MORPHOPHONEMIC CHANGES IN MEITEIRON COMPOUNDING

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The aim of this paper is to show the modification of bases in Meiteiron. The paper deals about the changes of consonants and vowels in the process of compounding.

Introduction

The general characteristics of the morphophonemic changes in Meiteiron roots are very irregular. The sound changes which occur in compounding can be discussed in the following headings. They are (1) voicing, (2) deaspiration, (3) change of lateral sound, (4) changes of nasals, (5) changes of vowels, (6) loss or delation and (7) addition of semi-vowels.

1. Voicing

In the process of voicing, the voiceless sounds change into voiced sounds. The type of process is of progressive assimilation. The unaspirated voiceless stop sounds p,t,c,k are found to have changed into their voiced counterpart b,d,j,g, respectively, when the second root is preceded immediately by a voiced sound (i.e., a nasal, a vowel) or a semi-vowel. It is shown in the following table.

Table 1

1st root ends in a nasal, or a semi-vowel or a vowel	+ 2nd root begins with p-	= Compound [-Voice] → [+ Voice] p > b
ends in a nasal or a vowel or a semi vowel	begins with t-	t > d
ends in a nasal or a vowel, or a vowel, or a semi-vowel	begins with c-	c > j
ends in a nasal or a vowel, or a semi-vowel	begins with k-	k > g

Voicing : $\begin{bmatrix} -\text{Voice} \\ p- \\ t- \\ c- \\ k- \end{bmatrix} \rightarrow \begin{bmatrix} +\text{Voice} \\ b \\ d \\ j \\ g \end{bmatrix} / \begin{bmatrix} +\text{Vowel} \\ +\text{nasal} \\ +\text{semi-vowel} \end{bmatrix} —$

Examples :

p > b

p^hi + pan = p^hiban 'border of cloth'

cloth border

t^ha + pum = t^habum 'the whole month'

month whole

$k^hoŋ$ + pi = $k^hoŋbi$ 'big toe'

leg mother

ləm + pan	=	ləmban	'wild arum'
land arum			
huy + pu	=	huybu	'owner of dog'
dog owner			
sən + pu	=	sənbu	'owner of cow'
cow owner			
ləy + pak	=	ləybak	'clay'
land + broad			
caw + pəŋ	=	cawbəŋ	'fool'
big to be fool			

t > d

p^hi + ta	=	p^hida	'type of cloth'
cloth type			
k^hoŋ + ta	=	k^hoŋda	'shape of leg'
leg shape			
k^hoy + toŋ	=	k^hoydoŋ	'one having big naval'
navel high			
t^həw + təw	=	t^həwdəw	'mode of doing'
duty + to do			
sen + ton	=	sendon	'debt'
money to debt			
ləm + toŋ	=	ləmdoŋ	'high land'
land to be high			
ciŋ + toŋ	=	ciŋdoŋ	'high hill'
hill to be high			

ciŋ + tum	=	ciŋdum	'hillock'
hill to be round			
pa + ton	=	padon	'end of eyelash'
eyelash tip			

c > j

p^hi + caw	=	p^hijaw	'big cloth'
cloth to be big			
p^hi + cəm	=	$p^hijəm$	'ordinary cloth'
cloth ordinary			
$t^hoŋ$ + caw	=	$t^hoŋjaw$	'door'
door to be big			
k^han + caw	=	k^hanjaw	'big pan'
pan to be big			
səm + ci	=	səmji	'knot of hair'
hair near			
k^haw + caw	=	k^hawjaw	'big bag'
bag to be big			
həy + caw	=	həyjaw	'big fruit'
fruit to be big			

k > g

p^hi + kəŋ	=	$p^higəŋ$	'dry cloth'
cloth to be dry			
$t^haŋ$ + kon	=	t^hangon	'sickle'
sword to be curved			

k^hon + kay	=	k^hongay	'undesirable speech'
voice to break			
t^həw + kən	=	t^həwgən	'guard'
duty to save			
siŋ + kəy	=	siŋgəy	'shed of firewood'
firewood store			
p^həy + kən	=	p^həygən	'thigh'
thigh to be hard			
miŋ + kəw	=	miŋgəw	'term of address'
name to call			
leŋ + ka	=	leŋga	'same age'
shoulder to group			

Exception : In some compounding there is no changes of p,t,c,k if the 2nd root is immediately preceded by a nasal or semivowel or a vowel.

