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133

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## PERFECTING SPELLING

SPELLING DISCUSSIONS AND REFORMS  
IN INDONESIA AND MALAYSIA, 1900-1972

WITH AN APPENDIX ON OLD MALAY SPELLING AND PHONOLOGY



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them has chosen its particular form of compromise between 'naturalized' and 'foreign' spellings.

The spelling problems of Malaya/Malaysia and Indonesia can be grouped into three types: 1. a problem of *notation* without any implications for pronunciation or for the fundamental principle upon which the orthography is to be based, the phonemic principle (the use of digraphs is only a very minor modification of this principle); 2. the problem that the standard variety at some points allows for a certain fluctuation in pronunciation, which again leads to uncertainties in spelling; 3. the problem of the spelling of foreign words, which is part of the larger problem of lexical and terminological modernization as a whole, and which was not solved adequately in 1972, so that a new set of regulations on this point had to be issued in 1975 (see also Asmah 1985: 290–327).

The ideology that lies behind the spelling reform activities seems to have undergone a change during the 1960s in both countries. In the fifties, the 'one-letter-one-sound' principle was a dominant theme in the discussions and in the subsequent proposals made by both official bodies and private persons. This may be seen as an expression of a consistent application of the phonemic principle, but it may also be seen in the context of a desire for some uniquely Malay or Indonesian letters that could distinguish the language from all other languages. (Such a symbolic function of peculiar letters within the framework of the Roman alphabet is not unknown in other parts of the world.) But after 1965, such considerations were largely discarded. Lexical modernization and Westernization was now given high priority, and the preparations for spelling reform took special account of this priority by allowing loan phonemes and phoneme sequences that did not occur in traditional Malay. Typographical and other practical considerations also prevailed, and the idea of admitting graphemes not used generally in the Roman alphabet, including graphemes with diacritics, was completely disposed of – for good, we may assume. The EYD is thoroughly entrenched and will probably remain stable in the foreseeable future.

## APPENDIX

### The spelling and phonology of Old Malay

#### 1. Introduction

As is well known, the only specimens of the Old Malay written language that have survived until our time are a few scattered inscriptions in the South Pallava script, the oldest of which date back to the end of the seventh century AD and were found in southeast Sumatra or on Bangka. (On the Pallava script and its use in Indonesian inscriptions, see De Casparis 1975: 12–27.)

This analysis will be based on seven of these oldest inscriptions, published in transcription and described by Coedès (1930) and De Casparis (1956: 1–6, 11–47). (For a short survey of the language of these inscriptions, see Kähler 1965: 22–31.) Some of the inscriptions are relatively long and contain enough Old Malay words to give an impression of the orthographic and thereby phonological system, while later inscriptions are so scattered and fragmentary that it is difficult to base an analysis on them. It seems clear, however, that the latter represent somewhat differing varieties of the language, while the texts used for the present analysis show a quite uniform variety with fixed spelling conventions. This variety will be called 'Sriwijaya Malay', since the texts seem to be royal edicts from the then rising empire of Sriwijaya and the linguistic form probably also had some kind of official status.

We shall give a survey of the spelling of Sriwijaya Malay and see what we can learn about its phonology from this spelling. We shall treat the separate graphemes, insofar as they present problems, one by one (including the lack of graphemes for /ə/ and /ŋ/), and then give a survey of the phonotactic structure of the root morphemes. A list of these root morphemes, phonologically transcribed, may give an idea of the linguistic (structural) relationship between ancient and modern Malay.

A somewhat complicating factor is that the Sriwijaya inscriptions contain two other languages besides Old Malay, namely Sanskrit and the so-called 'language B' (Damais 1968), an otherwise unknown Austronesian language used in a special formula at the beginning of three of the inscriptions. In this analysis I shall restrict myself to the genuine Malay

words, even though a very few Sanskrit words seem to have been adjusted to Malay pronunciation. What is of interest here is to see how the spelling rules, originally designed for Sanskrit, were applied to Malay.

Like other spellings from before the age of printing, we may assume that the Old Malay spelling was based on the phonemic principle (many ancient orthographies show signs of having been constructed by good practical phonemicists, although phonemics as a science is supposed to be a twentieth century invention). But the orthographic conventions of Sanskrit must also have had a formative influence, and the designers of the Old Malay spelling must have found themselves in the situation of having to find an acceptable balance between these conventions and the pronunciation of their own language. (In addition there may have been influences from earlier local writing traditions, from the 'language B', for example, but it is impossible to involve these in the analysis given the present state of knowledge.)

Although Sanskrit and Malay belong to two totally different language families, the phonological difference between them happens to be rather small (seen from the angle of modern standard Malay when Arabic and European influences are disregarded). Sanskrit had a somewhat richer inventory of phonemes than Malay; the only Malay phonemes lacking in Sanskrit are /ə/ and the somewhat dubious /ɾ/. In principle, a phonemic spelling of Malay could have been designed by leaving out superfluous characters of the Indian script and adding one or two extra characters. As we shall see, the spelling that developed was not so simple (in our eyes).

A notable fact is the strong uniformity of Sriwijaya Malay spelling. An indication of this uniformity is the fact that two of the inscriptions – one found in Bangka and one in Jambi – contain almost the very same text with precisely identical spellings except in one word, which in Jambi is spelled <ipuh> and in Bangka <upuh> (a kind of poison). This seems to be based on a dialectal difference in pronunciation, which may be an indication that the inscriptions were made by two different persons. The fact that the spelling is nevertheless so uniform seems to suggest that we have before us a standardized orthography with a tradition behind it, perhaps taught at the Buddhist learning center of which we are informed by I Tsing. The orthography could have been based either on a spoken language which was much more uniform than present-day Malay, or on a fixed and standardized speech variety used by leading circles at the Sriwijaya court and contrasting with dialectal variation in the general spoken language. The real sociolinguistic character of the speech reflected in the Old Malay inscriptions is of course impossible to determine now.

In citing Old Malay words, I shall follow the transcription used by Coedès and De Casparis. Where possible, I shall give the modern Malay equivalent or an English translation for those words which are not easily recognizable to anyone who knows present-day Malay.

## 2. The vowel system

There are three vowels in written Sriwijaya Malay: <a>, <i>, and <u>. They can be short or long. In addition there are the diphthongs <ai> and <au>, each written with a single character and both appearing in only one word in the extant inscriptions: <lai> (unclear meaning, perhaps 'other', see De Casparis 1956: 21–4), and <sāmvau> (a type of boat). (There is also <hanāu> 'sugar palm', which is probably another example of the diphthong /au/, cf. modern Malay <enau> /ənau/.) There are no <e> and <o>.<sup>24</sup>

This system poses two main problems: vowel quantity and the lack of a *pepet* or schwa (/ə/) character. We shall discuss them separately here. The status of the diphthongs will be treated under point 3.4 and point 4 below.

