

NOTES SECTION

The nasalisation of final stops in modern Khmer singing

NARASET Pisitpanporn
Mahidol University, Thailand

Abstract

This paper examines six final stops: -p, -t, -c, -k, -ʔ and -h in Khmer as found in songs sung by different Khmer singers. It is found that the six word-final consonants, in singing, tend to vary to nasals. However, words with such final stops may not always vary with the same singer and if so, they tend to be nasals. Whether the nasalisation of such final stops in singing, by Khmer singers, is intentional or sub-conscious, requires further sociolinguistic study to gain a better understanding of such linguistic phenomena.

1. Background of the study

This study is primarily concerned with modern Khmer songs. Modern Khmer songs are sung by people of all ages in Cambodia, and are broadcast through television and radio. Modern Khmer songs are also distributed in the form of CDs so they are easily accessed by all Khmer listeners in towns or in the rural areas. Some modern Khmer songs are reproduced from the 1960s and are sung by new singers. Young and attractive singers are promoted by music business companies to sing songs to meet the needs of Khmer consumers, especially teenagers.

Previous studies related to Khmer songs were conducted by Ehrman (1972) and Jacob (1993). In Khmer recitation and singing, as noted by Ehrman (1972:13-14), syllables that ended in voiceless consonants /p, t, c, k, ʔ, h/ would become homorganic nasals. This conclusion was in line with Jacob (1993:219) who pointed out that, in reciting Khmer poetry or in songs, final consonants of syllables are almost always followed by the nasals (i.e. *kuut* > *kun*; *tuk* > *tun*; *rək* > *rən*; *nih* > *niŋ*)¹.

This paper attempts to provide a further account of the phenomenon to which Ehrman (1972) and Jacob (1993) referred earlier. The observations made in this paper are based on modern Khmer songs sung by different Khmer

¹Ferlus (1974), although not in singing, reported the phenomena of nasalisation in Mon-Khmer languages, Ta-Oy and Ong, which are two related dialects in the Mon-Khmer language. For instance, the final /p, t, c/ in Ta-Oy corresponds to /m, n, y/ in Ong.

singers, especially those available on CD, in markets in Phnom Penh, the capital of Cambodia.

2. Consonant aspects

Linguistically, where nasalisation is concerned, it is understood that Khmer singers prefer to lower their soft palate and allow air to escape through their nose when singing, thus nasal consonants are pronounced. When this variation takes place, as the final consonant becomes a nasal consonant, the final -p, -t and -k tend to have the same place of articulation. This linguistic phenomenon is known as homorganic point of articulation: voiceless bilabial plosive /p/ > voiced bilabial nasal /m/; voiceless alveolar plosive /t/ > voiced alveolar nasal /n/ and voiceless velar plosive /k/ > voiced velar nasal /ŋ/.

2.1 The voiceless bilabial plosive /p/ > voiced bilabial nasal /m/

For example:

| | | | |
|------------|---|------------|--------------------|
| cap | ~ | cam | ‘to catch’ |
| srap | ~ | sram | ‘ready, available’ |
| yup | ~ | yum | ‘night’ |
| mlup | ~ | mlum | ‘shade’ |
| top | ~ | tom | ‘to block’ |
| sʔap | ~ | sʔam | ‘to hate’ |
| tra.lap | ~ | tra.lam | ‘to return’ |
| kuəp | ~ | kuəm | ‘satisfied’ |
| cuəp | ~ | cuəm | ‘to attach’ |
| təəp | ~ | təəm | ‘only, then’ |
| ban.cap | ~ | ban.cam | ‘to end’ |
| ʔaa.phuəp | ~ | ʔaa.phuəm | ‘bad luck’ |
| krup khniə | ~ | krum khniə | ‘everyone’ |
| thuj thap | ~ | thuj tham | ‘to be bored’ |

2.2 The voiceless alveolar plosive /t/ > voiced alveolar nasal /n/

For example:

| | | | |
|---------|---|---------|-------------|
| kat | ~ | kan | ‘to cut’ |
| mat | ~ | man | ‘word’ |
| sot tae | ~ | son tae | ‘only’ |
| cii.wut | ~ | cii.wun | ‘life’ |
| kwut | ~ | kun | ‘to think’ |
| ʔaa.tut | ~ | ʔaa.tun | ‘week, sun’ |
| ŋo.nut | ~ | ŋo.nun | ‘dark’ |
| puut | ~ | pun | ‘true’ |

| | | | |
|-------------|---|-------------|-------------|
| kam.bət | ~ | kam.bən | ‘knight’ |
| ʔət | ~ | ʔən | ‘no’ |
| snət | ~ | snən | ‘close’ |
| sam.puət | ~ | sam.puən | ‘cloth’ |
| duuəŋ cət | ~ | duuəŋ cən | ‘mind’ |
| rət | ~ | rən | ‘power’ |
| siiət | ~ | siiən | ‘to insert’ |
| cət borisot | ~ | cən borison | ‘pure mind’ |