Examples :

p remains as p

ləm + pak	=	ləmpak	'meadow'
land to be broad			
ceŋ + pak	=	ceŋpak	'flattened rice'
rice to be broad			
ləw + pu	=	ləwpu	'owner of the paddy field'
paddy field owner			

t remains as t

paw + tak	=	pawtak	'advice'
news to indicate			
u + ton	=	uton	'top of the tree'
tree top			
mi + top	=	mitop	'outsider'
man others			
ya + ton	=	yaton	'tip of the tooth'
teeth tip			
ləy + ton	=	ləyton	'tip of the tongue'
tongue tip			

c remains as c

k^hoŋ + cət	=	k^hoŋcət	'journey'
leg to go			
ləm + cət	=	ləmcət	'character'
land to go			
mi + cəm	=	micəm	'layman'
man simple			
məy + cak	=	məycak	'pang of sorrow'
fire to burn			

k remains as k

wa + kət	=	wakət	'complain'
word to give			

u + kup = ukup 'pieces of wood'

tree piece

ləw + kon = ləwkon 'paddy field'

paddy place

ləy + kəŋ = ləykəŋ 'dry land'

earth to be dry

2. Deaspiration

In deaspiration process, voicing rule will apply first and in the second step deaspiration will apply to the aspirated sounds. So, the voiceless aspirated stop p^h, t^h, k^h and voiceless fricative s become unaspirated voiced b,d,g and j, respectively, when the second is preceded by a vowel or a semi-vowel or a nasal. After applying voicing rule the initial of the second root p^h, t^h and k^h are deaspirated.

Table 2

1st root	+	2nd root	=	Compound
ends in a nasal, or a semivowel		begins with p^h, t^h, k^h & s-		P $\begin{bmatrix} p^h > b \\ t^h > d \\ k^h > g \\ s > j \end{bmatrix}$

Deaspiration : $\begin{bmatrix} p^h \\ t^h \\ k^h \\ s \end{bmatrix} \rightarrow \begin{bmatrix} b \\ d \\ g \\ j \end{bmatrix} / \begin{bmatrix} +\text{nasal} \\ +\text{semivowel} \\ +\text{vowel} \end{bmatrix} —$

Examples :

p^h > b

p^hi + p^həm	=	p^hibəm	'condition'
cloth place			
sa + p^həm	=	sabəm	'place where thing to be made'
to make place			

t^h > d

p^həw + t^hoy	=	p^həwdoy	'interest as paddy'
paddy more			
sen + t^hoy	=	sendoy	'interest'
money more			

k^h > g

p^hi + k^ha	=	p^higa	'lining'
cloth under			
sen + k^haw	=	sengaw	'purse'
money bag			

s > j

siŋ + sit	=	siŋjit	'an instrument to scrap turmeric, ginger etc. to powder'
ginger to scrap			
səm + set	=	səmjet	'comb'
hair to be dress			

Exception : In some compounding there is no changes of p^h, t^h, k^h and s if the second root is preceded

by a vowel, or a semi vowel or a nasal and also voiceless stop p,t and k.

