DENASOLARYNGEALIZATION IN SEDANG FOLK-LINGUISTICS

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- 0. Introduction
- 1. Folk-linguistic terminology
- 2. Denasolaryngealization
- 3. Renasolaryngealization

O. INTRODUCTION

A typological feature of the Mon-Khmer languages in Vietnam is contrastive vowel register. Two registers, termed tense register and lax register (on terminology of Smith, 1970, cf. footnote 2), each constitute a separate and independent set of vowels. In Khmer, Jeh, and Halang the tense register vowels are clear; whereas the lax register vowels are breathy or "deep" (Jenner, 1966:31-37; Henderson, 1952:151; Gradin, 1966:46; Cooper, 1966:97). The same phenomenon in Sedang has become relatively more tense (Smith, 1967a, b, 1969) so the tense register vowels are laryngealized while the lax register vowels are clear. In Sedang approximately one-third of all words have tense register vowels, two-third lax register. In Todrah, reflecting some of the tensing in Sedang, tense register vowels are clear or laryngealized (the latter paralleling final h in other languages); whereas the lax register is breathy or clear (again the latter paralleling final h in other languages) (Gregerson and Smith, 1970).

It is the purpose of this paper to report the folk linguistic terminology for these two vowel registers in Sedang and how the Sedang reverse the historical order of a denasolaryngealization phenomenon when borrowing certain words.

1. Folk-linguistic terminology

The Sedang distinguish their two vowel registers as $pr\acute{o}\eta$ (the laryngealized tense register) and $pr\acute{o}\eta$ (the clear lax register)? Women's speech is also described as $pr\acute{o}\eta$ but men's speech is $pr\acute{o}\eta$. Small gongs sound $pr\acute{o}\eta$ but large gongs sound $pr\acute{o}\eta$. The howling of dogs sounds $pr\acute{o}\eta$ but their barking sounds $pr\acute{o}\eta$. Both $pr\acute{o}\eta$ and $pr\acute{o}\eta$ are

used to refer to singing and the playing of flutes. Thus it would appear that $pr\delta_{\eta}$ corresponds to the western sense of 'high-pitched sound' whereas $pr\delta_{\eta}$ is 'low-pitched sound'. The laryngealization phenomenon, however, does not appear to be "pitched" any different than unlaryngealized sounds. The difference exists only in the rasp or trillization of the former, its absence in the latter.

In other contexts $pr\hat{o}_{\eta}$ means 'to roast', as of rice stuffed in a piece of bamboo and then roasted, or refers to a type of rice wine, $dr\hat{o}w$ $pr\hat{o}_{\eta}$. Any semantic relation between these and the folk-linguistic use of the word is unknown. $pr\hat{o}_{\eta}$ is used only in the linguistic sense; perhaps $pr\hat{o}_{\eta}$ is simply the mechanically laryngealized form of $pr\hat{o}_{\eta}$.

Halang and Jeh have similar terms for their corresponding vowel register contrasts. Cooper (1966:97), describing Halang lax register breathiness, says that "the Halang describe the vowel quality as bron meaning 'having overtones or 'dark sounding', as distinguished from $kli\eta$ meaning 'shrill' or 'clear'. The words bron and $kli\eta$ are both used to describe the quality of talking, singing, and the sounding of musical instruments-gongs, flute, and xylophone..." It would appear that the Sedang and the Halang share the linguistic meanings of the words $pr\delta\eta$ (Sedang) and $br\delta\eta$ (Halang), but not the non-linguistic. Sedang does not have a word similar to Halang $kli\eta$.

Although Sedang $pr\hat{o}\eta$ corresponds to Halang $br\hat{o}\eta$, Jeh $br\hat{o}\eta$, and Proto-Jeh-Halang* $br\hat{o}\eta$ (Thomas and Smith, 1967: 171), and although the consonants and vowel register of these words follow the normal sound change pattern among these languages, the vowel quality (i.e. Sedang \hat{o} versus Proto-Jeh-Halang o) does not. For this reason a Proto-North-Bahnaric form cannot be reconstructed.

Although it is not clear how to reconcile the linguist ic and non-linguistic meanings of Sedang $pr\delta\eta$ or how the word $pr\delta\eta$ arose, it is nevertheless a striking example of folk-linguistic terminology for a phenomenon which western investigators have not appreciated until recently.

A glaring inadequacy of attempts to write Sedang as recently as the early 1960s was the omission of any indication of vowel laryngealization. Recent literacy experimentation has found that teaching $\hat{}$ as meaning $pr\acute{o}\eta$ in contrast to its absence which is always $pr\acute{o}\eta$, using the folk-linguistic terminology, is among the easiest concepts to teach.

