MINOR-SYLLABLE VOCALISM IN SENOIC LANGUAGES

Gérard Diffloth
University of Chicago

More than sixty-five years ago, C. O. Blagden
(W. W. Skeat and C. O. Blagden, 1906) tried to
determine the places of the aboriginal languages of
Malaya within the "Mon-Annam" family, as it was then
called.   There was in his opinion a double relation-
ship: his "outer dialects", i.e. approximately our
"Semelaic" (South Aslian) branch, classified by
Blagden as type IV, were directly related to Mon-
Khmer proper, whereas his "Sakai" (Central Aslian)
dialects, type II and III, i.e. approximately our
"Senoic" (Central Aslian) branch, were "outlying
members" of the family very much like Khasi,
Palaungic and Nicobarese. As for his type I, or
"Semang" dialects, i.e. approximately our "Jahaic"
(North Aslian), they were not considered original
members of the family at all.

In this paper I should like to take up Blagden's
second claim, concerning the relationship of Senoic
to Mon-Khmer, and propose a qualification of it.

Turning first to lexicostatistics, I was
surprised to find that the relationship of Senoic
to several branches of Mon-Khmer such as Bahnaric,
Katuic or Palaungic falls in the 20-25% range.
This suggests that Senoic has approximately the
same degree of relationship with Mon-Khmer sub-
groups as these sub-groups have among themselves.
That is to say, Senoic would be a sub-group of

-Khmer proper. Attempts to reach a more precise
tement by this method and establish which branch
Mon-Khmer is closest to Senoic have thus far
ught me only frustrations. Variable percentages
 due to a dozen items for which any uncertainty
elicitation or in judgment of cognation can
alidate conclusions. I have therefore had to
n to the more compelling evidence of phonology.

Disregarding a few recent developments such as
al voiced stops in some Temiar dialects and pre-
asalized finals in some Semai dialects, Senoic
nology is typically Mon-Khmer. We have initial
 medial voiced and voiceless stops in four places
articulation. Predictably, we have no register or
e distinctions in the vowels. We have a very
wded vowel system with long *vs.* short, nasal *vs.*
1, and usually four (sometimes five) degrees of
ght. We have contrasts between final /k/ and /?/.
also have final palatals /c/ and /ɲ/. A few
mples of words with final palatals will be enough
illustrate the Mon-Khmer character of Senoic.[1]

Senoic final palatals

'flesh': Jh. /sɛc/, W.Si. /sɛc/, E.Si. /sec/,
    S-W.Te. /sec/, N-E.Te. /sej/, Sn. /sec/

'feces': Jh. /?ɛc/, W.Si. /?ɛc/, E.Si. /?ec/,
    S-W.Te. /?ec/, N-E.Te. /?ej/, Sn. /?ec/

'I': W.Si. /?ɛɲ/, E.Si. /?ejɲ/

'to throw, shoot': W.Si. /pɛc/, E.Si. /pejɲ/,
    N-E.Te. /pec/

'to harvest': Jh. /kɛc/, N-E.Te. /kej/, Sn.
    /kec/, W.Si. /kɛc/, E.Si. /kec/, S-W.Te.
    /kec/

'to weave': W.Si. /ta:c/, E.Si. /ta:jɲ/,
    N-E.Te. /ta:c/

'to ask': Jh. /smaɲ/, W. and E.Si. /sma:ɲ/,
    N-E.Te. /sma:ɲ/

'ghost': Jh. /kmɔc/, W.Si. /kiʔmɔ:c/, E.Si.
    /kcmɔ:c/, N-E.Te. /kɛjmu:j/

'tooth': Jh. /lmuɲ/, W. and E.Si. /lmu:ɲ/,
    S-W.Te. /lmɔɲ/, N-E.Te. /mɔɲ/, Sn. /lmɔɲ/

'to sting': Jh. /suc/, W. and S-E.Si. /sɵ:c/,
    N-E.Si. /so:c/, S-W.Te. /suc/, N-E.Te. /suj/

