	C1		t	uo		14.8.2	Pok 248	
water, boil v			t	ô	m	-	tum B1	b)
32		WGM	t	u	mel	(collapse, fall) IE dheu-(whirl)	Nie 465	
collapse,	B1		t					
fall v				-		tum	tôm	
33			t	u	mf	IE domped-	Nie 456	
mud, earth	AI		t					
			t	o	m	tum	-	
35			st	a	bnā	(a stem) ON stofn(tree trunk, log) IE stebh		
tree trunk	C		t				Nie 416	
			t	ô	n	-	-	Hov 693
39		MLG	t	u	te	ON toti (pointed mouth) GM tuta (?) (hollow, pointed obj)		
peck, nibble	D1L		t			IE dhē-	Vri 596,601	Nie 765,467
of fish			t	ðo	t	toot	toot	Pok 241
40			d	u	r	OHG turi IE dhur-		
door	A1		t				Nie 101	
	prà -		t	uu		tuu	tuu	
42			d	eu	z	(animal) OHG tior, IE dheusó-		
clf. f	A1		t	ue		15.4		Nie 99
animals			t	ua		tuu	tuu A2	

45		st	e	k	N stikke (hit sbdy w a ball) (kill) IE stig-	
hit, bring	D1S	t				Nie 419
about v			-		tik tik	
X1		t	ai	kn	(sign) ON teikna (show w signs, decorate) IE doig-	
decorate,	B1	t				Nie 450
draw up v		t	è	ŋ		
X3		st	a		nd-ison DA standse(stand against, stop) IE stā-	
stand against,	C1,A1	t				Nie 415,326
stop v		t	âa	n,	thaan -	

6.2

6		t	u	g	ON taug, tog (line) IE deuk-(to pull)	
line	A1	th				Pok 221
		th	ěε	u	teeu A2 teeu A2	
7		θ	e	k-	IE tegu	
				wia		
thick, dense	B1	th				Nie 469
		th	ïi		thii tii B2	
14		[] t	eu	qa	(utility article, tool) IE deuk-(to pull)	
cup	C1	th	ua	i	17.3	Nie 472
		th	ûa	i	thuui tuui C2	b)
15		st	u	wian	IE st(h) āu-, vn-m cfr hafn/hamn, stofn/stom	
flood	C1	th				Nie 428
		th	ûa	m	thuum tum B2	

18		st	u	r	(hubbub) staurian (disturb) IE tuer-	
wild	B1	th				Nie 428
		th	ià	n	thiin thiin	B2
19	ON,MLG	t	i	k	(sheep, female dog) N tikla (young sheep, cow)	
young male	D1S	th	ĩ		14.4.1 IE digh- (goat)	Hov 742
animal		th	ĩ	k	tik D2S tak D2S	Pok 222
X1		θ	i	ngas	(time) time usul. affiliated to noon	IE tenk-
noon	C1	th				Nie 454
		th	iâ	ŋ		
X2		θ	wa	h	IE tuak	
wash, rub	A1	th				Nie 456
v		th	ũu			
X3		t	au	m	tau-ma or tauq-ma OE tēam IE deu-(two) or deuk-(pull)	
team up	A1	th				Nie 473
v		th	ia	m		
X4		st	a	ng	IE stengh- (bar)	
clf. f ingots,	C1	th				Nie 415
bars etc		th	ê	ŋ		
X5	N ICEL	t	au	s	MDA,SW tös (girl, maid) maybe f GM tus-	
woman	A1	th			(pull, shake, jerk)	Nie 474
(young)		th	əə			Hov 730

						6.3
3			θ	u	r	IE tū-
dare	v	C2	d			Nie 466
			th	áa		Oxf 241
						- taa
5			θ	e	gn	(free man, keeping land) IE tekno-
Tai people		A2	d			Oxf 1107
			th	a	i	tai - b)
13			st	a	b	IE stebh
stick	n	C2	d			Nie 416
			mái-th	á	u	tua? taŋ, tiŋ (?)
18			st	a	ði	ODA stæth DA,N sted IE sta-ti-
place		B2	d			Nie 417
			th	ti		tii tii
22			st	u	k	IE (s) teu-g-
single,		D2L	d			Nie 428
alone			th	ɔɔ	k	took took
28			θ	eu	ð	(people) IE teuta-
group		B2	d			Nie 470
			th	ua	iA2,B2	- tooi B2
X1		WGM	θ	u	rh	IE tuer- (frame)
throughout,		B2	d			Oxf 1116
all			th	ûa		Pok 1101
X2			θ	e	g	ON þegar IE tek-
then		B2	d			Vri 607,610
			th	âa		

6.4

3	MLG	[] d	æ	s[ig]	dæsen (doze)	ON dusa(be tranquil)	IE dheues-	
idle, doing	A1	?d						Pok 270
nothing v		d	aa	i	daai	niii		Vri 88,74
4		θr	ē	ðu	IE trēi-tu-			
thread	C1	?d						Nie 465
		d	âa	i	-	naai		
5		moθ - t	a	k	(get) IE dēg			
get v	C1	?d	əi		16.1			Nie 287
		d	â	i	dai	nai		447,452
12	ON	[]dr	e	pa	(kill) IE dhreb- (crush)			Nie 95
extinguish	D1S	?d						
v		d	à	p	dap	nap		
14	ON	[] d	í	lí	(spot) ICEL (skin spot) IE dhel-(to light)			
white spot	BI	?d						Vri 77
		d	èε	n	-	-		Pok 246
15		[] d	ai	l	(part) IE dāi-lo-			
border	A1	?d						Nie 87
boundary		d	εε	n	-	-		
16		θ	i	qi	IE tenk-			Nie 87
good	A1	?d	(?)i		16.4			
		d	ii		dai	nii		
20	[]	d	e	nt	(dint) IE dhen-(beat)			Pok 250
tap, snap	D1L	?d						
jerk v		d	ïi	t	dit D1S	-		

