

## Loan Words and Devoicing in Khmer

Michael VICKERY  
Universiti Sains Malaysia

It has long been known that the two Mon-Khmer languages for which a long series of written records is available must have been subject to a devoicing of original voiced stops /\*g, \*j, \*d, \*b/ to /k, c, t, p/ at some time in the past and after Indic writing systems were adopted in the 6th-7th centuries A.D. This devoicing apparently accompanied, or contributed to, the development of two registers which retained a phonemic distinction when devoicing occurred, and eventually contributed to change in the vowels in one register. Another shift which probably accompanied these, but which until recently received less attention, was the change of pre-glottalized, or imploded, bilabial and dental/alveolar stops (β /ʔb, d /ʔd) to simple voiced exploded stops /b/ and /d/.<sup>1</sup>

Similar shifts, devoicing of a series of initial voiced stops, loss of implosion/preglottalization and prenasalization of stops also characterize the Tai languages, in which tonal distinctions appeared. There seems to be agreement that b and d existed in Proto-Tai, but then their devoicing, that is, their merger with the voiceless series of stops, resulted in a split of the tone system, that is, a multiplication of tones, at later stages.<sup>2</sup>

Not long ago conventional linguistic wisdom held that this devoicing of original stops which characterizes the languages of a large area of Southeast Asia occurred about 1,000 years ago. Even though that view was not universal among linguists, it was not a point of major controversy and attracted only unhurried specialist attention—a detail on which further perfection was required, but not of any urgency.<sup>3</sup>

Shorto, using mainly Mon evidence, concluded in 1967 that "register is an independent development in Mon and Khmer," with Mon having undergone the process during the 16th century. Similarly, Headley has argued that devoicing of

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<sup>1</sup>These two phonemes have been described in various ways. See Shorto 1967; Diffloth 1976, 1984; Jacob 1976; Headley 1976; Huffman 1976. Modern voiced /d, β/ in Mon, Khmer, and Thai (with loss of implosion in the latter) represent historically different phonemes from original voiced *d, b*. This has been obscured in Khmer because they were not distinguished in the Khmer writing system until the late 18th, or the 19th century (see further below). In other words, earlier written Khmer *p* and *t* each represented two phonemes, *p* /*p, β*/, *t* /*t, d*/, with *p* and *t*.

<sup>2</sup>Fang-Kuei Li 1977.

<sup>3</sup>Brown 1965:62; Chamberlain 1975; Matisoff 1983; Vickery 1987. Although Gedney 1964: 25 wrote that ". . . after the languages had separated they underwent sound changes which increased the number of tones," which could imply that the sound shift in question occurred much later, in his review of Marvin Brown (1965) Gedney offered no criticism of Brown on this point, obviously not then considering it a matter requiring immediate attention (Gedney 1965).

original initial voiced stops took place very late in Khmer, much later than the splits between the various Mon-Khmer languages. On the other hand, Huffman seems in fact to have accepted something that Shorto thought unlikely, that "those phonetic exponents of register which were present earlier as conditional features go back to a common stage in the history" of Mon-Khmer.<sup>4</sup>

Huffman demonstrated that several different stages of devoicing are represented among contemporary Mon-Khmer languages, meaning that there, whatever the date of onset, devoicing is a still continuing process. The 15 Mon-Khmer languages which he studied have not undergone these changes simultaneously; some are still in the process, but Khmer is the most advanced, and it would therefore seem that devoicing in Khmer was relatively early. In the absence of comparable records at earlier dates it may be impossible to ascertain the period during which Khmer devoicing occurred, but, as I shall demonstrate, it was certainly complete, or nearly so, by the end of the 16th century. Huffman's evidence shows that the "wave" was a very slow one, which has not yet swept over all of Mon-Khmer.

Most Tai specialists, on the other hand, until recently assumed that at whatever date they placed it, devoicing occurred in all Tai languages contemporaneously, in broad historical terms, or that it occurred at a time before proto-Southwestern Tai split into its various branches, although over 20 years ago Gedney offered a contrary opinion.<sup>5</sup>

About three years ago there was a new development which gave more urgency to the matter. The date of devoicing sprang forth as a factor in the controversy surrounding the authenticity of the Ramkhamhaeng inscription. If devoicing was really as ancient as had been hypothesized, at least in the Tai languages, it at first seemed to be a strong point against the authenticity of Ramkhamhaeng, but if it could be shown to have occurred much later, in the Ayutthaya period, 15th-16th, then Ramkhamhaeng might be in less danger.<sup>6</sup>

Suddenly there was much more insistence on any shred of evidence indicating late devoicing.

