MINOR-SYLLABLE VOCALISM IN SENOIC LANGUAGES

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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 relationship: 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
Attempts to reach a more precise statement by this method and establish which branch Mon-Khmer is closest to Senoic have thus far brought me only frustrations. Variable percentages due to a dozen items for which any uncertainty elicitation or in judgment of cognition can invalidate conclusions. I have therefore had to turn 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 phonology is typically Mon-Khmer. We have initial medial voiced and voiceless stops in four places of articulation. Predictably, we have no register or distinctions in the vowels. We have a very rived vowel system with long vs. short, nasal vs. l, and usually four (sometimes five) degrees of height. We have contrasts between final /k/ and /ʔ/. also have final palatals /c/ and /ŋ/. A few examples of words with final palatals will be enough illustrate the Mon-Khmer character of Senoic.

Senoic final palatals

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

'feces': Jh. /ʔɛc/, W.Si. /ʔɛc/, E.Si. /ʔɛc/, S-W.Te. /ʔɛc/, N-E.Te. /ʔɛj/, Sn. /ʔɛc/

'I': W.Si. /ʔɛɲ/, E.Si. /ʔɛɲ/

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

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

'to weave': W.Si. /taːc/, E.Si. /taːɲ/, N-E.Te. /taːc/
'to ask': Jh. /smaŋ/, W. and E.Si. /smaŋ/, N-E.Te. /smaŋ/

'ghost': Jh. /kmɔc/, W.Si. /ki?mɔ:c/, E.Si. /kɔmɔ:c/, N-E.Te. /kejmu:j/

'tooth': Jh. /lmɔŋ/, W. and E.Si. /lmɔŋ/, S-W.Te. /lmɔŋ/, N-E.Te. /mɔŋ/, Sn. /lmɔŋ/

'to sting': Jh. /suc/, W. and S-E.Si. /swːc/, N-E.Si. /soːc/, S-W.Te. /suc/, N-E.Te. /suːj/

'termite': Jh. /gruŋ/ ~ /druŋ/, W.Si. /gruːc/, N-E.Si. /groːŋ/, N-W.Si. /greːŋ/, N-E.Te. /garuc/

'uncle': W.Si. /kəːc/, N-E.Si. /koːŋ/, S-E.Si. /kəːŋ/, N-E.Te. /koːc/, Sn. /?ŋkɔŋ/

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 Bahnanic on the one hand and Khmer, Pearsic 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 /baːʔ/: 'padi', /krbaːr/: 'twin' (O. Mon, ῦar: 'two'), Si. /dic/: 'completed' (O. Mon ɖik), Si. (S-E., N-E.) /deːk, dəːŋ, doːkŋ/, Te. /deːk/ 'house (O. Mon ɖūŋ '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 languages except Senoic or Aslian.

One very conspicuous such feature has to do with root phonology. Senoic, and indeed Aslian languages in general, have a great quantity of syllabic words. I am not referring here to words containing minor syllables with neutral vowels, which are found in practically all Mon-Khmer languages including Senoic itself: I mean words with minor syllables containing contrasting vowels not predictable by environment. For many of these polysyllabic words, minor vowels are introduced by phonetic morphological rules which I shall outline below. In a large number of other cases, however, no such lanation is available. In other words, Senoic languages have a class of true disyllabic roots with vowel values as /a/, /i/, and /u/ in the minor syllable. This feature seems to me very unusual for Mon-Khmer languages if not altogether unique. As Blagden's statement was perhaps more than a sensible 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 types of such vowels with unusual phonetic qualities various Senoic dialects.