2.Denasolaryngealization

Words having a final nasal consonant (m, n or ŋ) and a clear tense register vowel in Proto-North-Bahnaric as well as in the present-day languages surrounding the Sedang language area have a laryngealized tense register vowel in Early Sedang. Though some portions of the Sedang language area continue to retain the laryngealized vowel and final nasal, more recently there has developed a further progression wherein a strengthened laryngealization of the vowel has affected the final nasal consonant to the point of cutting it off prematurely with a glottal stop, or sometimes entirely dropping the nasal and replacing it with a final glottal stop. Laryngealization of the vowel, whether present or absent, then becomes irrelevant, inasmuch as final glottal stop does not elsewhere occur in these dialects. This process has been termed "denasolaryngealization."

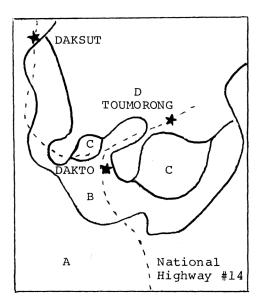
Each phase of the denasolaryngealization process is still current today among Sedang dialects and neighboring languages. The process has been stated as a rule (Smith, 1967b: Rule 25), in which V represents any clear vowel, V any laryngealized vowel, N any final nasal n, m, or η , N a weakly articulated nasal, and a raised dot $\underline{\cdot}$ a lengthened vowel:

VN of Area A become VN in Area B, which becomes $V^*(N)$ and V(N)q in Area C, which becomes $V(\emptyset-\hat{o}-i/e)q$ and Vq ia Area D. (The alternate forms for the first type of Area D correspond to the three nasals η , m, and n, respectively) 3

The historical order (cf. Smith, 1968:64-65; 1970) has developed from the forms now manifest only in Area A (reminiscent of Proto-North-Bahnaric and Proto-Hre-Sedang), to those of Area B (reminiscent of Early Sedang), to those of Area C (reminiscent of Pre-Central Sedang), and lastly to those of Area D (present-day Central Sedang). See the accompanying chart and map.

PNB -> PHrS	Early Sedang	Pre-Centr	al Sedang -	Pre-Central Sedang -> Central Sedang	Sedang	
KonHring Sedang Rengao Todra	DakSut Sedang W & SE Greater Sedang	Southwestern Central	∳ hwestern Central Sedang	Central	Central Sedang	
Area A	Area B	Area C	2	Area D		
		Type 1	Type 2	Type 1	Type 2	
NN	NA A	(N) ,1	$\downarrow V(N)q$	>V(Ø~Õ~i/e)q → Vq	<i>b</i> Λ ←	
hadêaŋ	ratéan	raté. a(ŋ)	ratêa(ŋ)q	ratêaq	ratêaq	'Sedang'
patam	patám	patá.(m)	pata(m)q	pataôq	pataq	'five'
und	und	pú.(n)	b(u)nd	pind	bnd	'four'
pian	pian	pi•a(n)	pia(n)q	pieq	piq	'squash'

Present-day dialect variants of the denasolaryngealization sound change. (Abbreviations: PNH - Proto-North-Bahnaric; PHrS - Proto-Hre-Sedang; W, SE - compass points)



Denasolaryngealization areas of present-day Sedang and surrounding language areas in central Kontum Province.

Given a word of form VN (Area A) or VN (Area B), etc., the form Vq (Area D, type 2) can easily be derived as indicated in the chart. The opposite order, however, cannot be predicted; given a word of form Vq (Area D, type 2), the other forms cannot be predicted inasmuch as the contrast of final nasals has been lost (i.e., neither the final nasals nor the various vowel glides of Area D--Type 1 which correspond to the different final nasals has been retained).

It should be noted that the above pertains only to words of the tense register; there is no corresponding phenomenon for words of the lax register. Lax register words of the form \grave{VN} in Area A are likewise lax register words of the form VN in Areas B, C and D.

3. RENASOLARYNGEALIZATION

The Sedang are familiar with the phenomenon of denasolaryngealization and its reversal, renasolaryngealization, though in varying degrees. Speakers of each of the four areas are apt to be familiar with the form of the adjacent area; but they may not be familiar with the form of the second or third distant area.