In fact, it is not directly crucial to the Ramkhamhaeng question, but it may be indirectly if it affects decisions on inter-Tai relationships, which may have a bearing on the statement that Ramkhamhaeng invented Thai writing.

Not inspired by the controversy, but perhaps more insistent because of it, have been attempts to show that single loan words, in particular from Mon to Thai, prove that devoicing had not occurred in Thai until after the 15th century.

That may in the end prove correct, but based on single words, not patterns of a larger vocabulary, it is not convincing. Study of loan words must take into account

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<sup>4</sup>Shorto 1965:247. Headley: 1976a:449; Huffman 1976:577-578.

<sup>5</sup>Gedney 1965. A recent modified position is Chamberlain 1989 which evokes evidence that the PH languages may have devoiced later than the P languages, and that devoicing had not yet occurred in 13th century Sukhothai. Chamberlain kindly supplied me with a prepublication manuscript, and publication by the Siam Society is due in a collection of papers on the Ramkhamhaeng inscription.

<sup>6</sup>Vickery 1987 and 1989.

not just the forms of the donor and borrowing languages as perceived by trained linguists, least of all when those are ancient *written* forms, but the way in which phonemes of the donor language may have been perceived phonetically by speakers of the recipient language. As a simple hypothetical example, though not irrelevant in the area concerned, if language A has phonemes /t, d/, and language B /t, th, d/, the realization of A /t/ in B cannot be predicted; it could be either [t] or [th]. If a language C had three alveolar stops /t, th, d/ as well as tone/register, say 'high' and 'low,' and a language D two alveolar stops /t, d/ with no tone/register/, C /t/ 'high' is likely to correspond to D /t/ whereas C /t/ 'low' is likely to correspond to D /d/.

And of course if an isolated loan word is subject to folk etymology or arbitrary reinterpretation in the borrower language, then anything may happen.

An example of this type in the real world is a problem encountered by English speakers learning Thai. Each language has two velar stops, voiceless unaspirated and aspirated (/k/, /kh/) in Thai but voiceless and voiced in English (/k/ [k]-[kh], /g/), without phonemic aspiration. When English speakers learn Thai they usually have trouble making the /k~/kh/ distinction, which is irrelevant in English, and without special instruction many of them will pronounce words beginning with /kV/ as /khV/. As a learning aid they are taught to position their vocal apparatus as for /g/, but to omit the voicing. As a result some of them, even after fluency is acquired, tend to speak a variety of Thai in which some voicing remains. Apparently voicing of /k/ > /g/ is not an impediment to comprehension, for it makes the necessary phonemic distinction, which the opposite error, aspiration of /k/ > /kh/, does not.

An interesting speculation is that if a population whose language had the English velar pattern became Thai-ized, they might well speak a Thai dialect with a voiced /g/ (written ก) / aspirated voiceless (kh / ข ค ) distinction. Their dialect could not be explained in terms of Proto-Tai, and if it were used in comparative historical linguistic work it would skew the reconstruction.

As another example, what will historical linguists a thousand years hence make of the evidence of one of the most recent, and certainly at the moment most frequently used, borrowings by standard Thai from English, *key* (เกย์) 'gay'? Will they conclude that English, by the 1980s, had devoiced original voiced stops?

And, precisely illustrating the problem of written loans in the past, how should linguists treat the Thai rendition of the name of the current Cambodian Minister of Defence, Tea Banh in Cambodian romanization, /ti:ə ban/ phonetically, dā bān as written in Khmer, but *tie panh* tie panh (เตีย พันห์ /tiə ban/) as transcribed in Thai, even though Thai script is as capable as Khmer of handling the correct form?<sup>7</sup>

What has obviously occurred here is Thai negligence of both Khmer pronunciation and orthography, even though Tea Banh himself is of the Thai minority of Cambodia's Southwest, may have spoken Thai as his first language before learning Khmer, and has given interviews to Thai journalists in Thai. Rather than transcribing this name directly from Khmer to Thai as tie pañ (เตีย พัน) , Thai writers have retranscribed it from French-based Cambodian romanization,

<sup>7</sup>For an illustration see *Matichon Weekly*, no. 475, 8 October 1989, p. 8.

neglecting the circumstance that *nh* in that system indicates phonetic, and phonemic, /ɲ/.