Anticipation of major vowels

In all forms of Senoic, the vowel of a major syllable beginning with /h/ or /ʔ/ is anticipated by 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., /bhɨ:p(m)/ 'blood': [bɨhiːp(m)], /kʔɛːp/ 'red centipede': [kɛʔɛːp]. Actually the phonetic notations used here do not reflect the articulations of these words with enough precision. The vowels on the one hand and the /h/ or /ʔ/ on the other require articulators whose movements are totally independent of each other, so that it is perfectly possible to superpose both articulations. The main vowel /ɛː/ of /kʔɛːp/ 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]. This also occurs if a glottal stop separates the two labials. Thus in North-West Semai, where the reduplicated /-t-/ of /btbɛːt/ 'sleeping' is changed to /-ʔ-/, /bʔbɛːt/ is pronounced [buʔbɛːt]. The lip-rounding of the labials spreads across four segments and is superposed 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 *bnuʔbɛːt but simply the regular /bʔneːt/: [mʔneːt].
Most Temiar dialects have a peculiar rule by which an \(-\epsilon/-\) instead of the expected neutral vowel is inserted in long consonant clusters. The rule easily stated if we count consonants backward, starting from the main vowel: \(-\epsilon/-\) is inserted in front of any consonant which is preceded and followed by another consonant. Thus in East Temiar /CBCI:b/ becomes [cεBCI:b], /BCI:b/ becomes [BCεCI:b] while /BCI:b/ becomes [BCεBCI:b] (all from the root /b/, 'to walk'). The process is recursive but interrupted by certain junctures; e.g., from the root /š:d/ 'curly hair' we get the phonological forms /lł:d/, /krdlł:d/ and /kd-krdlł:d/ with a special feature in the last word to attach the reduplicated fix /kd-/. The corresponding phonetic forms are /dłł:d/, /[kɛrdłł:d]/, and /[kɛɛkɛrdłł:d]/, not /kɛɛrdłł:d/ as free application of the rule would yield. Similarly, the form /barbrɛntu:k/ (bar-br+ŋ+k) 'to frighten each other' does not yield /brɛbrɛntu:k/ but simply [barɛbrɛntu:k], due to the structure between the prefix /bar-/ and the rest of the word.6

II.

Minor vowels of morphophonemic origin

Many minor vowels found in Senuoic are actually produced in morphemic variants of one sort or another. For example, the most common morphological process in Senuoic is infixation of the final consonant between two initial consonants; e.g., Si. µ:/ 'to choke' > /c?u:l/ 'to be choking'. In its having only a simple initial, e.g. Si. /c:pl/ 'lk', the final is inserted between the initial
consonant and its reduplication: /jc:CEPT/ → /cc:CEPT/ → /cpcc:CEPT/, 'to be walking'. This is a productive process in verbs, which I called elsewhere the Indeterminate mode (Diffloth, 1972); it is also found in a few nouns as a fossilized process. This kind of "infixed reduplication" gives rise to three categories of minor vowels.

1. Infixation of /-i-/ and /-u-/  

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

Si. /khɔ:y/ 'to yawn' > /kyhɔ:y/ → [kihɔ:y]  
'to be yawning'

/sje:w/ 'sharp' > /swje:w/ → [suje:w]  
'sharp'

/ɡwɔ:y/ 'to sit' > /gyɡwɔ:y/ → [ɡiɡwɔ:y]  
'to be sitting'

/ca:w/ 'to sprinkle' > /cwca:w/ → [cuca:w]  
'to be sprinkling'

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

Jh. */khway/ 'to yawn' > /kyhway/ → [kihway]  
'to be yawning'

*/hɔy/ 'to copulate' > /hɔy/ → [hɔy]  
'to be copulating'

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

To. /po:ɛy/ 'to blow (wind)' > /pypo:ɛy/ → [pɛypo:ɛy], not *pipo:ɛy, 'to be blowing'

/kɔ:w/ 'to call' > /kwkɔ:w/ → [kɛkwkɔ:w],  
not *kukɔ:w, 'to be calling'

However, there are a number of fossilized forms which can no longer be decomposed but which suggest that vocalisation of /-w-/ and /-y-/ at one time occurred.
Temiar. For example: /pɨpuːy/ 'not completely', not *peypuːy, from a root *puːy/ not found Temiar but which yields Semaɪ /pɨnuːy/ 'day-ameng', and /cnǐloːy/ 'flute', not *cnɛyloːy, al infixed and reduplicated form of a root /cloːy/ found in Modern Temiar but which yields Semaɪ loːy/ 'to lull a child to sleep'.

