PROTO MALAYIC:
THE RECONSTRUCTION OF ITS PHONOLOGY AND
PARTS OF ITS LEXICON AND MORPHOLOGY

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PREFACE

This publication is a revised version of my PhD thesis of the same title which I defended in October 1985 at Leiden State University. Most of the revisions are editorial, and I made only minor corrections and additions regarding the subject matter of the original thesis.

A number of publications relevant to the history of the Malayic isolects have appeared since 1985. The more important among these are Asmah Haji Omar (1981, 1985), Collins (1985, 1986a, 1986b, 1987), Hogan (1988) and a bundle of contributions to the International Workshop on the History of Malay held in Kuala Lumpur in 1986 (Mohd. Thani Ahmad and Zaini Mohamed Zain eds 1988). Nothofer's contribution to this workshop is of particular interest, as it is a critical evaluation of the definitions and subclassification of Proto Malayic that have been made by me and others (Nothofer 1988). Elsewhere I will treat his evaluation at greater length (Adelaar in press a and forthcoming). Here I limit myself to reacting to three of his most important criticisms, which are as follows.

Firstly, Nothofer observes that my definition of ‘Malayic’ is different from that of Blust (1981), a difference which I do not discuss, although I do refer to Blust (1981) in another context. This is correct: in the introduction to the thesis (and to this publication) I quote Hudson (1970, 1978), who coined the term, and to whose definition I clearly adhere.

Secondly, my thesis does not provide any quantitative or qualitative evidence supporting the existence of a Malayic subgroup. It is true that I did not give explicit evidence for this subgroup. In Chapter 7, however, I listed the phonological and lexical changes that have taken place between PAN and PM, and these changes as a whole are critical for the definition of the Malayic subgroup. But I readily admit that my thesis would have been the better for it if it had contained an explicit diagnostic device for the definition of Malayic and for the identification of Malayic isolects. As such a device, I propose a set of phonological criteria which I have added to Chapter 1 of this publication. In reference to Nothofer (1988), this phonological criterion excludes Embaloh (or Maloh, spoken in West Kalimantan, Indonesian Borneo) and Rejang (spoken in South Sumatra) from the Malayic subgroup (see Adelaar in press a and Blust 1984 for further details).

Finally, Nothofer criticises the fact that I treat the six isolects forming the basis of my thesis as if they all continued directly from Proto Malayic, and that only in the last chapter of my thesis do I conclude that “...it seems opportune to make a provisory bipartite division of the Malayic isolects, with IBN [Iban] in one branch, and all five other isolects in the other”. Nothofer is not so much concerned about this conclusion, but rather about the way in which it was reached. He himself gives supportive lexical evidence for a separate Iban branch in the Malayic subgroup. I agree with him that my statement was rather offhand. In this publication I make no attempt at any internal classification with regard to the six isolects forming the base of my reconstruction. Historically Iban and other ‘Malayic Dayak’ isolects underwent a separate development from other Malayic isolects, but that does not necessarily
imply that they form a separate branch. There are, at any rate, no sufficient linguistic criteria
to define such a putative branch. Nor does the fact that Iban is considered a language in its
own right, rather than a Malay dialect (Hudson 1970), imply that it is genetically more
remote from Standard Malay than other Malayic isolects: many of the shared similarities
between other Malayic isolects seem to be the result of language convergence. The question
of the internal classification of the Malayic subgroup, and hence the question of the
difference between 'Malay' and 'Malayic' as discussed by Blust (1988) and Nothofer
(1988), remains unanswered, and it is doubtful whether sound solutions will be obtained
from the comparative method alone.
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When I was writing this study I was pleased to receive the help of many friends at Leiden University. I very much appreciated the supervision provided by Bob Blust, Jack Prentice and the late Professor J.C. Anceaux. I am also grateful to Willem Adelaar, Rieks Smeets and Jan Timmers for their careful proofreading and criticism of earlier drafts of this study. Other people who gave useful comments on the study or parts of it, are Hein Steinhauer, René van den Berg, Jim Collins, Don van Minden and Willem van der Molen. Didi Karni offered me the opportunity to learn to operate and to use the word processor of his department. The efficiency and friendly help of Rini Hogewoning, Nico Noordhoek and Gerard Nagelkerke have always made it a pleasure for me to make full use of the library of the Royal Institute of Linguistics and Anthropology.

In the Research School of Pacific Studies in Canberra, I am grateful to Joan Birnie for copyediting the present revised version, to Lois Carrington for checking its bibliography, to Pam Rosser for proofreading it, and to Anne Rees for typesetting it and for adding final corrections to it.

K.A. ADELAAR
Canberra
LIST OF ABBREVIATIONS

(adv) adverb
a.i. all isolects (SM, MIN, BH, SWY, IBN, and JKT)
excl. exclusive
IC irregular correspondence(s)
incl. inclusive
k.o. kind of
(n) noun
N nasal
N- nasalisation, active verbal prefix
n.c. no cognate available
O object
o.i. other isolects (forming basis of this study)
pers. person
pl. plural
S subject
sg. singular
s.o. someone
s.th. something
UIC unexplained irregular correspondence(s)
(v) verb
VDI dynamic intransitive verb
VI intransitive verb
VSI stative intransitive verb
VTR transitive verb

SYMBOLS USED

*. form belongs to one of the reconstructed proto-languages
+.. form occurred in a stage between Proto Malayic and the present
[...] indicates the phonetic realisation of a sound or a word
‘...’ 1. indicates the orthography of a sound or word
      2. indicates the meaning of a label
‘(..)’ indicates the function of a label, or the meaning of a precategorial
< ‘originated from’
> ‘became’
~ ‘is a variant of, and similar in meaning to’
≠ ‘is different from’
/ (within a word) indicates a historical morpheme boundary between a fossilised affix and a lexeme, or between two former lexemes
# indicates a word boundary
- indicates a morpheme boundary, or, with phonemes, indicates whether this phoneme occurs initially (...-), medially (-...-), or finally (-...)
I... ‘with a position (I) in the environment (....)’
Languages and dialects most frequently referred to in this study, with abbreviations and primary lexical sources are as follows. When other sources are used, this will be indicated.

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<td>BRU</td>
<td>Brunei Malay (Wilkinson 1959; Prentice pers.comm.)</td>
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<td>BSM</td>
<td>Middle Malay, Besemah isolec (Helfrich 1904)</td>
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<td>Cham</td>
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<td>PM</td>
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<td>PMJ</td>
<td>Proto Malayo-Javanic (Nothofer 1975)</td>
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<td>PMP</td>
<td>Proto Malayo-Polynesian (Dempwolff 1938)</td>
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<td>POR</td>
<td>Portuguese (Wilkinson 1959; Klinkert 1916)</td>
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<td>PWMP</td>
<td>Proto Western-Malayo-Polynesian (Blust 1980a, 1984a, 1986)</td>
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<td>Language</td>
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<td>Rhade</td>
<td>(Lee 1966)</td>
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<td>Roglai</td>
<td>(Lee 1966)</td>
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<td>SAR</td>
<td>Sarawak Malay (Collins 1987)</td>
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<td>Sasak</td>
<td>(Goris 1938)</td>
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<td>SD</td>
<td>Selako(-Dayak) (Ina Anak Kalom &amp; Hudson 1970)</td>
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<td>Simalungun</td>
<td>Simalungun-Batak (Saragih 1989)</td>
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<td>SKT</td>
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<td>Standard Malay (Wilkinson 1959)</td>
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<td>SUN</td>
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<tr>
<td>WMP</td>
<td>Western-Malayo-Polynesian</td>
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</table>
MAP OF AREAS WHERE MALAYIC ISOLECTS ARE SPOKEN
Chapter 1

Introduction

Malay is spoken in a number of dialects in coastal areas of the Malay Peninsula, in Borneo, in South and South-east Sumatra, and in nearly all major trade centres of the Indonesian archipelago. The Malay language belongs to the group of Malayic languages, which also includes Minangkabau and Kerinci in Sumatra, and various languages and dialects of inland western Borneo, of which the most important is Iban. In what follows I will use the term ‘isolate’ to refer to a speech form without respect to its status as a language or a dialect. Hudson (1970:302-303) applies the name ‘Malayic’ to all isolates which seem, with Malay, to be “immediately related through descent from a common ancestor”.

In this study I compare the Malayic isolates, and attempt to reconstruct their common ancestor, Proto Malayic. There are several motives for this study. First, little is known about the linguistic evolution of the Malayic isolates, or the nature of Proto Malayic (PM). The reconstruction of PM may also provide more insight into the relative position of the Malayic isolates within the Austronesian (AN) language family, and more particularly, within the loosely defined branch of Western-Malayo-Polynesian (WMP) languages belonging to this family. An internal classification of Malayic isolates may give some indication as to the homeland of the PM speakers. The PM lexicon will ultimately yield more insight into PM culture and social organisation. Knowledge about the relative position of PM within the

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1For the sake of convenience and in line with international usage, I use the term ‘Borneo’ to refer to the whole island which is nowadays divided into four administrative parts: Sabah and Sarawak (which are part of Malaysia), Kalimantan (which is part of Indonesia) and Brunei.

2Van der Toorn (1891:VI-VII) calls Minangkabau a Malay dialect, but according to Dyen (1965:302) it shares a percentage of 66.8 with Standard Malay. According to Dyen (1965:302) Kerinci has a standard cognate percentage of 66.0 with Standard Malay, but Prentice & Hakim Usman counted a maximum of 86.2, and a minimum of 79.8; they argue that from a lexical point of view one should call Kerinci a Malay dialect, but that “the phonological changes...are of such a striking nature, and, in combination with other changes such as the loss of all suffixes, have had such far-reaching effects on the Kerinci sound system and morphology...that there appears ample justification for regarding Kerinci as a separate language” (Prentice & Hakim Usman 1978:123. See also Steinbauer & Hakim Usman for the morphology of Kerinci).

3Other Malayic languages/dialects reported by Hudson (1970, 1978) are: Selako, Banana, Kayung, Semitau, Ambawang, Kendayan, Suhait, Keninjal, Delang, and the Ibanic group, which includes apart from Iban: Sebuyau, Mualang, Kantu, and Air Tabun. Hudson opposes the statement of several scholars reiterated by Cense and Uhleneck (1958) that IBN is a Malay dialect. He considers it a language in its own right, a “close relative of Malay, one more like a first cousin than a delinquent child” (Hudson 1970:302-303).

4The term isolate denotes “any language unit that is accorded a separate name by its speakers, regardless of whether it is, technically, a dialect or a language”; its use is “connotationally neutral in regard to language-dialect identification” (Hudson 1967:12).

5Blust (1980a:11-12) makes the following classification of Austronesian languages: there is a primary split into four groups, of which are exclusively Formosan (viz. Atayalic, Tsouic and Paiwanic), while the fourth, includes all other Austronesian languages. Within Malay-Polynesian Blust distinguishes a Central-Eastern-Malay-Polynesian subgroup, and labels the remaining languages as Western-Malay-Polynesian. He divides the remaining Austronesian languages further into Central-Eastern-Malay-Polynesian (including languages of the Lesser Sunda Islands and languages of the southern and central Moluccas (including languages of South Halmahera and West New Guinea, and the Oceanic languages). He does not define the Western-Malay-Polynesian languages as a separate group of languages which did not undergo changes characteristic to the languages of the Central-Eastern-Malay-Polynesian subgroup.

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WMP language family and knowledge of its lexicon are relevant to the study of related fields such as anthropology, archaeology and prehistory. Finally, the reconstruction of PM will, it is hoped, contribute to the improvement of higher order reconstructions viz. Proto Austronesian (PAN), Proto Malayo-Polynesian (PMP) and Proto Malayo-Javanic (PMJ).

The Malayic isolects are characterised by a set of phonological developments which took place in their history. Most of these developments are not decisive in themselves (as, for instance, Chamic languages, Achehnese and Balinese each turn out to share more than half of them). It is the co-occurrence of the following developments which defines the members of the Malayic subgroup as such:

1. Devoicing of final stops;
2. PAN *j > PM *d, *-t;
3. *Z (and *z) > PM *j;
4. *R (and *r) > r;
5. Reduction of consonant clusters to their last component;
6. Heterorganic nasal + stop clusters became homorganic nasal + stop clusters;
7. *w- > ø;
8. *i, *-ey, *-uy, *-iw > PM *i;
9. *u, *-ew > PM *u;
10. *q > PM *h;
11. *h, *? > PM *? or ø.

PM morphology and lexicon do not provide strong criteria for a Malayic subgroup. Malayic morphology is admittedly quite different from what has been reconstructed as PAN morphology, but the differences in question seem to be shared with other western Indonesian languages.

There are many vocabulary items which are well attested and inherited in the Malayic subgroup as a whole, but there always seems to be a non-Malayic language which has a corresponding form. It is therefore all but impossible to collect a body of vocabulary items which are critical for a subgrouping argument. This fact reflects an important sociolinguistic reality: several forms of lingua franca Malay have had a tremendous influence on many insular Southeast Asian languages and on Malagasy, to the extent that non-Malayic languages have borrowed too many vocabulary items from all domains of the Malayic lexicon.

SM is one of the isolects Dempwolff used for the reconstruction of PMP (as explained below), and this is a good reason for comparing SM with the isolects with which it forms an exclusive subgroup. In a language family, lower order reconstructions are indispensable for a better understanding of higher order proto-languages, including the language ancestral to all members belonging to the family. This is not to say that an interim reconstruction of the highest order proto-language is not warranted: rather, lower order and higher order reconstructions should constantly be tested against one another. This may sound like a commonplace statement to anyone familiar with the comparative method, but the fact is that in the context of AN comparative linguistics lower order reconstructions have until recently remained rather neglected. It is only since the 70s that more than a tiny number of them have been made, and there is still much that remains to be done.6

6The only pre-1970 subgrouping attempts based on qualitative evidence and lower order reconstructions known to me are: Niemann (1891, on the relation of Cham to Achehnese); Stresemann (1927, on Ambonese languages); Dahl (1938, on Proto Malagasy; 1951, a comparison of Malagasy and Maanyan; Dayak); Grace (1959, on Proto Oceanic); Lee (1966, on Proto Chamic); and Hudson (1967, on Proto Bato). Other attempts
I make this reconstruction on the basis of SM, and on the basis of five other Malayic isolects which show important phonological retentions from PAN/PMP which are not found in SM, and for which there is a sufficient lexical and grammatical corpus available. Isolects such as Kerinci, Manado Malay, Moluccan Malay, and the Malayic isolects spoken by the Orang Laut, Orang Darat, Orang Akit and Orang Utan, are not systematically incorporated in the comparison because, although there is sufficient material available for them, they show no structural retentions not also present in SM, and thus will not alter the overall picture of the reconstruction of PM.\(^7\) It also follows that some isolects with considerable retentions from an older stage (e.g. isolects from the Malay Peninsula, Bacan, Old Malay) will only occasionally be drawn into the comparison, because the lack of material makes a systematic use of them impossible.

The isolects fulfilling the above requirements are Minangkabau, Banjarese, Middle Malay, Iban and Jakartanese: together with SM they will form the basis of this study.

SM is the isolect on which Bahasa Indonesia and Bahasa Malaysia are based, and by which is meant “…the literary Malay which represents the direct descendant of the language used in the court of the Malacca sultanate…and which continued to be used in the court of the Sultans of Riau and Johore” (Prentice 1978:23). SM itself is based on Classical Malay which is the Malay of literary works from the sixteenth till the nineteenth century.

Minangkabau (MIN) is very close to SM in its structure and vocabulary. It is spoken in the province of West Sumatra, in some adjacent regencies in Jambi (along the Batang Hari river), and in the regency of Kampar in the province of Riau. It is also spoken by immigrant groups in Jamëë (West Aceh), and in Negeri Sembilan (Malaysia). The isolect of Koto Gadang (near Bukittinggi, in the Agam regency) is the base of the dictionary and grammar which are used for MIN in this study. It has a threefold vowel distinction \((a, i, u)\) in the first syllable of trisyllabic lexemes, whereas the other isolects in this study (except Banjarese) only permit a schwa in this position. In a few cases it also retains heterorganic consonant clusters, which are reduced to a single medial consonant in other isolects, for example, \(sala\) ‘branding’, mN \(sala?\) ‘smell of roasting flesh’.

Banjarese is spoken on the south coast of Borneo, and on the east coast up to Kutai. Its centre is the city of Banjarmasin (Abdul Jebar 1977:1). Banjarese has two main variants: Bahasa Banjar Hulu (BH), and Bahasa Banjar Kuala (BK).\(^8\) BH is the isolect that I use in this comparison. Like MIN (and also like BK), it has a threefold vowel distinction \((a, i, u)\) in antepenultimate syllables. It also consistently reflects PAN/PMP \(*q\) as \(h\), whereas in initial position and between unlike vowels this proto-phoneme is largely lost in other isolects.

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\(^7\)The phonological and morphological differences between Kerinci and the other Malayic isolects are innovative (Prentice & Kakim Usman 1978:passim): Kerinci has two reflexes \((h\text{\ and } r)\) for SM \(r\), but Kerinci \(r\) tends to be restricted to loans. Manado Malay and Moluccan Malay do not show any phonological retentions that are not also present in SM, and have a very reduced affix system. The phonological differences between SM and the Malayic isolects spoken by the Orang Laut, Orang Darat, Orang Akit and Orang Utan (cf. Kähler 1966), are due to innovations in the latter.

\(^8\)Bahasa Banjar Kuala is spoken in the neighbourhood of Banjarmasin, Martapura and Palaihari; Bahasa Banjar Hulu is spoken in the Hulu Sungai area, and more specifically, in the regencies of Tapin, Hulu Sungai Selatan, Hulu Sungai Tengah, Hulu Sungai Utara and Taba<strong>on</strong>. (Abdul Jebar 1977:1).
Middle Malay is the name given to a number of closely related Malay isolects spoken in Bangka Hulu (Bencoolen) and in the Palembang highlands (Voorhoeve 1955:18). For two of these isolects, Besemah (BSM) and Seraway (SWY), Helfrich collected a wordlist and wrote a grammatical outline (Helfrich 1904; also Helfrich 1915, 1921, 1927, 1933). BSM and SWY both oppose a uvular (or velar) to a trilled r. Whether this x and r reflect PAN/PMP *R and *r respectively will be discussed in Chapter 3 (3.7). SWY is the Middle Malay isolect that is used as one of the six basic isolects in this study.

Iban, or Sea Dayak (henceforth IBN), is an isolect widely spoken by non-Moslem peoples in the western part of Borneo. IBN has b (from PAN/PMP *b) in the environment a - a, whereas the other isolects have w, for example, IBN laban 'against', cf. other isolects (o.i.) lawan 'against'. It also has a final glottal stop, which apparently reflects PAN *S, PAN *H (PMP *h), and PAN *(PMP *?).

Jakartanese (JKT) is the isolect of Jakarta. It has many variants; the variant of Mester is used in Abdul Chaer's dictionary (see below) and will also be the one used in this study. JKT a and schwa before final consonants reflect PAN/PMP *a and *e (schwa) respectively; in other isolects these proto-phonemes are merged in this position.

Table 1 summarises those phonological retentions in MIN, BH, SWY, IBN and JKT, that have been lost in SM.

My main sources for the six isolects are:

for SM:  
D. Gerth van Wijk: Spraakleer der Maleische taal (1889).  
D.J. Prentice: Malay (Indonesian and Malaysian) (1987) and lecture-notes on Indonesian and Malaysian grammar (n.d.).  

for MIN:  
J.L. van der Toorn: Minangkabauische spreakkunst (1899).  

for BH:  

for SWY:  
O.L. Helfrich: Bijdragen tot de kennis van het Midden Maleisch (Besemahsch en Serawajsch dialect) (1904, + supplements and additions).  

for IBN:  

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9 Voorhoeve (1955:18) credits J.L.A. Brandes with first suggesting the name (i.e. Dutch 'Midden Maleisch'). Its customary translation into English as 'Middle Malay' is actually ill chosen, as it suggests an earlier stage of Malay, and not a geographical variant. A more appropriate translation would have been 'Central Malay' (Prentice & Hakim Usman 1978:158 n.13). SM has a shared cognate percentage of 87.1 with Besemah, and 87.7 with Seraway; Besemah and Seraway have a shared cognate percentage of 99.3 (Dyen 1965a:28).

10 The exact phonetic realisation is not clear from the sources.

11 Prefer Thaib's dictionary to Van der Toorn's (1891) because, although largely based on the latter, it contains additional information.

12 I decided to use this work because it provides a large number of examples from Classical Malay.

13 A new Iban-English dictionary by Richards appeared in 1981. Although it contains much more information than Scott (1956), it does not distinguish between long and short vowels. I will, however, frequently use it as a supplement to Scott.
TABLE 1: PHONOLOGICAL RETENTIONS

<table>
<thead>
<tr>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>ø</td>
<td>ø</td>
<td>i</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td></td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>2)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>3)</td>
<td>h, ø</td>
<td>ø</td>
<td>h</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>4)</td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>x</td>
<td>r</td>
</tr>
<tr>
<td></td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>5)</td>
<td>w</td>
<td>w</td>
<td>w</td>
<td>w</td>
<td>w</td>
</tr>
<tr>
<td></td>
<td>w</td>
<td>w</td>
<td>w</td>
<td>b</td>
<td>w</td>
</tr>
<tr>
<td>6)</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>7)</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td></td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>ø</td>
</tr>
</tbody>
</table>

Isolects that are not systematically used but that are often drawn into the comparison are Kendayan Dayak (KD), Selako Dayak (SD), Kerinci (KCI) (see above), Bacan (BAC), and Old Malay (OM).

According to Hudson (1967), KD and SD belong to the Malayic Dayak subgroup of the Malayic isolecst. BAC is a Malayic isoelect spoken on the island of Bacan (near Buru, eastern Indonesia). It differs from other eastern Indonesian Malayic isolecst in that it is more archaic. Apart from many innovations it also shows a number of lexical retentions that have been lost in SM (Collins 1986a).

OM is the language of the inscriptions of South Sumatra and Kedah. It belongs to the Malayic group. According to Teeuw (1959:140-146) most scholars have been using the term Old Malay without careful critical checking of the data against other forms of Malay. One exception should be made for Aichele (1942-43), who made a study of the differences between Old Malay and Classical Malay. He was of the opinion that the language of the old inscriptions was rightly termed Old Malay, and attributed a number of the differences to influence from (early) Batak and (to a lesser extent) from Old Javanese. Teeuw criticises some of the views and methodological weaknesses in Aichele's work. But summarising the

15For JKT there is also an older dictionary by Hans Kähler (1966) which, however, contains less information than that of Abdul Chaer.
phonological, morphological and lexical data, he nonetheless concludes that “All in all it must
be admitted...that it is not related to any other present-day language so closely as to Malay”
(Teeuw 1959:146). In addition to Teeuw’s views it is worth mentioning that in this study a
number of the peculiarities of OM vis-à-vis Classical Malay are shown to have
correspondences in other Malayic isolects, so that they must be retentions from PM (cf. 5.3
on numerals, and Chapter 6 on the affixes di- and -a).

