

NOTES

On the *r* > *h* shift in Phnom Penh Khmer*

NARASET Pisitpanporn
Mahidol University

I. Introduction

Before my first visit to Cambodia in 1991, I collected some useful vocabulary from Khmer-English dictionaries to help in my work in Cambodia. The pronunciation of these words was mostly given according to the standard written language, but I soon discovered that many of them are pronounced differently in Phnom Penh, creating problems for non-native listeners.

The Phnom Penh dialect is used daily by natives of Phnom Penh, be they educated or not, rich or poor, civil servants or ordinary citizens. My data on it was collected during 1991-1993 from various people. The most help has come from Ms. Phoumy Ouch, who was born and has lived in Phnom Penh since 1958, and the forms given here are based on her idiolect. The standard Khmer forms and meanings are given here largely as in Huffman's and Jacob's dictionaries.

I could not find any records on the history of the Phnom Penh dialect, but the current pronunciation is at least 100 years old, as indicated by the speech of a grandmother of Ms. Phoumy who is now 82 but still speaks the way she did as a child.

From 1975 to 1978 the Khmer Rouge scattered Phnom Penh inhabitants throughout the country, with the result that Phnom Penh pronunciation has become widely known. And since 1979, with the return of many Khmer people to their homes, the Phnom Penh pronunciation has become quite popular. At present it is accepted and used unofficially by Phnom Penh people and others at all levels of society in their daily lives. One can predict that it will be the Khmer language of the future.

One of the most noticeable features of Phnom Penh Khmer is the variation between initial *r* and *h*, with its other concomitant features.

* I would like to thank Dr. David Thomas for editing and offering valuable suggestions for presentation of this note, and also to Dr. Suwilai Preamsirat for providing encouragement and advice in writing this note.

2. Phoneme inventories

2.1 *Standard Khmer*

The pure vowels in Standard Khmer are: i, ii, e, ee, ɛ, ɛɛ, a, aa, ɑ, ɑɑ, ɔ, ɔɔ, o, oo, u, uu, ɯ, ɯɯ, ə, əə.

The glided vowels are: ia, iə, iiə, əi, ai, ae, ao, au, aə, oa, ua, uaə, uə, uuə, əu.

The initial simple consonants are: m, n, ɲ, ŋ, b, d, p, t, c, k, ʔ, p^h, t^h, c^h, k^h, f, s, h, w, y, l, r

The initial consonant clusters are: pr, tr, cr, kr, sr

The final consonants are: m, n, ɲ, ŋ, p, t, c, k, ʔ, h, w, y, l

2.2 *Phnom Penh*

The pure vowels in Phnom Penh Khmer are as in Standard Khmer, but lacking /i/ and /ɛ/ (Noss lacked /ɔ/ [1966:91]). The glided vowels are as in Standard Khmer but lacking /ɛə/ and /ɔə/. The finals and the initial simple consonants are as in Standard Khmer except /r/, but Phnom Penh lacks the clusters (Noss lacked /f/ [1966:90]).

3. The r > h shift

The shift described above as *r > h* is in reality a registral shift involving several aspects of the phonology. There seem to be no restrictions on the occurrence of this shift; it may occur in all phonological environments (see Appendix 1, cōcurrence chart). Samples of the shifts are given below; for more examples see Appendix 2.

3.1 *r > h*

This is a shift of *voiced > voiceless* and *rhotacized > nonrhotacized*. The *r > h* initial words are marked by falling-rising pitch. For example:

ʔəŋrae	>	ʔəŋhɛɛ	ruam	>	hūuam	riəŋ	>	hiiəŋ
ruuəŋ	>	hūuəŋ	ruup	>	hūup	rɛɛc	>	hɛɛc
rooy	>	hđoy	səmrap	>	səmhiiap	ruw	>	hđəw

3.2 *Stop + r > aspirated stop consonant*

This is similar to the above except that the *h* is just a voiceless aspirated release /^h/ of a stop rather than a fully segmental /h/. The clusters *pr*, *tr*, *cr*, *kr* become aspirates *p^h*, *t^h*, *c^h*, *k^h*. For example:

prae	>	p ^h ɛɛ	pram	>	p ^h iam	pron	>	p ^h əŋ
truu	>	t ^h ūu	traeŋ	>	t ^h ɛŋ	trac	>	t ^h iac
crəi	>	c ^h əi	cruŋ	>	c ^h ūŋ	criəʔ	>	c ^h iəʔ