24	ON	[] d	á	mr	(taste) N dām(taste, scent) IE dhēm-(vapour etc)	
smell	AI	?d				Pok 248
		d	o	m	-	Hov 126
25		[] d	eu	n	MLG dūn(e)(swelling)IE tēu-,ten	
elevated,	A1	?d				Pok 1080-2
high land		d	ɔɔ	n	-	Pok 1066
29	WGM	gad	u	r	OE gædere [(to) gether] IE ghedh- ghodh-	
with,	C1	?d	uəi		17.3.1	Oxf 1125,408
together with		d	ûai		duui nii	Pok 423
31		h	ai	t	IE kâi-	Nie 176
hot	D1L	?d	ia		15.3.1	
		d	ià	t	diit naat	

6.5

5		n	ē	m	IE nem-	Nie 300
follow, lead	A2	n				
take v		n	a	m	- nam	
14	(der)	n	ē	h	(it near) or ON θann(-un) hve IE an-oku-	
this	C2	n	ii	(ai)	16.4	Nie 88,306
		n	ii		nai C1, nai ? C2 nii C1	
15		fen	qu	ras	IE penkurós-	
finger	C2	n	iu		16.16	Nie 118
		n	íu		niiu ?	
20		an-	ju	ng	(sibling-young) IE an- iuunkó-	
younger	C2	n	ɔɔ		14.11.1	Pok 36
sibling		n	ɔɔ	ŋ	nooŋ ? nuuŋ	Nie 480

23	ON	n	u	m(inn)	(taken away the strength) IE nem-(take)	
soft, tender	B2	n				Lan 408
		n	û	m	- num	Pok 763
26	ON	n	au	t	(cattle) GM (property) IE neut(enjoy, have)	
meat,	C2	n	io		15.3.2	Nie 304,307
flesh		n	ia		nii? nooB2	
X1		n	ē	h-	hēr (near-here)	Nie 306,180
here	B2	n			IE an-oku-kēi-r	
		n	ī			
X2		n	ēhw	ista	OHG nāhisto	
next	B2	n				Nie 307
		n	âa			Oxf 683
X3		n	ēh	θar	(near- there) IE an-oku-to-r-	
there	B2	n				Nie 306
		n	â	n		
X4		n	ēho	bar	(near-over) IE an-oku-upér-	
over there	C2	n				Nie 306,317
		n	óo	n		
<hr/>						
5		gr	eu	j	IE ghrū -(to shine)	6.6
morning	A1	hn				Nie 163
			-		nai	-
15		kn	ī	p	IE gn-eibh-	
pinch v	D1L	hn				Nie 230
		n	ñ	p	nip D1S	-

7.2

2			t	ē	m	(conform to, suit) MLG temmelik (suitable)
full	A1		tl			N(fullfilled, full) IE dem- (build)
			t	e	m	tim lim Nie 450

5	OSW	MDA	tr	i	ne	(rise, get up, walk) GM trad (tread) IE dreu-
get up,		B1	tl			Nie 461-3
wake up v			t	ï	n	tin hin (?)

7.3

1		GOT	t	a	r	ga-tarhjan(with eye notify) IE derh-(look)
eye	A1		tr	a		14.10 Pok 213
			t	aa		haa taa

2			str	eu	k	(go,leave,pass) N stryke med (pass away, die) IE streug-
die (lose life) v	A1		tr			Nie 425
			t	aa	i	haai taai b)

7.4

1			θ	u	l	ON θola (be patien) IE tel-
wait v	C1		thl			Nie 474
			th	âa		- šaa

2	NGM		ar θ r	a	-ka	(plough-do) IE arə-trom-
plough v	A1		thl	əi		16.1 Nie 32
			th	ăi		thai šai

7.5

9			θr	ei	f	ON θrifa (grasp) w the hand IE ter-
carry, hanging	CI		thr	iu		16.16 Pok 1071
f the hand			h	ïu		thiiu liiu Hov 765

11	ON	θr	ō	(pig trough) IE treuk (of wood, etc)			
wooden trough	A1	thr				Pok 1074	
as f pigs			-		-	luu	
12		st	ei	n	IE stāi or OHG trennila (roundy obj)		
stone	A1	thr				Nie 417	
		h	ĩ	n	hin	hin	Pok 207
14	OHG	tr	u	nkan	GM drenk (put under water) opposite fry, roast, bake		
cook, boil	A1	thr				Nie 93,94	
		h	ũ	ŋ	huŋ	luŋ	b)
15	[tar]	s	e	hwan	(eye see) GOT tar (eye), IE derh-(look) IE seku-(see)		
see v	A1	thr	e	14.6		Pok 213,	
		h	ě	n	han (?)	han	Nie 362
							7.6
3		dr	a	g	IE dherāgh -		
drag, pull v	D2L	dl				Nie 92	
		l	âa	k	laak	laak	
7	MLG	sl	ĩ	pen	(sharpen) IE (s) leib-(smooth)		
sharpen v	D2S	dl				Nie 390	
		l	á	p	-	-	
8		[] l	ē	k	(of small height) IE lēgh-		
small	D2S	dl				Nie 256	
		l	é	k	-	lek	