Although there are no systematic comparisons of Malayic isolects, SM has been used in
several comparative and historical studies with wider aims.

Dempwolff’s three-volume work, Vergleichende Lautlehre des austronesischen
Wortschatzes, was the first systematic attempt to reconstruct the phonology of a hypothetical
Malayo-Polynesian proto-language.16 He based his reconstruction primarily on three non­
Oceanic Malayo-Polynesian languages: Tagalog, Javanese and Toba-Batak, and tested it
against three other non-Oceanic Malayo-Polynesian languages (SM, Ngaju-Dayak and
Malagasy), two Melanesian languages (Fijian and Sa’a) and three Polynesian languages
(Tongan, Futuna and Samoan). The third volume of his work contains a list of 2,215 proto­
lexemes, which has served as a starting point for later scholars of AN comparative
linguistics, who have improved and extended it.

In a footnote Dyen (1949) used evidence primarily from SM to split Dempwolff’s PMP
*-ay into *-ay (on the basis of Tagalog -ay, SM -ay, and Tongan -e) and *-ey (on the basis
of Tagalog -ay, SM -i and, by extension, Tongan -e).

In his Proto-Malayo-Polynesian laryngeals (1953) Dyen improved Dempwolff’s
reconstruction by the introduction of two ‘laryngeals’, namely *q and *h. His inferences rest
on evidence from the so-called ‘Tagalic’ languages (Tagalog, Bisayan and Bikol), SM,
Javanese and Tongan.

Blust (1970, 1980, 1984a, 1986) gives a large number of PAN (and lower order) proto­
lexemes which are to a large extent based on IBN and SM.

In 1975 Nothofer published The Reconstruction of Proto-Malayo-Javanic. This is a
phonological and lexical reconstruction based on Javanese, SM, Sundanese and Madurese,
four languages which, according to Dyen (1965:26) belong with several others in a relatively
close-knit subgroup (the Javo-Sumatran Hesion of the West Indonesian Cluster of the
Hesperonesian Linkage).

In an article on vocative forms Blust (1979) interprets the irregular final glottal stop
(phonemically analysed as k) in SM kinship terms and titles as a petrified vocative suffix.

In a later publication (1982a) he examines the loss of medial vowels (usually schwa) and
the subsequent reduction of heterorganic consonant clusters in historically trisyllabic SM
lexemes.

Finally Zorc (1982) discusses the reflexes of PAN laryngeals in more than 100 AN
isolects. He argues that IBN final glottal stop17 reflects:

(1) PAN *H when a corresponding h is found in Formosan and Philippine languages;

16Dempwolff called his reconstruction Proto Austronesian, but he made it without Formosan evidence. Nowadays a reconstruction on the basis of Austronesian languages minus the Formosan ones would be labelled Proto Malayo-Polynesian (cf. fn.5).

17This glottal stop is represented as ‘q’ in Scott’s Systematic Spelling, a phonemic spelling for IBN which he uses in his dictionary between brackets besides the official spelling (cf. Scott 1956, VII and passim; Scott 1957).
(2) PAN *ʔ when a corresponding ʔ is found in various Philippine languages (and probably Takituduh Bunun and Ami in Formosa);
(3) PAN *S when a corresponding sibilant is found in Formosan languages (especially Paiwan and Ami), and an h in most Philippine languages.

The topics treated in this study are organised in the following way. Following this introductory chapter, Chapter 2 presents a phonological description of the six Malayic isolects treated here: for each of them a short outline is given of the phonemes, the morphophonemic changes, and the phonological constraints. Chapter 3 is a reconstruction of PM phonemes. These are arranged as follows: (1) vowels, (2) diphthongs, (3) semivowels, (4) voiceless stops, (5) voiced stops, (6) nasals, (7) liquids, (8) a sibilant, (9) a glottal spirant, and (10) intervocalic Ø. Only phonemes as such are treated: their distribution within a lexeme is treated in Chapter 4. (There are two exceptions to this: for the sake of convenience, the reconstruction of antepenultimate vowels (3.1.3), and IBN changes in antepenultimate syllables and in adjacent penultimate consonant clusters (3.11) are dealt with in Chapter 3.) Chapter 4 treats PM word structure: PM phonotactic constraints are given, and tendencies to phonotactic constraints are discussed. Chapter 5 deals with PM lexicon: it includes a basic vocabulary and lexicon pertaining to well-defined semantic fields. In Chapter 6 an attempt is made to reconstruct the PM affixes. Chapter 7 follows the developments from PAN to PM; an account is given of the sound changes and of the phonotactic and lexical changes that took place between PAN and PM. Chapter 8 is a concluding chapter, which includes a summary of the most important findings, suggestions for further research and some ideas on subclassification of Malayic isolects and on the PM homeland.

I will represent phonemes from other proto-languages as I find them in the lexical instances in the linguistic literature. Although there is good reason to question some of the PAN/PMP proto-phonemes proposed by Dempwolff (and maintained by Dyen and later Austronesianists), their reconstruction does not affect the interpretation of PM phonology.
CHAPTER 2

PHONOLOGICAL DESCRIPTION OF THE MALAYIC ISOLECTS

In this chapter a brief outline is given of the phoneme systems, morphophonemic changes, and phonotactic constraints in the inherited vocabulary of the isolects compared. Deviations from this pattern in loanwords are noted separately.

2.1 THE STANDARD MALAY PHONEME SYSTEM

2.1.1 SM PHONEMES

The SM phonemes are as follows:

**VOWELS**

<table>
<thead>
<tr>
<th></th>
<th>high</th>
<th>mid</th>
<th>low</th>
</tr>
</thead>
<tbody>
<tr>
<td>front</td>
<td>( i )</td>
<td>( e )</td>
<td>( a )</td>
</tr>
<tr>
<td>central</td>
<td>( o )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>back</td>
<td>( u )</td>
<td>( a )</td>
<td></td>
</tr>
</tbody>
</table>

(diphthongs: -ay, -aw)

**CONSONANTS**

<table>
<thead>
<tr>
<th></th>
<th>labial</th>
<th>supra-</th>
<th>alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>stops</td>
<td>voiceless</td>
<td>( p )</td>
<td>( t )</td>
<td>( c )</td>
<td>( k )</td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td>( b )</td>
<td>( d )</td>
<td>( j )</td>
<td>( g )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>( m )</td>
<td>( n )</td>
<td>( ŋ )</td>
<td>( ŋ )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fricatives</td>
<td>( s )</td>
<td></td>
<td></td>
<td>( h )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>liquids</td>
<td>( l )</td>
<td></td>
<td></td>
<td></td>
<td>( r )</td>
<td></td>
</tr>
<tr>
<td>semivowels</td>
<td>( w )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>( y )</td>
</tr>
</tbody>
</table>

\( d \) is always alveolar, whereas for most speakers \( t \) is supradental.
\( n \) is basically alveolar, but it becomes homorganic to a directly following \( t \).
\( k \) syllable finally is realised as a glottal stop.
\( h \) is a glottal fricative; in the speech of some speakers it is heard only between like vowels, and in final position.\(^{18}\)
\( r \) is pronounced as a velar or uvular fricative by some speakers (and then usually elided word finally), and as an apical flap by others. The apical flap is dominant outside the traditional Malay areas and in official Indonesian.

-ay and -aw (written ‘ai’ and ‘au’ in the official spelling) are actually sequences of \( a + a \) semivowel.

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\(^{18}\) \( h \) between unlike vowels is usually not pronounced, but there are minimal pairs of intervocalic \(-h\) with \(-\varphi\), e.g. \( hat \) ‘clay’ vs \( lihat \) ‘look!’, and \( tuan \) ‘sir’ vs \( Tuhan \) ‘(the) Lord, God’. A minimal pair of \( h \) and \( \varphi \) in initial position is \( arus \) ‘current’ and \( harus \) ‘have to, must’.
Stress falls on the penultimate syllable of a lexeme, unless this has a schwa followed by a singular consonant: then it falls on the final syllable. Stress is non-phonemic, and there are no other supra-segmental features with phonemic relevance.

2.1.2 SM MORPHOPHONEMIC ALTERNATIONS

A. The following changes are brought about by the active verbal prefix mə(N)-, the actor/instrument prefix pa(N)- and the nominal circumfix pa(N)-an:

1. Homorganic nasal substitution for p, t, and k, e.g.

   (pukul): mamukul 'hit'  \hspace{1cm} pamukul 'hammer'
   (tolak): manolak 'refuse' \hspace{1cm} panolakan 'refusal'
   (kirim): manirim 'send' \hspace{1cm} panirim 'sender'

2. Palatal nasal substitution for s, e.g.

   (salin): manalin exchange, translate  \hspace{1cm} pañalin translator

3. Homorganic nasal accretion\(^\text{19}\) before voiced stops and c, e.g.

   (bali): mambali 'buy' \hspace{1cm} pambali 'purchaser'
   (dəgar): mandəgar 'hear' \hspace{1cm} pandəgar 'hearer'
   (jual): mañjual 'sell' \hspace{1cm} pañjualan 'sale'
   (gali): mañgali 'dig' \hspace{1cm} pañgali 'shovel, spade'
   (cari): mañcarì 'look for' \hspace{1cm} pañcarìan '(means of) subsistence'

4. Velar nasal accretion before vowels and h, e.g.

   (aku): mañakui (+ transitivising suffix -i) \hspace{1cm} pañakuan 'confession'
   (ukur): mañukur 'measure' \hspace{1cm} pañukuran 'measurement'
   (hituŋ): mañhituŋ 'count' \hspace{1cm} pañhituŋan 'counting, count'

Before other phonemes only mə-/pa- is prefixed.

B. With some speakers of SM, suffixation of -an to lexemes with final h preceded by a high or a mid-vowel causes loss of h and the emergence of a non-phonemic glide (-an here denotes collectivity, or is part of the nominal circumfix pa(N)-an), e.g.

   puluh [puluh] 'ten' \hspace{1cm} puluhan [puluwan] 'tens'
   molatih [mɔlatih] 'exercise (v)' \hspace{1cm} pəlatiyan 'exercise (n)'

But cf.

   maŋalahkan [maŋalahkan] (+ transitivising suffix -kan)
   'defeat' \hspace{1cm} paŋalahan [paŋalahkan] 'victory'

2.1.3 SM PHONOTACTIC CONSTRAINTS

The canonical form of the SM lexemes is C V C V C. A few monosyllables and trisyllables also occur. Each C can be ø, and medial C can also be a cluster (see below).

Constraints on the distribution of vowels in the non-borrowed lexicon are as follows:

\(^{19}\)The palatal homorganic nasal in -n̯- and -n̯-c- clusters is written 'n' in official spelling.
(1) Schwa does not occur (a) in final syllables;  
(b) before h, a semivowel or a vowel;  
(c) in antepenultimate syllables preceded by h and followed by a single consonant.

(2) Before a cluster of r + a consonant only schwa is permitted, e.g. tarbat ‘fly (v)’, borsih ‘clean’.

(3) As a rule, only schwa occurs in antepenultimate syllables, e.g. balakat ‘back’, banua ‘land, continent’; exceptions are binatat ‘animal’ and lexemes where an antepenultimate non-schwa has been prevented from becoming schwa by constraint (1), e.g. kuala ‘mouth of a river’, baharu ‘new’, harimaw ‘tiger’.

(4) Schwa preceded by h or ø is followed by l, r, s or a nasal, e.g. (h)ampadu ‘gall’, aasan ‘blow one’s nose’, mayoram ‘brood’, alan (also halan, lajak ‘bird of prey’, handak ‘will (aspect marker)’. It is only followed by a stop in a few exceptional cases.20

(5) In final open syllables only a, i, u or diphthongs are permitted.

(6) Diphthongs only occur in lexeme-final position, e.g. bangay ‘corpse’, pulaw ‘island’.

(7) Vowels e and o occur in penultimate syllables and in closed final syllables, but only in penultimate syllables are they in phonemic contrast with i and u respectively.21

(8) There is vowel harmony of high and mid-vowels such that the last-syllable vowel agrees in height with the penultimate vowel, cf. tipis ‘thin’, kurus ‘slim’, pohon ‘tree’, leber ‘neck’, kulit ‘skin, bark’, hitup ‘count (v)’, belok ‘turn (v)’, boleh ‘be allowed, obtain’; CeCiC-, CiCeC-, CoCuC-, and CuCoC- sequences do not occur.

20 viz. ajan ‘squeeze out by pressure’, which is a variant of rajan ‘painful straining (in coughing or in easing the bowels)’ and adap ‘suck up moisture’, a variant of p ap; atam, the base of pagetam ‘reaping knife’, is due to false analogy (cf. katam) – adap and atam are not found in Iskandar.

21 The distribution of high and mid-vowels is problematic. Wilkinson followed Winstedt’s spelling rules for peninsular Malay (Winstedt 1927:48-49), and wrote only mid-vowels before final h and k, and only ø before -ap except if the last syllable was immediately preceded by another vowel. Furthermore, in the last syllable only mid-vowels (or a) were found if the preceding syllable had a mid-vowel, and in final open syllables only high vowels (or a) were found. Exceptions to these rules were loanwords. However, this was not a convention, and did not reflect the linguistic reality of all peninsular Malay isolates. In Sumatra Van Ophuysen’s convention was followed. In this convention high vowels before -h, -k and -ø, were not lowered, cf. Wilkinson’s jatoh ‘fall (v)’, gunun ‘mountain’, banoh ‘seed’, which occur as jathuh, gunung, and banuh in Klinkert. On the other hand, Van Ophuysen’s spelling agreed with that of Wilkinson and Winstedt in lowering final syllable high vowels wherever mid-vowels occur in the penultimate syllable. Emeis (1955:199) pointed out the rules for height harmony in SM as it is spoken in Sumatra:

- penultimate a, i, u and a, co-occur with a, i, u and with diphthongs in the final syllable, and
- penultimate e and o co-occur with a, e and o, in the final syllable.

Emeis drew this pattern from 4,548 inherited lexemes found in Pomerwadarminta’s (Emes 1955:192). This pattern differs only in detail from that given by Van Ophuysen. As to SM mid-vowels in penultimate syllables, there is no conditioning factor for their occurrence in lexemes like pohon ‘tree’, leher ‘neck’, ekor ‘tail’, oleh ‘by’, orap ‘human being’, tembak ‘shoot’. In cases like this mid-vowels are compulsory, and they are sometimes in contrast with high vowels, cf. borong ‘wholesale, by the gross’, and burong ‘bird’ (respectively borong and burong in Wilkinson). Dempewolf (1937:21-22) saw in the occurrence of SM high and mid-vowels a tendency to sound shift. He used SM u/o as a base for reconstructing PMP *i, and SM uwO as a base for reconstructing PMP *u. These correspondences are generally accepted among other Austronesianists. Dyen and Nothero attributed the origin of SM mid-vowels to “secondary developments including dialectal and interlinguistic borrowing” (Nothero 1975:30).

The relevant facts involved in the distribution of SM high and mid-vowels can be summarised as follows. Firstly, there is in various degrees a non-phonemic lowering of high vowels occurring in final closed syllables beginning with a consonant. This lowering is represented in Wilkinson before -k and -h and, for ø, before -ø, whereas it is ignored in Van Ophuysen’s orthography. Secondly, in penultimate syllables (and only here) high and mid-vowels can be in phonemic contrast. Thirdly, the vowel of the last syllable is never higher than the vowel of the penultimate syllable. The Ejaan Yang Disempurnakan (The Perfected Spelling, the uniform spelling for Bahasa Indonesia and Bahasa Malaysia which has been generally accepted since 1972) follows Van Ophuysen in the representation of high and mid-vowels, as I do in this study.
Constraints on the distribution of consonants in the non-borrowed lexicon are as follows:

(1) No voiced stops or palatals occur in final position.22

(2) The only consonant clusters that occur are:
   (a) nasals + homorganic stops, e.g. *hantu* 'evil spirit', *bangga* 'proud', *(h)*ąmpología '*'bile, gall'';
   (b) velar nasal + s, e.g. *lapsuŋ* 'straight, direct(ly)';
   (c) *r* + any consonant but *h*, *r*, *y* or *w*, e.g. *borsih* 'clean', *torbap* 'fly (v)'.23

(3) Semivowels do not occur initially, except in *yaitu* 'that is, namely', and in *yan* 'the relative clause marker', which are analysable as *+ia* + *+itu*, and *+ia* + *+ŋ* respectively. As has been said before, *y* has developed from an earlier *+i*.24 It does not occur adjacent to schwa or *i/e*, nor does *w* occur adjacent to schwa or *u/o*, although non-phonemic glides are heard (and sometimes orthographically represented) when *i/e* and *o/u* are adjacent to vowels of a different colouring (e.g. *ciyum* ~ *ciyum* 'kiss (*v*, *n*); sniff with the nose'; *duit* ~ *duwit* 'cent; money'; *baur* ~ *bawur* 'mixing up, confusing'; *ampuan* ~ *ampuwan* 'k.o. tray'). Exceptions are loanwords, and *kayan* 'heaven, fairyland' which is actually morphologically complex (*< +ka* + *(h)*iyan + *+an*).

(4) Two *r*’s rarely occur within one lexeme.25

N.B. I have modified Wilkinson’s spelling (which was the basis of the pre-1972 spelling of SM in Malaya) in the following ways:

<table>
<thead>
<tr>
<th>Wilkinson</th>
<th>present spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ch</em></td>
<td><em>c</em></td>
</tr>
<tr>
<td><em>e</em></td>
<td><em>ə</em></td>
</tr>
<tr>
<td><em>ng</em></td>
<td><em>ŋ</em></td>
</tr>
<tr>
<td><em>ny</em></td>
<td><em>ñ</em></td>
</tr>
<tr>
<td><em>-ai</em></td>
<td><em>-ay</em></td>
</tr>
<tr>
<td><em>-au</em></td>
<td><em>-aw</em></td>
</tr>
</tbody>
</table>

Furthermore, I follow the conventions of the Ejaan Yang Disempurnakan for the representation of high and mid-vowels (see fn. 21).

---

22Final voiced stops however are written in loanwords and in a very few sound-symbolic words e.g. *sabab* [sabap] 'reason; because'; *abyad* [abyat] 'white' (both loanwords, from AR), *lambab* (also *lambap*) 'damp, humid'.

23In Wilkinson a few *-rh* clusters occur in loanwords, in onomatopoeic forms, on morpheme boundaries, in *garhaw* 'agape', and in *garham* (with variants *garaham* and *garahm* 'molar tooth').

24Prentice (pers. comm.) and others (cf. Wilkinson for *ya itu*).

25Of the few lexemes in Wilkinson having more than one *r*, most are loanwords from MIN and JV (rawitan ‘emotional melody’ is based on a JV lexeme *rawit*, and only occurs in the poem ‘Panji Semirang’, Wilkinson 1959). Others have a variant with one *r*, or they are onomatopoeic. The form *raras* ‘a large tree, *Radermachera gigantea*’ is unexplained (it does not occur in *Iskandar*).
2.2 THE MINANGKABAU PHONEME SYSTEM

2.2.1 MIN PHONEMES

The MIN phonemes are as follows:

**VOWELS**

<table>
<thead>
<tr>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>mid</td>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td>low</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

(diphthongs: P, uP, uy, ay, aw)

**CONSONANTS**

<table>
<thead>
<tr>
<th>labial</th>
<th>dental</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>stops</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>voiceless</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>[k  ~ ?]</td>
</tr>
<tr>
<td>voiced</td>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>ñ</td>
<td>ñ</td>
</tr>
<tr>
<td>fricatives</td>
<td>s</td>
<td></td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>liquids</td>
<td>l, r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>semivowels</td>
<td>w</td>
<td></td>
<td></td>
<td>y</td>
</tr>
</tbody>
</table>

k has two allophones: [?] which occurs syllable finally, and [k], which occurs elsewhere.

h is a glottal spirant; in initial position it is not phonemic.²⁷

ay and aw usually occur in word-final position, where they are actually sequences of a + a semivowel. ay sometimes occurs before a final glottal stop in ill-adapted loanwords, e.g. siay? ‘healthy’ (< ML sehat ‘healthy’ < AR šihha(t) ‘health’).

Stress falls on the penultimate syllable.²⁸ It is not phonemic, nor are there any other suprasegmental features with phonemic relevance.

2.2.2 MIN MORPHOPHONEMIC ALTERNATIONS

A. The following changes occur with affixation of the active verbal prefix ma(N)-, the actor/instrument prefix pa(N)- and the nominal circumfix pa(N)-an:

(1) homorganic nasal substitution for initial p, t and k, e.g.

(\textit{pil}²\textbf{ph}): \textit{mamili}²\textbf{ph} ‘choose’ \quad \textit{pamili}²\textbf{ph} ‘chooser’

(\textit{turuy}?): \textit{manuruy}? ‘follow’ \quad \textit{panuruy}? ‘follower, docile person’

(\textit{kayu}?): \textit{mañayu}²\textbf{ph} ‘row with short oars’ \quad \textit{pañayu}²\textbf{ph} ‘k.o. agricultural implement’

(2) palatal nasal substitution for initial s, e.g.

(\textit{sudah}): \textit{mañudah} ‘end, finish, terminate’ \quad \textit{pañudahan} ‘termination, end’

²⁶It is likely that t is a supradental whereas d and n are alveolars (as in SM and JKT). Such a difference in articulation place between t and d/h is quite common in Southeast Asian languages (Henderson 1965:420-421). However, it is usually not pointed out in the linguistic literature, as t/d/n are phonemically in the same structural relationship as p/b/m,c/j/i/ and k/g/h.

²⁷See Van der Toorn (1891:X); in Thaib’s dictionary initial h does not occur.

²⁸Van der Toorn (not specifying whether this applies to lexemes or to words) speaks of a slightly longer penultimate vowel (Van der Toorn 1899:XIV). Moussay (1981) does not comment on MIN stress.
(3) homorganic nasal accretion before initial voiced stop and c, e.g.

(bun'fh): mambun'fh ‘kill’ pambun’fh ‘instrument to kill’
(da'ga): manda'ga ‘hear’ panda'ga ‘(sense of) hearing’
(jamu): manjamu ‘treat, entertain’ pa'jamu ‘host’
(gandin): ma'ngandin ‘thrust, flog’ pa'ngandin ‘s.th. to thrust or beat with’
(car'i): ma'ncari ‘look for, seek, search’ pa'ncari ‘livelihood, trade, business’

(4) before other lexemes only ma-/pa-/pa- an is affixed, e.g.

mali'nf ‘thief’:
malali'nf ‘steal’

itam ‘black’:
mai'jam ‘become black’

anam ‘six’ (+ transitivising suffix -kan):
maanamkan ‘make (s.th.) six’

B. The following changes take place when the transitivity marker -i or the nominaliser -an are suffixed to a lexeme:

(1) if the lexeme ends in -a, -P, or -h, a liquid appears between the lexeme ending and the suffix, e.g.

kapu ‘chalk’:
ma'gapu ‘plaster, whitewash’
(pikP):
pikPran ‘thought’
badP ‘gun’:
sapambadP ‘the distance of a gunshot’
(sasa):
ma'nasali ‘be sorry about s.o. or s.th.’