p^h remains as p^h

$k^hoŋ$ + $p^həm$	=	$k^hoŋp^həm$	'Place for putting foot'
leg + place			
t^hok + $p^həm$	=	$t^hokp^həm$	'exit'
to go out+place			
hip + $p^həm$	=	hipp^{h}əm	'sleeping place'
to sleep+place			
kət + $p^həm$	=	kətp^{h}əm	'place where to keep offerings'
to offer+place			

t^h remains as t^h

$p^həm$ + t^hon	=	p^h mt^{h}on	'higher post'
post + to name			
həy + t^hum	=	həyt^{h}um	'A fruit'
fruit+sweet			(Atalatia monaphalia)

k^h remains as k^h

t^ha + k^hay	=	t^hak^hay	'fortnight'
month+to separate			
həy + k^ha	=	həyk^{h}a	'plum'
fruit+bitter			

s remains as s

p^hi + sa	=	p^hisa	'mode of weaving'
cloth + to make			

t^{h}əw + sin	=	t^{h}əwsin	'mode of arrange-ment'
duty + to arrange			
cak + ta	=	cakta	'kind of rice / mode of rice'
rice + mode			
yot + pak	=	yotpak	'spade'
iron + to be broad			

3. Nasal change

The three nasals m,n, & ŋ are found to undergo irregular changes while compounding. These changes can be studied under two categories - (1) changes of nasals and (2) loss or deletion of nasals (details will be under the heading of loss or deletion).

3.1 Changes of nasals

In the process of changing the two elements are affected. So, the nasal changes is of reciprocal nature. In the first step voicing rule will be applied to the initial voiceless sound of the second root and correspondingly it will affect the preceding sound of the first root final. It is shown by the following table.

Table 3

1st Root	+	2nd Root	=	Compound
ends in -m		begins with k-		(k > g corresponding to the preceding sound and also m > ŋ corresponding to the following velar sound g)
ends in -n		begins with p-		(p > b corresponding to the preceding voiced sound & also n > m corresponding to the following bilabial sound b)
ends in -n		begins with k^h-		(k^h > g, the initial of the second root aspirated $\underline{k^h}$ is deaspirated and changes corresponding to the preceding voiced sound and also n > ŋ corresponding to the following velar sound g)

RECIPROCAL:

$$\begin{bmatrix} -\text{Voice} \\ k- \\ p- \\ k^h- \end{bmatrix} \rightarrow \begin{bmatrix} +\text{Voice} \\ g \\ b \\ g \end{bmatrix} \; / \; [\,+\text{nasal}\,] —$$

$$\begin{bmatrix} +\text{Nasal} \\ m \\ \eta \end{bmatrix} \rightarrow \begin{bmatrix} +\text{Nasal} \\ n \\ \eta \end{bmatrix} \; / — \begin{bmatrix} +\text{Velar} \\ +\text{Bilabial} \end{bmatrix}$$

Examples :

Ends in -m

nəm + kən = nəŋgən 'back (body)'

back+to be hard

k > g
m > ŋ

kom + kut = koŋgut 'pit'

pit + to be narrow

Ends in -n

sən + pən = səmbən 'fence'

p > b
n > m

cow + barrier

lan + pa = lamba 'match'

war + to oppose

Ends in -n and begins with k^h in the second root :

sen + k^haw = seŋgaw 'purse'

k^h > g
n > ŋ

money + bag

sən + k^hom = səŋgom 'milk'

cow + milk

The above examples have exceptions. There is no change of n and m , Only voicing rule applied to the 2nd initial sound. The nasals remain as it is.

Examples :

m remains as m

ləm + kaŋ = ləmgəŋ 'dry land'

land+to dry

kum + kaŋbə = kumgaŋbə 'draught'

year + to dry

n remains as n

sən + pi	=	sənbi	'cow'
cow + mother			
yen + pi	=	yenbi	'hen'
hen + mother			
pən + k^ha	=	pənk^ha	'south of the barrier'
barrier+south			
sen + k^hay	=	senk^hay	'to contribute one's share'
money + to contribute			

4. Changes of lateral sound

The lateral l changes into r, if it is preceded by a vowel or a semi vowel.