2.3 The voiceless velar plosive /k/ > voiced velar nasal /ŋ/

For example:

| | | | |
|-----------|---|-----------|---------------|
| phneek | ~ | phneenŋ | ‘eye’ |
| meek | ~ | meenŋ | ‘sky’ |
| peek | ~ | peenŋ | ‘too, beyond’ |
| tuk | ~ | tunŋ | ‘to keep’ |
| ʔəw puk | ~ | ʔəw punŋ | ‘father’ |
| tuk | ~ | tunŋ | ‘to keep’ |
| tuuk | ~ | tuunŋ | ‘boat’ |
| sra.nok | ~ | sra.noŋ | ‘comfortable’ |
| cook cey | ~ | cooŋ cey | ‘victory’ |
| nuk | ~ | nunŋ | ‘to think’ |
| pruk | ~ | pruŋ | ‘tree’ |
| tuk | ~ | tunŋ | ‘water’ |
| phək | ~ | phəŋ | ‘to drink’ |
| ləək piiə | ~ | ləəŋ piiə | ‘manner’ |
| cok cap | ~ | coŋ cam | ‘pain’ |

2.4 The final -c, -ʔ, and -h

2.4.1 The final voiceless palatal stop /c/ and voiceless glottal stop /ʔ/ tend to vary to voiced velar nasal /ŋ/

For example:

/c/:

| | | | |
|-----------|---|------------|-----------------------|
| lic | ~ | liŋ | ‘to sink’ |
| mdec | ~ | mdenŋ | ‘how’ |
| phlec | ~ | phlenŋ | ‘to forget’ |
| bam.phlec | ~ | bam.phlenŋ | ‘to forget something’ |

It is found that in modern Khmer singing, the voiceless palatal stop /c/ is in variation with voiced velar nasal /ŋ/ instead of the palatal nasal /ɲ/ as noted in Ehrman (1972) and Jacob (1993).

/ʔ/:

| | | | |
|---------------|---|---------------|---------------------------------|
| daʔ | ~ | daŋ | ‘to put’ |
| haʔ | ~ | haŋ | ‘seem’ |
| chaʔ | ~ | chaŋ | ‘to take something by force’ |
| piəʔ | ~ | piəŋ | ‘to wear’ |
| niəʔ | ~ | niəŋ | ‘person’ |
| mniaʔ | ~ | mniaŋ | ‘a person’ |
| niəʔ naa | ~ | niəŋ naa | ‘who’ |
| niəʔ nee.saat | ~ | niəŋ nee.saan | ‘fisherman’ |
| kriəʔ | ~ | kriəŋ | ‘hard, firm’ |
| ciəʔ | ~ | ciəŋ | ‘to fling’ |
| liəʔ | ~ | liəŋ | ‘to forget completely’ |
| luəʔ | ~ | luəŋ | ‘to sell’ |
| na.ruəʔ | ~ | na.ruəŋ | ‘hell’ |
| pra.laʔ | ~ | pra.laŋ | ‘dirty’ |
| sam.naʔ | ~ | sam.naŋ | ‘dwelling’ |
| caŋ.waʔ | ~ | caŋ.waŋ | ‘rhythm’ |
| ban.saʔ | ~ | ban.saŋ | ‘fate’ |
| morodaʔ | ~ | morodaŋ | ‘heritage’ |
| ʔaa.kraʔ | ~ | ʔaa.kraŋ | ‘ugly, mean’ |
| cua ciəʔ | ~ | cua ciəŋ | ‘to believe’ |
| tra.ciəʔ | ~ | tra.ciəŋ | ‘cold’ |
| ban.ciəʔ | ~ | ban.ciəŋ | ‘to explain’ |
| sam.piəʔ | ~ | sam.piəŋ | ‘to salute’ |
| luəŋ luəʔ | ~ | luəŋ luəŋ | ‘to sleep’ |
| soʔ.khaa | ~ | soŋ.khaa | ‘happy’ |
| phiəʔ.traa | ~ | phiəŋ.traa | ‘face’ |
| phiəʔ.kdəy | ~ | phiəŋ.kdəy | ‘loyalty’ |
| niʔ.kaa | ~ | niŋ.kaa | ‘moon’ |

2.4.2 The voiceless fricative stop /h/ tends to vary to voiced velar nasal /ŋ/; to voiced alveolar nasal /n/ or deleted altogether.