(2) if the lexeme ends in a glottal, this stop is sometimes followed and/or replaced by p or t, e.g.

rambuy ‘hair of head’:
rambuy’tan ‘k.o. fruit, the rambutan’

saki ‘ill’:
pasakitan (Van der Toorn pasakP’an, pasakitan) ‘difficulty, impediment’

ikuy ‘follow’:
ura'ng pasikuy’tan ‘s.o. without an opinion of his/her own’

tutuy ‘closed’:
tutuy’pan ‘prison’

(3) if the lexeme ends in -h, this is sometimes replaced by s, e.g.

manih ‘sweet’:
manisaran labah (Thaib), manihan labah (Van der Toorn) ‘honey’

N.B. (1) The exact realisation (as preglottalised stops?) of the clusters -?p- and -?t- is uncertain.

(2) The morphophonemic changes described in (2) and (3) are exemplified in the MIN dictionaries, but they are not treated in Van der Toorn (1899).

29See fn. 19.
30Thaib assumes that all lexemes with final a, P, and u? really end in an underlying liquid; he writes (.) wherever he expects a final liquid which is not attested through suffixation, e.g. pitata(.) ‘k.o. tree’, garigP(.) ‘shiver (v)’. 
2.2.3 MIN PHONOTACTIC CONSTRAINTS

The phonotactic shape of MIN lexemes is C V C V C. Monosyllables, trisyllables and tetrasyllables also occur. Each C can be $\emptyset$, and intervocalic C can also be a cluster (see below).

Constraints on the distribution of vowels:

(1) Only $a$, $i$ and $u$ are found in antepenultimate syllables,\(^{31}\) for example, *kulambu* ‘mosquito net’, *tilaņjaŋ* ‘naked’, *jambatan* ‘bridge’.

(2) Diphthongs only occur in the last syllable of a lexeme (as in *gunuŋ* ‘mountain’, *pulaw* ‘island’, *piliŋ* ‘choose’); all other vowels are also found in the penultimate syllable.

(3) $a$ occurs in final syllables before $h, ?, m, n, \emptyset$ or $\emptyset$;

$i$ occur in final syllables before $h, ?, m, n$ or $\emptyset$;

$u$ occur in final syllables before $h, ?, \emptyset$ or $\emptyset$;

$o$ occur in final syllables before $h, ?, \emptyset$ or $\emptyset$;

$e$ occur in final syllables before $h, ?, m, \emptyset$ or $\emptyset$;

$uy$ occur in final syllables before $h, ?, \emptyset$ or $\emptyset$;

$iy, u\emptyset$ occur in final syllables before $h, ?, \emptyset$ or $\emptyset$;

$ai$ and $au$ only occur lexeme finally (except for $ay$ in some loanwords).

Constraints on the distribution of consonants:

(1) Clusters consist of a homorganic nasal + stop, or $n + s$.\(^{32}\)

(2) The only final consonants that occur are $h, ?, m, n$ and $\emptyset$; final $m$ only occurs when preceded by $a$.

N.B. I have modified Thaib’s spelling in the following ways:

<table>
<thead>
<tr>
<th>Thaib</th>
<th>present spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>dj</td>
<td>$j$</td>
</tr>
<tr>
<td>tj</td>
<td>$c$</td>
</tr>
<tr>
<td>$j$</td>
<td>$y$</td>
</tr>
<tr>
<td>$ng$</td>
<td>$\emptyset$</td>
</tr>
<tr>
<td>$nj$</td>
<td>$\emptyset$</td>
</tr>
<tr>
<td>$\emptyset$</td>
<td>$u$</td>
</tr>
<tr>
<td>$-ai$</td>
<td>$-ay$</td>
</tr>
<tr>
<td>$-au$</td>
<td>$-aw$</td>
</tr>
<tr>
<td>$ie$</td>
<td>$i\emptyset$</td>
</tr>
<tr>
<td>$oee$</td>
<td>$u\emptyset$</td>
</tr>
<tr>
<td>$oei$</td>
<td>$uy$</td>
</tr>
<tr>
<td>$-(l), -(r)$</td>
<td>(omitted)</td>
</tr>
</tbody>
</table>

\(^{31}\)Exceptions to this rule are a few loanwords, a few forms with petrified affixes, and the lexeme *lemala*? (also *malaa*?) ‘k.o. bookmaker’.

\(^{32}\)The only other cluster that occurs in Thaib is *-rg- in targutu* and *turgutu*, both onomatopoeic forms symbolising the sound of turtle-doves; Wilkinson gives a doublet *sala, saIa* ‘broiling, cooking at an open fire’, where the velar nasal is a retention from PAN (cf. 4.6).
I have applied the same modifications to Van der Toorn's spelling, with the addition of the following:

\[
\begin{align*}
\text{oea, oee (1891)} & \quad u^o \\
\text{ia, ie} & \quad i^o \\
\text{ò, ò} & \quad o \\
\text{è, ë} & \quad e \\
\text{(hamza)} & \quad \text{?}
\end{align*}
\]

2.3 THE BANJAR HULU PHONEME SYSTEM

2.3.1 BH PHONEMES

The BH phonemes are as follows:

**VOWELS**

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i</td>
<td></td>
<td>u</td>
</tr>
<tr>
<td>low</td>
<td></td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

(diphthongs: -ay, -uy, -aw)

**CONSONANTS**

<table>
<thead>
<tr>
<th></th>
<th>labial</th>
<th>dental</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>stops</td>
<td>p</td>
<td>r\textsuperscript{34}</td>
<td>c</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>\text{\text{&quot;u&quot;}}</td>
<td>\text{\text{&quot;u&quot;}}</td>
<td>h</td>
</tr>
<tr>
<td>fricatives</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>liquids</td>
<td>\text{\text{&quot;l&quot;, \text{&quot;r&quot;}}</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Abdul Jebar does not give any explicit pronunciation rules for the BH phonemes. Stress is not phonemic, and there appear to be no other phonemic suprasegmental features in BH.

A non-phonemic glottal stop is heard between like vowels, and when -i (the transitive verbal suffix) is suffixed to a verb ending in a vowel.

Diphthongs occur only lexeme finally,\textsuperscript{35} and they actually consist of a or u + a semivowel. The occurrence of -uy seems to be restricted to loanwords.

\textsuperscript{33}The two main sub-dialects of Banjarese, BH and BK, differ mainly in their lexicon and phonology: BK adds a pair of mid-vowels to the vowels it shares with BH. (In his orthography Abdul Jebar uses two different letters 'e' and 'è'; he does not explain the difference between them, and, as there is only one phoneme e according to Abdul Jebar's own analysis of BK, one presumes that 'e' and 'è' refer to the same phoneme. Another possibility is that 'e' refers to a schwa, and 'è' to a mid-front vowel, but again, Abdul Jebar does not mention the occurrence of BK schwa in his phonological outline).

A problem with the treatment of BH and BK lexicon is that Abdul Jebar does not distinguish between them consistently: some of his entries are marked with BH or BK, but most are not; one might suppose that unidentified lexemes belong to BK if they contain a mid-vowel, but even then one is left with many lexemes belonging either to BH, to BK, or to both. I cannot but treat all Abdul Jebar's material as belonging to BH, unless it contains a mid-vowel or is explicitly marked as BK.

\textsuperscript{34}See fn. 26.

\textsuperscript{35}According to Durdje and Djantera there are also interconsonantal diphthongs, e.g. kaina 'wait; soon', sauda 'no, not', kuitan 'aged person'.

---

\textsuperscript{34}The notation conventions are as follows: 
- \text{\text{"l"}, \text{"r"}} for the liquid consonants.
- \text{\text{"u"}} for the glottal stop.
- \text{\text{"n"}, \text{"\text{"n"}} for the nasal consonants.
- \text{\text{"j"}, \text{"\text{"j"}} for the fricative consonants.
- \text{\text{"k"}, \text{"\text{"k"}} for the stop consonants.

---
2.3.2 BH MORPHOPHONEMIC ALTERNATIONS

The following alternations are brought about by prefixation of the active verbal prefix ma(N)- and the nominalising affix pa(N)-(an):

(1) homorganic nasal substitution for p, t and k, e.g.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>(turut):</td>
<td>manurut ‘follow’</td>
<td>panurut ‘who/which likes to follow’</td>
<td></td>
</tr>
<tr>
<td>(pankun):</td>
<td>mampankun ‘hit’</td>
<td>pampaŋkun ‘hammer’</td>
<td></td>
</tr>
<tr>
<td>(kuluh):</td>
<td>manaŋluh ‘monopolise’</td>
<td>paŋluhan ‘always trying to monopolise, greedy’</td>
<td></td>
</tr>
</tbody>
</table>

(2) palatal nasal substitution for s, e.g.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>(sapat):</td>
<td>maŋaŋat ‘sting (v)’</td>
<td>paŋaŋat ‘wasp’</td>
</tr>
</tbody>
</table>

(3) homorganic nasal accretion\(^{36}\) before voiced stops and c, e.g.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>(banam):</td>
<td>mambanam ‘burn’</td>
<td>pambanam ‘burning place’</td>
</tr>
<tr>
<td>(dulaŋ):</td>
<td>mandulaŋ ‘look for diamonds’</td>
<td>pandulaŋ ‘place where diamonds are found’</td>
</tr>
<tr>
<td>(jah):</td>
<td>maŋjahah ‘oppress’</td>
<td>paŋjahah ‘coloniser, colonising power’</td>
</tr>
<tr>
<td>(ganth):</td>
<td>maŋganthih ‘wine, twist, spin’</td>
<td>paŋganthih ‘spinning-wheel’</td>
</tr>
<tr>
<td>(cucuk):</td>
<td>maŋcucukkkan ‘pin up’</td>
<td>paŋcucuk ‘pin’</td>
</tr>
</tbody>
</table>

Before bases with other initial phonemes, only ma- or pa- (an) are affixed.

2.3.3 BH PHONOTACTIC CONSTRAINTS

The canonical shape of BH lexemes is C V C V C. Monosyllables, trisyllables and tetrasyllables also occur. Each C can be ø, and intervocalic C can also be a cluster (see below).

Constraints on the distribution of consonants:

(1) Voiced stops, c and ŋ occur in initial and medial position only.

(2) The consonant clusters which occur are:

(a) homorganic nasal + stop, e.g. jambatan ‘bridge’, hantu ‘spirit, ghost’, kaŋciŋ ‘button’, ampat ‘four’, baŋkay ‘corpse’;
(b) velar nasal + s, e.g. buŋsu ‘youngest’, laŋsuŋ ‘direct(ly), straight’;
(c) (in a few cases, mostly loanwords) stop + l, r, or s; r or s + stop or nasal; and ŋ + h, l, e.g. baksa ‘dance (v)’ (< JV boksa), ruksuy ‘bad (quality), ugly’ (?) < DU rotzooi ‘mess; things of bad quality’), ubraŋ ‘waste, sell-out’, cipraŋ ‘stain, spot’, haŋlur ‘crystal’ (< Persian); gargaŋ ‘saw’ (< SKT), garbaŋ ‘spread out, hanging down’, marma ‘horrible, terrible’, kasturi ‘musk, civet’ (< SKT), tarkam ‘pounce’; ba-tiŋhuy ‘whistle (v)’, siŋhaja ‘purposely’ (< SKT), laŋlam ‘disappeared, submerged’; other consonant clusters are found only in loanwords.

Other constraints: diphthongs only occur in lexeme-final position.

\(^{36}\)See fn. 19.
N.B. I have made the following alterations to Abdul Jebar's (and Asfandi's) orthography:

<table>
<thead>
<tr>
<th>Abdul Jebar present spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>ng</td>
</tr>
<tr>
<td>ny</td>
</tr>
<tr>
<td>-ai</td>
</tr>
<tr>
<td>-au</td>
</tr>
<tr>
<td>-ui</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

2.4 THE SERWAY PHONEME SYSTEM

2.4.1 SWY PHONEMES

The SWY phonemes are as follows:

VOWELS

<table>
<thead>
<tr>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>mid</td>
<td>e</td>
<td>ə</td>
</tr>
<tr>
<td>low</td>
<td>a</td>
<td>o</td>
</tr>
</tbody>
</table>

(diphthongs:38 ī, ū, oy, ey, (-ay), (-aw))

CONSONANTS

<table>
<thead>
<tr>
<th>labial</th>
<th>alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>stops</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
</tr>
<tr>
<td>voiced</td>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>ŋ</td>
<td>ŋ̃</td>
</tr>
<tr>
<td>fricatives</td>
<td>s̆</td>
<td>x</td>
<td>(h)</td>
<td></td>
</tr>
<tr>
<td>liquids</td>
<td>l, r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>semivowels</td>
<td>w</td>
<td>y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e does not occur in Helfrich; where Aliana et al. has e, Helfrich has a corresponding i.

Diphthongs occur in the final syllable of a lexeme. In Aliana et al. ī and ū are in phonemic contrast with final i and u respectively. -ay and -aw are phonemically sequences of a + a semivowel.

x, a (uvular or velar?) fricative, is in free variation with r in a number of lexemes.40

37Abdul Jebar sometimes uses an apostrophe to represent the glottal stop which is heard between like vowels, and before -i which is suffixed to verbs ending in a vowel. He does so for the sake of beginning students of Banjarese, and (before ī) to indicate that the two vowels belong to different syllables. There are, however, many lexemes with sequences of like vowels where he does not use the apostrophe. As the BH glottal stop is non-phonemic, I do not represent it in my orthography.

38 ī and ū only occur before -h and -l. In Helfrich's analysis they are allophones of i and u do not occur before -h or -l. But in Aliana et al. -h is not represented, and here ī and ū are in phonemic contrast with lexeme-final i and u. Examples of minimal pairs: ali 'sperm' and aliP(h) 'change place, move', agu 'use, wear' and aguP(h) 'k.o. bird's nest', baP(h) 'buy' and balP(h) 'wild, not tame'.

ey and oy do not occur in Helfrich's description. In Aliana et al. they are listed as diphthongs, but their occurrence seems restricted to the exclamations ey and oy (Aliana et al. p.12). In Aliana et al.'s orthography the symbol wa is found in two lexemes: kukuwa 'scratch (v)' and taluwa 'egg' (what I write as P and U in this study is represented as a and wa in Aliana et al.). Their wa monophthongises under the same conditions as P and U.

39 Aliana et al. also list z as a SWY phoneme, but I found only one instance (zaman 'time, period' (< AR)) and therefore do not consider it an inherited phoneme.

40 The exact place of articulation (velar or uvular?) of x is unclear. Helfrich describes it as a "burred r"; he represents it as 'gr', and Aliana et al. as 'gh' and 'g', which points to a velar articulation.
In this position it occurs in Helfrich, but is not represented in Aliana et al.; hence it is written between brackets in this study.

According to Helfrich stress falls on the penultimate syllable of a word, unless this contains a schwa (in which case it falls on the final syllable); stress is not phonemic, and there are no other phonemic suprasegmental features.

2.4.2 SWY MORPHOPHONEMIC ALTERNATIONS

A. Nasalisation of actor-oriented verbs, affixation of the nominalising affixes pɔN- and pɔN-an, yield the following alternations:

(1) velar nasal accretion for initial vowels, e.g.

(adiJ):  nadjili ‘give judgement’, pɔnadjilan ‘law court’
(ikat):  gikat ‘bind’, pɔŋikat ‘s.th. to bind’
(ukur):  nukur ‘measure’, pɔŋukur ‘measurer, gauger’

(2) homorganic nasal substitution for initial stops, e.g.

(potip(h)):  motip(h) ‘make white’
(pikuJ):  pamikul ‘s.o. carrying a yoke’
(boli):  mali ‘buy’
(buka?):  pɔnuka? ‘entrepreneur’
(danax):  nɔŋax ‘hear’
(dapat):  pɔŋapat ‘opinion’
(timbo):  nimoJ ‘bale (water)’
(tunju?):  nɔŋunju? ‘pointer’
(cukur):  nukur ‘shave’, pɔŋukur ‘barber’
(joliJ):  nɔliJ ‘look sidelong, squint’
(jait):  pɔŋait ‘dressmaker, needle’

(kapur) (in Helfrich kapux):  napur ‘whitewash’

N.B. As the above examples show, in Aliana et al. stops become homorganic nasals. Helfrich, however, is vague about the exact nature of nasalisation of stops, but from his examples it appears that voiceless stops usually become homorganic nasals, and that voiced stops usually have homorganic nasal accretion. Apparent exceptions are (baix), mbaix, maix ‘pay’, (boli), mboli, moli ‘buy’, (with nasal accretion as well as nasal substitution), (danax), nɔŋax ‘hear’ (Helfrich specifies that (danax) is the only lexeme with initial d undergoing nasal substitution), (pambo), (mɔ)pambo ‘carry on both hands’.

Examples of x in free variation with r. xilaw = rilaw ‘k.o. eel’, and kikix = kikir ‘a file’; but cf. also kuxo ‘milt, spleen’ vs kuro ‘turtle’, and raps ‘bare, leafless’ vs xaps, ma– ‘swing (of lianas)’.

4 Helfrich has h- in only ten lexemes, five of which are AR loans (viz. haji ‘pilgrim to Mecca’, hakim ‘judge’, basil ‘product, result’, hukum ‘law, sentence’, and horman ‘respect, honour’), two have variants without h- (habis, abis ‘finished, used up; completely’, and hati, ati ‘heart, core, mind’), and one is an exclamation (hay ‘hey’); the remaining two lexemes are: haHo ‘only’, and himpit ‘closely fitting’...(hutan is only found in BSM in nɪ hutan, (‘grandparent of the forest’) a taboo term for ‘tiger’; in other (BSM and SWY) contexts utan ‘forest’ is used).

Intervocalic h occurs in Helfrich in a very few Middle Malay lexemes which are not marked for SWY or BSM: I presume that these are BSM (BSM h–SWY d), e.g. daHa ‘phantom’, kahar ‘cart’ (< DU kar). (In one case it occurs between unlike vowels: laHo ‘hissing sound of the ulax muxo (a very poisonous snake)’).
palatal nasal substitution for initial s, e.g.

(subur):
\[ \text{nuburka 'make fertile'} \]

(sadut):
\[ \text{po\text{\text{"a}}ndut 'lazybones'} \]

(4) if the initial consonant is a liquid or nasal, \( m\text{- or } n\text{-, } p\text{-, and } pa\text{- an are affixed, e.g.} \)

(lupu\(\text{\text{\text{"a}}} \text{h})):
\[ \text{m\text{\text{"o}}lupu\text{\text{\text{"a}}} \text{h} 'flatten bamboo', p\text{\text{"o}}lupu\text{\text{\text{"a}}} \text{h} 'flattened bamboo'} \]

maxa? ‘flare up’:
\[ \text{m\text{\text{"o}}maxa? 'fan/feed (a fire)', 'light s.th.'} \]

(\( n\text{\text{\text{"a}}}y\text{\text{\text{"a}}}w)):
\[ \text{m\text{\text{"o}}n\text{\text{\text{"a}}}y\text{\text{\text{"a}}}w 'make dudul (a k.o. cake)'} \]

(\( n\text{\text{\text{"i}}}x\text{\text{\text{"i}}}s\text{\text{\text{"i}}}w) 'sieve (v)’:
\[ \text{p\text{\text{\text{"a}}}n\text{\text{\text{"i}}}x\text{\text{\text{"i}}}s\text{\text{\text{"i}}}x\text{\text{\text{\text{"a}}}n 'sieve (n)' \]

(axi ‘day’:
\[ \text{sa\text{\text{"a}}xi 'one day, per day'} \]

alus ‘fine, refined’:
\[ \text{so\text{\text{\text{"a}}}alus 'as fine/refined as'} \]

iku? ‘tail’:
\[ \text{siku? 'one tail; one piece per item'} \]

ixup ‘draught’:
\[ \text{so\text{\text{\text{"a}}}ixup 'a draught, a pull'} \]

uxan (oxan in Helfrich)
\[ \text{'person, human being': } s\text{\text{\text{"u}}}xan 'someone, a person, per person'} \]

umur ‘age’:
\[ \text{su\text{\text{\text{"o}}}mur 'as old as'} \]

B. Before lexemes with initial vowel, the allomorphs so- or s- of the clitic s- occur (s- denotes singularity, or the circumstance of belonging to the same category) occur, e.g.

axi ‘day’:
\[ \text{saxi 'one day, per day'} \]

alus ‘fine, refined’:
\[ \text{soalus 'as fine/refined as'} \]

iku? ‘tail’:
\[ \text{siku? 'one tail; one piece per item'} \]

ixup ‘draught’:
\[ \text{soixup 'as fine/refined as'} \]

umur ‘age’:
\[ \text{soumur 'as old as'} \]

C. The intransitive verbal prefix bo- is realised:

(1) as bo- before initial a, e.g.

ana? ‘child’:
\[ \text{boana? 'have children, give birth'} \]

(2) as bo- or b\( a\)- before initial i or u, e.g.

isi ‘content(s)’:
\[ \text{boisi 'contain'} \]

(ixis):
\[ \text{boixis 'be carved with'} \]

(ingut):
\[ \text{baxingut 'move, stir'} \]

(uba(h)):
\[ \text{baxuba(h) 'change (v)'} \]

umur ‘age’:
\[ \text{boumur 'having the age of, old, mature, last (v)'} \]

D. The prefix to- (denoting involuntariness, or superlative degree) is realised:

(1) as to- or t\( a\)- before initial a, e.g.

(\( \text{ambi\text{\text{"o}}}\text{\text{"a}}}?):
\[ \text{toambi\text{\text{\text{"a}}} 'taken away'} \]

alap ‘beautiful’:
\[ \text{toalap 'very beautiful'} \]

(\( \text{\text{\text{\text{"a}}}n\text{\text{"\text{"a}}}kat):}
\[ \text{ta\text{\text{\text{"a}}}n\text{\text{\text{"a}}}kat 'raised, lifted'} \]

(2) as t\( a\)- before initial i, e.g.

(ingut):
\[ \text{t\text{\text{\text{"a}}}xingut 'touched'} \]

(3) as t- before initial u, e.g.

(untap):
\[ \text{tuntap 'bump up against'} \]
E. The nominal circumfix ka- an (which forms nouns, or verbs with the meaning ‘be affected by [base]’) is realised as follows:

(1) as ko- an before a and i, e.g.