Table 4

1st Root	+	2nd Root	=	Compound
ends in vowel or semi vowels		begins with l-		l > r

Trill : $\begin{bmatrix} +\text{lateral} \\ \text{l} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{trill} \\ \text{r} \end{bmatrix} / \begin{bmatrix} +\text{vowel} \\ +\text{semi vowel} \end{bmatrix} \_\_$

Examples :

pi + laŋ	=	piraŋ	'tears'
tear+coweb			
mi + ləm	=	miram	'foreign land'
man + land			

ŋa + li = ŋari 'fermented fish'

fish+to store

u + li = uri 'creeper'

tree+cane

po + ləm = porəm 'way for pawn'

pawn+way

paw + ləw = pawrəw 'proverb'

news + to take

məy + lik = məyrik 'spark'

fire+spark

Exception : The lateral l remains as l when it is preceded by voiceless stop (p,t,k) and also by nasal sounds.

$$\left[l \right] \rightarrow \left[l \right] \Big/ \left[\begin{matrix} \text{Voiceless} \\ \text{p,t,k} \\ \text{and + nasal} \end{matrix} \right] \text{—}$$

Examples :

pot + ləm = potləm 'requirements'

thing+way

p^hək + len = p^həklen 'big mat'

mat best

k^hoŋ + lək = k^hoŋlək 'space between toes'

leg + between

4.1 In the process of changing the initial of the second root l changes into r, if it is preceded by a vowel, or a semi vowel. Then the preceding low vowel of the first root a changes into central mid vowel ə.

Examples :

a > ə

sa + lu	=	səru	'bone'
animal+bone			
ma + lon	=	məron	'his/her language'
his/her+language			

4.2 However, there is one exception that the lateral l > m after m . The process involved is to assimilate to m and become gemminated.

Example : l > m

p^həm + len	=	p^həmmen	'main seat in a house'
place+best			

5. Changes of vowels

In some compounds certain vowels are found change in Meiteiron. The changes took place in three ways and can be discussed in two sections. I. Changes of e>ə and o>u, 2. Changes of a > ə.

5.1 e>ə and o>u

Table 5

1st root	+	2nd root	=	compound
ends in n		begins with - voice		ŋ → Ø [e > ə; o > u]

$$\begin{bmatrix} e > ə \\ o > u \end{bmatrix} \text{ when } ŋ \rightarrow Ø \,/\, V\text{-}C$$

Examples :

ceŋ + ton = cədon 'broken rice'

rice+small

k^hoŋ + k^ha = k^huga 'sole'

leg + below

5.2 The vowel a>ə only in the four roots e.g. t^ha 'chest', sa 'body', cak 'rice' and ma 'he/she'. Out of four roots, again a root having -k in the final will also deleted.

Table 6

1st	+	2nd	=	Compound
ends in -a and -k		begins with - voice	i)	a > ə
			ii)	a > ə and also k → ø

Example :

t^ha + pak = t^həbak 'chest'

chest+to be broad

sa + tum = sədum 'flesh'

body+to be round

cak + kəŋ = cəgəŋ 'rice without curry'

rice + to be dry

ma + pa = məpa 'his/her father'

he/she+father

However, there are exceptions for all the above changes. Examples are on the next page.

ceŋ + pak = ceŋpak 'flattened rice'
rice+to be broad

k^hoŋ + pak = k^hoŋpak 'foot'
leg + to be broad

sa + p^hi = sap^{h}i 'dress for hunting'
body+cloth

cak + len = caklen 'dinner'
rice+best

cak + səŋ = caksəŋ 'kitchen'
rice+house

6. Loss or deletion

The loss of a consonant is usually related to articulatory processes in order to make pronunciation easier. The deletion may be discussed under the following categories : (1) loss of voiceless t & k (2) loss of nasals.

6.1 Loss of voiceless t & k

The final sound of the first root gets deleted when a voiceless sound as its initial of the second root and also the initial voiceless sound of the second root is changed into voiced sounds.