3.3 *sr* > *s^h* > *s* + *tone*

I hypothesize a two-step change in which the *r* after *s* is devoiced and derhotacized to form an aspirate *s^h*, which in turn becomes *s* plus falling-rising pitch. In a two-syllable word this results in reduction to one syllable. For example:

sroot	>	s ^h oot	>	sōot
sruuəl	>	s ^h uuəl	>	sūuəl
sraa	>	s ^h iia	>	sīia
səmraan	>	smhiian	>	smīian

3.4 *bVr* > *ph* + *tone*

In a two-syllable word where the first syllable has a voiced stop and the second has *r*, the word may collapse into a monosyllabic word with aspirated voiceless stop and falling-rising pitch.

baaraŋ	>	bəhiiaŋ	>	bīiaŋ	>	p ^h iiaŋ
--------	---	---------	---	-------	---	---------------------

3.5 *Diphthongization*

The simple vowels /a, aa/ and /ə, əə/ change to /iia/ and /uua/. For example:

kraŋ	>	k ^h iiaŋ	kraap	>	k ^h iiaŋ
traŋ	>	t ^h ūuaŋ	traaŋ	>	t ^h ūuaŋ

3.6 *Monophthongization*

The vowel glides to mid height /ae/, /aə/, and /ao/ change to simple vowels /εε/, /əə/, and /oo/, respectively. And there are other occasional changes. For example:

crae	>	c ^h εε	kraeŋ	>	k ^h εεŋ	sraeŋ	>	sεεŋ
praə	>	p ^h əə	sraəŋ	>	səəŋ	kraən	>	k ^h əəŋ
kraol	>	k ^h ɔɔl, k ^h ool	kraok	>	k ^h ɔɔk, k ^h ook	sraom	>	sɔɔm, sōom
craən	>	c ^h əəŋ						

3.7 *Vowel lengthening*

Many short vowels are lengthened. For example:

criəʔ	>	c ^h i:iəʔ	prəh	>	p ^h ɔ:əh	preŋ	>	p ^h ε:εŋ
riəp	>	hii:p	prəh	>	p ^h ɔ:əh	truuh	>	t ^h ū:ūuh
trəm	>	t ^h ɔ:m	ruam	>	hū:uam	ruŋ	>	hū:uŋ
pruh	>	p ^h ū:uh						

3.8 Vowel height change

The change of *r* > *h* may also affect vowel height; /u/ may lower to /ə/ and /o/ may raise to /uu/. For example:

ruh	>	hǝəh
proah	>	p ^h uuah

In summary, this is a complex register shift in syllables containing *r*. It involves simultaneous shift in common register components such as devoicing, pitch, vowel gliding, vowel length and vowel height.

Appendix 1. Distribution of Phnom Penh final consonants and vowels in syllables with original initials /r/, /pr/, /tr/, /cr/, /kr/, /sr/.