Sociological factors may be assumed to have always played some role in the way language borrowing occurred in the past, particularly if the terms concerned are rare and literary; and reliance on pure linguistics, without consideration for the socio-linguistic, may lead to error.

Such care is particularly necessary in the central and southern regions of Thailand where it is certain that within historical times non-Thai speaking populations, particularly Khmer and Mon, and possibly other Mon-Khmer groups, have been Thai-ized, with possible effects on the type of Thai they now speak and, presumably on the way in which terms from those languages may have been borrowed into Thai.<sup>8</sup>

As an introduction to my main subject I would like to discuss one such example of a conclusion based on a single word.

In his "Thai Etymologies" Christian Bauer has used a single Mon loan word in Thai to demonstrate that "the Thai shift of \*voiced stops to voiceless aspirated stops cannot have occurred before the end of the 15th century AD" (p.1). The word is /thayee/ (๓๓๓), glossed in the *Royal Institute Dictionary* as a type of music, but originally meaning, according to Bauer, 'sing', the Mon gloss. The Middle Mon pronunciation would have been /dəyeh/, but "by AD 1480 complex shifts . . . had occurred, with . . . initial sequences such as [/dəy/] assimilated to /həy/"; and a result is that the "Modern Mon word for 'to sing' /həyèh/" is still written as /dəyeh/<sup>9</sup>

Bauer concludes that because the spelling of the Thai loan reflects the pre-1480 Mon pronunciation the borrowing must have occurred then, which means that Thai *tho thahan* (๓) was still voiced /d/. Bauer has also demonstrated, however, that this word not only is "not attested [in Thai] prior to AD 1480", but hardly attested at all, apparently only in such works of classical literature as "*Khun Chang Khun Phaen*", "there explicitly associated with the Mons", and in "*Phra Aphaimanee*"; and he considers that the gloss in the *Royal Institute Dictionary* may be mistaken, illustrating again the extreme rarity of the word.

The nature of its attestations in Thai, then, suggest that /thayee/, from Mon /dəyeh/, may never have been borrowed into Thai as an item of spoken vocabulary, but by *littérateurs* familiar with Mon culture, writing about Mons, and rendering that loan word according to Mon orthography, not necessarily Mon pronunciation,

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<sup>8</sup>Anthony Diller, *Southeast Asian Linguistic Studies Presented to André-G. Haudricourt*, "Tones and vowels in Southern Thai: a diachronic anomaly", in: Suriya Ratanakul et al., eds, Bangkok/Salaya, Mahidol University, Institute of Language and Culture for Rural Development, 1985. 310-54 (see p.320).

<sup>9</sup>Christian Bauer 1987:5-8; my comments here, and the pagination cited, are based on a pre-publication typescript which Bauer kindly provided.

at whatever date the borrowing occurred. In such case it would have no bearing on the question of devoicing in Thai.<sup>10</sup>

Even had Thai devoiced before 1480, how would Thai speakers have pronounced a borrowed Mon word with initial /d/, and how would Thai writers render it? Probably not with *do dek* (๓) as one might at first assume, for, as Bauer shows in the next section of his "Thai Etymologies", Thai *do dek*, whatever its phonetic realization, corresponded from an even earlier date to the Mon implosive /d̥/ (d), not to the Mon simple voiced /d/ (d).

Thus, whether or not the original voiced stop had devoiced in Thai, a Mon word with initial /d/ borrowed by Thai before the Mon sound changes dated by Bauer at about 1480 would perforce have been written in Thai with *tho thahan*. There was no other choice available to Thai scribes, particularly if, as Shorto reported on Kuy-Thai relationships, an analogy was drawn between breathy or chest register in Mon and Thai low tone.<sup>11</sup> This single loan word does not provide evidence for dating the sound shift in Thai.