10 drought, dry	C2	dr dl l	au ε ée	g ŋ	(drought) θrangu(distress, need) IE trenk- 14.9 leen? leen	Oxf 296 Nie459
12 nail, fingernail	D2S	kl dl l	ē é	w p	(claw, nail) IE glēuā - lip lit	Nie 225
13 lick v	A2	sl dl l	i ie ia	k 	IE leigh- 15.2 lii lii	Nie 390
14 wheel, roll v	hwelb C2	-h dl l	we ó	lb 	(vault-vault) roll, hwēl hwula IE kue kuelo - luu	Nie 185,194
15 skin, peel v	D2L	fl dl l	a ô	h k	ON flá, IE plek-(to skin) look look	Nie 126
16 wind (blow)	A2	st dl l	u uo o	rm m	(storm) strum f metathesis of straum (stream) IE srou-mo- 14.8.2 lum lum	Nie 422,426
21 stroke, pat, caress v	D2L	sl dl l	u û	p p	(glide, stroke) IE sleub (h)- - lup D2S	Pok 963
X1 bald	C2	fl dl l	ai áa	na n	IE plēi	Nie 122

										7.7
2		roθr		a		IE erə -				
boat	A2	dr		i o		15.3.2				Vri 450
		r		i a		lii	luu			Nie 348
										7.8
5	GOT	st		aí		rno IE ster-nā				
star	A1	?dl/r		au		16.14				Nie 421
		d		aa		u	daau	naau		
7	d (aq)	l		eu		hsa (day light) IE āgher- IE leuk-				
sunlight	D1L	? dl/r		ie		14.9.1				Nie 84,271
		d		ëë		t	deet	-		
11		kn		u		k MLG knok IE gn-eu-g-				
bone	D1L	?dl/r		uo		14.5.4				Nie 230
		krà-d		ùu		k	duk DIS	nook		
16		h(wa) t-l		ī		k (what like) IE kuo-d, lēig -				
which, any	A1	?dl/r								Nie 191,261
		d		a		i	naí A1, A2	-		
										7.9
1		n		e		bla IE nebh-(water, humidity) Pehlavi nam (humidity)				
water	C2	nl/r								Pok 315-6
		n		á		m	nam?	lam		
3		fl		u		q-la IE plō-				
bird	D2S	nl/r		o		14.8				Nie 143
		n		ó		k	nuk	lök		

8.1

1		1	ī	b	(leave) IE leip-	
bid farewell,	A2	1				Pok 670
leave		1	aa		- lii	
7		1	i	bar	IE leip-	
pork fat, grease	A2					Nie 260
			-		laau laau	
17		1	u	r	IE leu-	
lure, deceive	B2	1				Nie 269
v		1	ôo		- -	
26	OS	well	i	gan	N velge, GM waljan (choose) rel to will IE uel-	
choose,	D2L	1				Nie 504,495
select v		1	iâ	k	liik lee B2 (?)	
27		bl	ō	θa,blēθa	(blood) IE bhelē- (to well, gush)	
blood	D2L	1	ie	15.3		Nie 56
		1	iâ	t	liit liit	Pok 122
29		gl	au	m	IE ghloumos	
forget v	A2	1	iu		14.4.4	Nie 158
		1	ïi	m	lum lum	
30		1	e	b	IE leibh-	
alive,	C2	1				Nie 264,260
living			-		- lii	
X1		1	a	nd	IE lendh-	
lawn,	A2	1				Nie 255
grounds		1	aa	n		

X2 flaming	D2S	l u q l l ú k	IE leuk-	Nie 267
<hr/>				
1 late	C1	[ga] l a t hl l âa	(with slowness) IE lød laa -	8.2 Nie 253
2 underneath below	C1	[bi] l ē q hl l âa	(below) IE -lēgh- - laa	Nie 256
3 many	A1	likal i k hl ai l ăa i	IE leig- 16.5 laai laai	Nie 261
9 grandchild, nephew	A1	anil a n hl l ăa n	IE an- laan laan	Nie 29
10 back behind	A1	hl e nk hl ə l ă ŋ	(bend) OHG hlanca (hip) IE kleng-ruggia and 14.7 bak also means "bend" laŋ laŋ b)	Nie 37,273, 353
11 close one's eyes v	D1S	sl a p hl l à p	IE lēb lap lap	Nie 389
13 sharpen w a knife v	OHG A1	kl io ban hl l ă u	IE gleubh (shear w a knife, cut off, to splinter) - lau	Pok 401

17 play v	C1	ga-l hl l	ī ê n	k-sam	MLG gelich-sam (as if) galik (like) IE lēig- Pok 262 etc.
19 incline sharply abrupt, steep	B1	br hl -	i - -	nk - -	IE bhren-g- Nie 65 liŋ
25 mud, sink in mud v	[ga] B1	l hl l	ō - ò	m - m	(clay, earth) N loms (clay) IE loi-mo-(wet earth) Pok 662 lum C1 lōm
30 loose, too large	[] A1	l hl l	eu - ŭa	m - m	ON luma(make/loose) OHG (indul-gent) IE lem-(weak) Pok 674 - -
33 be left over, surplus	[] A1	l hl l	ī - ia	b - -	(left over) SW lāmna (ts) IE leip- (leave etc) Nie 260 lī B1 lī Pok 670
34 brilliant shining	C1	gl hl l	i - iâ	m - m	IE ghlei- Nie 158 - -
X1 glance	D11	gl hl l	i - iâ	p - p	IE ghlei- Nie 158
X2 overflow v	A1	fl hl lón-l	au - ăa	m - m	(flood) IE pleu- (flow) Hov 170 Nie 124 Vir 129

X3		agsl	ā	-	(shoulder) IE ages-(axis)	
shoulder	B1	hl				Nie 25
		l	ài			
X4	[]	l	o	k	IE leug-(to tell a lie)	
lure,	D1L	hl				Nie 265
deceive v		l	òɔ	k		
X5		hl	eu	n	ON hlunnr (logs as a support) IE kel- (beat)	
bear,	A1	hl				Nie 268
support v		n	ũ	n		Pok 546
X6		kl	i	mp	(clump) IE geleb(h)-(press)	
wedge	A1	hl				Nie 224
		l	ĩ	m		