### 2.1. Vowel quantity

In modern Malay speech, vowel quantity does not exist as a phonological feature. When we come across indications of it in the Old Malay inscriptions, the natural reaction is to try to find out whether there is any regularity in the distribution of long and short vowels. And indeed, such regularity seems to exist. The short and the long vowels never contrast phonemically; there are no minimal pairs based on the quantity distinction. This indicates that the distribution is phonetically, but not phonemically, determined. The only cases of inconsistency that I have found appear in the words <ini> (once spelled <inī>), <tīda> (twice spelled <tida>), the word for 'hundred', which appears once in the form <ratus> and once as <rātus>, and <vanua> 'kingdom' (once spelled <vanuā>).<sup>25</sup>

The distribution between long and short vowels seems to be based on the principle that long vowels are written in penultimate open syllables, while short vowels are used in other cases. Therefore we find <āda>, <dātaṃ>, <dīri>, <dūruṃ> 'before', <jādi>, <jāhat>, <jānan>. But this rule is not without exception, as we can see from the following examples: <lavan>, <malūn> 'before', <pulaṃ>, <rumaḥ>, <sapulu>, <sarivu>. Of the root morphemes to which the rule should apply, about 45 are 'regular', while around 60 cases are 'exceptions', mostly in having a short vowel where a long one would have been expected.

A closer investigation shows that the indicated distribution rule in fact primarily applies to <a>: about 40 words with <a> in penultimate open syllable are spelled according to the rule, i.e. with indication of length, while short <a> in the same position is used in about 20 cases. For <i> and <u> we find a different situation. In general, they are written without indication of length, regardless of their position. Only in a few cases are long vowels used in open penultimate syllable: <dīri>, <gīla>, <tīda>, <dūruṃ>, and <tūva> 'a sort of poison', modern Malay 'tuba'. In three other cases, we find <ī> and <ū> used irregularly: <malūn> – which may correspond to modern

Malay 'belum' (De Casparis 1956: 21, 40), and where the use of <ū> is impossible to explain – and <larī>, <luvī>, and <marsī>. In the latter cases, there are two possible explanations: <larī> (in the inscription of Telaga Batu, De Casparis 1956: 33) in all cases but one appears before <ya> or <yam>; in one case we find the form <larīyakan>.<sup>26</sup> The word <luvī> also appears before <yam>. The long vowel character might be a reflection of a 'long' (or tense) pronunciation of the vowel in the transition to the following glide. But De Casparis offers another explanation (1956: 37) in connection with <luvī> and <marsī>: he relates the lengthening of the vowels to the loss of final /-h/, associating the words with <luviḥ> and modern Malay 'bersih', respectively. The meaning of these words is unclear.

The distribution rule outlined above does not seem very solid, since there are more 'exceptions' than 'regular' cases. But still it cannot simply be dismissed. If we look at the treatment of suffixed forms, we see that it really was operative. In such cases vowel length is transferred to the following syllable when this syllable is open. Examples: <dirī> – <dirīṇa>, <jāha> – <marjjahāti>, <tāhu> – <tahūṇa>, <dātu> – <datūa>. There are but few cases where both non-affixed and suffixed forms appear, but cases like <niminumṇa>, <nimākan>, and <niujāri> agree perfectly with the rule. Even here there are exceptions, like <vinīṇa>, <maṃhidupi>, and <maṃruruā>, but they are few.

In a few cases, <ā> occurs in other cases than those stated by the rule. It seems to appear regularly before <mv>: <sāmvau> 'a kind of boat', <sārāmvat> (unclear meaning), <tāmva> possibly 'herb medicine'. We also find it in the suffix <-ā> in <maṃruruā> 'destroy', and in the words <tuhā> 'some official' and <huluntuhāṅku> 'my empire', literally perhaps 'my slaves and lords (<tuhān>)' (De Casparis 1956: 26). In these cases, no linguistic explanation can be given, but there may have been stylistic implications involved.

Generally, this variation in quantity must, in my opinion, have been based on a pronunciation feature in the Malay of those days. It is known that an orthographic rule resembling the one discussed here is also present in Classical Malay and modern Malay written in the Arabic script. In both Sanskrit and Arabic, vowel quantity exists as a phonemically relevant and even very important feature, while in Malay it appears only as a prosodic feature, determined by the syllabic structure and affecting things like sentence intonation. It is probable that the penultimate syllable had a certain stress in Old Malay, such as is also the case in modern Malay, and that the vowel was pronounced somewhat longer and more accentuated when such a syllable was open. It is even possible that /a/ in this position had a different quality from the short /a/ in other positions, and if so, the frequent use of <ā> compared to <ī> and <ū> can be explained.

My conclusion is that the distinction between short and long vowels in

Old Malay was probably based on a phonetic reality, especially regarding <a>, but was not phonemically relevant.

## 2.2. The schwa (/ə/)

There was no letter for /ə/ in the Pallava alphabet. In those words where (based on our knowledge of modern Malay and/or of comparative linguistics) we would expect this vowel to occur, we find three manners of spelling: 1. a short <a> (which in the Indian-type alphabets is not written separately, but is inherent in the consonant character when no other vowel and no consonant cluster is indicated): <nigalarku>, <hanāu>; 2. deletion of the schwa (by a consonant ligature character): <gram>, <niknāi>, <tlu> 'three', <tmu>, <tṇah>; 3. a short <a> followed by a doubled consonant: <pattum> (modern Malay <betung>, Javanese <petung>). This word poses the only example of this spelling.<sup>27</sup>

The first two spellings are sometimes used inconsistently in the same word: <daṇan>/<dṇan><sup>28</sup>, <lpas> <marlapas><sup>29</sup>, <makalaṇit>/<makalṇit> 'make crazy or impotent'. This inconsistency indicates that both spellings reflect the same pronunciation, /ə/. Since the graphic difference between them is constituted only by the writing of two adjacent consonants independently or as a ligature, the inconsistency is easy to explain.

Kern (1931: 508–9) tried to formulate a distribution rule on the basis of the inscriptions treated by Coedès (1930): 'If the second syllable of the basic word starts with <l>, <m>, <n>, or <r>, then it [the schwa] is not written (<tlu>, <tmu>, <niknāi>, <grang>), as is sometimes also the case before <ṇ> (<dṇan> beside <daṇan>). Before other letters <ē> is not distinguished from <a> (<pattum>, Javanese <petuṇ>, Sundanese <bituṇ>). As for the pronunciation with pepet in the first syllable, present-day Malay can show the way. But in the last syllable, what was originally an <ē>, as shown by related languages (Javanese <ē>, Sundanese <ē> or <eu>, Malgache <i>, Batak <o>), has changed into <a>. It is possible therefore that the sound in the seventh century still sounded like <ē>, that one accordingly said: <dēṇṇ> (Sundanese <deuṇeun>), <tanēm>, etc, since <ē> and <a> as we saw are not distinguished in writing. More cannot be said about it.'<sup>30</sup>

This rule does not seem to be without exception, cf. <galar>, appearing in the forms <nigalarku> and <nigalarmāmu> and by Coedès associated with modern Malay /gəlar/. But the examples contained in the extant texts are too scarce to permit further conclusions. (One might guess that the schwa was an allophone of /a/, but all comparative evidence makes this highly improbable, and there is also the minimal pair <tlu> 'three' / <tālu> 'struck, punished'.)