Another inference drawn from a single word was Saveros Lewitz' conclusion that because the Portuguese in the 1590s transcribed Angkor (*angar*) as 'Angan', while the 17th century Dutch wrote 'Anco', devoicing had only occurred in the interim. Her evidence came from the narratives of Iberian adventurers in Cambodia at the end of the 16th century published in Bernard-P. Groslier's *Angkor et le Cambodge au XVIe siècle d'après les sources portugaises et espagnoles* (1958), from which Lewitz cited her evidence.<sup>12</sup>

The name 'Angan'/'Anco' was not the only Cambodian term recorded by Europeans in the 16th–17th centuries; and I reproduce below in tabular form all the relevant terms recorded by Groslier (see Figure 1).

The first column contains terms recognizable with certainty from the Spanish and Portuguese writings of the last two decades of the 16th century (except for the

<sup>10</sup>Perhaps a borrowing of Mon *dayeh* > /həyèh/ via spoken language may be identified in Khmer, where there is a type of popular singing called /a:yai/, in which, like Modern Mon /thayee/ (presumably /həyèh/, although on this point Bauer is unclear) "[a] male and female...sing alternately..." (Bauer 1987: [5]). A difference is that the Khmer variety is always humorous and frivolous, not "epic songs, both secular and religious" like the Mon. If a term like /a:yai/, or some other plausible adaptation of spoken Mon /həyèh/ cannot be attested in Thai, then Khmer /a:yai/ may reflect direct Mon-Khmer contact after 1480, suggesting, as I have argued in earlier publications, that the lower Menam Chao Phraya Basin, with its capital Ayutthaya, had not yet become Thai, and was still linguistically Khmer. See Vickery 1973, 1974, 1977.

<sup>11</sup>Shorto 1967:248. Neglect of this aspect may have weakened Chamberlain's argument (1989), via a 14th-century Vietnamese inscription, that the PH languages had not yet devoiced, because the ethnonyms Bon (modern Phuan) and Bong (modern Phong) were transcribed in Vietnamese as voiced, while Cam, name of a P language Tai group, was transcribed with the unvoiced unaspirated stop. We must first know, however, the phonetics of 14th-century Vietnamese--had \*ph (/ph/) become /f/ as in modern Vietnamese--and however that may have been, was there a series of Chinese characters which would have, for 14th century Vietnamese, represented initial /ph/? Modern Vietnamese, for example could not correctly render a loan word beginning with the aspirated unvoiced labial, and a loan word beginning with that sound would perforce be written with p (/p/), ph (/f/), or b (/b/), all of which would lead to error if that loan were subsequently used as an indication of the phonetics of the source language.

<sup>12</sup>Lewitz 1967:388.

last which is earlier), while the second column represents transliterations of those terms as written in Khmer, which also corresponds to the standard transliteration of Sanskrit.<sup>13</sup>

What is at first at issue are the original voiced stops—\*b, \*d, \*g, \*j—which devoiced to /p/, /t/, /k/, /c/. A second set of interest are the two consonants, \*ḍ/ḍb and \*ḍ/ḍd, written until modern times with *p* and *t*, but now pronounced /b/, /d/, accounted for by a hypothetical original pre-glottalization, pre-nasalization, or implosion not represented in the Old Khmer writing system.<sup>14</sup>

This first set of sounds is underlined in both columns, while \*ḍ/ḍb > b and \*ḍ/ḍd > d are in bold face. The Iberian rendering of the old name for Phnom Penh, *caturmukh*, 'four faces' illustrates still another type of shift, the relevant elements of which are italicized. Note that the Mon-Khmer devoicing affected Indic loan words as well, which account for 11 of the 22 terms listed.<sup>15</sup>

16c Source	Transliterated Form
<u>anch</u> or	aṅgar
an <u>g</u> ar	aṅgar
<b>b</b> apano	pā <u>b</u> hnam
<u>pra</u> uncar	<u>bra</u> ḥ oṅkār
cam <u>ba</u> ia / cam <u>bo</u> ia / cam <u>bo</u> ja / cam <u>bo</u> xa	kam <u>bo</u> jā / kam <u>bu</u> jā
ch <u>a</u> pina	cau <u>ba</u> ñā
ch <u>i</u> amai	jian hmai
chordem <u>u</u> ch / chordem <u>u</u> co / chordem <u>u</u> co / hordem <u>u</u> z / xordem <u>u</u> c	caturmukh [Phnom Penh]
<b>d</b> echu	tejo
<u>per</u> arach <u>y</u> oncar	<u>bra</u> ḥ rāj oṅkār
prab <u>an</u> tul	braḥ <u>p</u> andūl
pratar <u>p</u> an	<u>bra</u> ḥ trabaṅ
pr <u>a</u> put	<u>bra</u> ḥ <u>b</u> uddha
pr <u>o</u> bar missur	<u>bra</u> ḥ <u>p</u> aram isūr
sam <u>ca</u> ra <u>ch</u> e / san <u>cr</u> a <u>ch</u> e	saṅ <u>gh</u> arāj
sum <u>a</u> ḍay	sam <u>t</u> ec
send <u>e</u> che	sam <u>t</u> ec
saret zac <u>a</u> bedera	stec cakrā <u>b</u> arttirāj