Infixed reduplication in nouns also gives rise /-l-/ and /-u-/ minor vowels, especially in combination with the nasal infix which derives counts from mass nouns:

Sī. /sλeːy/, 'swidden (mass)', /s-n-y-laːy/ → [snǐleːy], 'id. (count)'
/teːw/, 'river', /t-w-n-eːw/ → [tunǐw] 'id. (count)'

Semaɪ as well as Temiar many noun forms with /-l-/ /-u-/ minor vowels can probably be explained as silized products of this same rule. For example, Sī.: /kukɛːw/ 'generic name for snake' and air /kukɛːw/ 'python' are probably fossilized duplications of a root *kɛːw/ *kɛːw/.

Infixation of /-l?-/

A few dialects of Semaɪ in the Kampar basin have this process one step further. In these lects, most infixed final consonants (except /l/ /r/, /w/ and /y/) have been changed to /-?/-; /gɛ:p/ 'to winnow vertically' → [g?gɛ:p] (other lects have [gmgwːpm]). However, if the final sonant to be infixed is a palatal, i.e. /-c/, /, /-s/ (for -y, see above), then the infixed form /-l?-/. Thus:

/ŋɛːc/ 'burnt' → /ŋc-ŋɛːc/ → [ŋɛlŋɛːc]
/prɔːc/ 'brittle' → /pɛɾɔːc/ → [pɛlɾɔːc]
/bes/ 'to throw out rubbish' → /bɛbs/ → [bɛlɛbs]
And again we find several fossilized noun forms such as /ki?mo:c/ from /kmo:c/ 'ghost'. The few final nasals preserved in this dialect give rise to /-iŋ/-, /-in/-, /-im/- or /-im/- infixes; e.g. /sma:ŋ/ 'to ask' > [simma:ŋ] < /s-ŋ-ma:ŋ/ 'asking' (cf. /s-n-ma:ŋ/ → [smma:ŋ] '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 /ʔ/, an /-a-/ is inserted in front of the infixed /h/ or /ʔ/. For example, /kuːʔ/ 'to vomit' yields the form /k?kwːʔ/ pronounced [ka?kuːʔ] and similarly /bheːʔ/ 'satiated' > /bʔheːʔ/ [ba?heːʔ]. With final /-h/ we have /koh/ 'to chop off' > /khkoh/ [kahkoh] and /clʔah/ 'to go down' > /chlʔah/ [cahlʔah]. 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 Senoi.

III. Minor vowels of morphological origin

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

Modals /haː/, /guː/, /kaː/

The verbs of several Semai dialects have three modals: a desiderative /haː/ prefix, an habitual /guː/ prefix and an involuntary /kaː/ prefix. All three are placed between the bare root and the personal prefixes which agree with the subject: /keːʔkiguja:p/, 'he is always crying' (he-third person-Habitual-cry). The Temair /barː/, "reciproc..."
phemes are productive like the ones just mentioned, 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 /dęp(m)/ 'to settle on a place off the und' is derived the noun /danem/ 'roosting place a bird', while from the verb /craw:t/ 'to go down lope' is derived the noun /cnarg:t/ 'downward pe'.

resultative /-a-/ infix 

There is also the resultative (Chafe, 1970) ix /-a-/ , which is unproductive in both Semai and pilar. In roots with two initial consonants the el /-a-/ is simply infixed between them. Thus Si. /slo:r/ 'to lay flat objects into a round tainer (e.g. banana leaves in a back basket)' > lo:r/ 'to be in layers (in round container)'. In roots with one initial consonant, the /-a-/ morpheme infixed between this consonant and its reduplica-

Thus W.Si. /cē:s/ 'to tear off' > /cacē:s/ to be torn off' and /roç/ 'to uproot (especially a er)' > /rarōç/ 'to be uprooted (of a tuber)'.
s infix has noticeable syntactic consequences: turns transitive, agentive verbs into intransi-
tive, agentless ones. Thus W.Si. /?abat ?ajeh cē:s la ?ep/ (cloth this I-will-tear by me) 'I ll tear this cloth' and /?abat ?ajeh la (bi)cacē:s/ both this Complete (it)-Resultative-tear) 'this oth is already torn', or /m-bc? knocn ku clo:t-n/ carry child at back-my) 'I carry my child on my k' and /knocn la ki-babc? ku clo:t-n/ (child
Completeive he-Resultative-carry at back-my) 'my child 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 few more identifiable prefixes.