<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>adil</td>
<td>‘just’</td>
</tr>
<tr>
<td>alus</td>
<td>‘fine, refined’</td>
</tr>
<tr>
<td>idup</td>
<td>‘live, life’</td>
</tr>
<tr>
<td>ilu</td>
<td>‘beautiful, good’</td>
</tr>
</tbody>
</table>

(2) as k- an before u, e.g.

<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ujan</td>
<td>‘rain’</td>
</tr>
<tr>
<td>kujan</td>
<td>‘be caught in the rain’</td>
</tr>
</tbody>
</table>

F. Before the clitics -ño (referring to the third person as an object or, if the verb is patient-oriented, to the third person as an agent) and -la(h) (emphatic particle), the transitive verbal suffix -ka is realised as -k°, e.g.

<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>diambid°ka</td>
<td>‘taken away’</td>
</tr>
<tr>
<td>kujanan</td>
<td>‘be caught in the rain’</td>
</tr>
</tbody>
</table>

G. The following sandhi rules apply word internally or within a word group:42

(1) i + i > ii, which is pronounced as a long vowel, e.g. di + ixup + o > diixupo43 [di: xupo] ‘sucked in, absorbed by him/her’

(2) n + ŋ > ŋ, e.g. dagān + ŋo > dagapaño ‘her/his merchandise’

(3) a(h) + a > a(h)a which is pronounced as a long vowel, e.g. bābua(h) + an > bābua(h)an44 [bābua:n] ‘various fruits’

(4) o + a > ua, e.g. mañco + an > mañcuan ‘reflection, consideration’

(5) a + u > a, e.g. ka + ai > ka‘ ‘to the water’

(6) a + i becomes u, e.g. ka + ulu > kulu ‘to the beginning/source; upriver’

(7) a + i > i, e.g. ka + ili > kilix ‘downstream’

H. The diphthongs i° and u° are monophthongised when the lexeme to which they belong is suffixed with -i/-an, or cliticised with -yo, e.g.

<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>jau</td>
<td>‘keep (it) away (from s.th./s.o.)’</td>
</tr>
<tr>
<td>di + ilu</td>
<td>‘embellished by him/her (+emphasis)’</td>
</tr>
<tr>
<td>ko + ilu°+an</td>
<td>‘beauty, goodness’</td>
</tr>
<tr>
<td>kə + koc°+an</td>
<td>‘smallness’</td>
</tr>
</tbody>
</table>

42 Only the general principles of sandhi are given here (see Aliana et al. p.25).
43 Aliana et al. analyse the vowels in these forms as single vowels which are phonetically long, e.g. bābuan [babua:n], kābarsian [kəbarsiyan], diixupo [di: xupo] in the examples given in Aliana et al. pp. 24-25 they are indicated as long vowels (with a bar to indicate length), but elsewhere in Aliana et al. they are written as ‘a’, ‘i’, so apparently they are phonemically interpreted as allophones of a and i).
44 See fn. 43.
45 See fn. 43.
$k\bar{o}+b\text{"arsi(h)an > }k\bar{o}b\text{"arsi(h)an}$ (with long [a:]$^{46}$: $[k\bar{o}b\text{"arsiya:n}]$) ‘cleaness’;
$di+tagi(h)+yo > \text{ditagi(h)yo}$ $^{47}$ [ditagiyo] ‘dunned, pressed for payment (by a 3rd person)’.

N.B. This monophthongisation process is not mentioned or exemplified in Helfrich.

2.4.3 SWY PHONOTACTIC CONSTRAINTS

The canonic shape of SWY lexemes is C V C V C. Each C can be $\varnothing$, and intervocalic C can also be a cluster (see below). Monosyllables, trisyllables and tetrasyllables also occur.

Constraints on the distribution of vowels:

1. Schwa does not occur in final syllables.
2. Initial schwa is always followed by a nasal or, in one case, a liquid (cf. $\text{alag}$, $\text{lag}$ ‘kite (bird)’). There are two exceptions, both of which are SKT loanwords, viz. $\text{arti}$ ‘meaning’, $\text{arto}$ ‘goods’.
3. As a rule trisyllabic bases have an antepenultimate schwa.
4. Diphthongs only occur in the last syllable of a lexeme: $-\text{ay}$ and $-\text{aw}$ only occur lexeme finally (as in $\text{banj}$ ‘corpse’ and $\text{pulaw}$ ‘island’); $i\varphi$ and $u\varphi$ only occur before final $h$, and before Helfrich’s final $h$ (which does not occur in Aliana et al., see 2.4.1), e.g. $\text{kac}\varphi$ ‘small’, $\text{ilu}\varphi$ ‘beautiful’, $\text{bors}\text{\textipa{(h)}}$ ‘clean’, $\text{jau}\varphi(h)$ ‘far’.
5. There are two mid-vowels, one of which, $e$, does not occur in Helfrich (2.4.1); $o$ does occur in Helfrich, but not in final closed syllables.

Constraints on the distribution of consonants:

1. Inherited $h$ occurs only lexeme finally after $a$, $\varphi$ and $u\varphi$.
2. According to Aliana et al., semivowels occur initially, but in Helfrich no lexemes with initial $y$ are found, and only a few with initial $w$ (sixteen, of which at least seven are loanwords: $\text{wajib}$ ‘obligation; obligatory’, $\text{wakil}$ ‘representative, agent’, $\text{waris}$ ‘heir’ (all from AR), and $\text{watas}$ ‘frontier’, $\text{waraj}$ ‘term of address to parents of child-in-law’, $\text{wajik}$ ‘k.o. cake’, $\text{walaj (ati)}$ ‘depressed because of a misfortune or because of the refusal of a request’ (all from JV). $y$ does not occur adjacent to $\varnothing$ or $i$ (the [y] heard in this position is a non-phonemic glide, as in $\text{ar}\varphi$? [ayi?]? ‘water’, or $\text{siaj}$ [siya?] ‘(after)noon’).$^{48}$
3. $\varnothing$ does not occur initially; in inherited lexemes it occurs only in final position.
4. Voiced stops, $c$ and $\bar{n}$ never occur in final position.

$^{46}$See fn. 43.

$^{47}$According to Aliana et al. (pp.24.-25), the form $\text{ditagiyo}$ is the result of the contraction of $\varnothing$ (‘a’ in Aliana et al.) $+\ y$ to $y$.

$^{48}$In Helfrich these non-phonemic glides are usually represented in the spelling. $w$ occurs adjacent to $\varnothing$ or $\varnothing u$ in the following cases: (pisan) $\text{kawali}$ ‘k.o. banana’; $\text{kawarasan}$ (< JV) ‘recovered’; $\text{kwikkawik}$ (onomatopoeia for the sound of a kite); $\text{rawu}\varphi(h)$ ‘yell while calling s.o.’. In three other cases, $\text{sawida?} = \text{suida?}$ ‘sixty’ (< JV), $\text{nawon} = \text{naon}$ ‘fruits of the kamli\text{ng} tree that fell a long time ago’, and $\text{ma-lawun} = \text{na-lawun}$ ‘yell while calling s.o.’, the semivowel is also a non-phonemic glide. BSM also has $\text{rauh}$ ‘at, to(wards)’ (< JV), and $\text{xawuh}$ ‘long and slim (of people)’.
Clusters only occur intervocally. The occurring combinations are:

(a) homorganic nasal + stop, e.g. xumput ‘grass’, kɔntal ‘thick, coagulated’;
(b) ŋ + l or s, e.g. bʊŋsu, bɔŋsu ‘youngest child in a family’, bəŋlay ‘k.o. plant’;
(c) s + t (only in loanwords, like masti ‘certainly; have to, must’ (<JV));
(d) r, x + C

N.B. I have modified Helfrich’s spelling in the following ways:

<table>
<thead>
<tr>
<th>Helfrich</th>
<th>present spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>ā, a</td>
<td>a</td>
</tr>
<tr>
<td>dj</td>
<td>j</td>
</tr>
<tr>
<td>ē</td>
<td>ə</td>
</tr>
<tr>
<td>gr</td>
<td>x</td>
</tr>
<tr>
<td>i, i</td>
<td>i</td>
</tr>
<tr>
<td>i’ā</td>
<td>i̯</td>
</tr>
<tr>
<td>j</td>
<td>y</td>
</tr>
<tr>
<td>ng</td>
<td>ŋ</td>
</tr>
<tr>
<td>nj</td>
<td>ŋ</td>
</tr>
<tr>
<td>ō, o</td>
<td>o</td>
</tr>
<tr>
<td>o’ā</td>
<td>ʊ</td>
</tr>
<tr>
<td>oe, o</td>
<td>u</td>
</tr>
<tr>
<td>tj</td>
<td>c</td>
</tr>
<tr>
<td>-aj</td>
<td>-ay</td>
</tr>
<tr>
<td>-aw</td>
<td>-aw, -0</td>
</tr>
</tbody>
</table>

Glottal stop and the non-phonemic glides -(w)- and -(j)- are omitted from the present spelling.

The modifications I have made to the spelling of Aliana et al. are as follows:

<table>
<thead>
<tr>
<th>Aliana et al.</th>
<th>present spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>ia</td>
<td>i̯</td>
</tr>
<tr>
<td>ua</td>
<td>ʊ</td>
</tr>
<tr>
<td>ng</td>
<td>ŋ</td>
</tr>
<tr>
<td>ny</td>
<td>ŋ</td>
</tr>
<tr>
<td>e</td>
<td>e</td>
</tr>
<tr>
<td>gh, ġ</td>
<td>x</td>
</tr>
<tr>
<td>k</td>
<td>?</td>
</tr>
</tbody>
</table>

2.5 THE IBAN PHONEME SYSTEM
2.5.1 IBN PHONEMES

The IBN phonemes are as follows:

49Aliana et al. do not mention x as member of a cluster, but Helfrich gives ample evidence for it.
50For Helfrich’s SWY -aw (to which correspond BSM -aw and -o) Aliana et al. have -aw and -o. I will follow the orthography of the latter.
VOWELS

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high51</td>
<td>i</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td>mid52</td>
<td>e</td>
<td>a</td>
<td>o</td>
</tr>
<tr>
<td>low</td>
<td></td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

(diphthongs: -ay, -aw, -uy)

CONSONANTS

<table>
<thead>
<tr>
<th></th>
<th>labial</th>
<th>dental</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>stops</td>
<td>p</td>
<td>t53</td>
<td>c</td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td>voiceless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>n̄</td>
<td>n̄</td>
<td>y</td>
</tr>
<tr>
<td>fricatives</td>
<td>w</td>
<td>s</td>
<td></td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>semivowels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a, i and u each have long counterparts which are phonemically analysed as sequences of like vowels, e.g. maa? [maʔ] ‘k.o. fruit’, liiŋ [liːŋ] (loŋŋ) ‘grease’, tambuŋ [tambuŋ] in tambuŋ padi ‘paddy that is more advanced than the rest’ (cf. maʔ ‘a load, burden’, tambuŋ ‘staff, cudgel’, liŋ ‘term of address for youths’).

? and h occur only in final position.

k is a voiceless stop; in final position it is realised as a glottal stop, and is phonetically identical with ?.

-ay, -aw and -uy are phonemically sequences of a/u + a semivowel.

Stress falls on the penultimate syllable, unless this contains a schwa, in which case it falls on the last syllable. It is not phonemic, nor are there any other phonemically relevant suprasegmental features.

2.5.2 IBN MORPHOPHONEMIC ALTERNATIONS

A. The active verbal prefix N- brings about the following changes to a base:

51 i is an unrounded front vowel (between high and mid); before a final consonant other than ? it is realised as "a diphthong with movement from an unrounded front vowel closer than Cardinal [ε] to an unrounded central vowel", e.g. pautik ‘a spell’ is pronounced [pautèk] (Scott 1957:510).

52 u is an unrounded back vowel (between high and mid); before a final consonant other than ? it is realised as "a diphthong with movement from a rounded back vowel closer than Cardinal [o] to an unrounded central vowel", e.g. buluh ‘bamboo’ is pronounced [boloh] (Scott 1957:510).


54 The contrast between long and short vowels is ignored in the orthography (and also in Richards, see fn. 14). The advantage of analysing the long vowels as sequences of two identical vowels is that the resulting syllable structure conforms to the general word pattern of IBN (as a long vowel is either the only vowel in a lexeme, or, in a few cases, it occurs in a lexeme of which the preceding syllable has a schwa).

55 The difference between ?- and -k is distributionally determined: ?- is preceded by an unrounded open vowel [a], by monophthongic allophones of i and u, or by e and o. -k (like other final consonants) is preceded by a realised as an open front vowel [a], or by i or u realised as diphthongs.

A description distinguishing between ?- and -k is more economical than one distinguishing only ? besides two phonemic diphthongs ? and ?. Moreover, it reflects the historical development of the sounds in question.

56 Cf. Richards (1981:XIV-XV), who furthermore specifies that stress falls on the last syllable if the penultimate vowel is a schwa, unless this schwa is followed by a consonant cluster containing r + a consonant, or a homorganic nasal + stop.
(1) homorganic nasal substitution for initial stops, e.g.

(puaI): \( muaI \) 'empty out'
(bunuh): \( munuh \) 'kill'
(tusu): \( nusu \) 'suck the breast (babies)'
(doaat): \( ndaat \) 'beat'
(kirum): \( nirum \) 'send'
(gagay): \( nagay \) 'chase'
(campur): \( nampur \) 'mix'
(jambuy): \( nambuy \) 'expose to the sun'

(2) palatal nasal substitution for \( s-, \) e.g.

(sapu): \( napu \) 'blow (on s.th.)'

(3) velar nasal accretion before initial vowel, e.g.

(ayun): \( nyun \) 'swing'
(idar): \( ndar \) 'change, transfer, move'
(undaI): \( nudaI \) 'visit, attend'

(4) prefixation of \( n- \) before \( l \) or \( r \), or before a monosyllabic base, e.g.

(laban): \( nlaban \) 'oppose'
(riñat): \( nriñat \) 'be angry'
(ñut): \( nñut \) 'shake'

Non-monosyllabic verbs with initial nasal do not undergo any change.

B. The nominalising prefix \( n- \) is added to active verb forms (i.e. to nasalised verb forms as described in A), e.g.

(saup): \( n aup \) 'help', \( pñauñp \) 'helper'
(tōmu): \( nñmu \) 'know', \( pññmu \) 'knowledge'
(riñat): \( nriñat \) 'be angry', \( pñriñat \) 'anger'
(untμ): \( nuntμ \) 'give a share', \( pñuntμ \) 'profit'

C. The allomorphs of the intransitive verbal prefix \( nN- \) are homorganic to the following (voiceless) stop or \( s \). (From Asmah's examples as well as from the examples in the dictionary, it seems that \( nN- \) is always prefixed to bases with an initial voiceless stop or \( s \).) e.g.

(cabaw): \( nñcabaw \) 'cut, mow'
(tacan): \( nñtacan \) 'skim'
(saput): \( nñsaput \) 'breathe'
(puak): \( nñpuak \) 'be surrounded by'
(kapal): \( nñkapal \) 'be pressed down'

D. The intransitive verbal prefix \( b- \) has the following allomorphs: \( ^{58} \)

(1) usually \( b- \), and sometimes \( ba- \) (in free variation with the former) before a consonant, e.g.

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\(^{57}\) See fn. 19.

\(^{58}\) The grammatically determined allomorph \( pa- \) is not dealt with here (Asmah 1977:86).
(puñca): \( bapuñca \) ‘coloured’
(boris): \( baboris \) ‘drizzle’
(titi?): \( batiti?, batiti? \) ‘visit one another’

(2) before vowels the usual allomorphs are \( ba- \) and \( bər- \); these are in many cases in free variation with each other, and also with \( ba- \) and \( b- \); an allomorph \( bəl- \) also occurs, which sometimes freely alternates with \( bər- \), e.g.

(ulun): \( bəulun \) ‘regard as a slave’
(anak): \( boranak \) ‘give birth’
(ai?): \( borai?, bolai? \) ‘(be) watery’
(idar): \( bolidar \) ‘be transferred, move’
(umay): \( bəumay, bəmay \) ‘farm’
(utan): \( bəutan \) ‘be in debt’
(ikan): \( bəikan \) ‘contain fish’, and (with different meaning) \( bərikan \) ‘fishing’
(acuk): \( bəacuk, bəacuk \) ‘keep poking’

E. \( tə- \) (denoting non-volition, or the possibility of an action) has two alternates: \( tə- \) occurs before any phoneme, and \( t- \) occurs only before vowels, e.g.

(ulih): \( tulih \) ‘acquire by accident; be able to acquire’
(indik): \( təindik \) ‘tread on unintentionally; be able to tread on’
(pəda?): \( təpəda? \) ‘notice; be able to see’

F. The passive voice marker \( dı- \) has two allomorphs: \( dı- \) occurring before any verb, and \( d- \), which may be found before vowels, e.g.

(əmpa?): \( diəmpa?, dəmpa? \) ‘be eaten’
(dıga): \( didiŋa \) ‘be heard’
(ka-datay-ka): \( dikədatayka \) ‘be brought’

N.B. When \( ba-, tə- \) and \( di- \) are prefixed to a base with an initial vowel and the vowel of the prefix is maintained, a glottal stop is heard between the prefix and the following vowel, e.g. \( bəulun \) [bəulun], \( bəumay \) [bəumay], \( təindik \) [təindik?], \( dəmpa? \) [diiʔəmpa?].

2.5.3 IBN PHONOTACTIC CONSTRAINTS

The canonic shape of IBN lexemes is C V C V C. Each C can be \( ð \), and medial C can also be a cluster.\(^61\) Monosyllables, trisyllables, and tetrasyllables also occur.

Constraints on the distribution of vowels:

(1) Schwa does not occur in final syllables.
(2) Initial schwa is always followed by a nasal.
(3) As a rule, antepenultimate syllables contain a schwa.

\(^59\)Instances with initial vowels other than schwa are not found in Asmah (1977).
\(^60\)In Scott’s Systematic Spelling (Scott 1956:VII, 1957) there are also clusters in initial position (consisting of a stop or \( s \) preceded by a homorganic nasal). In my analysis these are \( sNC- \) sequences. This analysis is favoured by the case of \( ampa? \) (Scott: \( mpa? \)): Asmah gives \( dəmpa? \) (along with \( dımpa? \) [diʔəmpa?] as a derived form. Now \( d- \) is only prefixed to initial vowels, and a \( -dmp- \) consonant cluster would at any rate be very improbable.
\(^61\)See fn. 60.
(4) In penultimate syllables only a, ə, i, and u occur; o and e only occur lexeme finally or before .

(5) The ‘long vowels’, aa, ii and uu only occur in closed final syllables.

(6) Diphthongs only occur in final position.

Constraints on the distribution of consonants:

(1) Semivowels do not occur adjacent to schwa or to a vowel of the same colouring (the [y] heard between i and a/u, and the [w] heard between u and a/i, are non-phonemic glides).

(2) Voiced stops, c and ɟ, do not occur in final position.

(3) h and ɹ only occur in final position.

(4) Clusters consist of a stop or s preceded by an homorganic nasal.

N.B. The orthography I use for IBN is Scott’s Systematic Spelling, with a few modifications:

<table>
<thead>
<tr>
<th>Scott’s Systematic Spelling</th>
<th>present spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>e</td>
<td>e (in final syllables)</td>
</tr>
<tr>
<td>ch</td>
<td>œ (elsewhere)</td>
</tr>
<tr>
<td>ng</td>
<td>ʊ</td>
</tr>
<tr>
<td>ny</td>
<td>ɲ</td>
</tr>
<tr>
<td>cch</td>
<td>cɕɕ</td>
</tr>
<tr>
<td>nng</td>
<td>ɲɲɲ</td>
</tr>
<tr>
<td>nny</td>
<td>ɲɲɲɲ</td>
</tr>
<tr>
<td>q</td>
<td>ɹ</td>
</tr>
</tbody>
</table>

2.6 THE JAKARTANESE PHONEME SYSTEM

2.6.1 JKT PHONEMES

The JKT phonemes are as follows:

VOWELS

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i</td>
<td>ə</td>
<td>u</td>
</tr>
<tr>
<td>mid</td>
<td>é</td>
<td>ə</td>
<td>ɔ</td>
</tr>
<tr>
<td>low</td>
<td>ɛ</td>
<td>ə</td>
<td>ə</td>
</tr>
</tbody>
</table>

(diphthongs: -ay, -aw, -ey, -oy)

---

62See fn. 52.
63An apparent exception in Scott is ‘wong’ (‘rapids’) which, however, he analyses phonemically as ụụŋ.
65In Scott ‘cch’, ‘nng’ and ‘nny’, are intended to represent geminated versions of c, ɡ and ɲ. In Scott’s Systematic Spelling there are initial consonants: the schwa which is sometimes heard between initial consonants is considered to be non-phonemic. I consider this schwa as phonemic, and analyse Scott’s geminated consonants as Cɕɕ sequences.
CONSONANTS

<table>
<thead>
<tr>
<th></th>
<th>labial</th>
<th>supralental</th>
<th>alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>stops</td>
<td>voiceless</td>
<td>p</td>
<td>t^66</td>
<td>c</td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>voiced</td>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>n̂</td>
<td>nj</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>fricatives</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>liquids</td>
<td>w</td>
<td></td>
<td>r, l</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ó and ò are in phonemic opposition, e.g. gülón ‘weep, cry heavily’, and gülön ‘go west’. So are é and è, e.g. gulé ‘k.o. curry soup’, and gulè ‘sugar’; but generally speaking the distinction between ó and ò is rather weak.67

As a rule, diphthongs only occur in lexeme-final position.68 They are actually sequences of vowels + semivowels.

h occurs initially only in loanwords, and finally only in exclamations and particles. In inherited lexemes it occurs intervocally between like vowels. This intervocalic h sometimes alternates with ð, and is never in contrast with it (Muhadjir 1981:20).

N.B. According to Abdul Chaer (pp.XXVI-XXVII), forms with initial c can also have nasal accretion,69 e.g. ācari, and (cium): āciu̯m, āniu̯m ‘kiss’; they can also have qa- prefixed, but Abdul Chaer does not give examples;

(2) palatal nasal substitution for s, e.g.

(simpon): ŋimpon ‘save, put away’

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66C.D. Grajns informs me that in JKT t is a supradental, whereas d and n are alveolars. This observation is not made in Abdul Chaer, Ikranagara or Muhadjirl.

67Muhadjir (1981:15) treats ó and ò as one phoneme in a seven-vowel system which looks as follows: low-central a; low-front e; mid-front e; schwa ò; mid-back ou; high-front i; high-back u.

Ikranagara (1980:113) distinguishes a system with six vowels: low a; mid e, ø and ò; high i and u. These underlying vowels generate 14 surface vowels, i.e. [a], [i], [e], [u], [o], [a]; four lax counterparts of the non-low tense vowels: [i], [e], [u], [o]; and four non-low tense vowels with off-glides: [iy], [ey], [uw], [ow]. She does not distinguish between ó and ò in the way Abdul Chaer does, and she treats Abdul Chaer’s e as a surface vowel representing underlying a.