**Figure 1:** Cambodian toponyms and titles found in 16th–17th century Spanish and Portuguese sources

<sup>13</sup>Several of the transcriptions of Cambodian terminology listed by Groslier are unrecognizable, and in some cases Groslier's interpretations are wrong. 'Anacapan' is more likely from *anak brai/prei/* rather than 'Neak Barom', for the latter is an impossible combination of terms; and there was never a title 'preah Alangkar' (nor the second term in any combination), Groslier's interpretation of 'Apramlangara', of which *apram* is probably from *param /barom/*. For some guidelines to systematic study of old Khmer titles see Vickery 1977, volume 2, annex 5, "Titles".

<sup>14</sup>The /ḍ/ < ḍ/\*ḍd is now written with the originally unaspirated voiceless term of the Indic cerebral/alveolar.

<sup>15</sup>*Angar* is counted as Indic (< nagara), *caturmukh* is considered two terms, *catu* 'four', and *mukha*, 'face', but *sangharaj* a single term, for its second element *raj(a)* is already counted in the title *brah raj onkar*. For the same reason *cak(r)abarttiraj* is counted as one term.

The term 'anchor' is from a Spanish source, and the rest, except the last, from Portuguese. One term, 'chiamai' < *jian hmai* (Chiang Mai), as transcribed in Portuguese, is not Khmer, but a Thai proper name; and in the expression 'chapina' < *cau bana* the first term is Thai and the second Mon, although the title was adopted both in Thai and Khmer. The last item 'saret zacabedera' was recorded much earlier than the other, in 1521, by A. Pigafetta who accompanied Magellan and wrote in Italian.<sup>16</sup>

As we see, there is ample evidence from the Portuguese and Spanish records that devoicing had occurred. In all cases except a few like 'angar' and 'cambaia', etc., the four original voiced stops were recorded as voiceless, as they are today. We might guess that in *añgar* and *cambaja* the Portuguese perception of voicing was influenced by the preceding nasal. Voicing, however, was not written in 'anchor' or 'samcarache' < *sañgharāj*, perhaps because the first term was recorded in Spanish rather than Portuguese, while the second, although recorded in Portuguese documents, is found either in translations of Cambodian letters, or in the work of Gaspar da Cruz, a missionary who had lived in Cambodia, thus in either case by persons who may have had some understanding of the language.<sup>17</sup>

The different treatments of 'samtec' illustrate different levels of perception by the borrowers. The first, 'sumaday' occurs in a title of a Cambodian king, *Nacqui Sumaday Peraorachyoncar* (nak samtec braḥ rāj oñkār), which was evidently transcribed, on the basis of oral transmission, by Europeans in whose languages (Portuguese and Spanish) consonant clusters were awkward, and for whom the Khmer unreleased final palatal sounded like /j/.<sup>18</sup> On the other hand the same title, 'nak samtec', was rendered rather correctly (*nacsendeche*) by Gaspar da Cruz, the missionary who had worked in Cambodia and who had undoubtedly acquired some knowledge of both the spoken and written language.<sup>19</sup> His only error is one still familiar to beginning western students of the language who have some difficulty learning to pronounce the unreleased final palatal and who tend at first to pronounce it as /ch/.