/ma-/ is prefixed to adverbs of quantity and degree to create verbs; e.g. , /gεc/ 'fast' > /m@γεc/ 'to hurry' , /gεʔ/ 'few' > /m@γεʔ/ 'to reduce, to share'.

The prefix /hu-/ creates time nouns: /hupu:r/ 'tomorrow' (< /pu:r/ 'to dawn') , /hunun/ 'the present 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. /kamiːŋ/ 'cheek' , Si. /takoːy/ 'a lizard' , Si. /kaloʔ/ 'snail' , Si. /bαlːk(ŋ)/ 'skies' , Jah Hut /talon/ 'python'.

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
Some type are inflected for the three basic grammatical categories: Indeterminate, Causative and Finalization regularly found in the other two types of verb roots. The morphological markers are as follows:

<table>
<thead>
<tr>
<th>Root Type</th>
<th>C&lt;sup&gt;m&lt;/sup&gt;CV&lt;sup&gt;f&lt;/sup&gt;</th>
<th>C&lt;sup&gt;P&lt;/sup&gt;C&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</th>
<th>C&lt;sup&gt;P&lt;/sup&gt;VC&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</th>
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<tr>
<td>Indeterminate</td>
<td>C&lt;sup&gt;m&lt;/sup&gt;C&lt;sub&gt;r&lt;/sub&gt;-C&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
<td>C&lt;sup&gt;P&lt;/sup&gt;C&lt;sub&gt;r&lt;/sub&gt;-C&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
<td>b-C&lt;sup&gt;P&lt;/sup&gt;VC&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
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<tr>
<td>Causative</td>
<td>pr-br-m C&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
<td>C&lt;sup&gt;P&lt;/sup&gt;-r-C&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
<td>p-C&lt;sup&gt;P&lt;/sup&gt;VC&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
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<tr>
<td>Finalization</td>
<td>C&lt;sup&gt;m&lt;/sup&gt;C&lt;sub&gt;r&lt;/sub&gt;-n-VC&lt;sup&gt;f&lt;/sup&gt;</td>
<td>C&lt;sup&gt;P&lt;/sup&gt;-n-C&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
<td>C&lt;sup&gt;P&lt;/sup&gt;-n-VC&lt;sup&gt;m&lt;/sup&gt;VC&lt;sup&gt;f&lt;/sup&gt;</td>
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Examples of this third type of root are /kalɔː:/ 'me, stupid' > /bkalɔː:/ 'being stupid', /pkalɔː:/ render stupid', /knalɔː:/ 'stupidity'. If these were morphologically complex rather than basic, they should not find such derivatives. To take a specific example, /kalɔː:/ cannot be analysed as an instance of the /ka-/ involuntary prefix plus a root -?/ even though the meaning "involuntary" could read into the gloss 'tame, stupid'. Compounds with the /ka-/ prefix cannot yield derivatives such /knalɔː:/, /bkalɔː:/, and /pkalɔː:/. Only the determinate mode would be possible, and this would be the form * /kalɔː?lɔː:/ from the postulated CVC * /lɔː?:/; but such a form does not exist in ai, nor is there evidence of any root /lɔː?:/ connected with the meaning 'stupid'. The analysis must be rejected.
It is also tempting to try to analyse verb roots with the /-a-/ minor vowel as instances of the resultative mode and to postulate defective roots. However, many of the verbs in question are transitive (e.g., /bake:/ 'to see'), while even those which are 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 integrated into the morphological patterns of Sinoic. For example, Si. /tiba:/ 'to arrive' (Mal. tiba) has the regular Semai derivatives /bti;ba:/, /piti;ba:/, /nti;ba:/ (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 to be more delicate when we recall Blagden's remark that Sinoic languages may contain borrowings from Austronesian languages other than Malay. This possibility might take us far afield but I doubt that it would invalidate my thesis, since many disyllabic Sinoic 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 disyllabic Semai roots I have encountered so far which end in a palatal obstruent /-c/ or /-n/. Since Austronesian languages as a whole do not have
nal palatal sounds, we can be reasonably sure that these
roots were not borrowed from that family.