68In the Introduction to his dictionary, Abdul Chaer (p.XXII) gives eyt as an example of a diphthong in non-final position. But this is an exclamation, and there are no other known examples of non-final diphthongs.

69See fn. 19.
(3) homorganic nasal accretion before initial voiced stops, e.g.

(bo?on): mbo?on 'lie, tell untruths'
(d?ak?at): nd?ak?atin 'approach, get near'
(gali): ngali 'dig'
(jual): njual70 'sell'

N.B. Verbal bases with initial voiced stops can also be prefixed by ?a- in free variation with the above device, e.g. ?a?d?ak?atin, ngali, ?a?jual, ?a?bo?on.

(4) velar nasal substitution for h, e.g.

(hargè (< SKT)): nargain 'give a price to, evaluate, bargain for'

(5) velar nasal accretion before initial vowel, e.g.

(atur): natur 'arrange, organise'
(ikut): ?ikut 'follow'
(?ôbrôl): ?ôbrôl 'chatter'

In other cases either ?a- is prefixed (i.e. before initial ?, ?, ?, and ?), or ø is prefixed (i.e. if the initial consonant is a nasal). Prefixation of ?a- also takes place before monosyllabic bases (which are usually loanwords), e.g.

(kir): ?akir 'examine (medically), test (mechanically)'
(pêl): ?apêl 'wash floors, mop' (< DU dweilen 'mop')

B. The intransitive verbal prefix b(r)- has six allomorphs:

(1) b- occurs before any consonant; it sometimes also occurs before a vowel; e.g.

(bisik): babisik 'whisper'
(darè): b?adarè 'bleed'
(tarô): batarô 'bet'
(jalan): b?ajalan 'walk'
(carè): b?acrè 'divorce'
(abang): b?abang 'have an older brother'

(2) b- occurs before liquids (and alternates with b-), e.g.

(laga?): b?alaga? 'behave'
(rasè): brasè, b?rasè 'feel'

(3-4) b?r-, and b?- are in free variation before vowels, e.g.

(alan): b?ralan, bralan 'prevented'
(untun): b?runtun, runtun 'lucky'
(ômpat): b?ômpat, ômpat 'be four'

70 See fn. 19.
(5) 

\[ b? \]

is mainly used before base forms which begin with a vowel in a closed syllable (and is sometimes in free variation with \[ b- \]), e.g.

\[
\begin{align*}
\text{arti}: & \quad b?\text{arti} 'mean' \\
\text{ampröć}: & \quad b?\text{ampröć} 'meet' \\
\text{amprö}: & \quad b?\text{amprö} 'have an older sister' \\
\text{abaŋ}: & \quad b?\text{abaŋ}, b?\text{abaŋ} 'have an older brother'
\end{align*}
\]

N.B. Whether there is any semantic difference between \[ b- \] and \[ b?- \] before initial vowels is not clear from Muhadjir’s description.

(6) \[ bl- \] only occurs with ajar viz. blajar ‘learn’.

C. Final \( e \) of a base becomes \( a \) when \( -an \) or \( -in \) is suffixed, e.g.

\[
\begin{align*}
\text{lupè}: & \quad kə\text{lupaan}, \text{lupaan} 'forgotten', \text{lupain} 'forget' \\
\text{lamè}: & \quad \text{lamaan} 'later', \text{lamain} 'prolong, extend; delay'
\end{align*}
\]

2.6.3 JKT PHONOTACTIC CONSTRAINTS

The canonical shape of JKT lexemes is C V C V C. Monosyllables, trisyllables and, to a lesser extent, tetrasyllables, also occur. Each C can be \( \phi \) or (except morpheme finally) a cluster (see below).

Constraints on the distribution of vowels:

(1) As a rule, only schwa occurs as an antepenultimate vowel.

(2) Initial schwa only occurs before a nasal or a liquid, except for \( acə\text{coan} \) ‘at random’;

Abdul Chaer also has ‘eyang’ which is erroneous for ‘éyang’, cf. JV (polite) and SUN éyan ‘grandparent’.

(3) \( a \) and schwa do not occur in word-final position (this rule applies specifically to the isolect of Mester; there are other JKT isolects with final \( a \) or \( a \)).

(4) Diphthongs only occur in lexeme-final position (see above).

Constraints on the distribution of consonants:

(1) Palatals do not occur in final position, nor do voiced stops. Although Adbul Chaer includes many entries with orthographical final ‘b’, ‘d’, and ‘g’, and gives some potential minimal pairs for final \( g \) and \( k \) (e.g. \( dədəg \) ‘terrain, surface’, and \( dədək \) ‘bran’), according to Muhadjir there are only a few lexemes with final \( p \), \( t \), or \( k \), which undergo voicing of the final consonant when they take the suffixes \( -in \) or \( -an \). The examples (six in number) given by Muhadjir appear to be all loanwords.\(^{71}\)

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\(^{71}\) viz. \( gə\text{bug} \) ‘hit with s.th.’, \( gə\text{bugin} \) ‘hit repeatedly’; \( k\text{rukup} \) ‘blanket’, \( k\text{rukuban} \) ‘covered with a blanket’;

\( uruk \) ‘put in the ground’, \( k\text{urugan} \) ‘buried’ (all from JV); \( j\text{awabin} \) ‘answer (n)’, \( j\text{awabi} \) ‘answer (v)’; \( m\text{ulut} \) ‘anniversary of Mohammed’s birth’, \( m\text{uludan} \) ‘celebrate the birthday of Mohammed’ (both from AR); \( p\text{arut} \) ‘grater’, \( p\text{arudin} \) ‘grate’ (\textless{} SUN).
Clusters occur initially and intervocally; many combinations of consonants are found. The common patterns are:

(a) for initial clusters:
- homorganic nasal + stop, e.g. mbok ‘brother’s wife’, nga/ngè ‘no, not’, nkøn ‘grandparent’, nkali (short for barankali) ‘perhaps’;
- stop (other than j or c) + r, and stop (other than d, t, j or c) + l, e.g. kriukkriuk ‘rumblings of the stomach (from hunger)’, trèm (tarèm) ‘tram, streetcar’ (< DU), tròtòl-an ‘full of sunspots’, klik ‘clique’ (< DU), γ-grèmbèγ ‘swaying (of walk)’.

(b) for intervocalic clusters:
- homorganic nasal + stop, e.g. rambut ‘hair’, pundak ‘shoulder’, banjé ‘corpse’, nanti ‘wait; soon’, ampàt ‘four’; and
- velar nasal + s, e.g. bapsè ‘people’, tansi ‘barracks’.

(c) for intervocalic clusters (less common clusters, mainly occurring in loanwords and onomatopoeia):
- stop or s + liquid, e.g. göblık ‘dumb, stupid’, ṣ-gàbrak ‘hit hard with both hands; threaten’, capełók I. ‘stamp’; II. ‘fried egg’, pòblöt ‘pencil’ (< DU potlood), bâlè ‘seizure’ (< DU beslag), pòkról ‘solictor’ (< DU prokureur), màsè ‘close, intimate’ (< SKT), gàsrèk, ikàn – ‘k.o. dried fish of inferior quality’;
- nasal + homorganic stop + liquid, e.g. santrònın ‘rush on s.th.’, sàlòmprèt ‘trumpet’ (< DU), ñ-ólnplòk ‘gather’;
- velar nasal + s + r, sànsràn (sànsàn) ‘caught in, hooked on’;
- r + stop or s, e.g. parban ‘bandage’, parsèn ‘present’ (both from DU), gàrtàk ‘noise made to frighten someone’;
- velar nasal + liquid, e.g. buplòn ‘chameleon’, ràpràn ‘k.o. red ant’;
- velar nasal + heterorganic stop, e.g. dàpdè ‘punishment, fine’ (< SKT), anpàw ‘k.o. gift in an envelope’ (< CHI), tònòn ‘see, watch (a performance etc.)’, òñjì ‘issuing of a licence’ (< CHI?);
- r + l, e.g. bàrtian ‘brilliant, diamond’ (< DU), parlu ‘have to, need’ (< AR);
- s + stop, e.g. màstì ‘must’ (< SKT), pistòl ‘pistol’ (< DU), miskin ‘poor’ (< AR), ñspàl ‘asphalt’ (< DU).

(3) In inherited lexemes h only occurs intervocically between like vowels. It sometimes alternates with ?, as in puhun, pu?un ‘tree’.

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72 Grijns says that most bases with an initial cluster have a variant form with an epenthetic schwa between the consonants. Whether a group of consonants is realised as a cluster or acquires an epenthetic schwa depends among other things on the number of syllables in the lexeme. Disyllabism is favoured in the canonical shape of JKT lexemes, and the insertion of ∑ would often result in more than two syllables. Nevertheless, there are inherited JKT lexemes which always occur with an initial consonant cluster, and which can form a contrasting minimal pair with lexemes containing a schwa. They may have a sound-symbolic value, in which case they have an initial cluster consisting of a stop or s + a liquid. Sometimes they are the result either of extension of a monosyllabic lexeme, or of reduction of another (non-monosyllabic) lexeme, in which case they have an initial cluster consisting of a nasal + a homorganic stop. (Grijns 1981:19-28). In the word-structural interpretation underlying Abdul Chaer’s dictionary, initial clusters of s + a liquid do not occur.

73 This list of clusters is not exhaustive (Abdul Chaer 1976:passim).
In initial position semivowels occur in some lexemes, but these lexemes are recognised as loans. In intervocalic position y is found preceding final e (as in bahayē 'danger') but it is a non-phonemic glide when following a front-vowel. (This glide is orthographically represented in Abdul Chaer in one lexeme, reyēt 'run down, ruined, broken' (a variant of reōdt, reōdt, and a SUN loan). Adjacent to a, y is probably not inherited.74 w occurs adjacent to a, ə, e, è or i; following u, ō or ō it is a non-phonemic glide [w].

74 Abdul Chaer gives 17 lexemes with y adjacent to a. Of these, 12 can be explained as loanwords, i.e.
(a) (probably from JV) ayam 'calm, at ease', ayāy-a-yāy-an 'turn around, walk around aimlessly, doing things without sense, like s.o. insane', bayam 'k.o. vegetable, amaranth', ampayak (also ampiaqik) 'penthouse, lean-to', gayam 'ruminate', puyam 'weep long and silently', uyāg-uyāg (puyāg-puyāg) 'massage the knee with palm of hand', puyāp 'dizzy, having a headache';
(b) (probably borrowed from SUN) riyēp (actually an orthographic variant of riyp) 'become dark' (SUN riyp 'id. 3. f.);
(c) (borrowed from DU) bayonēt 'bayonet', puyār 'powder';
(d) ayāq, which is an erroneous spelling of ēyāq 'grandparent' (borrowed from JV or SUN, cf. JV, SUN ēyāq).

In one case y is an orthographically represented non-phonemic glide: kiyēk-kivek 'the peeping of young chickens' (an onomatopoeic form), I analyse this form phonemically as kīk-kīk. The four remaining cases are: dampayak 'overgrown, with branches low to the ground', gayam 'calm, quiet' (~ ayam?), puyam 'dirt', kalayān, kaliyān 'dizzy, having a headache'.


CHAPTER 3

THE RECONSTRUCTION OF PROTO MALAYIC PHONEMES

In this chapter a reconstruction is made of PM phonemes on the basis of correspondences found in the six isolects. The following reconstructions (with different reflexes in the isolects) are treated, and are reflected in the proto-lexemes occurring in the following pages:

* a > SM, BH, IBN a, MIN a/o/e, SWY a/-o, JKT a/-è (3.1.1, 3.1.1.1, 3.1.1.3, 3.1.1.4); penultimate *ə > SM, SWY, IBN, JKT ə, MIN, BH a (3.1.1, 3.1.1.2); final-syllable *ə > SM, BH, SWY, IBN a, MIN a/o/e, JKT ə (3.1.1.5);
* i > BH, IBN i, SM i/e, MIN i/i'/e, SWY i/i', JKT i/é/e (3.1.2, 3.1.2.1, 3.1.2.3);
* u > BH, IBN u, SM u/o, MIN u/u'/u/a/o, SWY u/u'/u/o, JKT u/o/o (3.1.2, 3.1.2.2, 3.1.2.4);
* A > MIN, BH a, o.i. ə (3.1.3, 3.1.3.1); * ay > JKT -é, o.i. -ay (3.2, 3.2.1);
* aw > JKT -o, o.i. -aw (3.2, 3.2.2);
* p > MIN -t, o.i. -p (3.4.2, 3.4.2.1);
* t > MIN -t, o.i. -t (3.4.2, 3.4.2.2);
* k > MIN, SWY -t, o.i. -k (3.4.2, 3.4.2.3);
* ? > IBN -?, o.i. -? (3.4.2, 3.4.2.4);
* b1 *a _ *a > IBN b, o.i. w (3.5, 3.5.1);
* -m1 *(i,u) _ R > MIN -n, o.i. -m (3.6.3, 3.6.3.1);
* r > SWY x/r, MIN r/-ø, o.i. r (3.7, 3.7.3, 3.7.4, 3.7.5);
* s > MIN -h, o.i. -s (3.8, 3.8.2);
* h (non-final) > BH h, SM h/ø, o.i. ø (3.9, 3.9.1);
* h (between like vowels, or between V_1 and *ə) > IBN, SWY ø, o.i. h (3.9, 3.9.2); * ø > BH, SWY, IBN ø, o.i. h between like vowels (3.10).

3.1 THE PM PLAIN VOWELS

3.1.1 PM *a AND *ə

In all isolects a occurs in both the penultimate and final syllable. In JKT ə occurs in all syllables, while in SM, SWY, and IBN, it occurs only in non-final syllables.

Penultimate a and ə agree in SM, SWY, IBN, and JKT, whereas MIN and BH show a for both. As the distinction between a and ə in SM, SWY, IBN, and JKT penultimate syllables is not conditioned and reflects a PMP distinction, I reconstruct PM *a and *ə.

In closed final syllables a agrees in SM, BH, SWY and IBN, and this a corresponds to MIN a, e, ø, and JKT a, ø or è: MIN has a corresponding e before -? which developed from PM *t (cf. 3.4.2, 4.3.2.2) and before -h which developed from PM *s (3.8, 3.8.2); it has a corresponding o before -? which developed from PM *p (3.4.2, 3.4.2.1), see also (C) last N.B. below; otherwise it has a.
JKT has -ë corresponding to SWY -a(h), other isolects -ah (PM *-h was lost in JKT (3.9, 3.9.3). Before other final consonants it has a or a, and there is no conditioning factor for the distinction between these vowels.

In open final syllables, SM, BH, IBN a corresponds to MIN, SWY o, JKT è.

**TABLE 2: CORRESPONDENCES OF a AND ø FOUND IN THE SIX ISOLECTS**

<table>
<thead>
<tr>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
</tr>
</thead>
<tbody>
<tr>
<td>antepenultimate</td>
<td>ø</td>
<td>a</td>
<td>a</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>syllable</td>
<td>ø</td>
<td>i</td>
<td>i</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td></td>
<td>ø</td>
<td>u</td>
<td>u</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>penultimate</td>
<td>ø</td>
<td>a</td>
<td>a</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>syllable</td>
<td>ø</td>
<td>a</td>
<td>a</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>final closed</td>
<td>a</td>
<td>a/e/o</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>syllable</td>
<td>a</td>
<td>a/e/o</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td></td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>ø</td>
</tr>
<tr>
<td>final open</td>
<td>a</td>
<td>o</td>
<td>a</td>
<td>o</td>
<td>a(?)</td>
</tr>
<tr>
<td>syllable</td>
<td>-ap</td>
<td>-o?</td>
<td>-ap</td>
<td>-ap</td>
<td>-ap</td>
</tr>
<tr>
<td>(more specified)</td>
<td>-ap</td>
<td>-o?</td>
<td>-ap</td>
<td>-ap</td>
<td>-ap</td>
</tr>
<tr>
<td></td>
<td>-at</td>
<td>-e?</td>
<td>-at</td>
<td>-at</td>
<td>-at</td>
</tr>
<tr>
<td></td>
<td>-at</td>
<td>-e?</td>
<td>-at</td>
<td>-at</td>
<td>-at</td>
</tr>
<tr>
<td></td>
<td>-ak</td>
<td>-a?</td>
<td>-ak</td>
<td>-a?</td>
<td>-ak</td>
</tr>
<tr>
<td></td>
<td>-ak</td>
<td>-a?</td>
<td>-ak</td>
<td>-a?</td>
<td>-ak</td>
</tr>
<tr>
<td></td>
<td>-al</td>
<td>-a</td>
<td>-al</td>
<td>-al</td>
<td>-al</td>
</tr>
<tr>
<td></td>
<td>-al</td>
<td>-a</td>
<td>-al</td>
<td>-al</td>
<td>-al</td>
</tr>
<tr>
<td></td>
<td>-ar</td>
<td>-a</td>
<td>-ar</td>
<td>-ax,-ar</td>
<td>-ar</td>
</tr>
<tr>
<td></td>
<td>-ar</td>
<td>-a</td>
<td>-ar</td>
<td>-ax,-ar</td>
<td>-ar</td>
</tr>
<tr>
<td></td>
<td>-as</td>
<td>-eh</td>
<td>-as</td>
<td>-as</td>
<td>-as</td>
</tr>
<tr>
<td></td>
<td>-as</td>
<td>-eh</td>
<td>-as</td>
<td>-as</td>
<td>-as</td>
</tr>
<tr>
<td></td>
<td>-ah</td>
<td>-ah</td>
<td>-ah</td>
<td>-a(h)</td>
<td>-ah</td>
</tr>
<tr>
<td></td>
<td>-ay</td>
<td>-ay</td>
<td>-ay</td>
<td>-ay</td>
<td>-ay</td>
</tr>
<tr>
<td></td>
<td>-a</td>
<td>-o</td>
<td>-a</td>
<td>-o</td>
<td>-a</td>
</tr>
<tr>
<td></td>
<td>-a</td>
<td>-o</td>
<td>-a</td>
<td>-o</td>
<td>-a?</td>
</tr>
</tbody>
</table>

Since the occurrence of JKT a and ø in final closed syllables is not conditioned, I will take JKT as a test language for the reconstruction of PM *a and *ø in final syllables (before a final C other than *h or *ø).

The interpretation of JKT final-syllable ø however needs further investigation. JKT has borrowed heavily from JV, SUN, Balinese, and Sasak, which are closely related to the Malayic group and which maintain schwa in final syllables. One could argue that lexemes with final-syllable ø came into JKT through borrowing. There are, however, several reasons
for assuming that JKT final-syllable \( \emptyset \) is inherited and reflects PMP *e (schwa), and for reconstructing PM *\( \emptyset \) on the basis of it.

A. In Blust's 200-item basic wordlist for PMP (see 5.7), there are 32 reconstructions with final-syllable *a or *e and a final C other than *q which have a JKT reflex (PMP *q became h or \( \emptyset \) in the Malayic isolects, cf. 7.1). PMP and JKT agree in their distribution of *a/a and schwa, as can be seen from the following list (if the meaning of the JKT reflex differs from PMP, this meaning is given next to the JKT reflex):

<table>
<thead>
<tr>
<th>PMP</th>
<th>JKT</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. *ka-wanan</td>
<td>k/anan</td>
<td>right side</td>
</tr>
<tr>
<td>6. *Zalan</td>
<td>jalan</td>
<td>road, path</td>
</tr>
<tr>
<td>15. *tuqelan</td>
<td>tulan</td>
<td>bone</td>
</tr>
<tr>
<td>21. *DemDem</td>
<td>dan(\emptyset) ‘grudge, think, meditate, revengeful feeling’</td>
<td>think, meditate, brood</td>
</tr>
<tr>
<td>25. *liqeR</td>
<td>lêhêr</td>
<td>neck</td>
</tr>
<tr>
<td>37. *ka?en</td>
<td>ma/kan</td>
<td>eat</td>
</tr>
<tr>
<td>42. *isep</td>
<td>isap</td>
<td>suck</td>
</tr>
<tr>
<td>44. *depeR</td>
<td>dêñor</td>
<td>hear</td>
</tr>
<tr>
<td>47. *(ma)-huab</td>
<td>uap</td>
<td>yawn</td>
</tr>
<tr>
<td>49. *inep</td>
<td>inop ‘spend night’</td>
<td>lie down (sleep)</td>
</tr>
<tr>
<td>56. *anak</td>
<td>anak</td>
<td>child</td>
</tr>
<tr>
<td>62. *gatep</td>
<td>atap</td>
<td>roof, thatch</td>
</tr>
<tr>
<td>66. *ikut</td>
<td>ikôt</td>
<td>tie up, fasten</td>
</tr>
<tr>
<td>81. *tazem</td>
<td>tajom</td>
<td>sharp</td>
</tr>
<tr>
<td>89. *gemgem</td>
<td>gëngëm</td>
<td>hold (in the fist)</td>
</tr>
<tr>
<td>104. *mëñak/miñak</td>
<td>miñak ‘oil’</td>
<td>fat, grease</td>
</tr>
<tr>
<td>111. *ihekan</td>
<td>ikan</td>
<td>fish</td>
</tr>
<tr>
<td>115. *akaR/*wakaR,</td>
<td>akar</td>
<td>root</td>
</tr>
<tr>
<td>18. uRat</td>
<td>urat ‘vein, tendon’</td>
<td>root</td>
</tr>
<tr>
<td>127. *qutan</td>
<td>utan</td>
<td>woods, forest</td>
</tr>
<tr>
<td>129. *bulan</td>
<td>bulan</td>
<td>moon</td>
</tr>
<tr>
<td>133. *quZan</td>
<td>ujan</td>
<td>rain (n)</td>
</tr>
<tr>
<td>135. *kilat</td>
<td>kilat</td>
<td>lightning</td>
</tr>
<tr>
<td>138. *(ma)-panas</td>
<td>panas ‘warm, hot’</td>
<td>warm, of weather</td>
</tr>
<tr>
<td>142. *(ma)-beReqat</td>
<td>bërat</td>
<td>heavy</td>
</tr>
<tr>
<td>147. *(ma)-qitem</td>
<td>itam</td>
<td>black</td>
</tr>
<tr>
<td>165. *Zaqat/*Zaqet</td>
<td>jahat</td>
<td>bad, evil</td>
</tr>
<tr>
<td>166. *(ma)-bener</td>
<td>bëñor</td>
<td>correct, true</td>
</tr>
<tr>
<td>174. *gi Dalem</td>
<td>dalam</td>
<td>in, inside</td>
</tr>
<tr>
<td>175. *a ta?as</td>
<td>atas</td>
<td>above</td>
</tr>
<tr>
<td>196. *bilaŋ</td>
<td>bilaŋ (also ‘say’)</td>
<td>count (v)</td>
</tr>
<tr>
<td>200. *hepat</td>
<td>ampat</td>
<td>four</td>
</tr>
</tbody>
</table>