A special problem is posed by the doubling of the consonant in <pattum>. Poerbatjaraka (1957) shows that this process was employed also

in Old Javanese (<pañliwattan>, modern Javanese <pangliwetan>), and more recently in several other Indonesian languages (Madurese, Buginese, Macassarese). Iskandar (1958: 10–1) points to the same feature in Classical Malay manuscripts written with Arabic characters, as we mentioned in Chapter II. Ras (1968) treats the problem from a different angle. He finds it improbable that a doubled consonant was used as a way of marking a particular vowel, and puts forward an alternative hypothesis: that the doubling of consonants in Old Malay and Old Javanese was a spelling tradition reflecting an earlier pronunciation with long consonants. He supports this hypothesis by extensive comparison with other Indonesian languages where long consonants still exist as a phonological feature.

If long consonants ever existed in Malay, they must have been obsolete by the Sriwijaya period, i.e. they must have disappeared at the latest around or shortly after 600 AD. It is not easy to imagine that a pronunciation feature could become extinct that early and still be 'remembered' by seventeenth century scribes of Malay and Acehnese stock. At that late stage, at least, it is probable that the doubling of consonants (by means of the tashdīd mark) was really used as a way of marking the preceding schwa. It is of course not impossible that consonants in this position were pronounced – or conceived of as being pronounced – in a somewhat more energetic manner than elsewhere, and such a purely phonetic observation might be the basis for the tashdīd. A similar consideration might be the reason for the spelling <pattum> in Old Malay. In the latter case, another possible explanation might be influences from writing traditions of other languages in the area, preceding Old Malay as dominant written languages. To advance beyond this kind of speculation does not seem possible at present.

### 3. The consonant system

The following consonant characters are used in Sriwijaya Malay (in the transcription of Coedès/De Casparis):

<k>, <g>, <ñ>, <c>, <j>, <ñ̄>, <ḍ>, <ṇ>, <t>, <d>, <n>, <p>, <m>, <y>, <r>, <l>, <v>, <s>, <h>, the anusvara (<m̐>), and the visarga (<ḥ>).

There can be little doubt about the phonemicity of <k>, <g>, <ñ>/ṇ/, <j>/j/, <ñ̄>, <ṇ̄>, <t>, <d>, <n>, <p>, <m>, <l>, and <s>. In what follows, we shall concentrate on the remaining and problematic characters: <c>, <ḍ>/ṇ̄>, <v> (both in relation to the missing <b> and to the other semi-vowel, <y>/j/), the anusvara, the visarga, <h>, and finally the absence of a character for ṇ̄/.

#### 3.1. <c>

In the Sriwijaya Malay corpus, <c> appears only in the words <mañcak> 'full' and <mamañcak>, which possibly means a sort of martial dance (De Casparis 1956: 4). In view of the high frequency of /c/ in later Malay and other Indonesian languages, I tend to conclude that we are here confronted with an accidental lacuna in the corpus, which lacks words where we would expect <c> from a modern Malay viewpoint. I would therefore assume that a phoneme /c/ did exist in Old Malay.

#### 3.2. <ḍ> and <ṇ̄>

These characters in Sriwijaya Malay are only used in the honorific suffix <-ḍa>/<-ṇ̄ḍa> (<anakḍa>, <parvāṇḍa> (a military rank), etc.), an element that occurs also as a prefix in <ḍapunta hiyaṃ>, and which originally may have been developed as a clitic pronoun. De Casparis says about these characters (1956: 208): 'The spellings <ḍa> and <-ṇ̄ḍa> [...] could be due to other reasons that the pronunciation as linguals. The two affixes are honorific and this might be the very reason why a spelling, properly denoting sounds which did not exist in the language, was chosen. Modern Javanese gives close parallels; thus the names of the Susuhunans of the Surakarta court in Java are spelled with consonants that would represent Phakhubhuwana if the consonants had their etymological value. We therefore think that the linguals in the honorific affixes <ḍa-> and <-ṇ̄ḍa> are due to similar considerations.'

I agree with De Casparis in this interpretation of the facts, and consequently disregard the possibility of retroflex phonemes in Sriwijaya Malay.

#### 3.3. <ṭ>: One phoneme or two?

Unlike modern Malay, Sriwijaya Malay did not distinguish between the phonemes /b/ and /w/ in writing. The one character used to denote a voiced labial consonant is transcribed <v> by Coedès and De Casparis, and in Sanskrit it denoted a bilabial semivowel (/w/). This was not necessarily so (or not necessarily always so) in Old Malay, as we shall see.

Kern (1931: 509) writes that in his view (based on comparison with various other Indonesian languages), it is not improbable 'that e.g. <sām̐wau> (<sām̐vau>), Javanese <sambo>, [...] was pronounced <sām̐bau>, with a sound identical with or resembling modern Malay <b>. If this is true, then the character <w> indeed represents two sounds, and then also

other words written with <w> could have been pronounced with <b>. It is therefore not impossible that the pronunciation was: <banua>, <buat>, etc. In any case one cannot conclude on the basis of the inscriptions that the words were pronounced: <wanua>, <wuat>, etc.<sup>31</sup>

Damais (1968: 527) viewed it differently: 'Whatever the exact phonetic value of the aksara in question, it is evident that it cannot have been [b] in Old Malay, this letter being well known in the Pallava alphabet and certain to have been used by the writer of the inscription if he had wished to render this sound. Therefore, one must transcribe "v" if one follows the most current transcription of Sanskrit, or "w", as we personally do in order to indicate its definitely bilabial (and not labiodental) character.'<sup>32</sup> About the equivalence between <mv> and [mβ] ([β] is a bilabial fricative), he writes: 'This equivalence seems very probable – at least in certain cases – in language A [i.e. Sriwijaya Malay], but the fact that the graphic sign with the value <ba> is unknown in this language proves, we believe, that the voiced bilabial occlusive did not exist in the Malay dialect of Sriwijaya. But a value [mβ] is certainly plausible, also in language A.' (Damais 1968: 536)<sup>33</sup>.

Damais here seems to ignore that the Pallava character <b> is totally absent from the Sriwijaya inscriptions, even in the Sanskrit words. We find spellings like <vodhicitta> 'ideas of bodhi' and <vraḥmasvara> 'voice of Brahma', to mention two examples (Coedès 1930: 78). The variety of the Pallava alphabet used in the inscriptions simply did not have a <b>, if we may believe the evidence, and in view of this fact the conclusion of Kern does not seem improbable, namely that <v> in certain positions may have been pronounced [b]. However, there are no traces to be found of a phonological opposition between a /b/ and a /w/.

