On Sesquisyllabic Structure

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The term "sesquisyllabic" has been coined aptly by James Matisoff for the type of structure intermediate between monosyllabic and disyllabic (see Matisoff 1989: 165). It has been most prominently noted in Mon–Khmer languages but is also a general worldwide phenomenon. In writings on Mon–Khmer languages the half syllable has often been called a presyllable or a minor syllable; in some descriptions "presyllable" has been used in sesquisyllabic types (i) – (iii), and "minor syllable" in type (iv). Seldom is a language totally of one structural type, but it may be predominantly monosyllabic, predominantly sesquisyllabic, or predominantly disyllabic. This note attempts a general description of sesquisyllabicity. 1

Sesquisyllabic structures cover a range from near-monosyllabic to near-disyllabic, with the prototypical form being near the middle of that range. Sesquisyllabic structure is apparently usually a result of stress shift to the final syllable of the word (stress group), followed by increasing phonetic nucleation at the final syllable. This progressive strengthening of the final syllable leads to progressive weakening of the non-final syllables, so that the penultimate syllable in a disyllabic word tends toward fusion with the final syllable (Thomas 1980).

(i) C = CC - CC - CC

Type (i), the weakest sesquisyllabic form, is that where the phonetic presyllable is only a predictable open transition between consonants. Phonemically it is a monosyllable.

In Stieng between a stop and a liquid or aspiration there is close juncture [khwah] 'lack' (TLVC); between other pairs of consonants there is open juncture [bənaŋ] '24 hours' (CCVC); or if there are three consonants the open juncture is between the first two [kərmac] 'twist', [pəndriŋ] 'nourishing', [?ək?ay] 'lizard' (CCCVC) (Haupers 1969:131–5).²

In Central Khmer (Cambodian) there is aspirated transition if the two consonants are different voiceless stops [khcat] 'scattered' (TKVC), or a voiceless stop plus nasal [khnom] 'I' (TNVC). There is a voiced transition if both are voiced consonants [rəluət] 'extinguished' (LLVC), or they are identical voiceless stops

¹ I wish to thank Christian Bauer and Audra Phillips for helpful suggestions and comments on this manuscript.

² Structural abbrevations are: V any member of the stressed vowel set, v any member of a restricted vowel set, C any consonant, or any appropriate (undefined) consonant, T any voiceless stop, K a different voiceless stop, G a non-homorganic voiced stop, L any liquid, N any nasal. Other symbols have their normal phonetic value.

[kəkary] 'dig' (TTVC). There is no transition if the first is a stop and the second a liquid [krarp] 'prostrate oneself' (TLVC), or if the first is a voiceless stop and the second a non-homorganic voiced stop [kdau] 'hot' (TGVC). A three-consonant structure follows similar rules [krəʔorp] 'pleasant scent', [pəpleh] 'teasingly' (CCCVC)(Jacob 1968:12-5, 292-309).

In Northern Khmer there may be as many as four consonants /CCCCVC/ with transitions governed by the above Central Khmer rules, except that /h/ is a full consonant [pəphəle:c] / pphle:c/ 'radiant'. Stress is only and always on the final CVC. Only certain consonants can occur in the presyllable positions (Prakorb 1987: 114–21).

Mon is similar to Northern Khmer, with /h/ being a full consonant in Register 1, but apparently there is a maximum of three consonants /CCC/: phya 'market' CCC, kərao 'six' CC, pəthui 'disturb' CCC (Bauer ms.:119).

In a number of languages of types (i) or (ii) a nasal homorganic with the following consonant may have either close or open transition before it: /CNC-/ = [CNC-, CəNC-], as in Northern Khmer [pəmphət, pmphət] /pmphət/ 'completely'.

Similarly in Kuay [snte: ~ sənte:] 'tell' (CNCVC),*[kmphla: ~ kəmphla:] 'orphan' (CNCCCVC) [note the 5-consonant cluster!]. But forms like [nta:?] 'tongue', [mpph] 'a well' (NCVC) do not permit any vocalic element between the consonants since the nasal itself is syllabic or semisyllabic (Preecha 1988:65–8,74–6).

Halang usually allows only /N/ as the presyllable nasal, rarely /m/ or /n/ (Cooper & Cooper 1966:93).

(ii) $CaC - \neq CC -$

Type (ii), a slightly stronger sesquisyllabic form, has a contrast between the presence (CoC-) and the absence (CC-) of a vocalic transition in certain environments.

Chrau has contrast between play 'fruit' and pəlay 'unfortunately'. The phonetic quality of the transition is immaterial, as in type (i), ranging non—contrastively as far as [a], [i], and [u], but most often near a schewa position unless pulled forward by a palatal consonant or back by a labial consonant [sidac] 'king', [pədar] 'send', [ruwɛh] 'elephant'. Contrast between CC and CəC is found only between a stop and an l, r, w, or y (Thomas 1971:30–44).

Mon has contrast only before liquids [1] and [r] and semivowels [w] and [y]: /kərao/ 'six' CəC-, /krean/ 'variety of rice' CC-.