N.B. two apparent exceptions, *ka?en > JKT ma/kan and *liqeR > JKT lêhêr are explained in sections 4.5 and 3.1.1.5 IC respectively; see also 3.1.1.5 IC for *zaqat/zaqet > JKT jahat.
A broader picture of this correspondence is obtained by comparing JKT with the vocabulary of Dempwolff (1938). This comparison yields 324 lexemes which have JKT reflexes, and of these the following do not match:

<table>
<thead>
<tr>
<th>PMP</th>
<th>JKT</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ancam</td>
<td>ańcam</td>
<td>'threaten'</td>
</tr>
<tr>
<td>*bulat</td>
<td>bulet</td>
<td>round, circular</td>
</tr>
<tr>
<td>*deRas</td>
<td>dəras</td>
<td>'fast, rapid'</td>
</tr>
<tr>
<td>*degan</td>
<td>dəgan</td>
<td>'with'</td>
</tr>
<tr>
<td>*DeDak</td>
<td>dədək</td>
<td>Bran</td>
</tr>
<tr>
<td>*zinak</td>
<td>jinek</td>
<td>tame</td>
</tr>
<tr>
<td>*asap</td>
<td>așap</td>
<td>smoke</td>
</tr>
<tr>
<td>*(h(ei)(N)Zam)</td>
<td>p/ińjəm</td>
<td>borrow</td>
</tr>
<tr>
<td>*(i(n)zak)</td>
<td>ińjək</td>
<td>'step (v)'</td>
</tr>
<tr>
<td>*cecak</td>
<td>cəcek, cəcek</td>
<td>gecko, house lizard</td>
</tr>
<tr>
<td>*seDaŋ</td>
<td>sədaŋ</td>
<td>'medium, enough'</td>
</tr>
<tr>
<td>*rankap</td>
<td>rankap</td>
<td>'a pair'</td>
</tr>
<tr>
<td>*pantas</td>
<td>pantəs</td>
<td>'capable, correct'</td>
</tr>
<tr>
<td>*pesan</td>
<td>pəsan</td>
<td>'order, direction, command'</td>
</tr>
<tr>
<td>*putat</td>
<td>pətət, pətət</td>
<td>name of a tree</td>
</tr>
<tr>
<td>*cepat</td>
<td>cəpat</td>
<td>exchange</td>
</tr>
<tr>
<td>*tukar</td>
<td>tukəɾ</td>
<td>mend, repair</td>
</tr>
<tr>
<td>*tambal</td>
<td>tambal</td>
<td></td>
</tr>
<tr>
<td>*taŋkap</td>
<td>taŋkəp</td>
<td>'a pair'</td>
</tr>
<tr>
<td>*tegag</td>
<td>tegəŋ</td>
<td>firm, steadfast</td>
</tr>
<tr>
<td>*teman</td>
<td>təmən</td>
<td>'companion'</td>
</tr>
<tr>
<td>*tikar</td>
<td>tikəɾ</td>
<td>be used to</td>
</tr>
<tr>
<td>*tikam</td>
<td>tikəm</td>
<td>stab</td>
</tr>
<tr>
<td>*baDer</td>
<td>badəɾ</td>
<td>k.o. fish</td>
</tr>
<tr>
<td>*zelateŋ</td>
<td>jəlatəŋ</td>
<td>'stinging nettle'</td>
</tr>
<tr>
<td>*Re(n)teŋ</td>
<td>rəntəŋ</td>
<td>stretch out</td>
</tr>
<tr>
<td>*puket</td>
<td>pukət</td>
<td>drag-net, trawl-net</td>
</tr>
<tr>
<td>*qu(n)tek</td>
<td>otək</td>
<td>brain</td>
</tr>
<tr>
<td>*tempet</td>
<td>tampət</td>
<td>abode</td>
</tr>
<tr>
<td>*tilem</td>
<td>tiləm</td>
<td>mattress</td>
</tr>
<tr>
<td>*iheq</td>
<td>kəm/ih</td>
<td>urine</td>
</tr>
</tbody>
</table>

Several of these reconstructions can now be reinterpreted (all with final-syllable *e instead of final *a):

2. *bulat must be *buled on account of PMJ *buləd (Nothofer 1975:138).

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75Dempwolff’s reconstructions are given in Dyen’s orthography for PAN/PMP, as modified by Blust. The representation of these reconstructions also follows their reinterpretation by Dyen and later Austronesianists. However, I present Zorc’s evidence for PAN *-S, *-H, *-7 > IBN *-7 in the orthography used in Zorc (1982). When the difference between PMP and PAN is not relevant for the argument, I refer to PMP. The main difference between PAN and PMP phonology is constituted by the following mergers:
PAN *-S, *-H > PMP *h,
PAN *tand *C > PMP *t, and
PAN *n and *N > PMP *n.
As I already stated in the introduction, I will represent proto-phonemes as I find them in the lexical instances in the linguistic literature.
3. *deRas must be *deRes on account of Ngaju dehes (Dyen 1956: passim).
4. *dejan is attested in Toba and Ngaju (Dempwolff 1938) and furthermore in Sasak (dajan ‘accompany’), but in SUN one finds dinin ‘all that is eaten with rice; side-dish’, which makes a reconstruction of PMP *dejen at least as warranted as *dajan (it is not unlikely that the Toba, Ngaju and Sasak correspondences are borrowed from SM).
5. *DeDak is not a valid reconstruction. Dempwolff made it on the basis of Tagalog lalak, Toba dodak, JV dacak, and SM dak ‘bran’. Lalak is not found in the dictionaries, but there is darak ‘bran’, which is a Malay loanword according to Wolff (1976:366). In JV dacak occurs as well as dak, but Old Javanese only has dacak. Although there is at first sight no reason to consider Toba dodak a loan,76 corresponding forms in other languages justify this assumption, cf. Balinese dodak, dakdak, Madurese dhakdhak (and Old Javanese dacak). The shape of a P(W)MP proto-lexeme for ‘bran’ should therefore be *DekDek.
7. *asap should be *qasep on account of PMJ *hasap (Nothofer 1975:171).
8. *h(ei)(N) Zam has two correspondences which reflect PMP *e: SUN inijim and Kroel-Lampong ni-injam (Helfrich 1891), both meaning ‘borrow’, which warrants the reconstruction of a doublet *inzem.
9. *i(n)zak has also two other correspondences reflecting PMP *e: Mansaka indig (Philippines) and Tagalog t-indig ‘stand (v)’ point to a doublet *inzeg.
10. *ceczak is not a valid reconstruction: Toba sosak is probably a loan from SM,77 and Ngaju tasak, Malagasy tsatsaka have an irregular vowel (cf. Dempwolff 1938); on the other hand, Balinese and Sasak have cacacak which is regular. Balinese, Sasak cacacak, Timugon Murut sosok, Proto Philippine *cececek (Zorc 1971) and SM cacak point to PMP *cececek; JKT cacak/cacak may be a loan from Balinese or Sasak on account of the intervocalic cluster in cacak.
11. *seDal must be *seDel on account of PMJ *sodol (Nothofer 1975:154).
16. *cepat is not valid: Ngaju capat is a Malay loan (on account of its first vowel), and Sa’a toha ‘rejoice’ does not agree very well semantically. On the basis of Toba sopot ‘untimely, premature’ and Balinese cepat ‘precise, accurate; fast, accurate (mind)’, PWMP *cepet is more plausible.
19. *takkap should be *tak(η) kep on account of Toba tahop;78 Ngaju takep, takep/an, kep/an ‘put on, pulled on (clothes); be attached, fastened, tied to’, SUN takkip ‘put one’s arm around s.th.; wrap its roots, around s.th. (of plants); entwine, clasp’, and JV takkap ‘caught, seized, arrested’. Toba takkap [takkap] and Ngaju takkap (in Dempwolff 1938) must be loans.

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76Dodak is the regular term for ‘bran’ in Toba as well as in other Southern Batak isolects (viz. Angkola-Mandailing and Simalungun). But the Southern Batak isolects also have uhut (Toba- and Simalungun), ut (Angkola-Mandailing) with this meaning, and Karo (which is Northern Batak) does not have a form corresponding to dodak (it has kodap for ‘bran’).
77Sosak is found in Van der Tuuk but not in either Tambunan (1977) or Warneck (1977); the usual Toba term for ‘gecko’ is ilk. Toba-Batak sosak is not compatible with PMP *cececek (*soksok would have been a regular reflex), and it is probably borrowed from SM.
78Cf. Van der Tuuk (tahop) manahop ‘put one’s arm around s.o., as in wrestling; seize s.th. in its claws, as a vulture’; also takkop [takkop] ‘fit, of clothes’; Tambunan tahop ‘fishing net’; Warneck tahop/tahop ni bodil ‘cock of a gun’.
22. *tikar was reconstructed on the basis of SM tikar and Malagasy tsihy. But it should be reinterpreted as *tikeR on account of Bisaya and Bicol tikog, Ilokano tiker ‘reed-mace, cattail’ (cf. Conant 1911:80). This is not inconsistent with Malagasy tsihy ‘mat’ which could reflect either *tikar or *tikeR (but not *tikar).

Apart from these interpretations there is also the irregular JKT kômih, which must be a loan from another Malayan isolect because of its -h.

Of the 31 correspondences which do not match, 14 can be explained through erroneous reconstructions in Dempwolff (1938) or through borrowing (as with kômih), which leaves 17 irregular correspondences, or 5.55 per cent of the 324 tested ones. This quantitative evidence makes it difficult to believe that JKT final-syllable o does not reflect PMP *e.

B. If PMP *e in fact became JKT a in final syllables, one would have to assume that almost all inherited JKT lexemes containing a (≠ o) in this position were replaced by cognate loanwords from JV, SUN, Balinese, or Sasak, and that no Malayan isolect interfered in this process. But Malayan isolects (especially SM) have had considerable influence on the JKT lexicon. Furthermore, one would then have to explain a number of JKT lexemes with final-syllable a which have cognates only in other Malayan isolects, or which have cognates in JV, SUN, Balinese, and/or Sasak which agree far better with cognates in other Malayan isolects in other (phonological, semantic, and formal) aspects. For instance, the following cognate sets appear not to have cognates in isolects outside the Malay group:79

JKT sampat, garam: see (C) below;

JKT diam, IBN diaw (3.2.3), o.i. diam ‘be quiet, silent; dwell’;
JKT angan, SM angan, MIN angan, IBN angay (3.2.3) ‘unwilling, reluctant’;
JKT kajam, SM, SWY kajam, MIN, BH kajam ‘close the eyes’;
JKT laŋkap, SM laŋkap, MIN laŋko?, BH laŋkap, SWY laŋkap (penultimate a unexplained) ‘complete, having its parts or requisites’;
JKT randaŋ, SM, IBN randaŋ, MIN, BH randaŋ, SWY randaŋ, xandaŋ ‘soak, steep’;
JKT tagap, SM, IBN tagap, MIN tago?, BH tagap ‘strong, firm’.

The following JKT lexemes agree much better with cognates within the Malay group than with cognates in JV, SUN, Balinese, and/or Sasak:

JKT garam, SM, MIN, IBN garam, SWY garam, gaxam ‘salt’ (cf. Sasak garam ‘grain’);
JKT antam, SM (h)antam, MIN antam, BH hantam ‘fight, beat violently’ (Sasak antom ‘remorse (n)’);
JKT anam, SM, SWY, IBN anam, MIN, BH anam ‘six’ (Balinese nām, nānām, JV, Sasak nām ‘six’);
JKT kaŋcaŋ, SM kaŋcaŋ 1. ‘fast, rapid’ 2. ‘tight’ (JV kaŋcaŋ, SUN kēŋcaŋ (with irregular vowel correspondences) ‘tight’);
JKT m/uram, SM, MIN, BH m/uram ‘cloudy, overcast’, IBN uraw ‘cloudy, of indefinite colour’ (SUN hiim ‘shade, shadow’, Nothofer 1975:161; Balinese uram ‘sombre, overcast’);

79In Pigeaud JV diam, kajam, laŋkap, garam, randam/randaŋ, sampat (with similar meanings as in SM), and tageŋ ‘quick’ are found. But diam, laŋkap, garam, randam/randaŋ, and sampat are labelled as local, and kajam, tagap are labelled as bookish. Moreover, diam and randam have a (retroflex) d instead of an alveolar d (which points to borrowing).

In Jansz none of these forms is given (except for sampat, which is labelled as SM). They must be considered as not inherited: Pigeaud gives many loanwords that entered JV after Jansz (1913, 2nd edition) was published, and does not systematically indicate these loanwords as such (Pigeaud 1938 was only intended to be a practical and concise dictionary preliminary to a more complete edition, see his Introduction, sections 4-6).
JKT *pəɾəm, SM *pəɾəm, MIN, BH *pəɾəm ‘store fruit for artificial ripening’ (SUN *piyim ‘ketan which has been sweetened by ragi’, Nothofer 1975:81, 161);
JKT *taɾən, SM, SWY, IBN *taɾən, MIN, BH *taɾən ‘press down’ (JV *taɾən ‘walking-stick; (archaic) a support’).

Further, in the case of JKT *kaɓəl (SM, SWY, IBN *kaɓəl, MIN *kaɓəl) ‘invulnerable’, there are languages reflecting PMP final-syllable *e, but these are unlikely to be a source for borrowing: Toba *hobol, Karo *kaɓəl ‘invulnerable’.

C. Internal evidence for PM *ə is sometimes obtained from other Malayic isolects.

IBN and Mualang show internal evidence for a final schwa in some originally complex forms with a petrified suffix -i. This suffix became petrified before the change of PM final-syllable *e to a, but it has a still productive cognate -i in SM, MIN, BH, and SWY (cf. 6.1.1). It follows that final-syllable *ə (which changed into a after loss of the suffix) still occurred at least in morphologically complex forms of PM. For example:

IBN *səmpəti? ‘use spare moments’ (loss of *s- unexplained), and IBN *səmpət, SM *səmpət, BH *səmpət, JKT *səmpət, ‘having sufficient time’;
IBN *sələt/i? ‘fill a gap’, and IBN *sələt ‘alternation, stripe, streak’, SM *sələt ‘strait, narrows’ (cf. also *sələt/ən ‘south’, 5.2.1), MIN *sələt, SWY *sələt ‘intervening space, narrow space between two objects’.

Furthermore, there is internal evidence for a final-syllable schwa in some SM, SWY, IBN, and Mualang forms with a petrified suffix -ən. This suffix was lost in IBN and Mualang (before the change of final-syllable *ə to a), but it is still productive in the other isolects. For example:

SWY *kələm/ən ‘obscure, dark’, IBN *kələm/ən ‘the moon on the wane’, Mualang *kələm/ən ‘set (of sun, v)’; and SM, SWY *kələm, MIN *kələm ‘obscure, dark’, IBN *kəlaːm, JKT *kələm ‘go under’;
SWY *dələm/ən ‘be pregnant’, *dəxə(h) ən/dələm/ən ‘black and blue, of a contusion’, and JKT *dələm ‘inside, inner, in’, IBN *aləm, o.i. *dələm ‘deep; depth’;
SM, JKT *dəp/ən ‘before; next, coming’ (with apocope of the first syllable, see 3.1.1c), and SM (h)ədəp, BH *hədəp, SWY *ədəp, JKT *ədəp ‘(be) in front of, before’, MIN *mə/ado? ‘face, be in front of’.

N.B. All the originally complex forms given above underwent antepenultimate neutralisation (Mualang to a, the other isolects to ə, see also 3.1.2).

Tioman Malay (spoken on Tioman Island, off the south-east coast of the Malay Peninsula) reflects PMP *e in final syllables if the penultimate vowel equally reflects *e, thus PMP *e > Tioman Malay əl CəC_- C# (Collins 1985). For example:

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80 *ɲ-əɾəm/i? is found in verse 3003, and *kələm/ən in verse 2709, of the Kana Sera (Dunselman 1955). Dunselman gives ə and ə (usually ə in prefixes, and ə in lexemes) for the neutralised penultimate vowel in Mualang.
81 See fn. 80.
whereas:

<table>
<thead>
<tr>
<th>PMP</th>
<th>Tioman</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tebel</td>
<td>tabal</td>
<td>thick</td>
</tr>
<tr>
<td>*peZem</td>
<td>pajam</td>
<td>close (eyes)</td>
</tr>
<tr>
<td>*gemgem</td>
<td>gangam</td>
<td>squeeze in the fist</td>
</tr>
<tr>
<td>*demdem</td>
<td>dandam</td>
<td>hold a grudge</td>
</tr>
</tbody>
</table>

Finally, internal evidence is found in the correspondence SWY liax, SM leher, MIN li(h)i̯, JKT lêher ‘neck’, and SWY an/tuat, SM lu/tut, MIN lu/tuy, BH tuut ‘knee’, where the different development of the SWY final vowel is a reflex of PMP *e: see 3.1.1.5 IC.

A later change from JKT +a to ø is unconvincing, since one must then explain why this phonological change did not affect those final a’s which represent PMP *a. Therefore I conclude that JKT final ø is directly inherited from PMP *e. This conclusion does not rule out the occurrence of ø from +a through false analogy, which seems to be the case in loanwords like kulam ‘pond, pool, reservoir, tank’ (from TAM kulam) and imot ‘solicitude, care, attention’ (from AR himmat). Nor does it rule out the occurrence of loanwords from other Malay isolecst with final syllable a from PM *e: borrowing from SM is probably the origin of the irregular JKT reflexes 24-31 (see Table 4).

N.B. In MIN, the reflexes of PM *e and *a undergo identical changes in final closed syllables. Consequently, the merger of PM *a and *ø took place prior to other changes in the last syllable. The following rule order can be established for changes in MIN last syllables with -e, -eh, and -ø?

<table>
<thead>
<tr>
<th>TABLE 3: THE DEVELOPMENT OF PM *ø AND *a IN MIN FINAL CLOSED SYLLABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>I PM *ø and *a &gt; +a</td>
</tr>
<tr>
<td>II +a &gt; +o</td>
</tr>
<tr>
<td>&gt; +e</td>
</tr>
<tr>
<td>&gt; +a elsewhere</td>
</tr>
<tr>
<td>III -+p, -+t &gt; -?</td>
</tr>
<tr>
<td>-+s &gt; -h</td>
</tr>
</tbody>
</table>

It is possible that *a and *ø first merged to +a; a schwa would more easily give rise to vowel differentiation. But in some MIN isolecst where no raising took place, final *a and *ø are reflected as a. Note that the merger of *a and *ø took place in the last syllable (rule I) before it did in other syllables. Tamsin Medan’s dialect study of MIN shows a merger of final syllable *a and *ø in all MIN isolecst, whereas a merger in other syllables took place only in a few of them (among which Koto Gadang). In other isolecst non-final syllable *ø became e or o (Tamsin Medan 1980:78). Tamsin Medan also shows that in some other isolecst rules II and III did not apply at all, or not to the same extent.

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82 But even here there is another possible explanation: JKT imot may be a loan from SUN (SUN imit ‘diligent, industrious’ < AR). (The TAM lexeme kulam is pronounced as [kuλə]; it is not impossible that it was borrowed into JKT at some earlier stage of TAM (before nasalisation of the last vowel took place), and that its last vowel was perceived as a schwa).
3.1.1.1 PM PENULTIMATE *a > ALL ISOLECTS a
Examples:
*bara 'live coal'; SM, BH bara, MIN baro, SWY baxo, IBN bara?, JKT barè;
*hari 'day'; SM (h)ari, BH hari, MIN, IBN, JKT ari, SWY axi;
*salah 'at fault, amiss'; SWY sala(h), JKT salè, o.i. salah.

3.1.1.2 PM PENULTIMATE *ə > SM, SWY, IBN, JKT a, MIN, BH a
Examples:
*pənuh 'full'; SM pənuh, MIN pənuʔh, BH pənuh, SWY pənəʔ(h), JKT pənu;
*tənun 'weave'; MIN, BH tənun, o.i. tanun;
*səŋət 'sting of (venomous) insect'; SM, SWY, IBN səŋət, MIN səŋəʔ, BH səŋət; JKT n.c., but cf. PMP *səŋət 'sting'.

UNEXPLAINED IRREGULAR CORRESPONDENCES
(1) SWY laŋkap has a penultimate a corresponding to SM and JKT ə, cf. SM laŋkap, JKT laŋkap 'complete' < *laŋkap (3.1.1, 3.1.1.5).
(2) BH i reflecting PM *ə. BH sometimes reflects i for PM *a. This i often co-occurs with a preceding or following i, and may also occur in both the final and penultimate syllable. For example:
BH cilup (also culup) 'soak, dye', SM, JKT cəlup 'id.' (SWY cəlup 'drop in, pass by' may be a cognate; Wilkinson (1959) also gives MIN cəlup, JKT cələp 'id.');
BH kilım 'k.o. small seam on a rug', SM, SWY kəlim 'id.', JKT kəlim, ə-- 'fold, sew an edge' (this must be borrowed from a West-Asianic language (through Persian or AR?), cf. Turkish kılım, which refers to (1) a flatweave carpet, and (2) the woven edge of a carpet).
BH pijim (also pajam) 'close the eyes', SM, IBN pajam, MIN pajam, pijam (cf. PMP *pežem 'id.', Dyen 1951:536);
BH rikit 'stick, glue', SM, SWY rəkat, MIN rake? (cf. PMP *rekət and *riket 'id.', Blust 1970);
BH imit 'forethought, judgement; saving, careful', SM hemat 'id.', JKT imət 'saving, thrifty' < AR;
BH tikin 'sign (v)', SM tekən, JKT təkən < DU.

3.1.1.3 PM *a | _ C# (?- *a) > MIN o | _ ?(< *p)#, OTHER ISOLECTS a
MIN e | _ ?(< *t)#, OTHER ISOLECTS a
MIN e | _ h (< *s)#, OTHER ISOLECTS a
MIN a ELSEWHERE, OTHER ISOLECTS a
JKT e | _ ə (< *h),
JKT a ELSEWHERE, OTHER ISOLECTS a

Examples:
*akar 'root, creeper'; SWY akax, MIN aka, o.i. akar;
*hutan 'jungle, wilderness'; SM, BH hutan, o.i. utan;
*urag 'outsider'; SM, JKT orag 'human being', SWY oxaj (Helfrich), urag (Aliana et al.) 'id.', o.i. urag 'id.' (see 5.7 lemma 53 for the meaning of this etymon);
*anak 'child'; SWY ana?, o.i. anak;
*sayap 'wing'; SM, SWY, IBN, JKT sayap, MIN sayo?;
*bəras 'uncooked rice'; MIN bareh, BH baras, SWY bəxas, o.i. bəras;
*rumah 'house'; SWY xuma(h), JKT rumè, o.i. rumah;
*surat 'letter, written paper, book'; MIN sure?, SWY suxat, o.i. surat;
*salah 'at fault, amiss' (3.1.1.1).