8.3

8		h	a	m	(cover) ON hams(bran) IE kem	
bran	A2	r	ə		14.7	Nie 173
		r	a	m	ɬam lam	
17		str	a	ng	IE strenk-	
strength,	A2	r	ε		14.9	Nie 423
force		r	εε	ŋ	leenŋ leenŋ	
18		r	i	p	IE (s) ker-b-(run) ON hripudr (fire)	
quick, fast	A2	r				Hov 573
		r	eu		- liiu	Pok 935

20 call v	D2L	(sk) r ī k	(shout) IE (s) (k) erei-g-	Nie 377
		r		
		r iâ k	- -	
24 together, join together	B2	r u m	(room) IE reuə- (open)	Nie 350
		r		
		r ûa m	luum -	
30 pull, detach or strip off grains v	D2L	r au t	IE reud-	Pok 869
		r		
		r ûu t	- loot	
31 know v	C2	kn aw	IE gnō-	Pok 376
		r uo	14.5.4	
		r úu	‡uu? loo	
33 fence hedge	C2	r aho	IE rek	Pok 863
		r		
		r úa		
37 house	A2	r a zna	IE re-s- (rest)	Nie 339
		r ia	15.3.1	
		r ia n	liin laan	
38 hole	OHG A2	r ou b	ON rauf (hole) rel to GM raub (break, etc) IE reup-	Vri 435
		r		
		r uu	tuu luuA1	Nie 356,349
X1 learn v	A2	l ai z	IE les-(gather)	Nie 273
		r		
		r ia n		

X2 beam	OHG D2L	r uo ta r r ôo t	OE rōd IE rōt-	Pok 866
X3 clf. f buildings	A2	wr u nh r r oo ŋ	ON rong (rib, beam, room in ship) OE wrenc (press/wind together) IE ureng,	Hov 583, Pok 1155 b)
X4 rim	MLG A2	r e me r r i m	IE rem	Pok 864
X5 shop, house, room	C2	r a zna r r áa n	IE re-s-(rest)	Pok 339
X6 beam	A2	wr u nh r r oo ŋ	ON rong (rib) IE ureng-	Pok 1155
X7 press v	ON D2L	(k) r ei sta r r ii t	GOT kriustan, IE greus-	Nie 240
X8 wealthy	A2	r i ki r r ua i	(rich) IE reg-(steer, rule)	Nie 346
X9 stripe	C2	(st) r ei pa r r í u	IE streib-	Nie 424

X10		spr	u	t	IE spreu-d-	
sprinkle,	D2S	r				Nie 410
water plants v		r	ó	t		

8.4

16		ur	a	nho	ON vrá (corner in a room, space) IE urengh-	
room, space,	C1	hr				Pok 1155
compartment		h	ô	ŋ	- looŋ	

9.1

4		s	a	in	IE sē(i)-	
late	A1	s				Nie 364
		s	ăa	i	‡aai kwaai A2(?)	
13	ON	s	é	r	(oneself, as by oneself/itself) GM se-z ? IE se-(oneself)	
back of blade	A1	s				Nie 442
(as by itself)		s	ă	n	‡an -	Vri 470
17	GOT	s	au	ls	(pillar) ON súla, probl re to GM swell, IE suel- (sill)	
pillar	A1	s	əu		16.10	Nie 432
		s	ău		‡au ‡au	
25		t	i	nd		
rib, tooth of	C1	s				Nie 453
a comb, etc.		s	ī		- ‡ēē	
31		s	a	q	IE sokue-(say)	
indicate,	B1	s				Nie 898
slender, tell v		s	ô		- ‡oo	

39		θ	u	(you, sing.) IE tū	
you (pl.)	A1	s	u	14.5.2	Nie 96
		s	uu	-	ɬuu
40		t	ū	n HG Zaun	
garden	A1	s	ui	15.4.2	Nie 466
		s	ũa	n	ɬuan ɬiin
48		t	i	mb OHG zimbar (timber, room) IE dem-(build)	
room, com-	C1	s			Nie 473
partment		s	ûa	m	ɬuum -
X1		s	i	ng (sing) IE senguh-	
pronounce,	A1	s			Nie 441
voice		s	iă	ŋ	
X2		s	i-	dhlo ON, OHG seil(rope) IE sē(i)-(to bind)	
rope, clf.f	C1	s			Vri 468
lines		s	ê	n	Pok 892
X3		s	ū	p IE seub-	
suck v	D1L	s			Nie 433
		s	ùu	p	
X5		s	u	r(qo) GOT saurga (sorrow) IE suergh-	
sad	C1	s			Pok 1051
		s	âu		
<hr/>					
3	[]	s	a	nda IE samtho-	9.2
sand	A2	z			Nie 360
		s	aa	i	ɬaai ɬaai