For example:

/h/ > /ŋ/:

| | | | |
|------|---|------|------------|
| nih | ~ | niŋ | ‘this’ |
| cih | ~ | ciŋ | ‘to drive’ |
| cəh | ~ | cəŋ | ‘to know’ |
| nah | ~ | naŋ | ‘very’ |
| cbah | ~ | cbəŋ | ‘clear’ |
| cah | ~ | caŋ | ‘old’ |

| | | | |
|--------------|---|--------------|--------------------|
| mcah | ~ | mcaŋ | ‘owner’ |
| khmah | ~ | khmaŋ | ‘to shy’ |
| krah | ~ | kraŋ | ‘thick’ |
| khwah | ~ | khwaŋ | ‘to lack’ |
| phlah | ~ | phlaŋ | ‘to change’ |
| ruh rooy | ~ | ruŋ rooy | ‘to demolish’ |
| mnuh | ~ | mnun | ‘human’ |
| coh | ~ | coŋ | ‘to go down’ |
| proh | ~ | proŋ | ‘boy, female’ |
| khoh | ~ | khon | ‘fault, mistake’ |
| smah | ~ | smaŋ | ‘honest’ |
| sah | ~ | saŋ | ‘not any’ |
| kah | ~ | kaŋ | ‘island’ |
| ?ah | ~ | ?aŋ | ‘no more’ |
| smah | ~ | smaŋ | ‘honest’ |
| læh | ~ | læŋ | ‘to be over’ |
| ciæh | ~ | ciæŋ | ‘clean’ |
| priæh can | ~ | priæŋ can | ‘moon’ |
| miiæh | ~ | miiæŋ | ‘gold’ |
| pruæh | ~ | pruæŋ | ‘because’ |
| tuæh ciæ | ~ | tuæŋ ciæ | ‘although’ |
| cruæh | ~ | cruæŋ | ‘crevasse’ |
| tuæh | ~ | tuæŋ | ‘even though’ |
| baŋ.klaa.deh | ~ | baŋ.klaa.den | ‘Bangladesh’ |
| caŋ.kæh | ~ | caŋ.kæŋ | ‘waist’ |
| sra.lah | ~ | sra.laŋ | ‘clear’ |
| phlah | ~ | phlaŋ | ‘to change’ |
| pon.nah | ~ | pon.naŋ | ‘only’ |
| ro.bah | ~ | ro.baŋ | ‘thing, goods’ |
| ?aa.lah | ~ | ?aa.laŋ | ‘to be missed’ |
| pra.tiæh | ~ | pra.tiæŋ | ‘to encounter’ |
| sra.nah | ~ | sra.naŋ | ‘to miss’ |
| sra.lah | ~ | sra.laŋ | ‘clear’ |
| sam.rah | ~ | sam.raŋ | ‘fresh’ |
| cum.niæh | ~ | cum.niæŋ | ‘victory’ |
| ?ah.caa | ~ | ?aŋ.caa | ‘well, good’ |
| cih yon.hah | ~ | ciŋ yon.haŋ | ‘to travel by air’ |

/h/ > /n/:

| | | | |
|------|---|------|-------------------------|
| swih | ~ | swin | ‘Switzerland’ |
| cruh | ~ | crun | ‘to drop, to fall down’ |

/h/ > /ø/:

| | | | |
|----------|---|-----------|--------------|
| nih | ~ | niiø | ‘this’ |
| ban.ciəh | ~ | ban.ciiəø | ‘to explain’ |

3. Vowel aspects

When nasalisation in singing takes place, variation in some vowels also occurs. Several features of vowel variation are centering, rising, lowering, lengthening, shortening, diphthongising or monophongising.

