APPENDIX: VERBS THAT EXHIBIT STEM ALTERNATION

This verb list is based on work by Stephen Nolan and Kee Shein Mang, 2003. K'Chò Verb List with Stem I and II Derivations. Unpublished manuscript.

This is a list of 1662 stem 1 and 176 stem 2 verbs. They were based from Marc Jordan's dictionary (privately published) and checked phonologically, and supplemented for with the verb stem alternations. Approximately 75% of the dictionary has so far been checked so there is a scattered representation of forms from the last third of the dictionary. It is expected however that this list is a representative sample of verb stem alternation in $K'Ch\dot{o}$.

1.0 Verbs that modify vowel quality in stem II.

1.1 Vowel lengthening

	Short	Long	
1.	bi	bii	'do, work'
2.	ci	cii	'say, do'
3.	ge	gee	'learn the lesson (after trouble or suffering)'
4.	htu	htuu	'hit target or mark (shooting)'
5.	m'cha	m'chaa	'separate'
6.	m'hlu	m'hluu	'wash (clothes)'
7.	ng'cha	ng'chaa	'be separate'
8.	pha	phaa	'catch, arrest'
9.	ри	рии	'borrow'
10.	уи	уии	'be the right size or quantity to fit into'

1.2 Tonal modification.

	<u>(L)</u>	<u>(H)</u>	
11.	$b\grave{o}i$	boi	'mix with'
12.	chààng	chaan	'lift, raise up'
13.	cùùng	cuun	'distribute drink, set trap'
14.	dài	däi	'shine (light), blaze'
15.	dò	do	'accept, receive'
16.	èi	ei	'eat'
17.	hlèi	hlei	'be long (hair, nail)'
18.	hlòò	hloo	'drag, haul'
19.	hlòòm	hloom	'wear a turban, wrap head with piece of cloth'
20.	hlùi	hlui	'squeeze out liquid or juice, wear (clothes)'
21.	hngin	hngin	'be ripe (crop), be ready (food)'
22.	htèè	htee	'leak, drip'
23.	k'chữ	k'chü	'speak, filter with a sieve'
24.	k'cù	k'cu	'spread out (grain when dried in the sun)'
25.	k'pài	k'pai	'to cut, mow'
26.	k'phyùi	k' $phyui$	'make revolve'
27.	k'tầm	k'tắm	'chase away, drive out'
28.	kài	kai	'climb'
29.	kyùi	kyü	'be expensive'
30.	m'hlèèm	m'hleem	'pick up'
31.	m'hlòi	m'hloih	'siphon'
32.	m'tùi	m'tui	'lay egg'
33.	ng'äi	ng'äi	'sing'
34.	ng'bò	ng'bo	'split, divide (intr.)'
35.	ng'cài	ng'cai	'erect (male), remain fixed'
36.	ng'hlòi	ng'hloih	'flow out'
37.	ng 'lààm	ng'laam	'dance'
38.	ng 'phyùi	ng'phyui	'revolve'
39.	òi	oi	'put or wear around the neck'
40.	pài	pai	'blossom, bloom'

41.	phò	pho	'dry in the sun'
42.	pyò	pyo	'germinate'
43.	shààng	shaan	'ask for, beg'
44.	shèèn	sheen	'be fine (weather)'
45.	shòò	shoo	'sow seed (making holes in soil)'
46.	shùi	shui	'search, look for'
47.	tài	tai	'put sth. high up'
48.	tèi	tei	'distribute, ration out'
49.	thữi	thüi	'be sad, cheerless, offended'
50.	tùi	tui	'be sweet'
51.	vùù	vuu	'shout loudly (in K'Chò manner)'
	<u>(L)</u>	<u>(R)</u>	
52.	k'hmòi	k'hmói	'crush in palms'
53.	k'pèi	k'péi	'wrestle, rape'
54.	k'phyàn	k'phyán	'untie, release'
55.	khang	khán	'wear blanket across chest'
56.	lèi	léi	'empty, pour out'
57.	m'shùm	m'shúm	'point, sharpen into a point, be pointed'
58.	m'tùng	m'tún	'lean something against a wall or tree etc.'
59.	ng'cùm	ng'cúm	'ride on'
60.	ng'tùng	ng'tún	'lean against'
61.	ngàm	ngám	'doze'
62.	vèn	vén	/'hold, grap'
	<u>(H)</u>	(R)	
63.	k'shom	k'shóm	'chop, cut'
64.	shun	shún	'pierce, prick'