'termite': Jh. /gruɲ/ ~ /druɲ/, W.Si. /grɵ:c/,
    N-E.Si. /gro:jɲ/, N-W.Si. /grɵ:jɲ/, N-E.Te.
    /garuc/

'uncle': W.Si. /kɵ:c/, N-E.Si. /ko:jɲ/, S-E.Si.
    /kɵ:jɲ/, N-E.Te. /ko:c/, Sn. /ʔŋkoɲ/

The phonological features so far mentioned are
common Mon-Khmer features which are found or can be
reconstructed easily for most branches of the
family. What we need to find is a Senoic innovation
shared by some other group outside the peninsula.
Preglottalisation of d and b was proposed some time
ago by Haudricourt (Haudricourt, 1965) as an early
isogloss separating Mon, Palaungic, Katuic and
Bahnaric on the one hand and Khmer, Pearic and
Khmuic on the other. Senoic agrees with the latter
group, having apparently merged the old preglottalised
stops with simple voiced b and d. For example: Si.
/ba:ʔ/ : 'padi', /krba:r/ : 'twin' (O. Mon, ɓar :
'two'), Si. /dic/ : 'completed' (O. Mon ɗik), Si. (
S-E., N-E.) /dɵ:k, dɵ:uŋ, do:kŋ/, Te. /de:k/ 'house'
(O. Mon ɗūŋ 'city, province'). However, this does
not make a very convincing case inasmuch as the
history of the preglottalised stops is still
obscure; in any event, loss of preglottalisation is
highly probable as an independent innovation. Our
search is therefore still inconclusive. Perhaps it
would be more rewarding to turn the question around

look for innovations shared by most Mon-Khmer
guages except Senoic or Aslian.

One very conspicuous such feature has to do with
d and root phonology. Senoic, and indeed Aslian
guages in general, have a great quantity of
ysyllabic words. I am not referring here to words
ing minor syllables with neutral vowels, which
found in practically all Mon-Khmer languages in-
ding Senoic itself: I mean words with minor
lables containing contrasting vowels not predict-
e by environment.[2] For many of these polysyllabic
oic words, minor vowels are introduced by phonetic
morphological rules which I shall outline below.
a large number of other cases, however, no such
lanation is available. In other words, Senoic
guages have a class of true dissyllabic roots with
h vowels as /a/, /i/, and /u/ in the minor
lable. This feature seems to me very unusual
Mon-Khmer languages if not altogether unique.[3]
s Blagden's statement was perhaps more than a
sible guess, and I propose that this problem be
mined carefully throughout the family and to
in with, in Senoic.

I.

Minor vowels of phonetic origin

Before setting aside the matter of enunciative
anaptyctic vowels, I should like to mention three
es of such vowels with unusual phonetic qualities
various Senoic dialects.

Anticipation of major vowels

In all forms of Senoic, the vowel of a major
lable beginning with /h/ or /?/ is anticipated
a minor vowel. That is, a short, unaccented

vowel, otherwise identical to the major vowel, is
inserted before the /h/ or the /ʔ/ in case another
consonant precedes; *e.g.,* /bhi:p(m)/ 'blood':
[bihi:p(m)], /kʔɛ:p/ 'red centipede': [kɛʔɛ:p].[4]
Actually the phonetic notations used here do not
reflect the articulations of these words with enoug
precision. The vowels on the one hand and the /h/
or /ʔ/ on the other require articulators whose move
ments are totally independent of each other, so
that it is perfectly possible to superpose both
articulations. The main vowel /ɛ:/ of /kʔɛ:p/
starts where /k/ ends and ends where /p/ begins;
the glottal stop is superposed at some time during
the utterance of the vowel. The acoustic effect is
vowel anticipation, but in terms of articulation,
the segmental principle is violated, a fact which
is awkward to represent with the IPA and even
worse with distinctive features.