6		[niθ-]	s	a	k	(to wet) ODA sakke(to sink smth) IE sengu-	
wash clothes	D2S		z				Nie 361,359
v			s	á	k	ʈak ʈak	
X1		[hwat]	s	ī	na-lik	(3. person-like) IE kuod- ,sei-no-s-, lēig-	
whom, who	B2		z				Nie 366,261
			s	ī	ŋ		
<hr/>							
9.3							
5			k	a	z(a)	ON ker	
plate, cup	C1		č				Nie 216
			č	aa	n A1	- šaan,šeen	
7			k	i	pp	ON keppr (a stick) to stick is painful IE gei-(bend)	
be painful	D1S		č				Nie 249
v			č	è	p	čip - b)	
10	MLG		k	i	mme (insertion) OE cimb (groove) IE gem-(stick in etc)		
dip into	B1,C1		č				Pok 368
v			č	ī	mC1 B1 - šim B1		
14	[ga]		l	u	kj	(to close, with closing) IE leug-(bend)	
stop up,	D1S		č				Nie 267
cork v			č	ù	k	čookD1L šuk	
17	WGM	[] l	eu	hta	IE leuk-		
light, candle	D1S		č				Oxf 582
			č	ù	t	čoot D1S šut	
18			k	iw	-ð	kiw- laiθa ODA keed(dull)	
insipid,	D1L		č	i(u)	14.4.4		Nie 218,257

tasteless		č		ǣ		t	-	šutD1S	
19		h		au		buða	(head, master) IE kap-ut (head)		
master	C1	č		iəu		16.3		Nie 187	
		č		âu		čaju	tuu		
X1	MLG	k		e		tel	IE geid-(to tickle)		
tickle v	C1	č						Pok 356	
		č		īi					
X2		sk		uw		-qa	GOT skugg-wa, ON skugg-sjá GM skuw (shadow)-		
mirror	D1S	č				qa(like) IE (s) keu-(cover)		Pok 951	
		č		ò		k			
<hr/>									
									9.4
X2		s		e		lba	ON sjalfr (self) IE se-lo-		
lme	A1	čh						Nie 363	
		čh		ă		n			
X3		sk		ī		n	GOT skein IE skāi-		
shine	A1	čh						Nie 374	
		čh		ăa		i			
<hr/>									
									9.5
3		sk		e		h	(happen) IE (s)kek-(jump)		
be so v	B2	ǰ		ei/		ɛi	16.8	Nie 371	
		čh		âi			čh šh	b]	
4		sk		a		if	IE skoipo-		
slant v	C2	ǰ						Nie 386	
		čh		áa		iA2	- šaaiC1		

5 veranda porch	A2	sk ǰ čh	a aa n	wal IE (s) keū-(cover) čaan šaan	Pok 951
9 skillful, artisan	B2	sk ǰ čh	a âa ŋ	lk (servant) IE (s)kel-(run) čiiŋ šaanŋ	Oxf 621 Nie 369 b)
12 taste v	ICEL A2	k ǰ čh	ei i	mur (dis-taste) N keim(taste,after-taste) IE gem-(be satiated) čim šim	Hov 324 Pok 368
26 male, men	A2	k ǰ čh	e aa	rl (man) IE ger-(get older) čaai ʔaai	Nie 216
X1 trash	A2	sk ǰ čh	a aa	l (peel) skaljan(separate) IE (s)kel-(cut) n	Nie 369,373
X2 sore, hurt v	C2	sk ǰ čh	a á	mp MLG schamfēren(sore, hurt) IE (s) kamb-(bend) m	Nie 370,382
X3 coast	A2	sk ǰ čh	a aa	rja (shear) MLG schōre(shore) E dial skerry (rocky coast) IE (s)ker- (shear) i	Nie 385

9.6

3 still, not yet	A2	ne- ñ j	a a	nθi-qin IE ne-anta-kuene-(not yet at all) ŋ - -	Nie 26,107
------------------------	----	---------------	------------	--	------------

14		muwj	ō	(n)[k-]	N dial mehunk IE mu-(onom ?)	
mosquito	A2	ñ				Nie 292
		j	u	ŋ	juŋ	juŋ
<hr/>						
9.7						
1		gr	a	s	IE ghrōs-	
grass	C1	hñ	ia		14.10.1	Nie 164
		j	âa		jaa	jiiC1,jaaA1
4		h	au	na	IE kau-	
mock,	A1	hñ				Nie 200
ridicule v		j	ă	n	-	jənB1
8		kerl	ī	n	ON kerling	
woman	A1	hñ				Nie 207,216,248
		j	ĩ	ŋ	nin A1,A2	-
<hr/>						
9.8						
1		g	a	won	OE giem(to cover) IE ghou(ē) (take care of)	
cover, calk	A2	j				Nie 154
v		j	aa		jaa	jii
5		g	a	ng	(walk) N gjengle(walk step by step unsteadily)	
take a step,	B2	j			IE ghengh-	Nie 151
step v		j	âa	ŋ	jaŋ? C2(?)	- Hov 224
8		habj	a		(lift up) IE gher-	
raise	A2	j				Nie 313,198
lift up v		j	ɔ		joo	jooA1
<hr/>						

						9.9	
2		ne-ei-g	i		(not, not at any time) IE ne-aiu-kuene(not time at all)		
prohibitive,	B1	ʔj				Nie 105	
completive particle		j	àa		jaa jii		
8		h	ai	m	(home) ODA hiem, visit is to go to sbdy's home,		
visit v	A1	ʔj			IE kei-(lie down)	Nie 184	
		j	ʔa	mC1	- jaamA1		
13		h	u	s	(house) ON hju(family) hiwa IE kūso-		
home,	C1	ʔj				Nie 184	
house		j	âu		- -		
14		k	a	lǝ	(cold) IE gel- ON kœla (to cool)		
cool, fresh	A1	ʔj				Vri 342	
		j	e	n		Nie 233	
16	ON	hi	o	n	(married couple) hjá (be at) GM hus (home, house)		
stay, be at	B1	ʔj	u		14.5.2 IE kusō-	Hov 280	
		j	ùu		juu juu	Nie 184	
X1		k	e	(n)k	MLG ki(n)k (a small bend, kink)IE geng-(clump)		
kink, pinch	D1S	ʔj				Pok 379	
v		j	ï	k			
X2	N	kj	e	ske	(to want, have a mind to) ON kerski (joy)		
want v	D1L	ʔj			IE ger- (grow, arouse)	Hov 374	
		j	àa	k		Pok 390	