nal disyllabic roots with final palatal obstruents 9

\[ \text{kwɔːːc/} \quad \text{Exp. 'curved (as a road)'} \]

\[ \text{ulɔːc/} \quad \text{V. -tr, -ag, -pat, +loc 'to walk}
\quad \text{to and fro'} \]

\[ \text{latɔːc/} \quad \text{V. +tr, +ag 'to scratch, tear with}
\quad \text{nails'} \]

\[ \text{anɾɔŋ/} \quad \text{Exp. 'protruding muscles (of thin}
\quad \text{person)'} \]

\[ \text{apɔːc/} \quad \text{V. +tr, +ag 'to scratch and scoop'} \]

\[ \text{apɔːc/} \quad \text{V. 'to pick up by the handful'} \]

\[ \text{{'ball (of eye, testicle)', see also}
\quad \text{the verb /krɛːc/ 'to extract the}
\quad \text{pit of a fruit'} \]

\[ \text{urɔːc/} \quad \text{N. 'bird sp.'} \]

\[ \text{araːc/} \quad \text{V. -tr, -ag, -pat 'to slide (of land)'} \]

\[ \text{elɛc/} \quad \text{Exp. 'nimble, fast'} \]

\[ \text{aleːc/} \quad \text{Exp. 'short (of hair on neck)'} \]

\[ \text{alɑːc/} \quad \text{V. +tr, +ag 'to disobey (orders)'} \]

\[ \text{galɑːc/} \quad \text{Exp. 'long (of teeth, forehead)'} \]

\[ \text{galɛːc/} \quad \text{V. +tr, -ag, -pat 'to be inquisitive}
\quad \text{about sth.'} \]

\[ \text{galɛːc/} \quad \text{N. 'small plant sp.'} \]

\[ \text{awɔːc/} \quad \text{Exp. 'wide open'} \]

\[ \text{awɔːŋ/} \quad \text{Exp. 'hooked (of nose)'} \]

\[ \text{nuʔɛːc/} \quad \text{N. 'by-name of /ɡɔːɛːk(ŋ)/, the three-}
\quad \text{striped palm civet, Aratogalidia}
\quad \text{trivirgata'} \]

\[ \text{araːŋ/} \quad \text{Exp. 'protruding (of teeth)'} \]

\[ \text{unɛŋ/} \quad \text{N. 'name of a hill'} \]

\[ \text{uruŋ/} \quad \text{N. 'the last remaining of a series,}
\quad \text{e.g. teeth'} \]

\[ \text{agɛːc/} \quad \text{V. +tr, +ag 'to sharpen a tool roughly,}
\quad \text{quickly'} \]
/pilw:i/ Exp. 'drooping (of eyes)'
/payp:i/ Exp. 'dishevelled'
/valc:/ V. +tr, +ag 'to curse food, when angry'
/mani:c/ Exp. 'ugly face'
/manu:n/ N. 'small fruit sp.'
/mamn:i/ Exp. 'angry, grinning expression'
/mamn:/ V. +tr 'to beg food'
/ridu:ci/ Exp. 'large body'
/ranjo:jn/ N. 'jaw's harp'
/ranjka:n/ Exp. 'skeletal'
/ranjo:ci/ Exp. 'bare-necked (as of chicken)'
/rana:ci/ ?Adv. 'without rules, at random'
/runtuc/ V. +tr, +ag 'to snatch'
/lunec/ V. +tr, +ag 'to crush sth. soft in the hand'
/siwa:c/ V. 'to throw blood toward the skies to stop thunder'
/siruc/ ~
/sruci/ V. +tr, +ag 'to sip a drink'
/sagoc/ V. +tr, +ag 'to pry (e.g. a log) open halfway'
/sapoc/ V. +tr, -ag, -pat, +loc '(of the fingers) slip (in trying to grasp)'
/samoc/ V. 'to end'
/sawo:ci/ Exp. 'striped'
/saro:ci/ N. 'alternate name for the /ho:ri/ or three-striped ground squirrel, *Lariscus insignis* Cuvier'
/sarei:ci/ V. -tr, -ag, -pat 'to be grieved'
/salici/ V. +tr, +ag 'to occupy, take over a place'
/salec/ V. -tr, +pat (Resultative) 'to be dislocated (of joint)' (a case of unproductive sa- prefix ?) (but there is no root /lce/) gloss
/sahu:c/ V. 'to slide down a hill, for fun'
/suma:ci/ V. -tr, -ag, -pat, +loc 'to boil over from a container'
Exp. 'pointed and oval (as snake's head)'