2. */-u-/ insertion*

In Semai, when two labial consonants precede
the major vowel, the neutral transitional vowel
acquires the quality /-u-/; *e.g.,* /mmat/ 'a shrub,
Clinogyne sp.': [mumat].[5] This also occurs if a
glottal stop separates the two labials. Thus in
North-West Semai, where the reduplicated /-t-/ of
/btbɛ:t/ 'sleeping' is changed to /-ʔ-/, /bʔbɛ:t/
is pronounced [buʔbɛ:t]. The lip-rounding of the
labials spreads across four segments and is super-
posed *on the glottal stop.* This lip-rounding rule
is a late phonetic rule and is not manifested in
morphophonemics: nasal infixation does not produce
a form *bnuʔbɛ:t but simply the regular /bʔnɛ:t/ :
[mʔnɛ:t].

/-ε-/ *insertion*

Most Temiar dialects have a peculiar rule by
ch an /-ε-/ instead of the expected neutral vowel
is inserted in long consonant clusters. The rule
easily stated if we count consonants backward,
rting from the main vowel: /-ε-/ is inserted in
nt of any consonant which is preceded and followed
another consonant. Thus in East Temiar /cbci:b/
omes [cεbci:b], /brci:b/ becomes [bεrci:b] while
bci:b/ becomes [brεbci:b] (all from the root
:b/, 'to walk'). The process is recursive but
errupted by certain junctures; *e.g.*, from the root
ã:d/ 'curly hair' we get the phonological forms
lã:d/, /krdlã:d/ and /kd-krdlã:d/ with a special
cture in the last word to attach the reduplicated
fix /kd-/. The corresponding phonetic forms are
dlã:d], [krεdlã:d], and [kεdkrεdlã:d], not
εkrεdlã:d as free application of the rule would
ld. Similarly, the form /barbrŋtu:k/ (bar-br+ŋ+
k) 'to frighten each other' does not yield
rεbrεŋtu:k but simply [barbrεŋtu:k], due to the
cture between the prefix /bar-/ and the rest of
word.[6]

II.

Minor vowels of morphophonemic origin

Many minor vowels found in Senoic are actually
roduced in morphemic variants of one sort or
ther. For example, the most common morphological
cess in Senoic is infixation of the final conso-
: between two initial consonants; *e.g.*, Si.
ʔu:l/ 'to choke' > /clʔu:l/ 'to be choking'. In
ts having only a simple initial, *e.g.* Si. /ci:p/
lk', the final is inserted between the initial

consonant and its reduplication : /cî:p/→/ccî:p/→
/cpcî:p/, 'to be walking'. This is a productive
process in verbs, which I called elsewhere the
Indeterminate mode (Diffloth, 1972); it is also foun
in a few nouns as a fossilized process. This kind o
"infixed reduplication" gives rise to three categor
of minor vowels.

1. *Infixation of /-î-/ and /-u-/*

In those roots where the final consonant is a
/-w/ or a /-y/, the infixed form is vocalised to
/-î-/ and /-u-/.

> Si. /khɔ:y/ 'to yawn' > /kyhɔ:y/ → [kîhɔ:y]
>   'to be yawning'
>
> /sjɛ:w/ 'sharp' > /swjɛ:w/ → [sujɛ:w]
>   'sharp'
>
> /gʉ:y/ 'to sit' > /gygʉ:y/ → [gîgʉ:y]
>   'to be sitting'
>
> /ca:w/ 'to sprinkle' > /cwca:w/ → [cuca:w
>   'to be sprinkling'

We find the same pattern in Jah Hut,[7] where the
morpheme boundary is in addition marked by a glotta
stop.   Thus:

> Jh.   */khway/ 'to yawn' > /ky?hway/ → [kî?hway
>   'to be yawning'
>
> */nɔy/ 'to copulate' > /ny?nɔy/ → [nî?nɔy
>   'to be copulating'

As for Temiar, the rule of /-ɛ-/ insertion see
to supersede any vocalisation of /-w-/ and /-y-/.
Thus:

> To. /po:y/ 'to blow (wind)' > /pypo:y/ →
>   [pɛypo:y], not *pîpo:y, 'to be blowing
>
> /kɔ:w/ 'to call' > /kwkɔ:w/ → [kɛwkɔ:w],
>   not *kukɔ:w, 'to be calling'

However, there are a number of fossilized forms whi
can no longer be decomposed but which suggest that
vocalisation of /-w-/ and /-y-/ at one time occurre

Temiar. For example: /pĩpu:y/ 'not completely
...ke', not *pɛypu:y, from a root */pu:y/ not found
...Temiar but which yields Semai /pĩnu:y/ 'day-
...aming', and /cnĩlo:y/ 'flute', not *cnɛylo:y,
...al infixed and reduplicated form of a root */clo:y/
...found in Modern Temiar but which yields Semai
...lo:y/ 'to lull a child to sleep'.