10.1

2		k	eu	k	(little clump) keuk-lin (chicken) IE gēu-(bend)	
chicken	B1	k	əi		16.1	Nie 247
		k	ài		kai kai	
6	N	k	a	mse	(hold and form a ball of dough) IE gem-(press together)	
hold in the	A1	k				Hov 334
hand v		k	a	m	kam kam	Pok 368
7	WGM	g	a	dur	(-gether) IE ghedh-,ghodh-	
together,		k				Oxf 1125,408
mutual		k	a	n	kan -	Pok 423
17	ME	k	e	tte	OE cyttan	
cut v-		k				Oxf 235
		-			kaat kaat	
24		g	a	b	(catch, take) IE ghabh-(ts) OHG kepi(wealth, gathered)	
pick up,	D1S	k				Pok 408
collect		k	è	p	kip cip	
27	WGM	k	e	rf	(to carve, cut) IE gerbh-	
cut w sickle,	B1	k	iəu	(?)	17.2	Nie 217
reap v		k	ià	u	- čiiu	
30		k	e	fal	(gnaw, chew) MHG kifelen (ts) IE geb(h)- (eat)	
eat v	A1	k				Pok 382
		k	i	n	kin kin	
31		gr	i	n-qa	(gape-like, branching) grin(gape) ON greinn	
branch	B1	k			(branch) IE ghē-(gape)	Nie 162,204
		k	ĩ	ŋ	kiŋ -	

38	ODA	(i)g	oo	r	GM gjez IE ghies-(yesterday, recent past)	
first,	B1	k				Nie 170
beforehand		k	ðɔ	n	koon koon	Oxf 1250
42	N	g	o	p	(frog egg, smth w a gape) GM gap (gape) IE ghēp-	
frog	D1S	k	o		14.8	Nie 150
		k	ò	p	kup kɔp	Hov 234
45		ék	a	n	IE egom-	
I, me	A1	k	iəu		16.13 note	Nie 211
		k	uu		kau kuu	
X2		sk	ðu	ha	IE skeu-(cover)	
shoe	D1L	k				Nie 375
		k	ià	k		
X3		g	eu	t	ON gjóta (throw a child) IE gheud-	
give birth	D1L	k				Nie 167
v		k	əə	t		Pok 448
X4		k	wi	k	(quick) MLG kec, MDA kœk (brave, clever) IE guig-	
skillful	B1	k				Nie 248,246
		k	è	ŋ		
X5		g	a	u	ODA gaa (walk) IE ghē-	
step, go	C1	k				Nie 169
forward v		k	âa	u		
<hr/>						
						10.2
1	WGM	sk	i	nk	(thigh) IE (s)keng-(limp)	
thigh, leg	A1	kh				Nie 374
		kh	ăa		khaa kaa	

10 horn	A1	kn kh kh	u ă u	f - u	(horn) ON knyfill(small horn) IE gen-(press) Hov 359 Vri 322,Pok 371
24 water muddy	B1	sk kh kh	u u ù	l - n	skwal IE (s)kuel- 14.5.1 hun(?) Nie 383
X1 write v	A1	sk kh kh	e - iă	r - n	(shear) IE (s)ker- Nie 385
X2 race	ON B1	sk kh kh	ei - éé	ðangr gang (walk, run) IE skēit- ghengh- ŋ	GM probl skaið-gang-, skaið (separate) Pok 921,438

10.3

12 choke v	C2	[] g g kh	a - èé	qin - n	(against, etc.) ODA igen(closed) Nie 204,154
14 tongs, pincers	A2	g g kh	e iə ii	m - m	(jump) N f DU gimpe nâl (tool for tackling of cord) Nie 156,151 Hov 222, Oxf 417
18 chew v	WGM C2	k g kh	e iau iá	w - u	(chew) IE gebh-(mouth, eat) 17.1 čeeu Oxf 171 Nie 248
19 sickle, scythe	A2	kn g kh	i - ia	f - u	knip (knife, shearing tool) IE gn- eibh- Nie 230

20		kn	a	p	IE gn-ebh-	
narrow	D2L	g				Nie 228
		kh	êɛ	p	keep kɛpD2S	
21		kr	o	k	IE ger-(to wind)	
bent,	A2	g				Nie 238
crooked		-			koo koo	
27	OHG	sk	u	lter	(shoulder) IE skol-(shovel)	
carry w		g				Nie 381
a stick on the shoulder		kh	ɔɔ	n	koon -	
X1		g	e	t	(beget, guess) ON geta(guess) IE ghed	
think v	D2S	g				Oxf 415
		kh	î	t		Pok 438
X2		g	e	rt-ia	(sprig) ON gaddr (odd) IE ghazdho-(sprig etc.)	
odd	B2	g				Pok 413
		kh	ʔi			

10.4

1		g	a	balo (fork)	IE ghabh(o) lā	
branch,	B2	ŋ				Nie 150
fork		ŋ	âa	-	ŋaa	
4		[ga] r	ai	ði	(with order) ON greiðr (easy)	IE reidh-
easy	B2	ŋ				Hov 238
		ŋ	âa	i	-	ŋaai
						Nie 342
6	NGM	g	a	p	IE ghēp	
open the	D2L	ŋ				Nie 150
mouth		ŋ	âa	p	ŋaap	ŋaap