3.1.1.4 PM FINAL SYLLABLE *a | _ *?/ø > MIN, SWY ø, JKT ē, OTHER ISOLECTS a

Examples:
*apa 'what (interrogative)'; MIN, SWY apo, JKT apè, o.i. apa;
*dua(?) 'two'; MIN, SWY duo, JKT duè, o.i. dua (cf. 5.3);
*bara* 'live coal' (3.1.1.1).

3.1.1.5 PM *ø > MIN e (l_ ?# < *t, h# < *s), o (l_ ? < *p), a ELSEWHERE

Examples of cognate sets are given in 3.1.1 (B) and (C); here follow the PM reconstructions that can be made on the basis thereof:

*sadap 'pleasant, tasty'; *(γ-)oram 'brood';
*kajam 'close the eyes'; *poram 'ripen fruit artificially';
*lajkap 'complete'; *angan 'unwilling, reluctant';
*tagap 'strong, firm'; *disam 'be quiet, silent; dwell';
*takan 'press down'; *sampat 'having sufficient time';
*random 'soak, steep'; *hantam 'fight, beat violently';
*ənam 'six'; *ko-la(ho)am 'obscure, dark; go under, wane'
*garam 'grain' (cf. 5.7 lemma 125) (see 4.5 for subsequent vowel contraction);
*kabal 'inulnerable'; *hadoop 'be in front of, before';
*uroam 'cloudy, overcast'; *(d-)alam 'deep, depth; in(ner)';
*salar 'narrows, intervening space'.

IRREGULAR CORRESPONDENCES: ASSIMILATION OF *ø TO THE PRECEDING VOWEL

In two cases SWY exhibits final-syllable a corresponding to a high vowel in other isolects:

SWY an/tuat 'knee', SM, JKT lu/tut, MIN lu/tuy?, BH tuut, IBN tu(u)t (Richards 1981); cf. BRU tuhut (Wilkinson 1959), PMP *tuhed 'knee';
SWY liax 'neck', SM leher, MIN li(h)i;83 JKT lêhèr; cf. PMP *liqeR 'neck'.

In these cases SWY reflects PMP *e. The other isolects assimilated PMP *e to the vowel of the preceding syllable whenever the two vowels were separated by ø or *h. In SWY assimilation did not take place, and PMP *e became a (following the general rule PMP *e > a | _ C#).

There are no other examples of this retention: the only other cognate sets with a final-syllable vowel reflecting PMP *e which was separated from the preceding vowel by ø or *h, are cases with penultimate a like SM, BH, JKT jahat, MIN jae?, SWY jaat, IBN jai? (with unexplained -i?, see 3.2.3) 'bad, evil' (< PMP *Zaqat/*Zaqet), and SM g/ər/aham, MIN g/ər/am/ən, SWY g/əx/m/an, IBN gaam 'molar tooth' (< PMP *Raqem; the initial consonant in the Malayic isolects is unexplained). In both examples it is not clear whether final-syllable a came about through assimilation, or through the general rule that PMP *e > a in all isolects except JKT. Since PMP final-syllable *e > JKT ø if the assimilation of *e to a preceding vowel separated by PMP *q, *h, or ø, does not apply, and since the SWY developments

83Thaib gives lî as well as lihê.
show that this assimilation had not yet taken place in PM, PM final-syllable *ə must be reconstructed in the sets SM jahat etc. and SM g/er/aham etc. Hence:

*gaham ‘molar tooth’;
*jahat ‘bad, evil’;
*lihar ‘neck’; and
*tuşat ‘knee’ (see 3.10 for ə); (see also *tahan and *pahat, 3.9.2).

N.B. It is also possible that PM still maintained the distinction between PMP *-aq and *-eq (which was lost in the Malayic isolects, including JKT). Cases like lu/tut, an/tuat, etc., and leher, liax, etc. as well as other lexemes deriving from proto-lexemes containing *ə adjacent to *h (cf. 3.1.3.3) show that in many positions the Malayic isolects have a strong avoidance of ə adjacent to h, which is not inherited from PM. But as there is no stronger evidence against the merger of PMP *-eq and *-aq (which is also testified in many AN languages outside the Malayic group), and it is reflected in all Malayic isolects, I presume that this merger had already taken place at the PM level.

3.1.2 THE PM HIGH VOWELS

The following correspondences of high and mid-vowels are found in the isolects:

(a) BH: In BH two high vowels, i and u, are found; mid-vowels do not occur.

(b) IBN: On the phonemic level, IBN has a pair of high vowels corresponding to BH i and u; it has also o and e, but these phonemes do not occur in the inherited vocabulary.

(c) SM: Corresponding to BH, IBN i and u, SM has respectively i/e and u/o. These high and mid-vowels are in phonemic contrast only in penultimate syllables followed by closed final syllables with an initial consonant (i.e. they are in contrast in CVCVC-structures as opposed to CVCV-, and CVV(C)-structures, see 2.1.3 and fn. 21). SM i and e reflect PMP *i, and SM u and o reflect PMP *u (fn. 22).

(d) MIN: Corresponding to BH, IBN i, SM i/e, MIN usually has i or ə.

(i) It has i in non-final syllables, and in final syllables before *ʔ from PM *p or *t, e.g. *sisip > sisip, and *jahit > jai? (see 3.1.2.1 - 3.1.2.4) for the reconstruction of this and the following examples);
-n from PM *m and *n, e.g. *kirim > kirin, and *aŋin > aŋin;
-h from PM *s, e.g. *habis > abih;
-ə, e.g. lagi, tingi.

(ii) It has ə in final syllables before -h from PM *h, e.g. *putih > putiʔh;
-ʔ from PM *k, e.g. *tarik > tarik;
-ŋ, e.g. *könig > kaniŋ;
-ə from PM *l and *r, e.g. *panggil > pangiʔ, *lihar > li(ə)ʔi.

Corresponding to BH, IBN u, SM u/o, MIN usually has u, uʔ, or uy.

(i) It has u in non-final syllables, and in final syllables before
-n from PM *m and *n, e.g. *balum > (b)alun, and *puhun > puhun;
-ə, e.g. tuju, abu.

(ii) It has uʔ in final syllables before
-h from PM *h, e.g. *jatuh > jatuʔh;
-ʔ from PM *k, e.g. *duduk > duduʔ;
-ŋ, and -ø from PM *l or *r, e.g. *sambuŋ > sambuŋ2ŋ, *puku > puku², and *təur > təur².

(iii) it has uy in final syllables before
-ŋ from PM *s, e.g. *təur > təuruy;
-ʔ from PM *p and *t, e.g. *tutup > tutupery, and *təur > təuruy².

N.B. (1) In some MIN isolects diphthongisation of final-syllable high vowels took place only to a very limited extent, cf. the MIN of Padang Sibusuk (Kabupaten Sawah Lunto Sijunjug, central-east of the MIN area) and Tapan (Kabupaten Pesisir Selatan, extreme south); Tapan also maintains -p and -t (Tamsin Medan 1980:70-75).

(2) The following rule ordering can be applied to the changes that MIN underwent lexeme finally:

I merger of final labial and dental consonants in +t and +n if the preceding vowel was high;

II diphthongisation of high vowels preceding final velars and liquids; diphthongisation of *u preceding +t (< *-p, *-t) and +s;

III merger of final stops in -ʔ; merger of final *s and *h to h; loss of final liquids.

Examples:

*bəlum  I *bəlun  II *bəlun  III (b)əlun
*puhun  *puhun  *puhun  puhun
*tutup  *tutut  *tutuyt  tutuery
*ətur  *ətur  *təuryt  təury²
*əkirim  *əkirim  *kəirin  kəirin (but cf. 4.4)
*səsip  *səsit  *səsit  sisi² (but cf. 4.4)
*jəhit  *jəhit  *jəhit  jai²
*dədək  *dədək  *dədu²k  dədu²?
*jətuh  *jətuh  *jətuh²h  jətuh²h
*hətun  *hətun  *hətuŋ  hətun²ŋ
*ətəlur  *ətəlur  *təlu²h (*+təlu²ʔ?)  təlu²
*pəkul  *pəkul  *pəku²l  pəku²
*təriκ  *təriκ  *tari²k  tari²?
*pətih  *pətih  *pəti²h  pəti²h
*kəniŋ  *kəniŋ  *kəni²ŋ (*kəni²ŋ?)  kəni²ŋ
*ləhɔr > +ləhiɾ > *ləhiɾ  *ləhi²r  l(h)²
*pəgəl  *pəgəl  *pəgə²l  pəgə²
*həbiš  *həbiš  *həbiš  abih
*tərəs  *tərəs  *teruys (*+təruys?)  teruys

MIN also has mid-vowels in the penultimate syllable. In a few cases these mid-vowels correspond to PMP high vowels. Lexemes containing them may be loans from SM or other languages, since they are relatively few in number, and some of them are of marginal use (cf. Van der Toorn 1891:passim), for example,

goreŋ ‘fry’; the usual MIN term for frying is sala or səŋla (4.6); the usual term in SM is goreŋ;
merah ‘red’; the usual MIN term is səɾaŋ, whereas in SM it is merah;
potəŋ ‘cut’; the usual term is kəɾeŋ (in SM it is potəŋ);
tembo? ‘wall’; this term is rarely used; SM also has tembok, “...which does not occur in old books” (Wilkinson 1959).

Some of these lexemes have a doublet with high vowels, cf. teñju ~ tiñju ‘fist’, goso? ~ gusur? ‘rub’ (cf. 3.4.1.4 UIC), gele ~ gili ‘turn, turning’, lompe? ~ lumpe? ‘jump’ (according to Van der Toorn (1899:XII), the dialect of Koto Gadang often lowers original high vowels in the penultimate syllable (cf. teñju, lumpe?). Most of the MIN mid-vowels correspond to SM mid-vowels, whereas the contrary (i.e. SM mid-vowels corresponding to MIN ones) is often not the case.

(e) SWY: SWY has i, u, and o corresponding to high and mid-vowels in the other isolects. In final syllables, i and u were diphthongised to i? and u? respectively when preceding -? or -(h), e.g. pangil, bibix, kānig, kirim/kixim, jait, and bini, maintained final-syllable i, but in bāni(h), boli(h), tari?, it was diphthongised to i; furthermore tuxut, tutup, tālu, puun, tlun, sambun, etc. vs bunu(h), jatu(h), dudu? (see 3.1.2.1 - 3.1.2.4 for the meaning of these lexemes, and their PM ancestral forms). o is rare, and does not occur in final syllables; e.g. obat, oxaJ (uxa1) (Aliana et al.), poti(h) (see 3.1.2.2).

(f) JKT: JKT has i, é, è, and u, ó, ó.

é occurs word finally and in penultimate syllables preceding final é or ó, and é occurs in non-final position (lexeme-final é reflects PM *a). é is sometimes in free variation with i; it does not occur very often; e.g. lagi ~ lagé ‘again’.

ó is often in free variation with u, e.g. anu ~ andó ‘so-and-so’; dapur ~ dapór ‘kitchen’. It does not occur very often (cf. fn. 57), and I found only four instances where it contrasts with ó.84 é and ó often alternate with è and ò in variants with final -? (e.g. légò ~ légòd? ‘sell’; dénké ~ dènkè? ‘stand on tiptoe’).

As in SM, there is no conditioning factor for the split of PMP *i and *u into high and mid-vowels. There is a tendency to height harmony of high and mid-vowels in adjacent syllables, and often (but far from always) a mid-vowel is found immediately following an a, e.g. tòlò, nènè?; lehèr, po?don/pu?un/puhun (see 3.1.2.1 - 3.1.2.4) and taön ‘year’ (< *tahun, 3.4.1.2), aos ~ aus ‘thirst(y)’ (< *haus, 3.8.2). But in many cases there is no conditioning factor, as is shown in the cognate sets in 3.1.2.1 - 3.1.2.4.

DISCUSSION

From the above description it appears that BH and IBN have a mutually agreeing pair of high vowels to which each of the other isolects have different correspondences. Since the high vowels, diphthongs, and mid-vowels in the other isolects all reflect PMP *i and *u, they must be the result of a split.

The diphthongisation of final-syllable high vowels in MIN and SWY can easily be explained as the result of a split which was conditioned by the following consonant (or, in MIN, by the historical antecedent of this consonant). It did not take place (or took place to a much smaller extent) in some other MIN and Middle Malay isolects (cf. the MIN of Tapan, Tamsin Medan 1980:70-75; and Semende (Middle Malay), Yuslizal Saleh et al. 1979:22). This phenomenon (which was realised in a different way for MIN and SWY) must be distinguished from the split of PMP *i and *u into high and mid-vowels in SM and JKT.

84These four cases are: (1) capó? ‘without money’, and capó? ‘easy to break or tear’; (2) gùlón ‘go west’ (< JV), and gulón ‘weep, cry a lot’; (3) pó? ‘place to store s.th. in great number’ (< ENG ‘pool’?), and pó? ‘full’ (< DU ‘vol’); (4) bót, in spatu bót (< ENG) ‘boot’, and bót ‘bread’ (< DU ‘brood’).
(and, to a lesser extent, in MIN and SWY). For the latter no comprehensive conditioning factor was found.

The question now is whether the split into high and mid-vowels took place before the divergence of the isolects, whereupon the secondary vowels merged again to i and u in BH and IBN, or whether PM still maintained the PMP high vowels, and the split occurred after the isolects began to diverge. In the latter case two developments are possible: the split may have taken place in each isolect separately, and BH and IBN did not follow, or BH and IBN may have been the first isolects to branch off from PM while maintaining the latter's high vowels, whereas the other isolects continued to have a common development, during which the split of PM *i and *u in high and mid-vowels took place. The answer to this question must be that PM, like PMP, had only a pair of high vowels, which were maintained in BH and IBN, and that the vowel split took place separately in each of the other isolects. This analysis is based on two considerations.

Firstly, the split into high and mid-vowels took place in each isolect in a different way. In SM and JKT mid-vowels occur very frequently in final as well as in penultimate syllables, whereas in SWY their existence is restricted to penultimate o. In MIN, lexemes with mid-vowels (from PMP *i and *u) are not frequent and must be loanwords from SM. These differences make it probable that vowel lowering was not part of the common history of these isolects. The lexical distribution of high and mid-vowels is also different for each isolect, as is shown in the following table.

**TABLE 4: LEXICAL DISTRIBUTION OF HIGH AND MID-VOWELS**

<table>
<thead>
<tr>
<th>SM</th>
<th>MIN</th>
<th>SWY</th>
<th>JKT</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>oraŋ</td>
<td>uraŋ</td>
<td>oxɑŋ/uxɑŋ</td>
<td>orted</td>
<td>human being</td>
</tr>
<tr>
<td>(BM) ubat,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Bl) obat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jatuh</td>
<td>jatuɑ(h)</td>
<td>jatuɑ(h)</td>
<td>jat0</td>
<td>fall (v)</td>
</tr>
<tr>
<td>tolog/tulun</td>
<td></td>
<td>tulun</td>
<td></td>
<td>help, assistance</td>
</tr>
<tr>
<td>talur/talur</td>
<td>tɑluɑ</td>
<td>tɑluɑ</td>
<td>tɑl0r</td>
<td>egg</td>
</tr>
<tr>
<td>lompat/lumpat</td>
<td>lɑmpɑ</td>
<td>lɑmpɑ</td>
<td>l0mpat</td>
<td>jump</td>
</tr>
<tr>
<td>putih</td>
<td>putiɑ(h)</td>
<td>putiɑ(h)</td>
<td>puti</td>
<td>white</td>
</tr>
<tr>
<td>nene/k</td>
<td>ninEθ</td>
<td>---</td>
<td>nɛnEθ</td>
<td>high</td>
</tr>
<tr>
<td>tingi</td>
<td>tingi, tɛngi</td>
<td>tɛngi</td>
<td>tɛngi</td>
<td>high</td>
</tr>
<tr>
<td>pohon</td>
<td>puhun</td>
<td>pʊun</td>
<td>puhun</td>
<td>tree</td>
</tr>
</tbody>
</table>

Secondly, Prentice and Hakim Usman (1978:134) pointed out that BRU and KCI only reflect high vowels for PMP penultimate *i and *u.85 Besides these two, Collins (1986b:184) found three other Malayic isolects with corresponding high vowels only, viz. Ulu Trengganu, Urak Lawoi’, and Bacan. He goes on to say that it would not be unthinkable if PM already had a split into high and mid-vowels, and that an isolect or a group of contiguous isolects underwent a subsequent merger of these high and mid-vowels. But he finds it doubtful that this process could have taken place independently in five isolects which

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85BRU, as a matter of fact, also retains PMP *i and *u in final syllables. KCI vowels in the final syllable underwent changes which altered the original PMP high vowels considerably, but no split into high and mid-vowels was involved.
46
were not in close contact with each other. To these five isolects can be added BH8 6 and
Bahasa Semende, 87 which maintain the PMP high vowels in. the final as well as in the
penultimate syllable, and IBN, which on the phonemic level only reflects i and u for PMP *i
and *u. Furthermore, the OM of the inscriptions of Srivijaya, which date from the seventh
century AD and are the oldest record of any form of Malay, only has four vowel phonemes
viz. a, d 8 8 i, and u, the use of mid-vowels being restricted to SKT loanwords. But in the
OM inscription of Kedu (Java) which dates from the ninth century, the inherited word
sa/popo ' (first degree relative in collateral line) ' is found instead of an expected +Sd/pUpU
(Teeuw 1959 : 1 46). Collins (1 986b: 1 86) concludes from this that the mid- vowels emerged
in coastal Malay isolects spoken in areas where Malay was not autochthonous (particularly in
Java) and in an era (ninth century AD) when borrowing and spread of linguistic features
began to play an important role in coastal Malay. (Quoting Nothofer (1975), he mentions
that the split of PMP *i and *u into high and mid-vowels is also seen in JV and Madurese.)
In other words, there are isolects other than BH that did not undergo (or partly underwent)
the split of PMP *i and *u into high and mid-vowels, and there are some indications that the
origin of the split must be sought in areas where Malayic was not autochthonous. As a
conclusion, I reconstruct only a series of high vowels ( *i and *u) along with PM *a and *d.
I reconstruct PM penultimate *i on the basis of BH, IBN, SWY i, SM MIN ile, JKT i!6/e,
and PM penultimate *u on the basis of BH, IBN u, SM, MIN, SWY ufo, JKT u/6/o. I
reconstruct PM final-syllable *i on the basis of BH, IBN i, SM i/e, MIN i/P/e, SWY i/P, JKT
i/6/e, and PM final-syllable *u on the basis of BH, IBN u, SM ufo, MIN u/w/uy/o, S W Y
u/I?, JKT u/6/o.
,

3. 1 .2. 1 PM PENULTIMATE *i > SM, MIN i/e, JKT i/6/e, OTHER ISOLECTS i
Examples:
*hituI) 'count (v)'; SM, BH hituI), MIN etoI], (Van der Toorn 1 89 1 ) hitWI], oj. ituI];
*lihdr ' neck' (3. 1 . 1 .5IC);
*nini? 'grandparent, ancestor'; SM nene/k, MIN nini;}j?, ninPj?, BH nini, IBN ini?, JKT
nenej? (cf. 3.4.2 for -7); MIN has also nene/I] in si-nene/I] uraI] 'a well-to-do person, s.o. of
rank' (cf. 5.4 for SM -/k, MIN -j? / -/I], JKT -j?, and for the loss of *n- in IBN);
*sisip 'insert'; SM sisip ' insert', MIN sisi? 'add ' (but cf. 4.4b);
*bini 'wife'; MIN bini (cf. 3.6. 1.2 for n), oj. bini;
*kirim ' send (s.th.) ' ; SM, BH, JKT kirim, MIN kirin, SWY kirim, kixim, IBN kirum (cf.

4.4a).
3 . 1 .2.2 PM PENULTIM ATE *u > BH, IBN u, JKT u/6/o,

OTHER ISOLECTS ufo

Examples:
*bulan 'moon; month'; a.i. bulan;
8 6Bahasa Banj ar B ukit also retains PMP *i and *u, but this isolect is too closely related to BH (Abdurachman
Ismail et al. 1979:7) to be considered as separate evidence.
87It is in fact indicative of the relative lateness of the SWY changes, that of the two other Middle Malay isolects
for which there are data available (viz. BSM and Semende), neither diphthongises *i and *u before -1and -h,
nor does Semende have a split of penultimate *u into u and o.
88A schwa as such is not represen�ed in these inscriptions, but it can be inferred from the non-occurrence of a
vowel symbol, or from the doubling of the followmg consonant grapheme . In a number of cases it is not
distingUIshed from short a (Vik0r 1988:7 1 ).


*ubat ‘medicine, drug’; SM, SWY obat, MIN ube?, BH, IBN ubat, JKT obat (< (P(W)MP
*ubaj (‘id.’); Dempwolff reconstructed *ubat and Zorc (1971) reconstructed Proto Philippine
*ubad, but cf. SUN ubar, Balinese ubad (‘id.’) which points to PMP *
j);
*huban ‘grey or white (hair)’; SM (h)uban, MIN, JKT uban, BH huban, SWY oban ‘id.’,
IBN b/uban ‘white-haired’, ban/an ‘prematurely white-haired’ (with apocope: cf. 3.11c);
*buay ‘throw away’; IBN buay (cf. 3.2.3 for -y), o.i. buay;
*putih ‘white’; MIN puti?h, SWY poti?h(h), JKT puti, o.i. putih;
*tulun ‘help, assistance’; SM tolo?g, tulun, MIN tolo?g, o.i. tul?g.89

3.1.2.3 PM FINAL-SYLLABLE *i > BH, IBN i, SM i/e, MIN i/i/e, SWY i/i?, JKT i/e/e

Examples:

*habis ‘all, entirely; used up, done with, finished off’; SWY, JKT abis ‘done with, all used
up, finished off’, MIN abih ‘finished off, used up, completed; all’ (Van der Toorn 1891),
IBN abis 1. ‘all, the whole of, entirely’ 2. ‘used up, finished’ (cf. 5.7 lemma 191);
*tindi ‘high’; MIN tindi, tedi, IBN tindi?, o.i. tindi.
*boli ‘buy’; SM, SWY, IBN, JKT bali, MIN bali;
*banih ‘seed (for planting)’; SM, IBN banih, MIN ban?h, ba?n?h, SWY ban?h(h) ‘id.’, BH
banih ‘rice plant’;
*tarik ‘pull’; MIN tari? ‘take (away), pick’, IBN tarik ‘pull taut’, SWY tari?, o.i. tarik
‘pull’;
*pangil ‘call, summon, invite’; SM, SWY, IBN, JKT pangil, MIN p?ngi?
*bibir ‘lip, rim’; MIN bibi?, SWY bibix, o.i. bibir;
*jahit ‘sew, stitch’; SM, BH jahit, MIN jai?, o.i. jait;
*lagi? ‘again, later on’; SM, BH, SWY lagi, MIN lagi, lage, JKT lagi, lagé ‘again’, IBN lagi?
‘later on’;
*pali ‘testicle’; SM, IBN p?li, BH palir, SWY polix, JKT p?ler;
*anin ‘wind (n)’; SM, MIN, BH, SWY, JKT anin;
*kanih ‘eyebrow’; SM kanih, MIN kani?h, ka?n?h, (3.6.1.2), BH kanih ‘eyebrow’, o.i.
kanih ‘forehead’ (the PM reconstruction for ‘forehead’ is *dahi, cf 3.4.2.6).