In Jeh there is contrast only with the consonant pairs pr, tr, th, kl, kh: (Gradin 1966: 46–7).

trah 'chop out' tərah 'squawk' khey 'moon' kəhey 'moon'

In Cua (Maier 1969:14–6) there is a neutralized central /3, written as a, which assimilates to its surrounding environment and is in contrast with its absence only before /1, r/:

bla 'answer' bala 'jest'

klaat 'fog' kalaat 'piece of meat'

trak 'eggplant' tarak 'unison call in prayer'.

Chrau (and Koho?) presyllable /r/ varies freely between $[C \ni C - \sim Cr \ni C - \sim Cr \cap C -$

Mon has a vowel-initial presyllable, with /ə/ being the only permitted vowel: əca 'teacher, əthe 'married man' (Bauer ms.:120).

The contrast between presence and absence of vocalic transition may also extend to wider environments.

(iii) CvC-

In Type (iii), the vocalic element has a contrast between two or three phonemes.

There are a few cases of /a, i/ contrast in Northern Khmer, with the /i/ mostly involving animal names or onomatopoeia, such as /tiŋwa:j/ 'spider', /tiŋku:y/ 'chameleon', /panle:t/ 'divide' (Prakorb 1987:120).

Mon has an /i,u/ contrast only in the environment ?—C, perhaps to be contrasted also with the C₂C presyllables: ?isəlam 'Islam', [?i?ra?] 'particle, perfective' (Bauer ms.:118a-b).

More commonly the contrast involves three phonemes. Pacon contrasts /a, i, u/, as in papi 'converse', tinol 'a post', kuchet 'die' (Watson 1964:144).

Central Khmer contrasts /ɔ, u, ua/, as in kənteil 'mat', tumne 'free time', tuənle 'river' (Jacob 1968:14).

Kuay contrasts /i, ə, u/ kilek 'a tree', kəthiim 'garlic', sulin 'Surin' (Preecha 1968:75).

(iv) CVC-

precullable

In Type (iv) the vocalic element may have nearly full vowel contrasts in a weakly stressed minor syllable, in distinction from a limited-contrast unstressed presyllable like that in types (ii) and (iii).

In Kensiw the presyllable can take only /i, a, ə, u/ (usually /ə/), i.e. type (iii), but the minor syllable can take all vowels except /ə, ũ, ĩ/ (Paiboon 1984:98–9, 155–243):

minor syllable

presynable	117	minor syndole	
sə"so? 'ligament' pə"tom 'black ant' tə"mon 'pile'	'la"com 'tu"doŋ 'ni"boŋ 'ke"ton 'pɔl"?oh	'to weight down' 'to cover' 'Yala' 'no' 'sweat'	

Similarly Northeastern Thai has 'ka"tha? 'pan', 'phi"ti? 'pretend', 'bak"khiəp 'custard apple' (Preecha 1988:62).

Kuay has a few examples of this type, such as 'plaj"khon 'mango', 'cok"ckok (Preecha 1988).

In Halang, which is basically a type (ii) language, in reduplicative words any short vowel may occur in the presyllable (Cooper 1966:98). This is true for many type (ii) or (iii) languages.

Mon "weakened disyllables" may perhaps fall under this category (Bauer ms.: 118a).

Summary

To summarize, stages (ii) and (iii) may be considered the classic sesquisyllabic types. Below (i) is monosyllabism, with no predictable open transitions between initial consonants, as is the norm in Vietnamese or Nung (Saul and Wilson 1980). Beyond (iv) is disyllabism, with vowel and consonant patterns the same in both syllables, and with potential stress shifting or contrast, as in Tagalog.

A language will frequently (usually?) have more than one type of sesquisyllabism, but one type may be most prominent.

One significant impact of sesquisyllabism is seen in formal genres such as poetry, chanting, and singing, which force syllable counting or syllable breaks. Sesquisyllabic words, especially type (i) would tend to be ambivalent in such situations, sometimes counting as one syllable, sometimes as two. Listening to Northern Khmer people learning to sing recently composed songs, I frequently observe uncertainty whether to sing a sesquisyllable with one note or two. And

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similarly in English hymnody words like *heaven* are sometimes treated as one syllable, sometimes as two.

Sesquisyllabism, though rampant in the Mon-Khmer family, is of course not confined to Mon-Khmer languages, nor do all Mon-Khmer languages (e.g. Vietnamese, Muòng) have it. Neighboring languages such as Cham, Thai, and Moken have borrowed layers of sesquisyllabicity.

English has many sesquisyllabic words, most with initial stress, some with final stress: type (i) ["hæmr ~ "hæmər] hammer', ["lændəd] 'landed'; type (ii) [sə"mɛnt] 'cement' vs. ["smɛl] 'smell'; type (iii) [su"pərb] 'superb', [sɪn"siər] 'sincere', [sə"plai] 'supply'. And K.L. Pike has pointed out the sesquisyllabic phonetic and morphemic fusion in rapid colloquial English [djin"djoit ~ djən"djoit] 'Did you enjoy it?'.

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