	r-	pr-	tr-	cr-	kr-	sr-
ii				-w		
e		-ŋ				
ee		-ŋ, -n				
εε	-c					
a	-ŋ, -p, -c	-m, -ŋ, -p, -ʔ, -h	-m, -ŋ, -p, -c, -ʔ	-ŋ, -c	-ŋ, -ʔ	-m, -ŋ, -p, -c, -ʔ, -h
aa	-n	-n, -c, -w	-ʃ, -c, -w	-n, -ŋ, -l	-ʃ, -m, -n, p	-ʃ, -ŋ, -p, -t, -w, -l
ɑ		-ŋ, -ʔ, -h	-ŋ, -h	-h		-m, -ŋ, -h
aa		-p	-ŋ	-ʔ	-ʃ, -ŋ, -ʔ	-p
ɔ		-h			-ŋ	
ɔɔ			-m			
o		-ŋ				
oo	-y	-m	-m, -p	-ŋ, -t, -k	-p	-p, -t
u	-ŋ	-h	-ŋ, -h	-ŋ, -h, -l		
uu	-p	-ʃ	-ŋ	-k	-ʃ	
u	-h	*h	-ʃ			
uuu				-h		
ɔ		-ŋ, -h	-m, -ŋ, -h, -w	-h		-m, -p
ia	-ʔ					
iə	-n, -ŋ, -p	-ŋ, -p, -y	-p, -y	-ŋ, -p, -ʔ	-p, -ʔ, -w	-w
iiə	-n, -ŋ, -p, -y	-w		-p, -y		
ai		-ʃ			-ʃ	
ae	-ʃ	-ʃ, -ŋ, -t, -c	-ʃ	-ʃ, -ŋ, -c	-ʃ, -ŋ	-ʃ, -c, -ŋ
ao					-m, -k, -y, -l	-m, -p, -c
au					-ʃ	
aə		-ʃ		-n	-n	-ŋ
oa		-h				
ua	-m, -h			-m	-m	
uaɔ			-m			
uə	-p	-h	-p	-ŋ, -ʔ, -h	-p, -h	
euə	-c, -ŋ	-h, -ŋ, -l		-ŋ, -l	-c, -h	-c, -l
uə	-ŋ				-ŋ	
ie		-ʃ	-ʃ	-ʃ	-ʃ	-ʃ
əu		-ʃ		-ʃ	-ʔ	

Appendix 2. List of r > h words.

Standard	Phnom Penh	
?aŋ.rae	?aŋ.hɛɛ	cradle, hammock
?aa kruə?	?aa k ^h uuə?	evil, demon
?aa.sraŋ	?aa.suuam	hermitage
baa.raŋ	p ^h iaŋ	France, foreigner
caŋ.kraaŋ	caŋ.k ^h uuəŋ	to edit, compile, collect
caŋ.kraan	ck ^h iaŋ	stove
crəə?	c ^h uuə?	to fill
crəh	c ^h uuah	to be imitative of the sound of hacking, slashing
crəh.rəh	c ^h əh.həh	to choose
crəi	c ^h əi	a kind of tree
crəu	c ^h əu	deep
crəən	c ^h əən	many, much
crəŋ	c ^h iaŋ	river bank
crəal	c ^h ial	very red
crəan	c ^h iaŋ	to push
crac	c ^h iac	a kind of tree
crac	c ^h ɛɛ	to shuffle cards; a kind of palm tree
crəeŋ	c ^h ɛeŋ	to stand with hands at waist; to support, prop from an angle
cracc	c ^h ɛɛc	to intrude, interfere, bother
crəə?	c ^h iaə?	to split into lengthwise sections
crəeŋ	c ^h iaŋ	to sing
crəəp	c ^h iaəp	dead silent
criiəp	c ^h iaəp	to come to the knowledge of, be learned by
criiəy	c ^h iaəy	soft and easily squashed
criiw	c ^h iaw	shrivelled
crooŋ craaŋ	c ^h ooŋ c ^h iaŋ	sticking up here and there irregularly
crook	c ^h ook	to resort to the shade, take shelter in, at; to depend on the help or power of others
croot	c ^h oot	to cut down with a sickle
cruə?	c ^h uuə?	pickled vegetable
cruəh	c ^h uuəh	gorge, mountain stream, spring
cruəŋ	c ^h uuəŋ	chopping board
cruŋ	c ^h uŋ	angle, corner
cruam	c ^h uam	to eat (vulgar)
cruh	c ^h uh	to fall off, be shed
crul	c ^h ul	to go beyond the reasonable limit
cruuəl	c ^h uuəl	to scatter in panic, scatter in disorder
cruuəŋ	c ^h uuəŋ	wrinkled (face)
cruuk	c ^h uuk	pig
cruwah.ruh	c ^h uwah.huwah/ c ^h uwah.həh	to choose
kaŋ.traa	kəŋ.t ^h ia	contract