Infixed reduplication in nouns also gives rise
...-ĩ-/ and /-u-/ minor vowels, especially in
...bination with the nasal infix which derives count
...s from mass nouns:

Si. /slə:y/, 'swidden(mass)', /s-n-y-la:y/ →
[snĩla:y], *id*. (count)'

/te:w/, 'river', /t-w-n-e:w/ → [tunĩ:w]
id. (count)'

Semai as well as Temiar many noun forms with /-ĩ-/
.../-u-/ minor vowels can probably be explained as
...silized products of this same rule. For example,
...Si.: /kukɛ:w/ 'generic name for snake' and
...air /kukɛ̃:w/ 'python' are probably fossilized
...uplications of a root */kɛ:w/ */kɛ̃:w/.

Infixation of /-ĩʔ-/

A few dialects of Semai in the Kampar basin have
...ied this process one step further. In these
...lects, most infixed final consonants (except /l/
.../r/, /w/ and /y/) have been changed to /-ʔ-/;
... /gʉ:p/ 'to winnow vertically' > [gʔgʉ:p] (other
...lects have [gmgʉ:pm]). However, if the final
...sonant to be infixed is a palatal, *i.e.* /-c/,
.../, /-s/ (for -y, see above), then the infixed form
.../-ĩʔ-/. Thus:

/ŋʉ:c/ 'burnt' > /ŋc-ŋʉ:c/ > [ŋĩʔŋʉ:c]
/prɔ:c/ 'brittle' > /pcrɔ:c/ > [pĩʔrɔ:c]
/bəs/ 'to throw out rubbish' > /bsbəs/ >
[bĩʔbəs]

And again we find several fossilized noun forms such as [ki?mɔ:c] from /kmɔ:c/ 'ghost'. The few final nasals preserved in this dialect give rise to /-iŋ-/ /-iɲ-/, /-in-/ or /-im-/ infixes; *e.g.* /sma:ɲ/ 'to ask' > [simma:ɲ] < /s-ɲ-ma:ɲ/ 'asking' (*cf.* /s-n-ma:ɲ/ → [smma:ɲ] 'a request').

3. *Infixation of* /-a-/

This same infixed reduplication causes the appearance of an /-a-/ minor vowel in Semai. When the final consonant is an /h/ or a /?/, an /-a-/ is inserted in front of the infixed /h/ or /?/. For example, /kʉ:?/ 'to vomit' yields the form /k?kw:?/, pronounced [ka?kʉ:?] and similarily /bhe:?/ 'satiate' > /b?he:?/ [ba?he:?]. With final /-h/ we have /koh/ 'to chop off' > /khkoh/ [kahkoh] and /cləh/ 'to go down' > /chləh/ [cahləh]. This rule is found in all dialects of Semai except in a few villages of the Perak basin in the extreme Northwest corner of Semai territory. It is found nowhere else in Senoic.

III.

Minor vowels of morphological origin

Finally, certain minor vowels are introduced as parts of morphemes or may even constitute morphemes by themselves.