V. -tr, tag 'to crane the neck to see sth.'

This list gives a good idea of the variety and frequency of dissyllabic roots in Senoic. By far the most common minor vowel is /a/, often preceded by /t-/ or /k-/ , but other consonants and vowels are by no means 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 my regular correspondences in minor vowels found throughout the Senoic branch (ex: 'cliff': Si., Te. /lata?/, Jh. /lata?/) there are unexplained regularities from language to language and even on the dialect level. In some cases, the whole minor syllable may disappear in some dialects and remain in others: this is the case for Semai /kami:η/ ~ /Γi:η/ 'cheek'. Alternatively, the minor vowel may disappear for no apparent reason: Te. /guruc/, Jh. /gurc/, Jh. /grun/drun/ 'termite'. As these variations are not accompanied by any change of meaning they must be assigned to a morphophonemic process now inactive. There are synchronic traces such alternations, very reminiscent of what opens in Khasi compounds. For example, Si. /ntu:η/ 'larva' (for /mat kmu:η/, literally 'eye, bead of caterpillar'). In any event, the full form rather than the abbreviated one must be considered the root, since it contains more unpredictable material. We hope this elision process can be better documented and explained in the future. If this is, it may be possible to show that Senoic had an even greater number of dissyllabic roots: many
present-day monosyllables may prove to be elided forms of longer roots which have since become obsolete. More puzzling and somewhat discouraging are the few cases of minor vowel irregularities: Semai has /kuroːʔ/ 'knee' corresponding to Temiar /karɔːʔ/ Jh. /krwal/, and Sennam /kayɔː/.  

In view of all this, I would propose that in future Mon-Khmer historical research we examine the hypothesis that Senoic disyllabic roots represent an archaic feature which has disappeared from most other 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 disyllability is the rule. This disyllabic hypothesis would also bridge the gap between Munda and Mon-Khmer, and could even add some fuel to the dormant Austric theory.


2It 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 predictable.

3This article being written in the field, I lack proper bibliographical reference, but I recall that
Mon, some Kauic languages and Khasi may have nemic minor vowels.

4 If the consonant preceding the /h/ or /ʔ/ is nasal or a liquid the vowel is not anticipated; e.g., /mɛhrûːr/ 'a snake sp.' : [mɛhrûːr], /sʊnɔːy/ man being, Senoi' : [sʊnɔːy].

5 From Malay bēmban, through the regular sound changes: bmbatn, bmbat, bmat, mmat.

6 There are other exceptions to the rule due to the fact that /wa/ and /ye/ are historically derived from syllabic nuclei (/uə/ and /iə/) while today, as w and the y are sometimes analysed as consonantal sometimes not; ex.: [tɛːlɪhwaı̯], 'causing to enter' nd not *tɛɛlɛːhwaı̯, ɡɛɛcyɛs and not *ɡɛɛcyɛs).

7 The third major division of Senoiic.

8 These words and many others have clear Mon-ner cognates outside Senoiic and even Aslian.

9 Abbreviations are N. = noun, V. = verb, tr. = transitive, ag. = agent, pat. = patient, loc. = locative, Adv. = adverb, Exp. = expressive.

10 Cf. also Semelai /rʊŋ/, Semaq Beri /dǝɾəŋ/, e'Wong /dǝɾəŋ/, Jahai (Scheb) /dǝɾʊŋ/.
REFERENCES