But later Old Malay inscriptions show a somewhat different picture on this point. In the Gandhasuli inscription (De Casparis 1950: 50–73), <b> and <v> are distinguished. Here we find <sahañakña>, <bapaḥ> or <bapuḥ> (unclear meaning), <bariḥ> (a measure unit), <buña>, <busu> (a title), but: <vatak> 'group', <vini>, <viniḥ> 'seed', <vintañ>, <vuat>.

In modern Malay, there exists a phonemic contrast between /b/ and /w/, but it is marginal and probably developed at a late stage in the history of the language under influence from other languages (Sanskrit, Arabic, Javanese, and others). It is noteworthy that the opposition <b>:<v> in the Gandhasuli inscription reveals no connection with the present phonological /b/:/w/ opposition. The surviving words occurring with initial <b> or <v> in the inscription all have /b/ (and consequently <b>) now: <banyak>, <bunga>, <bini>, <benih>, <bintang>, <buat>. On the other hand, oppositions like <bañak>, <busu> vs <vatak>, <vuat> in the inscription must be regarded as virtually minimal pairs, especially in such a small corpus. Such pairs form a clear indication, but certainly no

conclusive proof, that /b/ and /w/ did exist as separate phonemes in this particular variety of Old Malay.

In Sriwijaya Malay, however, the available evidence indicates the absence of such a distinction. The character <v> in this variety seems to have represented a single phoneme – albeit that this phoneme may have been realized through two positionally determined allophones, [b] and [w]. Some further light can be shed on this problem through a comparison with the semi-vowel /j/, to which we shall now turn.

### 3.4. The semi-vowels

The semi-vowels are written with characters transcribed <y> and <v>. The <y> in Old Malay only occurs in medial position, if we disregard the particles <ya> (modern Malay <ia>) and <yam> (modern Malay <yang>). These particles also appear in the forms <iya> and <iyam> in the inscriptions, and that is probably their original form.

In most of the remaining cases, <y> functions as a glide between <i> and another vowel: <nāyik>, <iya>, <dīya>, <ñiyur>. If no other evidence were to be found, we might well totally dismiss <y> as a phoneme (with the risk of falling victim to an accidental lacuna in the corpus). However, we find both <miāyuāyu> 'to make beautiful' and <kāyu>. The phonemicity of <y> (/j/) cannot be doubted.

If we may assume a parallelism in the distribution between the semi-vowels /j/ and [w], we can then suggest the following conclusion regarding the pronunciation of the character <v> in Sriwijaya Malay. The allophone [w] could occur only in medial position between vowels, while [b] would appear in initial position<sup>34</sup> and after /m/. We would get [baraṇ], [bukan], [sambau], but: [tuwa] (a kind of poison), [mamawa] 'membawa', [parawis] 'all'.

The phonological interpretation of the diphthongs <ai> and <au> poses an additional problem in this context. They may be viewed as VC sequences: /aj/ and /aw/ (see the discussion of the same problem in relation to modern Malay spelling in V.3). Since the semi-vowels never occur in final position in other contexts, and since the diphthongs occur in final position only, the /aj/ and /aw/ analysis seems to be the most satisfactory from a structural point of view as far as Old Malay is concerned. Then I disregard the problems created by the Sanskrit suffix /-wan/ (see V.3), for which we have no evidence in the extant Old Malay texts. Our basic assumption here is, as we stated at the outset, that we are dealing with a presumably 'pure' form of Old Malay, and we disregard Sanskrit and other external influences.

In section 4 of this appendix, we shall return to the phonological problem of the semi-vowels as 'glides'.

3.5. *The anusvara*

The anusvara in the Pallava alphabet – and other Indian alphabets – is a character denoting a kind of indeterminate nasal. It 'denotes before fricatives, <l>, and <h> the nasalization of the vowel it follows, comparable to the nasalized vowels of French [...]. In other surroundings it is most reasonably viewed as [...] an abbreviation of a full nasal: <phalaṃ bharati>, <sambharati> are to be pronounced with <-mbh->' (Mayrhofer 1965: 17).<sup>35</sup> Before dentals and velars it was pronounced /n/ and /ŋ/, respectively. The usual transcription is <ṃ>.

If we disregard the nasalization of vowels, this character might have rendered a particularly good service in Malay – if it had been used to denote the prenasalization after <me-> and <pe-> and only that. But this was not the case. The anusvara in Sriwijaya Malay was used without morphological constraints before consonants and in final position – in accordance with the spelling rules of Sanskrit. It occurred where, from a modern Malay point of view, we would have expected <m> or <ñ>, but never in the place of <n>.

If we look at the words where modern Malay has /ŋ/, we find that the anusvara and the character <ñ> are in complementary distribution: <ñ> occurs before vowels, and the anusvara elsewhere. Examples: <umaṃgap>, <dātaṃ>, <pulaṃ>, <maṃruruā>, <maṃhidupi> – <daṇaṃ>/<dñaṃ>, <vāṇun>, <tñaḥ>, <maṇalap> 'search for', <maṇujāri>. There are a few exceptions: the word that corresponds with modern Malay <gerang> is written <graṇ> in the Karang Brahi and Kota Kapur inscriptions, but <gram> in the Telaga Batu inscription. In the latter inscription, on the other hand, the assimilation product of /n/ before the clitic /ku/ is written <ñ> (<pamvalyaṅku>, <huluntuhāṅku>).

In the words with modern Malay /m/, the situation is somewhat different. The anusvara is used in the following cases: <dalaṃña>, <minuṃ>, <niminuṃña>, <nitānaṃ>. With <m> we find: <samālam>, <sāmvau>, <sarāmvat>, <sumpaḥ>, <tāmva>, <tāmvan> (unclear). It seems that <m> was written before a homorganic plosive, while <ṃ> was used in morpheme-final position (with <samālam> as an exception). Before vowels, <m> was always used.

In any case, comparison with related languages, including modern Malay, makes it very improbable that the anusvara had any other pronunciation than /ŋ/ and /m/. We may, I think, safely assume that it was a spelling convention only, adopted from Sanskrit without any phonological relevance whatsoever.

3.6. *The visarga*

In Sanskrit, '<h> is a voiced and <-ḥ> (visarga) an unvoiced breath sound',

according to Mayrhofer (1965: 16)<sup>36</sup>, and we may add that they are in complementary distribution: <h> before vowels, visarga elsewhere. This distribution was adopted and strictly adhered to in Old Malay: <huma> 'rice-field', <maṃhidupi>, <jāhat>, but <darah>, <sumpaḥ>, <nisuruḥ>. This must be a spelling convention without any phonological consequence, or at most two allophones.

In view of the problems posed by <h> in present-day Malay (see V.5), it would be tempting to ask whether this character was always pronounced in Old Malay. Oppositions like <maṇalap> 'search for' – <hālap> 'calm', and <tuhā> (title of an official, cognate of modern Malay <tua>) – <tuva> (a sort of poison, cognate of modern Malay <tuba>) indicate that this may have been the case. The same may be said about the fact that the presence and absence of <h>/<ḥ> in the inscriptions seems firmly regulated, without inconsistencies and fluctuations of the kind we know in modern Malay. That no minimal pair can be found in the corpus with the contrast between presence and absence of final <-ḥ> is probably due to an accidental lacuna.