Table 7

1st root	+	2nd root	=	compounding
ends in -t		begins with voiceless t-		t → Ø Vl > Vd
ends in -k		begins with voiceless k-		k → Ø Vl > Vd (in such cases the preceding vowel of the first root is shorten as a>ə)

$\begin{bmatrix} -\text{voice} \\ \text{t-} \\ \text{k-} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{voice} \\ \text{d-} \\ \text{g-} \end{bmatrix}$ when $\begin{bmatrix} \text{t} \\ \text{k} \end{bmatrix} \rightarrow \emptyset$ — c c (gemination)

Example : t > Ø

k^hut + taŋ	=	$k^hudaŋ$	'Part of the hand between wrist & elbow'
hand + joint			
k^hut + top	=	k^hudop	'ring'
hand + add			

k > Ø : when k- is deleted the vowel of the first root a is shorten and changes into a>ə.

Examples :

cak + ka	=	cəga	'scorch rice'
rice+to burn			
cak + kum	=	cəgum	'waste rice'
rice+waste.			

Exception : There are some compounding which have no deletion of t and k.

Example :

k^hut + ta	=	k^hutta	'Shape of hand'
hand + shape			
sək + ta	=	səkta	'shape of face'
face + shape			

6.2 Loss of nasals

The nasal sound ot the 1st root final gets deleted when a nasal sound is in the initial position of the second root.

Table 8

1st root	+	2nd root	=	compounding
ends in -m		begins with n-		m → ø n > m
ends in -n		begins with n-, p-, t-, c-.		ŋ → ø o > u e > ə
ends in -n		begins with l-		n → ø l > r

6.2.1 m→ø

When the nasal sound m of the 1st root is deleted and also the initial of the second root n > m.

Example :

im + nuŋ	=	imuŋ	'inside the house'
house+inside			

p^həm + nuŋ = p^həmmuŋ 'bed'

place+inside

6.2.2 ŋ→ ø

The nasal sound ŋ of the first root final is deleted and also the vowel of the first root o > u and e>ə.

Examples :

k^hoŋ + niŋ = k^huniŋ 'heel'

leg + back

k^hoŋ + pom = k^hubom 'calf'

leg + bulging

ceŋ + kem = cəgem 'broken rice'

rice+break

ceŋ + ton = cədon 'broken rice'

rice+small

Exception : In some environments the nasal ŋ remains intact and also there is no change of the lst root vowel.

Example :

k^hoŋ + pak = k^hoŋpak 'foot'

leg +to be broad

k^hoŋ + kap = k^hoŋkap 'foot step'

leg + span

ceŋ + p^hu = ceŋp^hu 'a pitcher for storing rice'

rice + pot

6.2.3 n → ø

The nasal sound n of the 1st root final is deleted and also the initial of the second root l > r due to the preceding vowel.

Example :

yen + lum = yerum 'egg'

hen + egg

7.0 Loss of vowels

The vowel a gets deleted while compounding in two instances.

$$[+\text{Vowel} \quad a\ ] \rightarrow \emptyset \,/\, \begin{bmatrix} V \\ ə- \end{bmatrix} —$$

Example :

ca +əni = cəni 'two hundred'

hundred+two

ca + əhum = cəhum 'three hundred'

hundred+three

8.0 Addition of semi vowel

While compounding the semivowel w and y are added. The semi vowel w is added (1) between semivowel & and mid back vowel (2) low vowel a or high front vowel i and mid back vowel o . The semi vowel y is added between a - o. It is shown in the following table.

Table 9

1st root	+	2nd root	=	Compound
ends in semi vowel -w, -y		begins with o-		+w
ends in -a or -i		begins with o-		+w
ends in -a		begins with o-		+y

Addition : $\emptyset \rightarrow \begin{bmatrix} w \\ y \end{bmatrix} / \begin{bmatrix} w \text{ — } o \\ a \text{ or } i \text{ — } o \\ a \text{ — } o \end{bmatrix}$

Example :

t^{h}əw + oŋ	=	t^{h}əwwoŋ	'nature of work'
duty+nature			
sa + un	=	sawun	'leather'
animal+skin			
na + in	=	nayin	'ear ring'
ear + to wear			

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