3.1 Centering

ε > ə

| | | | |
|------|---|------|-----------|
| piɛh | ~ | piɛn | ‘special’ |
|------|---|------|-----------|

3.2 Rising

a > u

| | | | |
|--------------|---|---------------|-----------|
| thnaʔ thnaam | ~ | thnuuŋ thnaam | ‘to care’ |
| nah | ~ | nuuŋ | ‘very’ |
| cam.nah | ~ | cam.nuuŋ | ‘old’ |

3.3 Lowering

u > o

| | | | |
|---------|---|---------|----------|
| ʔəw puk | ~ | ʔəw poŋ | ‘father’ |
|---------|---|---------|----------|

3.4 Lengthening

i > ii

| | | | |
|----------|---|-----------|--------------|
| nih | ~ | niiø | ‘this’ |
| ban.ciəh | ~ | ban.ciiəø | ‘to explain’ |

3.5 Shortening

iiə > iə

| | | | |
|-------|---|------|--------|
| miiəh | ~ | miəŋ | ‘gold’ |
|-------|---|------|--------|

3.6 *Dipththongising*

| | | | |
|------------------------|---|-------------------|------------------------------|
| $\alpha > u\text{ə}^2$ | | | |
| chaʔ | ~ | chuəŋ | ‘to take something by force’ |
| kbət | ~ | kbuə ³ | ‘to betray’ |

3.7 *Monophthongising*

| | | | |
|------------------|---|-----|--------|
| $ii\text{ə} > i$ | | | |
| piiəʔ | ~ | piŋ | ‘word’ |

4. Other aspects

In reduplication, when the variation takes place, it is mainly found in the second morpheme.

For example:

| | | | |
|-----------|---|-----------|--------------|
| cah cah | ~ | cah caŋ | ‘old people’ |
| pric pric | ~ | pric priŋ | ‘dripping’ |

Since the variation does not occur consistently, some words vary and some do not.

For instance:

Vary the first, retain the last:

| | | | |
|------------|---|------------|---------|
| ruk.kciiət | ~ | ruŋ.kciiət | ‘plant’ |
|------------|---|------------|---------|

Vary the last, retain the first:

| | | | |
|--------------|---|--------------|-------------|
| soʔ.phiəʔ | ~ | soʔ.phiəŋ | ‘happiness’ |
| keʔ.teʔ.yuəh | ~ | keʔ.teʔ.yuəŋ | ‘honor’ |

²The /α/ ~ /uə/ variation is a common linguistic feature found in Phnom Penh Khmer.

³The final consonant /t/ in this word is deleted while the initial consonant is retained; in some singers the initial consonant /k-/ in such word may be deleted while the vowel is retained: kbat > øban, thus only [ban] remains.

5. Conclusion

Linguistically, the nasalisation of final stops in modern Khmer takes place in singing. The nasalisation in singing co-occurs with vowel variation (i.e. centering, rising, lowering, lengthening, shortening, diphthongising or monophongising). Socially, whether the linguistic behavior of Khmer singers nasalised their final stops to produce nasal consonants when singing is intentional or sub-conscious, is still unclear.

6. Questions needing further research

Further sociolinguistic study should be carried out to gain a better understanding of the nasalisation of final stops in modern Khmer singing.

So far, the phenomenon, especially in singing, has not been found in other Khmer varieties, such as Khmer Surin in Thailand or any Mon-Khmer languages. Further research on this phenomenon should be done with other Khmer dialects and other Mon-Khmer languages.

REFERENCES

- Buchanan, Cynthia D. 1963. *A Programed Introduction to Linguistics: Phonetics and Phonemics*. Lexington, Massachusetts: D.C. Heath and Company.
- Bussmann, Hadumod. 1996. *Routledge Dictionary of Language and Linguistic*. London: Routledge.
- Crystal, David. 1994. *An Encyclopedic Dictionary of Language and Languages*. Oxford: Blackwell.
- Ehrman, Madeline E. 1972. *Contemporary Cambodian: Grammatical Sketch*. Washington: Foreign Service Institute.
- Ferlus, Michel. 1974. "La langue Ong, mutations consonantiques et transphonologisations." *ASEMI* 5(1): 113-121.
- Jacob, Judith. 1993. "Some Features of Khmer Verifications." In Smyth, David A, ed., *Cambodian Linguistics, Literature and History*, pp.212-224.
- Pisitpanporn, Naraset. 1999. "A note on colloquial Phnom Penh Khmer." *Papers from the Ninth Annual Meeting of the Southeast Asian Linguistics Society*, 243-248. Program for Southeast Asian Studies, Arizona State University.
- Smyth, David A (ed.). 1993. *Cambodian Linguistics, Literature and History*. London: School of Oriental and African Studies.
- Trask, R.L. 1996. *A Dictionary of Phonetics and Phonology*. London: Rutledge.

Received: 15 September 2008

Institute of Language and Culture
for Rural Development, Mahidol University,
Salaya, Nakhon Pathom 73170
THAILAND
<lcnp@mahidol.ac.th>