khluun praan kṛṇṇ	k ^h lūun p ^h ian k ^h ṛṇṇ	body city; to catch by placing net, pot, etc., over; to protect
kraa kraaʔ kraaṇ krəi kraa kraʔ	k ^h ūua k ^h ūuaʔ k ^h ūuaṇ k ^h əi k ^h ūua k ^h iaʔ	poor, rare, difficult sausage to plait one's hair poor heartwood of tree which has fallen through natural causes
kraən kraṇ	k ^h əən k ^h iaṇ	to urge a huge book for official registration in the King's palace or temples
kraa kraaʔ kraam kraap krae kraeṇ	k ^h ia k ^h iaʔ k ^h iam k ^h iap k ^h ɛɛ k ^h ɛɛṇ	a kind of insect sound of an object pulled out kilogram to prostrate bed to have regard for others and their feelings
krai kraok kraol kraom kraoy krau kriəʔ kriəp	k ^h iai k ^h ɔk/k ^h ok k ^h ɔl/k ^h ol k ^h ɔm/k ^h om k ^h ɔy/k ^h oy k ^h iau k ^h iaʔ k ^h iap	extremely to wake up stable, cattle-shed under behind outside ugly appearance; to tie to a post a kind of snack; sound of brittle object being crushed
kriəw kroop kruəh kruəp kruam kruu kruuəc kruuəh kruəṇ prəh praʔ praap praṇ prah prəṇ prəṇ praenṇ prəh/pruəh	k ^h iaw k ^h oop k ^h ūuəh k ^h ūuəp k ^h ūuam k ^h ūu k ^h ūuəc k ^h ūuəh k ^h ūuəṇ p ^h ɔh p ^h ūuaʔ p ^h ūuap p ^h ūuaṇ p ^h ūuah p ^h əṇ p ^h əṇ p ^h ɛṇ p ^h əh/p ^h ūuəh	to castrate a cover accident, casualty seed, gain extremely weak teacher a kind of bird gravel, small rounded stones ingredient male to roof, thatch, to be roofed with next to, adjacent, very near a kind of tree to sprinkle to make an effort to try hard to a kind of deer; conical bamboo entry to a fish trap
prəi prəu praʔ praə praṇ (khae)	p ^h əi p ^h əu p ^h iaʔ p ^h ə p ^h iaṇ	forest unmarried and old silver, money to use dry, hot (season)

praac	p ^h iac	intelligent
praaw	p ^h iaw	sound of crushing brittle objects
prae	p ^h ɛɛ	to alter, change
praec(k)	p ^h ɛɛc	small river, a part of cart
praet	p ^h ɛɛt	demon, ogre, monster, inhabitant of hell
prah	p ^h iah	to toss and turn in sleep; roll along the ground; move, struggling to free oneself
prai	p ^h iai	salty
pram	p ^h iam	five
prap	p ^h iap	to tell
preŋ	p ^h ɛɛŋ	oil
preeŋ	p ^h ɛɛŋ	ancient
preen	p ^h ɛɛn	food offered to spirits
priəŋ	p ^h iəŋ	to do in rough, do as a practice before the real thing
priəp	p ^h iəp	pigeon
priəy	p ^h iəy	ghost, demon, malevolent spirit
priəw	p ^h iəw	groping, hazard a guess
pɔŋ	p ^h ɔŋ	to be guarded; to be ready to; to intend to; to plan for; to try to
proah	p ^h uuh	to be kind to, square, deliver from death
proom	p ^h ɔom	to be ready, agree to, consent to, accept
pruəh	p ^h uəh	<i>because; to sow, scatter, broadcast</i>
pruh	p ^h uuh	to bark
pruu laan	p ^h uu laan	a bus conductor
pruuəh	p ^h uuəh	to spit onto
pruuəl	p ^h uuəl	a bit at a time, trying it out; wicker work frame with various uses
pruuəŋ	p ^h uuəŋ	arrow
raəŋ	həəŋ	to winnow, sift
riəŋ	hiiəŋ	shape, form, appearance
riən	hiiən	to learn
riəp	hiiəp	to prepare
ria?	hiiə?	shallow
riiəŋ	hiiəŋ	to have had enough of, give up
riiən	hiiən	platform, stage
riiəp	hiiəp	flap
riiəy	hiiəy	small change
rooy	hɔoy	hundred
ruəp	huuəp	to count
ruah	huuah	to rake
ruam	hiiuam	to dance
ruŋ	hiiuŋ	to push
ruuəc	hiiuəc	to finish, achieve, get through to the end
ruuəŋ	hiiuəŋ	to shrivel, shrivel
ruup	hiiup	picture, shape, statue, likeness