Modals /ha-/, /gu-/, /ka-/

The verbs of several Semai dialects have three modals: a desiderative /ha-/ prefix, an habitual /gu-/ prefix and an involuntary /ka-/ prefix. All three are placed between the bare root and the personal prefixes which agree with the subject: /ke:?kiguja:p/, 'he is always crying' (he-third person-Habitual-cry). The Temair /bar-/, "reciprocal" prefix could also be added here. So long as these

phemes are productive like the ones just mentioned,
y present no special difficulty; but there are
o morphemes which are no longer productive, and
 identification of these may pose problems.

nominal infix /-an-/

A morpheme /-an-/ is infixed into a small number
verbs to yield mostly nouns of location. Thus
m the verb /dəp(m)/ 'to settle on a place off the
und' is derived the noun /danəm/ 'roosting place
 a bird)', while from the verb /cru:t/ 'to go down
lope' is derived the noun /cnaru:t/ 'downward
pe'.

resultative /-a-/ *infix*

There is also the resultative (Chafe, 1970)
ix /-a-/, which is unproductive in both Semai and
iar. In roots with two initial consonants the
el /-a-/ is simply infixed between them. Thus
.Si. /slɔ:r/ 'to lay flat objects into a round
tainer (*e.g.* banana leaves in a back basket)' >
lɔ:r/ 'to be in layers (in round container)'. In
ts with one initial consonant, the /-a-/ morpheme
infixed between this consonant and its reduplica-
n. Thus W.Si. /cɛ̃:s/ 'to tear off' > /cacɛ̃:s/
 be torn off' and /rɔc/ 'to uproot (especially a
er)' > /rarɔc/ 'to be uprooted (of a tuber)'.
s infix has noticeable syntactic consequences:
turns transitive, agentive verbs into intransi-
e, agentless ones. Thus W.Si. /ʔabat ʔajeh
acɛ̃:s la ʔɛɲ/ (cloth this I-will-tear by me) 'I
l tear this cloth' and /ʔabat ʔajeh la (bi)cacɛ̃:s/
oth this Completive (it)-Resultative-tear) 'this
th is already torn', or /ʔm-bɔʔ knɔ:n ku clo:t-n/
carry child at back-my) 'I carry my child on my
k' and /knɔ:n la ki-babɔʔ ku clo:t-n/ (child

Completive he-Resultative-carry at back-my) 'my chil
was carried on my back'. In resultative derivations
the object (target or product) of the active verb
becomes the subject; there is no agent expressed or
even implied, and the Subject is described as being
in the state resulting from the action of the Verb.
Thus the resultative could also be called anti-
causative since the active is really a causative of
the resultative.

Rare prefixes /ma-/, /hu-/, /sa-/

Going down the scale of frequency, we find a fe
more identifiable prefixes.

/ma-/ is prefixed to adverbs of quantity and
degree to create verbs; *e.g.*, /gec/ 'fast' > /magec
'to hurry', /gɛʔ/ 'few' > /magɛʔ/ 'to reduce, to
share'.

The prefix /hu-/ creates time nouns: /hupu:r/
'tomorrow' (< /pu:r/ 'to dawn'), /hunun/ 'the prese
time' (nun is a deictic).

There is also a prefix /sa-/ with the same
function as resultative /-a-/: *e.g.*, /tu:h/ 'to
destroy' > /satu:h/ 'destroyed'.

One point of this long enumeration is this:
even after so much analysis there remains a large
number of words in which minor vowels cannot be
accounted for and must be considered part of the
root. I would claim this to be the case for words
like Si. /kami:ŋ/ 'cheek', Si. /takɔ:y/ 'a lizard',
Si. /kalo:ʔ/ 'snail', Si. /balɪ:k(ŋ)/ 'skies', Jah
Hut /talon/ 'python'.[8] Thus we have at least three
types of roots in Senoic: CVC, CCVC and CvCVC.

This third type, with minor vowel CvCVC, is as
basic and unanalysable as the two others. Verbs of

s type are inflected for the three basic grammat-
l categories: Indeterminate, Causative and
inalization regularly found in the other two types
verb roots. The morphological markers are as
lows:

Root type \ Grammatical category	$c^m cv^f$	$c^p c^m vc^f$	$c^p vc^m vc^f$
eterminate	$\underline{c^m c^f} - c^m vc^f$	$c^p\underline{c^f} c^m vc^f$	$\underline{b} - c^p vc^m vc^f$
sative	$\left.\begin{array}{l} p\,r- \\ b\,r- \\ p- \end{array}\right] c^m vc^f$	$c^p - \underline{r} - c^m vc^f$	$\underline{p} - c^p vc^m vc^f$
inalization	$c^m c^f - \underline{n} - vc^f$	$c^p - \underline{n} - c^m vc^f$	$c^p - \underline{n} - vc^m vc^f$

mples of this third type of root are /kalɔ:ʔ/
me, stupid' > /bkalɔ:ʔ/ 'being stupid', /pkalɔ:ʔ/
render stupid', /knalɔ:ʔ/ 'stupidity'. If this
e were morphologically complex rather than basic,
should not find such derivatives. To take a
cific example, /kalɔ:ʔ/ cannot be analysed as an
tance of the /ka-/ involuntary prefix plus a root
:ʔ/ even though the meaning "involuntary" could
read into the gloss 'tame, stupid'. Compounds
h the /ka-/ prefix cannot yield derivatives such
/knalɔ:ʔ/, /bkalɔ:ʔ/, and /pkalɔ:ʔ/. Only the
eterminate mode would be possible, and this would
e the form *\/kalaʔlɔ:ʔ/ from the postulated CVC
t *\/lɔ:ʔ/; but such a form does not exist in
ai, nor is there evidence of any root /lɔ:ʔ/
nected with the meaning 'stupid'. The analysis
t be rejected.

It is also tempting to try to analyse verb root
with the /-a-/ minor vowel as instances of the
resultative mode and to postulate defective roots.
However, many of the verbs in question are transitiv
(e.g., /bake:?/ 'to see'), while even those which ar
intransitive often do not have either the meaning or
the syntactic properties of resultatives.   In such
cases also the analysis must be rejected.

I must also address myself to the obvious
objection that roots with minor vowels could simply
be Malay or Austronesian borrowings.

It is true that there is a good number of Malay
borrowings in Semai, and these are usually integrate
to the morphological patterns of Senoic.   For exampl
Si. /tiba:?/ 'to arrive' (Mal. tiba) has the regular
Semai derivatives /btiba:?/, /ptiba:?/, /tniba:?/
(indeterminate, causative, and nominalisation,
respectively).   These borrowings tend to refer to
everyday items or notions such as 'stone', 'to like'
and even 'day'.   They are therefore conspicuous and
usually easy to identify.   But the problem is seen t
be more delicate when we recall Blagden's remark tha
Senoic languages may contain borrowings from Austro-
nesian languages other than Malay.   This possibility
might take us far afield but I doubt that it would
invalidate my thesis, since many dissyllabic Senoic
roots have obvious cognates in other Mon-Khmer
languages.   Even in the absence of known Mon-Khmer
cognates, the phonological details of many of these
roots make an Austronesian origin very unlikely.
In order to support this claim, I list below most
of the dissyllabic Semai roots I have encountered so
far which end in a palatal obstruent /-c/ or /-ɲ/.
Since Austronesian languages as a whole do not have

al palatals, we can be reasonably sure that these
ots were not borrowed from that family.

ai dissyllabic roots with final palatal obstruents[9]

/wõ:c/	Exp. 'curved (as a road)'
/ulɔ̃:c/	V. -tr, -ag, -pat, +loc '(to walk) to and fro'
/atã:c/	V. +tr, +ag 'to scratch, tear with nails'
/anrɔɲ/	Exp. 'protruding muscles (of thin person)'
/apã:c/	V. +tr, +ag 'to scratch and scoop'
/apü̃:c/	V. 'to pick up by the handful'
/alɛc/ ~ /klɛc/	'ball (of eye, testicle)', see also the verb /krlɛc/ 'to extract the pit of a fruit'
/urõ:c/	N. 'bird sp.'
/ara:c/	V. -tr, -ag, -pat 'to slide (of land)'
/alɛc/	Exp. 'nimble, fast'
/ale:c/	Exp. 'short (of hair on neck)'
/alãc/ ~ /galã:c/	V. +tr, +ag 'to disobey (orders)'
/ala:c/ ~ /gala:ɲ/ ~ /galɔ:ɲ/ ~ /galʉ:ɲ/	Exp. 'long (of teeth, forehead)'
/u?ɛ̃:c/	V. +tr, -ag, -pat 'to be inquisitive about sth.'
/alɛc/	N. 'small plant sp.'
/awã:c/	Exp. 'wide open'
/awɔ:ɲ/	Exp. 'hooked (of nose)'
	N. 'by-name of /gŋsɛ:k(ŋ)/, the three-striped palm civet, *Arctogalidia trivirgata*'
/araɲ/	Exp. 'protruding (of teeth)'
/uɲɛɲ/	N. 'name of a hill'
/urɔ:ɲ/	N. 'the last remaining of a series, *e.g.* teeth'
/agɛc/	V. +tr, +ag 'to sharpen a tool roughly, quickly'