3.7. *The glottal stop*

In Sanskrit, no glottal stop was expressed in writing. In view of the problematic character of this feature in modern Malay, I have tried to find traces of it in Old Malay. The words where a glottal stop is now pronounced in post-vocalic position (or would have been pronounced, in the case of extinct words), were then written with <-k> (generally): <anakmāmu> (modern Malay <anakmu>), <maṇcak>, <parlak>, <maṣārak>, <tāpik>, <vaṇakña>, <vatak>. But in some words we find zero: <dātu>, <tīda>.

I think it is safe to assume that no phoneme /ʔ/ existed in Old Malay. Whether the post-vocalic <k> was pronounced [k] or [ʔ] or with some other allophone is impossible to know. In any case, <dātu> and <tīda> must have had a final vowel – at least phonemically. A phonetic [ʔ] after the final vowel may of course have existed, but if so, it clearly contrasted with postvocalic /k/.

3.8. *Summary*

Summarizing this treatment, we give a survey of our reconstructed consonant system of Sriwijaya Malay in the following table. We use IPA characters, except for /v/, which denotes the phoneme of which [b] and [w] are allophones.

	Labial	Dental	Palatal	Palato-velar	Velar	Uvular
Unvoiced plosives	p	t	c		k	
Voiced plosives	v([b])	d	j		g	
Fricative		s				
Semi-vowels	v([w])			j		
Nasals	m	n	ɲ		ŋ	
Vibrant		r				
Lateral		l				
Breath						h

#### 4. The phonotactic structure

So much for the graphemes and phonemes as separate entities. We shall now end this discussion with some brief remarks about the phonotactic structure of the language – the ways the phonemes are combined into syllables and words. As a concrete illustration, we give a complete list of the genuine Malay root morphemes contained in the corpus, transcribed according to the phonological system we have deduced on the preceding pages. In addition, we give them in their authentic spelling for ease of reference.

In initial position, all phonemes appear except /c/, /ŋ/, and /ə/. Regarding /c/, we think it is excluded only because of an accidental lacuna in the corpus (see the treatment of this phoneme under 3.1). The real position of /ŋ/ is impossible to determine; comparative evidence would indicate that it was scarce in, but not necessarily excluded from, initial position (it may have occurred as a product of nasalization). Regarding /ə/, the corpus contains one word where modern standard Malay has initial /ə/: <mas>, modern Malay <emas> /əmas/ or /mas/. The Old Malay pronunciation of this word may of course have contained an initial /ə/.

We mentioned in section 3.4 that initial /j/ only appears in <ya> and <yaṃ>, which are variants of <iya> and <iyaṃ>, respectively. This fact makes it reasonable to exclude initial /j/ in a phonological analysis. This decision is strengthened by the existence of the initial consonant cluster <dy-> in <dya> and <dyāku>, which are variants of <dīya> and <diyāku> (from <di> + <āku>), and <hy-> in <hyaṃ>, variant of <hiyaṃ>. These are the only graphemic and phonetic consonant clusters to appear in initial position in the whole corpus, when we disregard the clusters caused by the graphic absence of /ə/ in words like <tmu>.

In medial position, all consonants and vowels appear, except (again) /c/, and we explain its absence in the same way as we have done before. The fundamental syllabic structure is (C)VCV(C). Consonant clusters are generally avoided with the exception of the type NC, meaning nasal plus homorganic plosive (if we accept that <v> after <m> denotes [b]). Two exceptional cases showing /rC/ have been found and are included in the list below.

In final position, all consonants and vowels appear except /c/, /j/, /ɲ/, /g/, /l/, and /ə/. I would attribute the lack of /l/ to an accidental lacuna in the corpus. As for the palatals, we may safely assume that they were excluded from final position in Old Malay as in all varieties of later Malay and the cognate languages (disregarding forms like /kolej/ 'college' in present-day Malaysian!). Less simple is the situation regarding the voiced plosives. The form <tavad> 'dam' (modern Malay <tebat>) seems to indicate that voiced plosives could occur in final position in Old Malay. But this word is the only example in the corpus, and it occurs only once. It may have been a loanword or in some other way the result of interference from another Indonesian language. No certain conclusion can be drawn.

The diphthongs, which appear only in final position, will here be analyzed as VC sequences (<aj/ and <aw/), as I indicated in section 3.4.

Graphemic vowel sequences – and vowels with a glide between them – pose a more difficult problem. They occur initially, medially, and finally, but that makes no difference in this context. The problem is whether the presence or absence of a glide in writing was phonologically relevant, and if not, how this type of sequence can best be represented in a phonological transcription. The sequences in question can be grouped like this:

- <āi>/<āyi>: <āir><sup>37</sup>, but <nāyik>
- <āu>: <hāur> kind of bamboo (modern Malay <aur>)
- <iya>/<ia>/<ya>: <dia>/<dīya>, <hiyaṃ>/<hyaṃ>, <rumviya>
- <iyu>: <ñiyur>
- <ua>/<ūva>: several examples with <ua>, among them <dua>, <luar>, <vanua>; only one with <ūva>, viz. <tūva>, cognate with modern Malay <tuba>
- <uvi>: <luvi>, <tuvi>

We see that there is some vacillation in some of the groups, and not in others. But the examples are so scarce that no certain conclusion can be drawn. Comparative evidence seems to indicate that the graphemic distinction between the presence and absence of glides was without phonological basis: in more recent varieties of Malay, these glides are an optional phonetic feature. In writing, the glides are seldom represented (see V.11 above), but we have an example in the pre-1972 Malaysian



spelling <ayer> for <air> (often pronounced /ajer/ also in Indonesia). This indirect evidence supports the assumption that the <āi> of <āir> and the <āyi> of <nāyik> were pronounced the same way. On the other hand, the situation may have been different in the <ua>/<ūva> group: the only written <v> in the examples of this group corresponds to modern Malay /b/, while the other examples all have the optional and unwritten phonetic glide in the surviving words in modern Malay. The distinction between short and long <u> may also have significance in this connection.

In spite of this reservation, I regard it as most probable that the distinction between the presence and absence of glides was orthographic, not phonological. The problem that remains is whether the glides should be marked when we transcribe the words phonologically on the basis of our analysis. Structurally, the most elegant solution in our opinion is to mark the glide. That would eliminate the vowel sequences as a category, since a sequence of two identical vowels (with a /v/ to distinguish them phonetically) never appears in the corpus. (They may of course have existed in the language nevertheless, but in the indigenous vocabulary of modern Malay, they do not exist, as is well known.) It will also help us avoid an extra rule about the distribution of the semi-vowels, banning them from an environment where they were almost certainly realized phonetically. In our list, therefore, we consistently mark the glides and treat them as full-fledged phonemes.