2.0 Verbs that modify the final consonant or tone plus coda in stem II.

2.1 Syllable closing

	(H)	<u>(H)-t</u>	
65.	hla	hlat	'be far away, be long (journey)'
	<u>(L)</u>	<u>(H)-t</u>	A .
66.	kà	kat	'be hard, tiresome'
67.	m'nò	m'not	'be turbid, make become turbid'
68.	nà	nat	'be painful, ache, hurt'
69.	yằ	yät	'be near, close (distance)'
	<u>(H)</u>	<u>(H) –k</u>	
70.	chu	chuk	'cut down, fe!l (tree)'
71.	gu	guk	'write, set flower or other accessories in hair'
72.	hla	hlak	'wear trousers or longyi), weave (of baskets)'
73.	hlu	hluk	'hit or bang with horns (animals)'
74.	hlu	hluk	'pound, ram'
75.	kyu	kyuk	'fall down'
76.	m'chu	m'chuk	'cause to fall down, give to (of meat)'
77.	shu	shuk	'pound, hammer'
78.	tu	tuk	'slash with knife, launch an attach'
	<u>(H)</u>	(<u>H</u>) –h	
79.	cho	choh	'refuse or disagree with someone to go'
80.	go	goh	'kill animal (feast), burn hair of killed animal'
81.	hngu	hnguh	'see'
82.	htui	htuih	'bite'
83.	let (lò)	leh (loo)	'rise from reclining position, get up'
84.	loo .	loh	'devour, kill (predators of their prey)'
85.	moi	moih	'uproot'
86.	thai	thaih	'dawn, become daybreak'
87.	tho	thoh	'wake up, new shoots come up (bamboo)'

2.2 Modification by tone change and syllable closing

	(<u>H</u>)	(<u>R</u>)– <u>k</u>	
88.	e	ék	'pass excrement'
89.	k'cha	k'chák	'drop, report someone to authorities'
90.	kya	kyák	'fall, behave, to be'
91.	la	lák	'take'
92.	lu	lúk	'have sex with (of man)'
93.	m'gu	m'gúk	'steal'
94.	па	nák	'wear ring (finger, ear), bark at'
95.	ta	ták	'own or possess, have sex with a woman'
96.	vo	vók	'clear forest for new field, collapse upon (trap)'
	<u>(L)</u>	<u>(H)-h</u>	
97.	kyù	kyüh	'be afraid'
98.	ngò	ngoh	'sit, assign'
99.	phùi	phuih	'carry with strap from head'
100.	shì	shih	'die'
101.	vòi	voih	'throw sth. at someone,'
102.	yòi	yoih	'sell'
	<u>(R)</u>	(H)-h	
103.	ng 'düi	ng'düih	'stand'

2.3 Modification of coda

	(<u>H</u>)- <u>p</u>	(H)-h	
105.	ip	ih	'sleep'
106.	k'cep	k'ceh	'wedge between'
107.	k'kot	k'koh	'carry in hand or on shoulder'
108.	kep	keh	'hold something tightly to one's chest'
109.	kop	koh	'adhere, stick to'
110.	kyap	kyah	'cry, weep'

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111.	m'chäp	m'chäh	'put into a container'
112.	m'hlep	m'hleh	'harvest in great quantity'
113.	ng'cep	ng'ceh	'be wedged in between'
114.	ng'hlep	ng'hleh	'produce or yield great harvest (crops)'
115.	shep	sheh	'make, forge'
116.	thup	thuh	'hide something'
	(H)-t	(<u>H</u>) - <u>h</u>	
117.	bat	bah	'hang up'
118.	gut	guh	'take by force'
119.	hteit	hteih (hteh)	ʻgoʻ
120.	k'bot	k'boh	'pluck out (feathers), pick by pulling'
121	. k'hlet	k'hleh	'remove'
122.	m'hlat	m'hlah	'turn back (tran)'
123.	ng'bat	ng'bah	'hang from'
124.	ng'hlat	ng'hlah	'turn back or turn around (intr)'
125.	that	thah	'beat, strike, whip'
126.	vüt	vüh	'bore a hole'
	<u>(H) –k</u>	<u>(H) –h</u>	
127.	cik	cih	'make fire, set fire to'
128.	hlek	hleh 🙏	'pick, plug out'
129.	k'dook	k'doh	'swallow'
130.	khok	khoh	'peel, unbark, take off sth. sticking'
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2.4 Modification of tone and coda