9			sk	uw	w	IE skeu-(cover)	
shadow	A2		ŋ				Nie 383
			ŋ	au		ŋau ŋau	
13			n	i	kwes	IE neigu-	
mythological	D2L		ŋ	ie	15.3		Pok 761
sea monster			ŋ	ʔa	k	ŋiik ŋiik	Nie 309
X1	HG	(an) gen	eh	m	(pleasant) GM nam(take) an-ga-nam?		
beautiful	A2		ŋ				Pok 763
			ŋ	aa	m		
X3			gl	i	p	(close the eyes, leaving only a small slit) IE ghlei-	
have a nap	D2L		ŋ				Nie 158
			ŋ	ʔi	p		
<hr/>							
							10.5
3	OHG	anag	i	wen	(yawn, gape) IE ghē-(ts)		
yawn v	A1	hŋ					Pok 420
		h	ʔa	u	-	ŋaau	
7		[an] k	eu	k	(jaw, cheek) IE gebh-(mouth, eat)		
gum (tooth)		hŋ					Oxf 169
		ŋ	ià	k	hiik ŋiik		
<hr/>							
							10.6
7		kn	ew	a	IE gneuo-		
knee	B1	x	ou		16.12		Nie 232
		kh	àu		khau hoo		

14			h	ō	k	(hook) IE keg-	
hook, sickle	A1		x				Pok 537
			kh	ōɔ		- hoo	
17		WGM	kh	u	t	ON knottr (knot) IE gen- (press)	
knot		D1L	x				Nie 231
			kh	ōɔ	t	khoot hoot	
18		MN	kr	o	ta	(scrape) probl f GM krat IE gred-, grod-(scrape)	
scrape off		D1L	x				Nie 237
v			kh	ōɔ	t	- -	Hov 382
27			k	u	rn	GOT kaúrn(grain) IE gro-nom-	
rice		C1	x	əu		16.10	Nie 234
			kh	âu	khâau khau hauC2		b)
28			sk	ī	t	IE skei-d-	
excrement		C1	x	ei		16.2	Nie 372
			kh	īi		khii haiC2	
29			sk	au	t	(shoot) N skjöt (joint)where the pieces shoot	
joint		C1	x			over each ofher IE (s) keud	Nie 386
			kh	ōɔ		- hooB2	b)
32	WGM	keuk-l	ī	n		IE geu-(bend) GM ĩn (diminutive)	
young	B1	x	ia			15.3.1	Nie 247,207
(chicken)		kh	ia	ŋ		- haanB2	
<hr/>							
1			h	a	lm	(grass straw) IE koləmo-	10.7
thatch	A2		Y				Nie 172
grass			kh	aa		kaa haa	

8			g	a	rǝ	(fence, ridge) IE ghordho-	
dike of a rice	A2		Y				Nie 170
field			kh	a	n	kan kan	
9	ON		g	ø	la	(praise) GOT goljan, OE galan (sing magic songs)	
praise,	B2		Y			IE ghel-(shout)	Nie 150
flatter v				-		kan han	Hov 227
11			g	e	rd	IE gherdh-	
gird, tie	D2L		Y				Nie 157
around v			kh	âa	t	- hît	
13	WGM		sk	a	nk	(part of bovine leg, as ankle/thigh etc.) IE (s) keng-(limp)	
lower leg	B2		Y	ε		14.9	Nie 370
			kh	êε	ŋ	keen heen	
14			h	a	ls	IE kuolso-	
throat,			Y	ɔ		14.11	Nie 172
neck	A2		kh	ɔɔ		koo hoo	
17			k	u	l(b)	(club) IE geleb(h)-(press together)	
hammer	C2		Y				Nie 251
mallet			kh	ɔɔ	n	koo? -	
22			gr	i	p	(span betw thumb and other fingers) IE ghreib-	
span betw.	D2L		Y				Nie 161
thumb and middle finger			kh	fi	p	- -	
24			h	a	k	(chin) IE keg-, keng- (hook)	
chin, lower	A2		Y				Nie 171
jaw			kh	aa	ŋ	kaar haar	

X1		sk	u	l	(hide) N skule(look askance at) IE skeu- (cover)	
look	C2	Y				Nie 375,381
askance at		kh	ʃɔ	n		
X2		skr	u	t	(brag) ICEL kýta (scold) N kyte (brag) IE gōu-(cry)	
brag v	A2	Y				Pok 403
		kh	ui			Nie 379

11.1

6	MLG	kl	a	nk	(sound/hollow obj.) IE glengh- IE gel-(roundy obj.)	
tube, log	A1,B1	kl				Nie 222,224
		kl	a	ŋ A1	- čaŋ B1	Pok 357 b)
11		k	a	lð	(cold) IE gel-(ts)	
cold (water)	D1S	kl				Nie 233
			-		kat čot	
14		k	u	la	(coal) IE g(e) ulo-	Nie 242
charcoal	B1	kl				
			-		- čoo	

11.2

X1		skr	au	m	IE skrē-m-	
afraid	A1	kr				Nie 379
		kl	ua			Vri 506

11.3

10		k	a	ng	MHG kanker (spider) IE gengh-(weave)	
spider	A1	khl				Pok 380
			-		(khjaanC1-) (čom B1)	
					khjaau A1 čaau A1	

X1	OHG	kl	u	ng	(group) GM kleng(ts) IE glek-, gel-(press together)	
herd(of ele-	A1	khl				Nie 227,151
phants), horde		khl	ö	ŋ		Vri 318