The following list, then, includes in principle all root morphemes of supposedly genuine Malay stock in the corpus, arranged according to syllabic structure. The phonological transcription (left column) follows the IPA, with the reservation concerning /v/ stated in 3.8 above. For the graphemic representation (right column), we enter the root morpheme when it is found in the inscriptions. If not, we enter the derived form implying the smallest changes compared to the root morpheme in isolation. In most cases, however, we have little choice. For the meanings, we refer to the word index of Coedès (1930: 66–80) and the word index, translations, comments, and notes of De Casparis (1956: 4–6, 15–46, 344–53).

## CVCVC

dalam	dalamña	padah	marppādah
darah	darah	pahat	nipāhat
datan	dātam	pasañ	pasam
dəŋan	dañan/dñan	pətuŋ	pattum
durun	dūrum	pinañ	pinam
gəlar	nigalarku	piñan	nipiñanña
gəra	gram/grañ	pulañ	pulam
halap	hālap	rajin	rājin
hanav	hanāu	ratus	ratus/rātus
hañun	hañun	rumah	rumah
havur	hāur	sakit	sākit
hidup	mamhidupi	sarak	marśarak
hijañ	hiyam/hyam	suruh	nisuruh
hulun	hulun	tanam	nitānam
jahat	jāhat	tapik	tāpik
jalan	jālan	tavad	tavad
jañan	jāñan	təŋah	tñah
kasih	kaśihan	tuhan	huluntuhāñku
lavan	lavan	valuŋ	valum
ləŋit	makalñit makalañit	vañun	vañun/vāñun <sup>38</sup>
ləpas	marlapas	vañak	vañakña
livat	kalivat	varañ	varam
luvar	luar	vatak	vatak
makan	nimākan	vukan	vukan
malam	samālam	vulan	vulan
malun	malūn	vuluh	vuluh
minim	minum	vunuh	nivunuh
mulañ	mulañ	vuruh	vuruh
muvañ	muah	vuvah	vuahña
najik	nāyik	vuvat	vuatña
nijur	ñiyur		

## CVCV

dari	dari	mati	māti
datu	dātu	pulu	sapulu
dija	dia/dīya/dya	rivu	sarivu
diri	dīri	ruru	maṃruruā
duva	dua	sana	sāna
gila	makagīla	sida	sida
haji	hāji	sini	sini
hulu	hulu	tahu	tāhu
huma	huma	talū	tālu
jadi	jādi	tamu	tamūña
Java	jāva	təlu	tlu
kaju	kāyu	təmu	tmu
kamu	kāmu	tida	tīda/tida
kəna	niknāi	tuha	tuhā
kita	kita	tuva	tūva
lagi	lāgi	tuvi	tuvi
laki	lāki	vali	pamvalyañku
lari	lari/maṃlāri <sup>39</sup>	vatu	vātu
lilu	lilu	vava	nivava/mamāva
luvi	luvī	vini	vinīña
mana	māna		
mata	mata		

## VCVC

ajir	āir	ijaṅ	iyam/yam
akan	akan	inan	inar
alap	mañalap	ipuh	ipuh <sup>40</sup>
alit	mañalit	ujar	niuḡari
anak	anakmāmu	upuh	upuh <sup>40</sup>
avis	parāvis	uraṅ	uram

## VCV

ada	āda	apa	apa
aju	miāyuāyu	ija	iya/ya
aku	āku	ini	ini/inī

## (C)VNCV(C)

anggap	umamgap	sumpah	sumpah
maṅcak	mañcak	tamva	tāmva

punta	punta	tamvan	tāmvan
samvav	sāmvaui		

## CVCCV(C)

marsi	marsī	parlak	parlak
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## CVC2

maṅmaṅ	mammam
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## Monosyllabic: CVC

daṅ	daṃ	laj	lai
diṅ	diṃ	mas	mas
jap	jap		

## Trisyllabic

minaṅa	mināña	saramvat	sarāmvat
muvara	muara	vaduva	vaduāmāmu <sup>41</sup>
puhavaṅ	puhāvaṃ	vanuva	vanua vanuā
rumvija	rumviya		

## 5. Conclusion

The picture of Old Malay phonology arrived at here is of course an abstract construction. The 'real thing' must have been a much more complex entity, complex in terms of being fluctuating and full of geographic, social, and situational variations – like the phonology of any other living and evolving language, especially a language functioning over a large geographic area and as a lingua franca of different ethnic groups (as Old Malay probably already was in the seventh century). Even within the more or less artificially codified variety which we call 'Sriwijaya Malay', there are complicating factors and problems which we have not treated here.

They can be illustrated by the form <pamvalyañku>, interpreted by De Casparis (1956: 31) as 'that which is given in return (by me)', i.e. 'recompense', and equated by him with the modern Malay <pengembalianku>. This word consists of the morphemes /paN-/ , /-vali-/ , /-an-/ , and /-ku/ (in my phonological transcription, /N/ denotes the pre-nasalization product). Four morphemes make three morpheme junctures within the word and each of these junctures somehow influences and changes the phonetic shape of one of the morphemes involved. The /N/ of /paN-/

becomes /m/ because of the following /v/ (i.e. [b]); the final /i/ of /vali/ seems to have been weakened to /j/ before the vowel /a/, to judge from the spelling with <y>; and the /n/ of /-an-/ is assimilated to /ŋ/ by the following /k/.

In any agglutinating or inflecting language, morphophonemics is an important part of morphology. To try to unravel the morphophonemics of Old Malay is, however, not feasible, due to the paucity of the corpus. We know some facts, for instance that Old Malay, like later Malay, used nasalization processes after the prefixes <ma-> and <pa->. Not only <pamvalyaŋku> but also several <maN-> forms in the corpus can tell us that. We also know that the initial consonant of root morphemes could be (but did not have to be) doubled after the prefix <mar->, but the meaning or function of this doubling is unknown to us (see note 27).

The form <pamvalyaŋku> can tell us more, however, if we re-focus our attention from phonology to the main consideration of this book: principles of orthography. It tells us that the scribes of Old Malay went further than modern Malaysians and Indonesians in allowing phonetic adjustments at morpheme junctures to be represented in writing. The modern spelling of <pamvalyaŋku>, if the word had still existed in this particular form, would have been <pembalianku>. The morphophonemic spelling principle does not seem to have been important to the ancient scribes, who even in this matter may have been deeply influenced by the orthographic traditions of Sanskrit. In Sanskrit, as is well known, the so-called sandhi phenomena are extensively represented in writing.

To draw further conclusions about the spelling principles of Old Malay would be somewhat precarious. We have used the spelling in order to form a picture of the pronunciation and phonology, and if we were now to make a characterization of the orthographic principles based on this reconstructed phonology, we would be guilty of circular argumentation. The analysis above, therefore, shall be left to speak for itself.