/pilɐ:ɲ/	Exp. 'drooping (of eyes)'
/payaɲ/	Exp. 'dishevelled'
/balɛc/	V. +tr, +ag 'to curse food, when angr[y]
/maɲɔ:c/	Exp. 'ugly face'
/maɲu:ɲ/	N. 'small fruit sp.'
	Exp. 'angry, grinning expression'
/mamɐ:ɲ/	V. +tr 'to beg food'
/ridu:c/	Exp. 'large body'
/raɲɔ:jɲ/	N. 'jaw's harp'
/raŋkaɲ/	Exp. 'skeletal'
/raŋgɔ:c/	Exp. 'bare-necked (as of chicken)'
/rawɐ:c/	?Adv. 'without rules, at random'
/runtuc/	V. +tr, +ag 'to snatch'
/luɲɛc/	V. +tr, +ag 'to crush sth. soft in the hand'
/siwa:c/	V. 'to throw blood toward the skies t[o] stop thunder'
/siruc/ ~ /sruc/	V. +tr, +ag 'to sip a drink'
/sagɔc/	V. +tr, +ag 'to pry (*e.g.* a log) open half way'
/sapɔc/	V. -tr, -ag, -pat, +loc '(of the fingers) slip (in trying to grasp)
/samɔc/	V. 'to end'
/sawã:c/	Exp. 'striped'
	N. 'alternate name for the /hɔ:r/ or three-striped ground squirrel, *Lariscus insignis* Cuvier'
/sarɔc/ ~ /sarɐ:c/	V. -tr, -ag, -pat 'to be grieved'
/salic/	V. +tr, +ag 'to occupy, take over a place'
/salɛc/	V. -tr, +pat (Resultative) 'to be dislocated (of joint)' (a case of unproductive sa- prefix ?) (but there is no root /lɛc/) gloss[
/sahũ:c/	V. 'to slide down a hill, for fun'
/suma:c/	V. -tr, -ag, -pat, +loc 'to boil ove[r] from a container'

..lɛɲ/ ~	Exp. 'pointed and oval (as snake's
/sulɔɲ/	head)'
..lɯ̃:c/	V. -tr, +ag 'to crane the neck to see sth.'

..s list gives a good idea of the variety and
..quency of dissyllabic roots in Senoic. By far the
..t common minor vowel is /a/, often preceded by /t-/
..r /k-/, but other consonants and vowels are by no
..ns absent. Thus even if a /ta-/ or /ka-/ prefix
..discovered in the future our claim will not be
..validated by any means.

I should like to remark, finally, that despite
..ny regular correspondences in minor vowels found
..roughout the Senoic branch (ex: 'cliff': Si., Te.
..ata:?/, Jh. /lata?/) there are unexplained
..regularities from language to language and even on
..e dialect level. In some cases, the whole minor
..llable may disappear in some dialects and remain
..others: this is the case for Semai /kami:ŋ/ ~
..:ŋ/ 'cheek'. Alternatively, the minor vowel may
..sappear for no apparent reason: Te. /garuc/,
.. /grɯ:c/, Jh. /gruɲ/druɲ/ 'termite'.[10] As these
..riations are not accompanied by any change of
..aning they must be assigned to a morphophonemic
..ocess now inactive. There are synchronic traces
.. such alternations, very reminiscent of what
..ppens in Khasi compounds. For example, Si.
..at mu:r/ 'larva' (for /mat kmu:r/, literally 'eye,
..ed of caterpillar'). In any event, the full form
..ther than the abbreviated one must be considered
..e root, since it contains more unpredictable
..terial. We hope this elision process can be
..tter documented and explained in the future. If
..is, it may be possible to show that Senoic had an
..en greater number of dissyllabic roots: many