	(R)-t	(<u>H</u>) -h	
131.	chót	choh	'scratch'
132.	hlút	hluh	'take off (clothes, rings, necklace etc.)'
133.	khéit	kheih	'choke the neck and kill (chicken)'
134.	ng'chót	ng'choh	'scratch oneself'

 $(R) -k \qquad (H) -h$

hlók hloh 'scoop up. 135. k'hloh 'peel off (trans.)' 136. k'hlók lók loh 'collect, levy tax' 137. m'léik m'leih 'lap, lick' 138. 'peel off (intrans.)' ng'hloh 139. ng'hlók

2.3 Modification of nasal finals

2.3.1 Nasal coda change

 $(H)-ng \qquad (H)-n$

140. pang pan 'be deaf'

2.3.2 Tone and nasal coda change

(H)-ng (R)-n'take something down from high' chán 141. chang 'hold, grab' 142. k'pang k'pán (L) -ng (H) -n 'set trap' 143. cùùng cuun 'be alive' 144. ghững ghün güng 'wait for' 145. gün 'shake off or beat up' k'khoon 146. k'khòòng 'crow (cock)' khoon 147. khòòng 'flow' loon 148. lòòng 'make, repair' 149. pyààng pyaan 'cook' 150. shòòng shoon 151. 'buy a plot of land' thòòng thoon 'fly' 152. yòòng yoon

	(L)-ng	<u>(R)-n</u>	
153.	chùng	chün	'cut (bamboo plant or tree)'
154.	k'hmòng	k'hmón	'open (door, gate)'
155.	lòng	lón	'be the right size to enter into'
<i>156</i> .	màng	mán	'face, turn towards'
157.	ng'büng	ng'bün	'cap with, cover with'
158.	ng'chùng	ng'chǘn	'be separated, share with'
159.	phyòng	phyón	'escape from bondage or danger'

3. Verbs that exhibit three different types of stems

	Stem I (H)-Short	Stem II (H)-long	Stem II Rising	
160.	thu	thuu	k'thú	'smell, rot'
161.	ni	nii	k'ni	'be good'
162.	she	shéit	k'shé	'be bad'
163.	kha	khaa	k'khá	'be bitter'
164.	lo	loo	k'ló	'come'

4. Collocated verbs

Stem I		Stem II	
Be hla	'tell, make'	béit hlak	'tell'
Èi o	'eat, drink'	ei ók	'eat or have feast/party'
Hlu dèng	'pound, pound'	hluk deen	'pound'
Hteit htoon	'go, ?'	hteih htoon	'travel'
K'hleih shu	'buy, ?'	k'hleih shuk	'buy'
Khit khón	'tie, tie'	khih khón	'tie'
Lèim bài	'be injured,?'	leim bai	'to be injured'
Loi shòòng	'make beer, cook'	loi shoon	'entertain guests'
Lùùm pyààng	'play, make'	luum pyaan	'not do work seriously'
M'dèi màng	'open eyes, face'	m'dei mán	'be watchful'
Ng'tu ng'vo	'physical, verbal fight'	ng'tuk-ng'vók	'fight'
Pe ta	'give, have'	péit ták	'give'
Phùi k'kot	'head-carry, hand-carry'	phuih k'koh	'carry'
Shòòng cik	'cook, make fire'	shoon cih	'cook or prepare food'
Shùi lèi	'search, ?'	shui lei	'search'
Tu m'bei	'give drink, give food'	tu m'bei	'give food'
Tu that	'slash, beat'	tuk thah	'beat, whip'
Tùi hlìm	'sweet, delicious'	tui hlim	'be delicious'
Vòi k'pet	'throw at, splash'	voih k'peh	'give offering'
Yòòng ng'phầi	'fly, jump'	yoon ng'phäi	ʻjump'
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