The final item also shows interesting peculiarities which argue against isolated loans as strong evidence for sound changes. 'Saret' for /stec/ is not a problem. We do not know what chain of translation separated Pigafetta from Cambodian informants, and a dental when pronounced in alveolar position may be perceived as a strongly flapped /r/. The second term, however, now pronounced /cakkapoattireac/ in Khmer and /cakraphattirāt/ in Thai, illustrates clearly the hazardous and arbitrary nature of such records. The initial voiced /z/ does not reflect Khmer /c/, nor an Indic source, at any period, nor does /d/ in the fourth syllable accurately represent the native pronunciation, either Khmer or Indic, of *cak*

<sup>16</sup>See Groslier's index for contextual locations of the terms. The Spanish origin of 'anchor' is described on p. 76, n. 6, and 101, and the text partially reproduced on p. 172-173. The reference to Pigafetta is on page 144 and in note 6, where Groslier misunderstood the terms, possibly because he was relying on the inaccurate Cambodian chronicles for examples of original royal titles. See Vickery 1977, vol. 2, Annex 5, p. 92, nos. 7-8, for genuine titles of 'Ang Chand', king in 1521, including the terms *stac* and *cakrabartiraj*.

<sup>17</sup>See the letters in Groslier, p. 46-49, 165-168; and on Gaspar da Cruz see Groslier, p. 28.

<sup>18</sup>Groslier, p. 56. His note 4 shows that he misunderstood 'Sumaday' and 'Peraorach', for his reinterpretations, 'Sumddei' and 'Pararaja' do not exist.

<sup>19</sup>Groslier, p. 159.

(*r*)*aba(r)t̥tirāj*, in which the dental of the 4th syllable was always unvoiced. Thus we cannot give credence to the /b/ of the third syllable of Pigafetta's rendition as proving that Khmer had not yet devoiced.

The 16th century evidence, however, does not with certainty attest a concomitant phenomenon in modern Khmer, vowel shifts to take up the load formerly borne by consonant, or register, distinctions. The shift is seen in the /o/ of /anchor/ and /bapano/; but the final /a/ in /camboja/ and its variants, in /perarach/ (*braḥ.raj*), /-pañ/ (in /tarpañ/ < *trabāñ*), and in the third syllable of /samcarache/ have not changed to the modern /ea/.

This could mean *either* that the stop devoicing in Khmer was recent, or that registers, now lost in most Khmer dialects, were still clearly phonemic;<sup>20</sup> and if it is correct that registers developed as a result of devoicing (Huffman 1976: 576) then the functioning registers reflected here indicate a much earlier completion of devoicing.

The converse phenomenon of modern Khmer development, voicing of written *t* and *p* in some words, is illustrated in the terms *bapano*, *dechu*, (*pra*)*bantul*, *sumaday*. The contrast between 'Angan' and 'Anco', the example to which Lewitz called attention, may really reflect more about Portuguese or Dutch phonology than Khmer. Particularly interesting is that the Portuguese represented a voiced dental in chordemuco < catur-mukh (two Sanskrit, not Khmer, terms) where none had ever occurred, nor developed later, and with a metathesis which would have rendered the term unrecognizable and indecipherable, were it not so well attested in so many sources where context permits comprehension. 'Chordemuco' is an example of arbitrary interpretation or folk etymology; it does not illustrate or reflect any feature of Khmer, and it cannot be accounted for by Mon-Khmer linguistics alone, without attention to Portuguese. This Portuguese borrowing is of no help in the reconstruction of Middle Khmer. Probably, following borrowing into Portuguese and metathesis, the dental was influenced by the preceding voiced /r/, which strengthens the argument above about the influence on dentals of preceding nasals.

So much for isolated loan words as evidence for the question of Thai/Khmer devoicing. Conclusions from old European records about Khmer devoicing and related changes cannot be derived from single terms. They may only be taken seriously when a larger body of evidence is considered, and then the phonologies of the borrower languages, including possible difference even between Portuguese and Spanish at the time of borrowing, must be studied for their influences on the transcription.

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<sup>20</sup>It must be emphasized that phonemic registers are not found in Modern Khmer as spoken in most regions of Cambodia, although the phenomenon is understood by literate Khmers, who are able to produce register distinctions for illustration. Huffman 1976: 585-6, confirms that Khmer has "partially lost the register contrast" and in some linguists' analyses of Khmer "registers [are] structurally irrelevant, which is in fact already the case in some dialects of Cambodian" [including those which represent the standard language--MV]. Linguists have often been confused by Henderson's 1952 study based on an informant, Keng Vannsa, who believed that registers should be active and insisted on producing them when speaking formally. In his university lectures in the 1960s he also pronounced the final /s/ wherever it occurred in the written language.



former, but then says that the presence of voiced /d/ and /b/ in modern Khmer results from the (conscious) reluctance of the Khmer to dispense with them, and thus new consonant symbols were devised for their representation.<sup>21</sup>

As is accepted now by linguists generally, the modern voiced /d/ and /b/ are distinct from the old voiced series, and represent old preglottalized or pre-nasalized dental labial consonants which have now become simple voiced consonants in some varieties of Khmer. This has nothing to do with volition of Khmer speakers.