ruəŋ	hũuəŋ	matter, issue, story, event, play
ruh	hũuwh/həəh	root
rɛɛc	hɛɛc	to carry on one's shoulder
səm.raan	sĩian	to sleep
səm.rac	səm.hĩiac	to decide; to achieve
səm.rap	səm.hĩiap	for
sɔad?	sũua?	to decrease(water)
sɔap	sũuap	to follow closely; to agree with
sɔaŋ	sũuaŋ	to bathe (Buddhist monk); to pick something out of a liquid, save from drowning
srah	sũuah	fresh, vivid before one's eyes, nice-looking, pretty
sɔai	səəi	female
sɔəm	səəm	appearing bit by bit
sɔəp sraal	səəp sĩaal	to get excited
sɔa?	sĩa?	stack; to tie round tightly
sɔaəŋ	səəŋ	scurf
sɔaŋ	sĩaŋ	a kind of insect
sraa	sĩa	alcohol
sraaŋ	sĩaŋ	glimmer, opaque
sraal	sĩaal	light in weight; not serious
sraap (khae)	sĩaap	July-August (lunar system)
sraat	sĩaat	to take off clothes, undress
sraaw	sĩaaw	to wind in, wind up
sɔac	sĩaac	to finish, complete
sɔaɛ	sɛɛ	paddy-field
sɔaɛc	sɛɛc	to shout
sɔaɛŋ	sɛɛŋ	leprosy
srah	sĩah	lake, pond
sram	sĩam	to be cracked
sraoc	sɔɔc/səoc	to sprinkle
sraom	sɔɔm/səom	envelop
sraop	sɔɔp/səop	to cover all over the surface
srap	sĩap	already complete
sriəw	sĩaw	to feel a chill of fear; to shiver
sroop	səop	to suck in
sroot	səot	swiftly and directly
sruuəc	sũuəc	pointed, sharp
sruuəl	sũuəl	easy, comfortable
trəwm	tʰɔwm	to be weakened
trəaŋ	tʰũuaŋ	to catch liquid in a container
trəŋ	tʰũuaŋ	direct, straight
trəh	tʰũuah	a kind of tree
trəŋ	tʰəəŋ	to be silent and halt, unable to continue what one's doing
trəh	tʰəəh	than
trəi	tʰɔi	fish
trəm	tʰɔm	exact, just up to the same point as
trəm trəw	tʰɔm tʰəəw	right, accurate, proper
trəw	tʰəəw	must, correct, right

traʔ	t ^h iaʔ	an anonymous letter
traŋ	t ^h iaaŋ	a kind of tree
traac	t ^h iaac	a kind of tree
traaw	t ^h iaaw	taro
trac គគ	t ^h iaac គគ	to go, walk, move forward
trae	t ^h ɛɛ	horn
traeŋ	t ^h ɛɛŋ	a kind of tree
tram	t ^h iam	to soak
trap	t ^h iap	to imitate
triəp	t ^h iəp	a kind of sweet
troom	t ^h ɔm	go down (of elephants going into bent position)
troop	t ^h ɔp	sag, flop down on
truəp	t ^h uəp	wealth, possessions, belongings; to spread out under
truŋ	t ^h uŋ	pen, enclosure
truŋ triəy	t ^h uŋ t ^h iəy	form, shape
truaəm	t ^h uaəm	to put up with, endure, suffer
truh	t ^h uh	to harm
truu	t ^h uu	a cylindrical fish-trap
truuŋ	t ^h uuŋ	chest
truh	t ^h uh	than

REFERENCE

Noss, Richard B. 1966. */R/ in two modern Khmer dialects. *SCAL* pp.89-95.

Received: September 1993

Institute of Language and Culture
for Rural Development
Mahidol University, Salaya
Nakhorn Pathom 73170, Thailand