A case in point: Tuaq (the informant used for the analysis described in Smith (1968), from which this case is drawn) grew up in Area D-Type 1. As such he had a full complement of denasolaryngealized words using the vowel glides. He was able to renasolaryngealize many words to supply the VN form; but for other words he contended that there was no corresponding VN form. Thus, for Tuaq:

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čaq & čán 'fish fin'
čaq # 'sword'
raq & rán 'arrow'
raq # 'dried (wood)'
laôq & lám 'to go'
pieq & pían 'squash'
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Not having discovered the denasolaryngealization phenomenon in its completeness, the erroneous conclusion was made by the author then that $\check{c}aq$ 'fish fin' had indeed been derived from $\check{c}a\eta$ but that $\check{c}aq$ 'sword' has no nasolaryngealized counterpart and thus had a significant ly different etymological background.

Later however, it was found that speakers of Area B would say:

čán	'fish fin'
ean	'sword'
ran	'arrow'
ran	'dried (wood)
lam	'to g o'
pían	'squash'

But some of these Area B speakers were entirely unacquainted with the denasolaryngealized forms of Area D. And likewise there are speakers of Area D-Type 2 who give the denasolaryngealized form-- but are entirely unacquainted with the nasolaryngealized forms of Area B or C.

Tuaq evidenced knowledge of a sound shift between two dialects— but not in its entirety; he renasolaryngealized only the words in which $V\hat{o}q \sim \hat{V}m$ and $V(i/e)q \sim \hat{V}n$. He did not recognize that $Vq \sim \hat{V}\eta$ in every case; he knew only those which he could consciously remember having heard in the variant manner.

In borrowing words from other languages which have final -q or the equivalent, Sedang speakers of Area B, who have no final glottal stop in their sound inventory, nasolaryngealize such words following the renasolaryngealization process. A final nasal is thereby given to a word which, etymologically, never before had one. Thus words borrowed from Bahnar (i.e., subsequent to the split of Proto-North-Bahnaric into Bahnar on the one hand and Jeh-Halang-Hrê-Sedang on the other) having final glottal stop are nasolaryngealized.

Bahnar	Sedang	ıg	
	(Area B)		
tasĕq	tasin	'little'	
čakhóq	čakhóŋ	'shoe'	

In borrowing open-syllable Vietnamese words, Vietnamese high tone $s\tilde{a}c$ (marked _) becomes Sedang final -q in Area D and a nasolaryngealized word in Area B, also following the renasolaryngealization process.

Vietnamese	Sedang	
	(Area D)	(Area B)
phó	phoq	phón 'assistant, deputy'

FOOTNOTES

- 1. The Sedang number perhaps 40,000 tribes people in central Kontum Province in the highland region of Central Vietnam. Their language belongs to the North Bahnaric branch of the Mon-Khmer family of languages. The author studied Sedang in the field from 1963 to 1967, resuming it again in 1969, under the auspices of the Summer Institute of Linguistics.
- 2. Sedang orthography used in this paper approximates the Vietnamese quoc-ngu, except that _ indicates Sedang vowel laryngealization (tense register), _ indicates non-Sedang vowel breathiness (lax register), and q indicates glottal stop. Voiced stops in Sedang b, d, etc. are prenasalized. _ is used for short vowel in Bahnar.
- 3. The orthography used in Devereux (1937, 1938) also employs brackets to indicate "almost inaudible" sounds. He also indicates length—here shown by a raised dot _. Such words that he includes are:

current orthography Devereux Area B Area D

hä(rh)nde°a(ng)	rotéang	rotêaq 'Sedang'
kpe°(n)	kopén	kopeg 'loincloth'
Ndu°e(n)	Dúan	Duq 'personal name
Tum-Ro°a(ng)	Tum-Rốang	Tum-Rôaq 'village nam
Nu°(n)	Nún	Nuq 'personal name

The long vowel and almost inaudible nasal as transcribe by Devereux correspond to the first type of Area C stated in this Rule. Presumably Devereux was unaware of vowel laryngealization—as were all investigators until the 1960s—though strengthened laryngealization of the vowel accounts for the lengthened vowel and weak articulation of the final nasal. Though Dak Ha village where Devereux resided, is not a sample village in Smith (1967b), Dak Ha village does lie within the Area D. This suggests the very reasonable possibility that within the past 30 years the dialect of that village in this respect has progressed from $V^{\circ}(N)$ to one of the two types of Area D without the final nasal.

4. Proto-North-Bahnaric words with final -q related genetically to Sedang lose the final -q in Sedang; for example: PNB * jiq, Bahnar jiq, Sedang $\check{c}ay$ 'sick'.

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