present-day monosyllables may prove to be elided
forms of longer roots which have since become obso-
lete. More puzzling and somewhat discouraging are
the few cases of minor vowel irregularities: Semai
has /kuro:l/ 'knee' corresponding to Temiar /karɔ:l/
Jh. /krwal/, and Sennam /kayɔl/.

In view of all this, I would propose that in
future Mon-Khmer historical research we examine the
hypothesis that Senoic dissyllabic roots represent a
archaic feature which has disappeared from most othe
branches of Mon-Khmer. If this can be confirmed, it
might indicate that Senoic separated from the rest
of Mon-Khmer earlier than any other branch, as
Blagden indicated. Or else the split is more recent
and several Mon-Khmer branches have independently
innovated their loss of minor vowels in roots. The
latter view fits well with the indications of
linguistic geography: most other branches of Mon-
Khmer are in contact with monosyllabic languages,
whereas Senoic is not, and has been in contact with
languages where dissyllabicity is the rule. This
dissyllabic hypothesis would also bridge the gap
between Munda and Mon-Khmer, and could even add some
fuel to the dormant Austric theory.

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[1]The following abbreviations are used: Jh. =
Jah Hut, W.Si. = West Semai, N-E.Si. = North-East
Semai, S-E.Si. = South-East Semai, E.Si. = East Sema
S-W.Te. = South-West Temiar, N-E.Te. = North-East
Temiar, Sn. = Sennam.

[2]It should be clear that I am also excluding
from discussion the orthographic vowels noted y in
Khasi, a in various Montagnard languages, as well as
the two minor vowels of Khmer, inasmuch as their
qualities and very occurrence are entirely predictab

[3]This article being written in the field, I lac
proper bibliographical reference, but I recall that

Mon, some Katuic languages and Khasi may have
nemic minor vowels.

[4] If the consonant preceding the /h/ or /ʔ/ is
asal or a liquid the vowel is not anticipated;
., /mrhũ:r/ 'a snake sp.' : [marhũ:r], /snʔɔ̃:y/
man being, Senoi' : [sənʔɔ̃:y].

[5] From Malay bĕmban, through the regular sound
nges: bmbatn, bmbat, bmat, mmat.

[6] There are other exceptions to the rule due to
 fact that /wa/ and /yɛ/ are historically derived
m syllabic nuclei (/uᵊ̯/ and /iᵊ̯/) while today,
 w and the y are sometimes analysed as consonantal
 sometimes not; ex.: [trɛlhwal], 'causing to enter'
d not *tɛrlɛhwal, gɛrcyɛs and not *grɛcyɛs).

[7] The third major division of Senoic.

[8] These words and many others have clear Mon-
er cognates outside Senoic and even Aslian.

[9] Abbreviations are N. = noun, V. = verb, tr. =
nsitive, ag. = agent, pat. = patient, loc. =
ative, Adv. = adverb, Exp. = expressive.

[10] *Cf.* also Semelai /ruɲ/, Semaq Beri /darəɲ/,
'Wong /darəjɲ/, Jahai (Scheb) /daruɲ/.

REFERENCES

Chafe, W. L. 1970, *Meaning and the structure of language*. Chicago, University of Chicago Press, p. 124.

Diffloth, G. F. 1972, "Ambiguïté morphologique en Semai", in *Langues et Techniques, Nature et Société*. Paris, Klincksieck, vol. I.

Haudricourt, A. G. 1965, "Les mutations consonantiqu des occlusives initiales en Mon-Khmer", in *BSLP*, 60:160-72.

Skeat, W. W. and Blagden, C. O. 1906, *Pagan races of the Malay Peninsula*. London, Macmillan, vol. II, Appendix.