Lewitz was correct in noting that use of the retroflex symbol ʈ for modern /d/ is a modern phenomenon (she said 19th century); at least it post-dates the latest IMA of 1748.<sup>22</sup>

This orthographic detail seems to have been ignored by another Khmèrisant, who in an article which appeared several years later, in attempting to relate Khmer /do:ŋ/ 'coconut' to Skt. tuṅga commented that "the Khmer spelling is not \**duña* which would be expected from Skt *tuña*, but rather ʈuña", forgetting that use of the retroflex is neither historical nor etymological, but a strictly modern convenience, irrelevant for a putative relationship with Sanskrit.<sup>23</sup>

No single word borrowed in isolation can provide proof several hundred years later for the existence of devoicing or lack thereof in the donor language. Proof of historical sound change via loan words, just as with cognate forms, must depend on a large number of examples of regular change.

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<sup>21</sup>Lewitz 1967:389: "On a l'impression que la communauté khmèrophone n'a pas voulu renoncer aux sonores d et b, et que, sous certaine réserve, le t et le d étaient neutralisés à l'initiale meme, ainsi que le p et le b".

<sup>22</sup>IMA - *Inscriptions modernes d'Angkor* [Silacarik nagaravatt, 2ème édition. Phnom Penh (1958)]; Lewitz 1967:389.

<sup>23</sup>Headley 1967b:456. In fact, Headley, who suggested the Sanskrit term had been borrowed from Mon-Khmer, was mistaken on another point, that "Khmer spelling \**dūña*...would be expected from SKT. *tuṅga*." A Sanskrit word with an initial voiceless dental would correspond to the same initial in Khmer, and "Khmer spelling \**dūña*," if it corresponded to an Indic term, could only relate to a word beginning with the voiced dental in the Indic language. Headley seems to have been confused by the fact that Khmer script *d* is now devoiced, although in writing it still corresponds to Sanskrit *d* in loanwords, which are pronounced in Khmer with a voiceless initial. At any conceivable date at which Sanskrit might have borrowed a Mon-Khmer term for 'coconut', Old Khmer *d* would still have been pronounced /d/; and this in itself shows that Headley's hypothesis is wrong. Moreover the *g* in Sanskrit *tuṅga* cannot be accounted for by Mon-Khmer, and the gloss 'coconut' is a trope from the base meaning 'prominent', Khmer loans. On the use of the cerebral dental symbols in Khmer and Thai see Vickery 1989: 55-58.

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Pusat Pengajian Ilmu Kemanusiaan  
Universiti Sains Malaysia  
11900 USM Pulau Pinang  
Minden, Malaysia

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### OM [s-] Addenda

**Christian BAUER**  
Mahidol University

The contribution I submitted to *Austroasiatic Languages—Essays in Honour of H.L. Shorto* (Jeremy H.C.S. Davidson, ed., London, SOAS, 1991, pp. 241-9) gives a preliminary analysis of the Old Mon prefix [s-], referred to, following Shorto, as the "hypothetical." That contribution was originally part of a longer historical study of modality and aspect in Mon, written in late 1985.

I shall present below some addenda to the version published as part of the Shorto Festschrift, which were part of the earlier draft, as well as some new reflections.

### 1. Cognates

I mentioned in the Festschrift that a cognate of OM [s-] had so far not been identified in other MK languages, except preverbal /si-/ in Lawa, marking 'future, irrealis'. But Shorto himself mentioned to me in conversation (2 June 1990) a verbal auxiliary in Praok, on which he collected material in 1957, published in part in 'The structural patterns of Northern Mon-Khmer languages' in *Linguistic Comparison in South East Asia and the Pacific*, London, SOAS, 1963, pp.45-61, /saj/, indicating 'futurity'.

It is obviously tempting to regard Praok /saN/ as a fossilized prefix complex, consisting of a prefix \*s- and a 'frequentative' infix \*-N-; the latter can be reconstructed for PMK.