## NOTES

1. '[...] supaja disekolah menengah djuga diadjarkan édjaan internasional.'
2. 'Tapi rupa-rupanya masyarakat belum merasa puas dengan edjaan itu. Hal ini ternyata, bahwa bermacam-macam surat kabar, madjalah dan buku2, bahkan surat-surat badan pemerintah sendiripun ada yang tidak menurut edjaan yang diresmikan itu.'
3. 'Dengan jelas perlu diterangkan disini, bahwa édjaan Bahasa Indonésia sudah ada dan sudah ditetapkan oleh pemerintah. [...] kita ada mempunyai peraturan dan peraturan itu harus kita taati.'
4. For a historical survey of language planning institutions in Indonesia, see Moeliono 1985: 17-9 and 34-6.
5. '[...] sudah sa-patut-nya tulisan Rumi di-rasmikan bagi Persuratan Melayu dengan tidak menghapuskan tulisan Jawi sa-hingga masa akan menentukan-nya.'
6. 'Saya rasa ejaan baharu yang sama bagi Indonesia dan Malaya itu tidak boleh di-namakan ejaan siapa2 seperti ejaan Suwandi dahulu atau ejaan Wilkinson [...]. Ejaan ini kehendak bangsa Melayu dan Indonesia dua bersaudara dan kerana itu saya rasa nama-nya harus-lah ejaan MELINDO (Melayu/Indonesia).'
7. '[...] buat sementara waktu sampai sudah ada daftar kata2 yang resmi yang ada tjara mengutjakannya didalamnja.'
8. 'Ketika penulis kebetulan mempertjakapkan soal édjaan ini dengan saudara Noer Soetan Iskandar, penulis mendengar, bahwa Bung Hatta yang biasanya baik basa Indonésianja lama sekali melafalkan bébas sebagai "bebas".'
9. '[...] djanganlah goeroe-goeroe memaksa moeridnja menjoboetkan perkataan yang tertjetak atau yang tertoeleis itoe menoeroet hoeroefnja; melainkan wadjib atas goeroe ingat dan mengingatkan, bahwa segala perkataan itoe haroes diboenjikan menoeroet seboetan (lafal) orang baik-baik dan 'alim.'
10. 'Het teeken "wordt gebruikt: 1) om de <ai> (tweeklank) van <a-i> (tweelettergreep) te onderscheiden in open lettergrepen.'
11. 'Kesulitan ini tidak besar karena tjara membuat kata2 seperti ini dapat ditentukan oleh artikata itu dalam kalimat.'
12. 'Kami sependapat dengan konsep LBK yang tidak mengakui adanya diftong dalam tata fonem Indonesia. Apa yang biasa disebut diftong itu, menurut anggapan kami, sesungguhnya ialah rangkaian vokal dengan konsonan lunturan y atau w.'
13. 'Kemudian tentang J dan DJ dan TJ, SJ, apakah alasan édjaan Soewandi yang kuat untuk mempertahankan sistim-édjaan basa Belanda didalam hal ini? Mengapakah tidak masing2 dijadikan Y dan J dan C dan Ç sadja? Seperti biasa dipakai dikalangan ilmubasa! Didalam basa Tjeko dan Italipun C dipakai untuk transkripsi bunji TJ kata. Besar kemungkinannya di Malaya dan

Kalimantan Utarapun édjaan tsb. akan dapat diterima pula, sehingga dapat ditjapai kesatuan édjaan antara Indonésia dengan daérah-daérah tersebut. Disamping itu sekaligus dapat dilaksanakan asas univocité: satu hurup untuk satu suara!

14. 'Alasan memilih <ch> dan bukan <c> adalah antara lain:
  1. <ch> lebih bersifat internasional
  2. <ch> memudahkan orang Indonesia memahami utjapan bahasa asing [the wording in the preliminary draft: '<ch> memudahkan orang asing mempeladjar bahasa Indonesia.']
  3. <c> pada umumnja lebih melambangkan <s> atau <k> daripada <tj>.
 Alasan memilih <c> dan bukan <ch> adalah antara lain:
  1. <c> sebagai satu huruf dan bukan dua huruf berarti penghematan
  2. <c> bersifat internasional dalam keilmu-bahasaan (dalam Abdjad Fonetik Internasional)
  3. <c> sebagai konsep Indonesia telah diterima oleh Malaysia
  4. <ch> dalam bahasa internasional djuga mewakili lebih dari satu bunji (misalnja: c. š. k. x).'
15. '28. Kata2 Arab (Pérsi dsb.) jang soedah biasa di Indonésiakan, ditoelis menoeroet seboetan Indonésia, misalnja: <gaib>, <pitrah>, <pitnah>, <adat>, <alim>, <ulama>, <pihak>, <pasal>, <pikir> dsb. Oleh karena 'perindonésiaan' ini sesoenggoehnja adalah soeatoe prosés peroebahan jang sedang berlangsung [...], maka – dengan mengingat kepada pasal 26 – menoeroet kebiasaan orang masing2 boléh ditoelis: <zaman> atau <djaman>, <lazim> atau <ladjim>, <lazat> atau <lasat>, <zamrud> atau <djamrud>, <masjarakat> atau <masarakat>, <tamasja> atau <tamasa>, <sjahbandar> atau <sahbandar>, <sjah> atau <sah>, <sjahwat> atau <sahwat>, <sjahadat> atau <sahadat> dsb. Teroetama dalam bahasa gagah atau dalam sa'ir moengkin perloe orang mempergoenakan seboetan dan édjaan jang menjimpang dari Indonésia asli itoe.'
16. '26. Boenji hamzah atau jang memper dengan boenji ini selaloe ditoelis dengan <k> pada achir soekoe, misalnja <tak>, <rakjat>, <tidak>, <makna>.'
17. 'Selandjuntja mengenai kata2 Arab didalam hal2 keagamaan, dimana lafal Arab hendak dipertahankan, perlulah diadakan kesatuan édjaan: tidak katjau seperti halnja sekarang. Berapa transkripsikah ada sekarang. Untuk perkataan 'aidu'lfriti?'
18. 'Sebenarnya kami berpendirian, bahwa fonem /f/ tidak termasuk sistem fonem Indonesia. Tjontoh2 rupanja sudah tjukup, bahwa /f/ dalam kata2 asing jang dimasukkan kedalam bahasa Indonesia, dalam beberapa waktu telah diasimilasikan menjadi /p/. Kami bisa menarik kesimpulan, bahwa semua fonem f jang sampai sekarang masih dipakai, akan diutjapkan sebagai /p/. Tetapi sebagai orang jang mau menguraikan keadaan jang sebenarnya, kami tidak berhak untuk menghilangkan fonem itu, apa jang lebih menjeramkan, mengurui masjarakat untuk melenjapkan fonem /f/ itu. Jang bisa kami kerdjakan hanjalah mentjatat apa jang dipakai oleh masjarakat, dan menarik beberapa kesimpulan jang bisa diramalkan, tetapi tidak boleh mendesakannja kepada masjarakat.'
19. 'Tetapi kata2 pindjaman dari bahasa asing sering tak dapat diasimilasikan dengan tjepat2, ketjuali karena besar perbedaan sistem fonemnja, pengutjapannja sering dipengaruhi oleh sifat manusia jang masih adolesens, jang ingin memamerkan bahwa ia bisa "berbahasa" asing.'
20. 'Kata-kata Arab jang ada hubungannja dengan rasa keagamaan supaja diberi perlakuan khusus.'