11.4

2		aj	ja		NGM aggja IE ə-ióm	
egg	B1	chr	ai		16.1	Nie 512
		kh	ai		khjai čai	

4	WGM	ask	ō	j	(ask) IE ais-	
ask, beg	A1	chr				Pok 16
v		kh	ö		hoo -	Oxf 50

X1		kr	a	t	IE gred-	
scrape v	D1L	chr				Pok 405
		kh	à	t	- -	

11.5

2		gl	o		w-ka (to glow) IE ghlōu-	
burn v	D2L	gl				Nie 158
		khl	ö	k	- -	

11.6

X1		gr	ō	bō	(grave, hollow in the ground) ODA grue (fireplace)	
kitchen	A2	gr			IE ghrebh-	Nie 163
		chr	ua			b)

11.8

1		[]r	e		q-na (rain) IE rek-nó- skur (shower)	
shower,clf	B1	xr				Nie 342
f rain, storms		h	aa		haa laa	Vri 507

4		auz	a	n	ON eyra IE ōus-	
ear	A1	xr				Nie 518
		h	ũu		huu lii A2	
8		str	eu	k	N stryk (rapid river) IE streug-	
mountain	C1	xr	uəi	(?)	17.3.1	Nie 425
stream		h	ûa	i	huui, vuui vii	
10	GOT	gar	u	ns	(way, road) IE er-(move)	
way, road	A1	xr				Pok 329
		h	ö	n	- hön	
<hr/>						
						12.1
4		kw	a	st	(tuft, brush) IE gues-d-	
sweep v	D1L	kw				Nie 235
		kw	àa	t	kweet(?) kwaat,kwæt(?)	
<hr/>						
						12.4
1		dāqw	a	z-	gjez, ODA-igoor (day before) wan koon to waan(?)	
yesterday	A2	ŋw				Nie 84,170
		w	aa	n	vaa -	
2		dāqw	a	z	(day) (burning be) IE dhōguho-	
day	A2	ŋw				Nie 84
		w	a	n	van ɲn	
<hr/>						
						12.5
2		akw	e	zi	IE agu(ə) sī-	
axe	A1	xw				Nie 517
		khw	ǎa	n	- vaan	
<hr/>						

						12.6
1		kw	i	k-fé (liveing cattle)IE gueg-,peku-		
buffalo	A2	ɣw				Nie 246
		khw	aa	i	vaai	vaai
						13.1
1	NGM	g	a	p	IE ghēp-	
open	C1	?				Nie 150
(mouth) v		?	âa		?aa	?aa
5	NGM	[] -	ai	-ma (smoke, vapour) IE āi-(burn)		
vapour	A1	?				Nie 106
		?	ai	-	?aai(?)	Vri 96
7		k	i	k		
cough v	A1	?				Nie 219
		?	a	i	?ai	?ai
17	ON		ei	tt	(one, neutr) GM aina IE oi-no	
one	D1S	?	ie		14.6.1	Nie 106
		?	è	t	?it	?it
						Lan 124
19	WGM	k	i	m	MLG kimme(brim, edge) IE gem-(be full, etc.)	
full	B1	?	i		14.3.1	Pok 368
satiated		?	ï	m	?im	?im
						Hov 342
35		h	[]	lew	ON hlȳr IE kel-(warm) OE halōian (to burn)	
warm	B1	?				Pok 552
		?	ù	n	?un	?ɔn
37	ON	h	i	nn	IE ko-eno-	
other	B1	?	iə		14.4.3	Nie 182
		?	ï	n	?in	-
						Vri 228

13.2

9		unh	[]	twōn	ON ótta (morning) rel. to naht (night) IE noktu-	
morning	D1S	h				Nie 317
			-	-	hat	
17		h	u	piz	MLG hufte (hips) IE kubi-	
hips, loin	D1L	h				Nie 185
			-	-	hūt	Oxf 471-2
X1	NGM	h	ō	pia	(small bay) IE (s) kamb-(bend)	
space, depress-	D1S	h				Vri 248
ion(betw. mountains)		h	ù	p	hùp-khǎu(valley)	Pok 918
X2		h	a	rja	(army) IE korio-	
parade	B1	h				Nie 197
		h	êε			b)
X3		h	a	mp	IE kem-	
forbid	C1	h				Pok 555
prohibit v		h	âa	m		
X4	OHG	(ar)h	ei	gētun	(dried out) IE kai-(heat)	
dry	C1	h				Pok 519
		h	êε	ŋ		
X5		h	i	p	ODA hibe (longing for)	
hungry	A1	h				Nie 183,131
		h	ĩ	u		
X6		h	ūd	artō	(skin wart) IE kuti-,uordā-	
wart	D1L	h				Nie 500,188
		h	ūu	t		

Explanatory notes:

Group No. and Word No. as in Fang Kuei Li. For words not in Li, an x-No is given.

Line 1. The GM version: The GM word is usually a GM root, if not then from an old GM language (stated). The GM etymology is mainly from N. Å. NIELSEN, 1990. In addition Pokorny is a main tool. The references are shortened as follows:

<u>Nie</u> N. Å. Nielsen-90	<u>Pok</u> J. Pokorny-59	<u>Oxf</u> Oxford English Dict. -84
<u>Lan</u> Landrø and Wangenstein 1986		<u>Hov</u> Hovdenak e.a.-86
<u>Vri</u> Jan de Vries-77	<u>Fal</u> Falk & Torp-60	<u>Buc</u> C. D. Buck-49

Parantheses () are used for letters supposed to have fallen away. Brackets [] are used for letters supposed to have been in the word before the transfer. English translations are also in paranthesis.

b) - markers are for words with an adjacent meaning in GM.

Line 2. The Proto-Tai version (after Fang Kuei Li): Tone classes are given as by Li, for x-words reconstructed. Proto-Tai vowels are presented if included in Li.

Line 3. The Tai version: The Tai words are presented as in Li: No. 1 Siamese, No. 2 Lungchow and No. 3 Po-ai dialects. X-words (not in Li) are only in Thai.

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