21. '[...] memperhatikan perlunya diadakan tanda-tanda tertentu untuk membedakan bunji jang artinja berbeda.'
22. 'Dalam hal ini perlu ada ketegasan. Djadi bukan *boléh*, tetapi *harus*.'
23. During the spelling discussions in Indonesia, suggestions had been made to implement an /a/ /ba/ /ca/ type of letter-name inspired by the practice relating to the Arabic, Javanese, and other regional Indonesian alphabets (Edjaan baru 1967: 9). (While the Javanese characters are named /ɔ/ /nɔ/ /cɔ/ and so on, the /ɔ/ corresponds to /a/ in Sundanese and other Indonesian languages.) But this proposal was given up when the final reform came in 1972.
24. In a later variety of Old Malay, used in the so-called Gandhasuli inscription (De Casparis 1950: 50–73), the form <sapopo> (modern Malay <sepupu>) appears. See Teeuw (1959: 146) and the discussion in Adelaar (1985: 55), where the <o> is viewed as interference from Javanese (the inscription being found and probably made in Java).
25. In addition, we find <mamāva> beside <nivava>. These words probably derive from the same root, <vava>, to be equated with modern Malay <bawa>. Also the root <vañun> seems to be inconsistently spelled. We find <marvvañun> twice on the Talang Tuwo stone, and on the Telaga Batu stone we find twice <vañun> and once <vāñun>. But some of this inconsistency seems to be due to De Casparis. When he mentions this word in his introduction and his notes, he spells <vāñun>, even when referring to places where his text transcription has <vañun>, while in his word index he only gives <vañun>, nowhere commenting upon the vacillation between long and short <a> (1956: 26, 33, 34, 38, 44, 353). So we cannot be sure what the correct rendering is.
26. De Casparis is somewhat inconsistent and confusing in his rendering of the derivations of <lārī>. The verb form 'flee with something' is transcribed <mamlārī> in his transcription of the text (1956: 33) and his notes to his translation (1956: 40), but <mamlārī> occurs twice in his word index. For 'make others flee' (both translations are his conjectures) he spells <lārīyākan> in his text transcription (p. 33), <(mam)lārīyākan> in his translation notes (p. 40), and <lārīyakan> in the index (p. 347).
27. Prefixed verb forms like <marjjahāti>, <marppādah>, and <marvvañun> may be interpreted as other instances of the <pattum> principle – provided that the prefix <mar-> (modern Malay <ber->) was pronounced /mar/. But one should be cautious here: the spelling <mārgga> (Sanskrit) 'road' suggests that the consonant doubling in these forms was an orthographic convention without any connection with a possible *ṛ* pronunciation.
28. It is possible that <dañan> and <dñan> were semantically different, the former being a noun and meaning 'companion', the latter a preposition meaning 'with'. But De Casparis (1956: 3) refers to one case where <dañan> is used in the meaning of <dñan>, and he continues: 'Most probably, the latter is nothing but the enclitic form or an orthographic variant of the former.'
29. The reading <lpa> (De Casparis 1956: 5) seems very doubtful, however, in the one instance where it occurs.
30. 'Vangt de tweede lettergreep van 't grondwoord met <l>, <m>, <n> of <r> aan, dan wordt ze niet geschreven (<llu>, <tmu>, <niknāi>, <grang>), soms ook niet vóór (<ñ>) (<dañan> naast <dñan>). Voor andere letters wordt <ē> niet van <a> onderscheiden (<pattum>, Jav. <pētuñ>, Sund. <bituñ> enz.). Wat de uitspraak met pēpēt in de eerste lettergreep betreft, kan 't hedendaagsche Maleisch den weg wijzen. Maar in de laatste lettergreep is thans de, blijkens verwante talen, oorspronkelijke <ē> (Jav. <ē>, Sund. <ē> of <eu>, Mlg. <i>, Bat. <o>) in <a>

- overgegaan. Mogelijk is dus dat de klank in de 7e eeuw nog als <ē> klonk, dat men dus zeide: <dēñēn> (Sund. <deuñeun>), <tanēm> enz., daar immers <ē> en <a> in 't schrift niet onderscheiden worden. Meer kan men er niet van zeggen.'
31. '[...] dat bv. <sām̄wau> (<sām̄vau>), Jav. <sambo>, [...], <sāmbau> werd uitgesproken, met een klank gelijk aan of nabijkomende aan nieuw-Maleisch <b>. Is dit juist, dan vertegenwoordigt 't schriftteeken <w> inderdaad twee klanken en kunnen ook andere met <w> geschreven woorden met <b> uitgesproken zijn geweest. 't Is dus niet uitgesloten dat men zeide: <banua>, <buat> enz. In allen gevalle mag uit de inscripties niet besloten worden dat men uitsprak: <wanua>, <wuat> enz.'
32. 'Quelle que soit la valeur exacte phonétique de l'aksara en question, il est évident qu'il ne s'agit pas en vieux malais d'un [b], bien connu en alphabet pallawa et que l'auteur de l'inscription aurait certainement utilisé s'il avait voulu rendre ce son. On ne peut donc que transcrire "v" si l'on suit la transcription la plus courante du sanskrit, ou "w" comme nous le faisons personnellement pour indiquer son caractère certainement bilabial et non labio-dental.'
33. 'Cette équivalence semble très probable, – au moins dans certains cas – dans la langue A, mais le fait que le signe graphique valant <ba> y est inconnu prouve bien, croyons-nous, que l'occlusive bilabiale sonore n'existait pas dans le dialecte malais de Srī Wijaya. Mais une valeur [m̄b] est certainement plausible, aussi en langue A.'
34. We cannot be sure what 'initial position' should mean here: 'word-initial' or 'morpheme-initial', i.e. how to interpret forms like <savañakña>, <nivunuh>, and <nivuat> – or <marvvañun> and <marvuat>, where the morpheme-initial <v> follows upon a non-nasal consonant.
35. '[...] bezeichnet vor Zischlauten, <l> und <h> die Nasalierung des Vokals, hinter dem er steht; vergleichbar den nasalierten Vokalen des Französischen [...]. In anderer Umgebung ist er meist als [...] abkürzende Schreibung für einen Vollnasal anzusehen: <phalaṃ bharati>, <sambharati> sind mit <-mbh-> zu sprechen.'
36. '<h> ist stimmhafter, <h> (Visarga) stimmloser Hauchlaut.'
37. This word is inconsistently rendered by Coedès, who spells <āir> in the text transcription and <air> in his word index.
38. See note 25.
39. See note 26.
40. See the discussion of <ipuh> and <upuh> in the introduction to the appendix.
41. This word is spelled inconsistently by De Casparis: <vaduamāmu> in the text transcription, and <vaduāmāmu> in the word index (1956: 33, 353).

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