3.1.2.4 PM FINAL-SYLLABLE *u > BH, IBN u, SM u/o, MIN u/u/u/u/o, SWY u/u?, JKT
u/u/u

Examples:

*bolum ‘not yet’; SM bolum, MIN (b)alun, BH balun, SWY (b)olum, JKT bolom, bol?n;
*bubur ‘(generic for) gruels’; SWY bubux, MIN bubu?, o.i. bubur;
*bunuh ‘kill’; MIN bunu?h, SWY bunu?h(h), JKT bunu, o.i. bunuh;
*ombun ‘dew’; SM, SWY, JKT ombun, MIN, BH ambun ‘dew’, IBN g-ombun ‘expose to
the dew’;
*habu ‘ash, dust’; SM (h)abu, BH habu, o.i. abu;
at anchor’, IBN jatu? 1. ‘fail (in business)’ 2. ‘besmirched, degraded (name)’;

89 According to Wolff (1976:367) tolo?g is a Chinese loan, cf. CHI tō lōn ‘patronise, help a man on’.
**kəlu** ‘sigh, complain’; SM kəlu, MIN kəlu, JKT kəlu ‘id.’, SWY kəlu(h) ‘gasp for breath, recover breath’;

*mulut ‘lips, mouth’; SM, SWY, JKT mulut, MIN muluy?, IBN mulut ‘lips, mouth’;

*puhun ‘stem; origin, basis; ask, beg (forgiveness)’; SM pohon, SWY puun, JKT puhun, pə̄n, pu’un ‘tree’, SM mohon, JKT mahun ‘ask, beg for’, MIN puhun 1. ‘origin, reason; the west’ 2. ‘beg, request’, BH puhun 1. ‘tree’ 2. ‘host, owner of the house’, IBN puun ‘origin, basis, start, stem’;

*pukul ‘strike, hit, knock’; MIN pukul, o.i. pukul;

*sambuḷ ‘extend; extension piece’; MIN sambuḷ, o.i. sambuḷ;

*tdgur ‘address; rebuke (v)’; SM tdgur, MIN tagi, BH tagur, JKT tdgor ‘greet, address’;

*pukul ‘right through, in a direct line through’; MIN taruyh, BH tarus, SWY taxus, o.i. tarus;

*tu{lku ‘earthstones, tripod’; SWY tu{lku, IBN tu{lku, MIN, BH tu{lku ‘(three) hearthstones, used for cooking’;

*tdrus ‘follow, obey’; SM, BH, JKT turut, MIN turuy, SWY turut ‘be in accordance with, follow’, IBN turut ‘offer no resistance’;

*tutup ‘close up, cover; lid, covering piece’; MIN tutuy, o.i. tutup.

3.1.2.5 THE ORIGIN OF (SM) MID-VOWELS THROUGH CONTRACTION OF *a + *i/*u OR *i/*u + *a

In SM (and possibly in other isolects too) some mid-vowels originated from contraction of earlier high vowels with *a. There are seven examples of this:

(1) PMP *(ma-)iRaq ‘red’ > SM, MIN m/erah, SWY m/ira(h), IBN mirah, JKT m/ərə;

(2) PMP *Rahut(-an) ‘whittle, split wood’ > SM rot/an,91 MIN, JKT röt/an, IBN rut/an ‘rattan’;

(3) PMP *(maR-)uliq ‘be able to’ > SM b/oleh, MIN b/ulih, SWY b/olih(h), JKT b/ôle, b/ólè ‘be allowed, obtain’, IBN b-ulih ‘get, obtain’; cf. also SM (mam)pər-oleh, MIN (mam)pə-uli(h), BH ba-ulih, SWY x/ola(h) (x must be the result of a backformation from PM *(mb)Ar-ulih, see below), IBN n-ulih ‘get, obtain’, and SM oleh/oleh ‘present brought back from a journey’; (it is, however, also possible that o (as with e) originated through lowering instead of contraction);

(4) PMP *ba-isa-n ‘tie between parents-in-law of a married couple’ > SM besan, JKT bəsan ‘id.’, MIN bisan ‘men whose wives are sisters’, SWY bisan ‘term of address to parents of child-in-law’, IBN isan ‘relatives of child-in-law’ (3.5.1 UIC);

(5) PMP *saqup ‘help, assist with work’ (Blust 1980a) + *an > SM, MIN sop/an, JKT səp/an ‘showing respect (through courtesy, modesty or timidity)’, BH sup/an ‘shy, ashamed’;

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90 The same range of meanings is found with JV wit, cf. wit ‘tree; origin, stem’, wiwit ‘begin, beginning’, amit ‘sorry! (in passing)’, wət/wət ‘west’; see also 4.5 for the relation between *puhun and *ampun.

91 According to Dempwolff, rot/an is originally JV (see Dempwolff 1938: *raut).
(6) BH ba/hira\textsuperscript{92} ‘defecate’ vs SM b/era/k, JKT b/era/k (-/k unexplained cf. 3.4.2.4 UIC), IBN b/ira? ‘defecate’; cf. also BRU baria/k (with metathesis) ‘defecate’;

(7) BH kam/ari/an ‘evening’ vs SM kom/are/n, kəm/ari/n, kəlm/ari/n, kalam/are/n, JKT kom/are/n ‘yesterday’ (cf. also 5.1.3).

Assuming that lowering of high vowels took place in each isolect independently, this contraction must have happened after the split of the six isolects. But it is more likely that the correspondences with mid-vowels in the non-SM isolects are SM loans. A reflex of PMP *(ma-)iRaq is found in each isolect (except BH), but it is the usual term for ‘red’ in only two of them (SM and JKT): BH and SWY have abaŋ, IBN has mansaw, and MIN has sirah, also, SWY m/ira(h) has an apical trill, which indicates borrowing (see 3.7). SM, MIN rot/an, JKT röt/an, IBN rüt/an replaced an earlier PMP *quey, which is still reflected in SWY and IBN ui ‘rattan’. It is not likely that the same semantic shift took place separately in SM, MIN, IBN and JKT. SM b/olah seems to be the result of contraction of *A and *u after the loss of *r on the morpheme boundary in *(m)bAr-ulih. But the other isolects (with the possible exception of JKT b/olé /b/ólè, if this is not a loanword) do not reflect such a development: only SWY has a mid-vowel, but it also has a doublet that still reflects the *r of the PM prefix *(m)bAr- (cf. 6.1.1). JKT b/era/k has the same unexplained final k as SM b/era/k, which points to borrowing from SM. In the above cases, most of the correspondences with mid-vowels are found in JKT, which borrowed heavily from SM.\textsuperscript{93}

On the basis of these sets I reconstruct:

*ma-irah ‘red’ (cf. also 5.7 lemma 149);
*(m)bAr-ulih ‘get, obtain’;
*ba/isa(a)n ‘tie between parents-in-law of a married couple’;
*sahup-an ‘respectful’;
*ba/hira? ‘defecate’;
*kə-lə(h)əm *hari ‘evening’ (3.1.1.5; cf. also 5.1.3).

On the basis of SM rot/an no reconstruction is made; however, *raut ‘scrape with a knife (bamboo)’ can be reconstructed on the basis of MIN rauy?, SWY raut, o.i. raut (cf. PMP *raut ‘id.’).

3.1.3 VOWEL CHANGES IN ANTEPENUMULITE SYLLABLES

In Malayic isolects the antepenultimate vowel is usually a schwa unless it is followed by h or by a vowel (as in SM buaya ‘crocodile’, piutag ‘debt’, biuku ‘turtle sp.’, kuilu ‘rabbit’ (< POR)). This does not apply to MIN and BH, where antepenultimate high vowels often occur (and where *o > æ). The schwa in the other isolects must be the result of antepenultimate neutralisation. MIN and BH only partly avoided this phenomenon: PM *i and *u were usually retained, but in some cases there is disagreement between MIN, BH, and PMP (see below). MIN and BH may also have doublets with an antepenultimate

\textsuperscript{92}Written ‘babira' in Abdul Jebar.

\textsuperscript{93}Waruno Mahdi (pers.comm.) explains the vowel contraction in the last syllable of SM kam/are/n (etc.), JKT kam/are/n as a Bazaar Malay development. Only later on kam/are/n became accepted in SM.
a. BH sometimes shows a high vowel which must have originated through assimilation with the following consonant. There are several reasons for regarding the MIN and BH antepenultimate high vowels as retentions, and for assuming that subsequent neutralisation of these vowels took place in the other isolects after they split from PM. Firstly, MIN and BH were not in close contact, and it is unlikely that their agreement is due to influence of one of these isolects on the other. Furthermore, the other isolects maintain antepenultimate high vowels in specific environments viz. before a vowel (usually a) or (in SM) h. IBN has ơ corresponding to these high vowels.

Finally, the MIN and BH antepenultimate high vowels (usually) agree with high vowels in PMP or PMJ. Antepenultimate neutralisation is in agreement with the phonotactic tendency to disyllabicity in Austronesian languages (and in Malayic isolects in particular). This tendency is shown by the great majority of disyllabic lexemes in Austronesian languages and in lexical reconstructions for PMP, and by processes of apocope, syncope, and antepenultimate neutralisation in originally trisyllabic (or tetrasyllabic) lexemes.

The factors involving antepenultimate vowels are categorised as follows:
- those involving high vowels before consonants other than h (treated in 3.1.3.1),
- those involving high vowels before h or a vowel (see 3.1.3.2),
- those involving other vowels (indeterminate *a or *ə, which is represented as *A; see 3.1.3.3).

### 3.1.3.1 PM *i, *u > MIN, BH i, u, OTHER ISOLECTS a | C _ CV(C)V(C)

Examples:

*kulili ‘go or turn around’; MIN kuliliə, BH kuliliŋ, o.i. kaliliŋ,
*sumañat ‘spirit (of a living being), soul, inspiration’; SM somaŋat, MIN sumaŋe?, BH sumañat ‘spirit, inspiration’, SWY somaŋaj (-y unexplained), IBN somaŋat (penultimate ə unexplained; Mualang has somaŋat ‘spirit, soul’, JKT somaŋet (a SUN loan?), somaŋat (a SM loan?) ‘inspiration’ (cf. PMP *sumaŋad);
*surambi? ‘eaves of a house’; SM sarambi, MIN, BH surambi ‘front verandah’, IBN serambi? ‘a shed at the back of a house’;
*b/ìn/antu ‘child-in-law’; SM, IBN mənantu, MIN minantu, binantu, BH minantu, SWY nantu (with loss of antepenultimate syllable) (cf. PMP *b/ìn/antu ‘son-in-law’; see 3.6.1.6 for *b > m);
*biruən ‘bear’; SM, IBN bərəuən, MIN, BH biruən, SWY bəxuən, JKT biruən (< SUN?) (but cf. PMP *be(rR)uən, Prentice (1974:44);
*tıŋadah ‘look upwards’; SM tıŋadah, MIN, BH tıŋadah, JKT tıŋadè;
*tıŋgaluŋ ‘civet cat’; SM tıŋgaluŋ, MIN tıŋgaluŋ, BH tıŋgaluŋ;
*tılaŋjaŋ ‘naked’; SM, SWY tıłaŋjaŋ, MIN tılaŋjaŋ, tılaŋjaŋ, BH tılaŋjaŋ, IBN tılaŋjaya (see 3.2.3 for IBN -ay);
*subəraŋ ‘opposite bank or side’; SM, SWY JKT səbaraŋ, MIN, BH subaraŋ, IBN səbaray (see 3.2.3 for IBN -ay).

N.B. Sometimes antepenultimate neutralisation (to a) has also affected MIN or BH high vowels; as a result MIN can have an antepenultimate high vowel where BH has a or vice versa. In such cases I will reconstruct a PM high vowel, unless evidence from other isolects or other AN languages provides a more convincing explanation. For example:
*kulambu* ‘mosquito net’; SM, SWY, JKT *kələmbu*, MIN *kulambu*, kalambu, BH kalambu; *tulad/an* ‘example, sample’; SM tuladan, tuladan, MIN tuladan, BH taladan, SWY, IBN, JKT taladan; *pilanduk* ‘mousedeer’; SM palanduk, MIN palanduŋ?, BH pilanduk, IBN palanduk.

In a number of cases BH has a *u* which does not reflect PMP *u*. This *u* possibly originated through colouring by a following (labial) consonant, for example, *gumalan* ‘gamelan’ (*< JV*), and *jambat/an* (also *jambat/an* ‘balustraded gangway’, SM *jambat/an* (also *jambat/an* in Wilkinson 1959), MIN *jambat/an*, JKT *jambat/an* ‘id.’). According to Wilkinson, SM *jambat/an*, *jambat/an* comes from *+jambat* ‘hold in the hand’ + *+an*. Compare also BH *kubaya* ‘k.o. dress’, and SM *kəbaya*, MIN *kəbaya* ‘id.’, which comes from AR *qaba:ya* (plural of *qaba* ‘k.o. tunic’) according to Von de Wall. In one case the same assimilation seems also to have been at work in MIN, viz. SM *səmbahyə*, MIN *səmbayaŋ*, *sambayaŋ*, BH *səmbayaŋ*, *sambahyə*, IBN *səmbiəŋ*, JKT *səmbayaŋ* ‘prayer; pray’, SWY *səmba(h)yə* [sic] ‘obligatory ritual prayer’. For SM *jambat/an* etc. and SM *səmbah/yə* etc., I reconstruct:

*jambat-an* ‘balustraded gangway, jetty, bridge with handrail’;
*səmbah-**hiəŋ* ‘pray to (the) god(s)’.

If both MIN and BH have antepenultimate *a* where PMP/PMJ show a high vowel, I will reconstruct *(A,i)* or *(A,u)*, as it is not clear whether antepenultimate neutralisation took place on the PM level or later on, when MIN and BH were separate isolects; e.g.

*t(A,i)ŋgiliə* ‘anteater’; SM, SWY, JKT *təŋgiliŋ*, MIN *təŋgiliŋ*, BH *təŋgiliŋ*, IBN *təŋgiliŋ* (3.11); cf. PMJ *təŋgiliŋ* ‘anteater’.

**UNEXPLAINED IRREGULAR CORRESPONDENCE**

All isolects (except IBN, which does not have a reflex) maintain antepenultimate *i* in SM, BH, SWY, JKT *binataŋ*, MIN *binataŋ*, minataŋ* (3.6.1.6). No reconstruction is made for this correspondence set, which is most likely not inherited from PM.94

3.1.3.2 PM *i, *u > IBN ø, OTHER ISOLECTS i, u | C (h)VCV(C)

Examples:

*biawak* ‘monitor lizard’; SM, BH biawak, MIN, SWY biawaŋ?, IBN bayak (with possible metathesis of *+w* with *a* (non-phonemic) *+[y]- glide, and subsequent loss of *+w*), JKT biŋawak (nasalisation of *+y* unexplained);
*buhaya* ‘crocodile’; SM buaya, MIN, SWY buayø, BH buhaya (Fudiat Suryadikara et al. 1981:128), IBN baya, JKT buyə;

94*PMP *bi(nN)a(ŋ)C(C)ŋ* ‘beast, animal’ (Blust 1970:119) is problematic. Jack Prentice (pers.comm.) drew my attention to the fact that many Austronesian languages lack a general term for ‘animal’. As far as they have such a term, it is not amenable to the reconstruction of a PAN or PMP etymon. Brandes’ (1884:175) connection between SM *binataŋ*, Ibanag *batag* ‘trap-net’ and SUN *pamataŋ* ‘s.o. who hunts deer on horseback’ is not entirely convincing.
pattern outlined above.

Sulawesi dialects from various other languages, cf. SM, MIN, BH, JKT patu; pasa ‘fast (n)’, cf. SM, BH puasa, MIN, SWY puaso, JKT "puasè (< SKT).

3.1.3.3 PM ANTEPENULTIMATE *A FOR INDETERMINATE *a OR *ə

In a number of cases it is difficult to determine whether PM had antepenultimate *a or *ə, since in MIN and BH *a and *ə both became a, and in the other isolects all antepenultimate vowels as a rule became ə. The solution depends on a more general question, that is, whether PM had more than one non-high vowel in this position, and if not, which of *a or *ə occurred. This question has not yet been dealt with for PMP, and many scholars silently take it for granted that on this level only antepenultimate *a occurred (along with *i and *u).

Consequently, evidence for PM antepenultimate *a and/or *ə must be sought within the Malayic group, and this evidence does not yield a satisfactory solution. Some indication that PMP *a (with or without preceding laryngeal) became (pre-)PM *ə is given by the fact that such an *a was lost in all isolects, cf.

PMP *habaRat ‘north-west monsoon’ > SM barat ‘west’ (5.2.1);
PMP *q(ai)telur ‘egg’ > *tolur (5.7 lemma 98);
PMP *qaniBuG ‘k.o. palm tree’ > SM, SWY, IBN nibuG, MIN nibuG (cf. PM *nibuG, 3.6.1.2);
PMP *hapejiq ‘smarting, stinging pain’ > SM padih, MIN padih, BH padih, SWY padih(h), IBN padih, bo-padih? (with unexplained -h);
PMP *qanilaw ‘k.o. tree: Grewia spp.’ (Blust 1984a) > SM nilaw ‘id.’, SWY nilaw ‘k.o. wood’.

\(^{95}\) Kuantan must be a (originally high speech?) style variant. In a number of cases some (or all) isolects show a variant form that was created through replacement of an original -CV sequence by another ending. This new ending is usually -ntan, but -ntan and -ntang also occur. For example:

BH cun\(\text{t}an\) ‘steal’ < +curi (a North Indian loanword, cf. 3.4.1);
BH kuantan ‘cooking pot’ < *kuali (3.1.3.2);
Perak, Kedah antan ‘pestle’ < *halu (3.9.1);
BH kamintiv ‘candlenut’, SM kamiri, kambiri, JKT kamiri;
SM, MIN, BH, IBN santan, SWY santan (a JV loan?), JKT santan ‘coconut milk’, also SM sari ‘flower; flower-like; pollen, quintessence’ (< Old Javanese), JKT sari ‘stamen’;
SWY p\(\text{u}\)t\(\text{a}\)p ‘restrain oneself from s.th. prohibited (because harmful)’, o.i. pantag ‘taboo, thing not done, prohibition due to custom or superstition’, and SM p\(\text{a}\)mali, MN (rare) p\(\text{a}\)mali ‘id.’.

Sometimes the original form is no longer found in the isolects, but it can be traced through comparison with other languages, cf.

SM, MIN, IBN (Richards 1981; not usual), JKT jantan ‘male, masculine’, and SUN jalu, IV jalu (< SM?), Karo dalu/n\(\text{a}\) ‘masculine’, Tobo, Dairi dalu, IV dalu/n ‘boar’ yielding PWMP *Zalu ‘male’ (cf. Proto South-Sulawesi *Zalu ‘male (animals)’, Mills 1975 vol.2).

Brandes (1884-88) credits Van der Tuuk for explaining SM a\(\text{n}i\)j\(\text{g}\) as a high speech variant of PMP *asu ‘dog’. But this is doubtful, since the difference between *asu and a\(\text{n}i\)j\(\text{g}\) does not fit in well with the formal variant pattern outlined above.
Most probably, loss of PMP *a took place after an intermediate stage in which it was weakened to +ə.

Another indication that PM had an antepenultimate *ə is the cognate set (h)əmpədu, MIN ampadu, BH hampadu, SWY, IBN ampadu ‘gall bladder’. SM (2.1.3) and JKT (2.6.3) show a strong avoidance of initial schwa followed by a stop, and in SWY (2.4.3) and IBN (2.5.3) this sequence does not occur at all. But schwa followed by a cluster of a homorganic nasal + stop occurs regularly in these isolects, and it seems that inherited lexemes which in PMP had initial (laryngeal +) schwa + stop acquired a homorganic nasal preceding this stop. This is seen in MIN ampe?, BH ampat, other isolects ampat ‘four’ (3.4.1.1), which came from PMP *hepat (7.2.5). The nasal in this set must be reconstructed for PM, because MIN and BH have it as well. So, the same avoidance of sequences of initial (laryngeal +) schwa + stop seems to have occurred in PM, and this possibly explains the nasal which is found in the cognate set SM (h)əmpədu etc., including its MIN and BH members. In that case *həmpədu must be reconstructed, but lack of other analogical cases makes this reconstruction premature. Since it is not possible to determine with certainty whether antepenultimate *ə and/or *a occurred, I will reconstruct PM *A for the correspondence MIN, BH a, other isolects ə in antepenultimate position.

Examples:

*bAlaŋa? ‘earthenware vessel’; SM balaŋa, MIN balago, BH balaga, SWY balago, IBN balaŋa?, JKT balagə;
*hAmpadu ‘gall bladder’ (see above);
*jArami? ‘rice stalk, straw’; SM, SWY, JKT jarami, MIN jarami, IBN jarami?
*tAliga(?) ‘ear’; SM taliga, MIN taligo, BH taliga, SWY taligo.

In a number of cases SM has an antepenultimate a adjacent to h. This a does not necessarily reflect PM *a, since PM *ə also occurred adjacent to *h (cf. 3.1.1.5). But since SM ə adjacent to h is avoided (except in the sequence (h)əN- + stop (cf. 2.1.3), PM *ə may have become SM a in this environment. I will reconstruct *A for this SM a (/MIN, BH a, SWY ə(a), IBN ə).

Examples:

*hArimaw ‘tiger’, SM harimaw, rimaw, BH harimaw, MIN arimaw ‘tiger’, SWY ximaw (with loss of *ə if *A was a schwa), or (if *A was an *a) with neutralisation of *a to schwa and subsequent loss, cf. also 2.4.3) ‘wild cat’; IBN has rimaw ‘tiger’, but since tigers are not found in Borneo this is probably borrowed (from SM?);
*hAlu-an ‘bows, forepart of a vessel’; SM, BH halu/an, MIN, SWY alu/an (with unexpected retention of a; < SM?), IBN lu/an (3.11c);
*hAlilipan ‘centipede’; SM halipan (with haplology of second syllable), (li)lipan, MIN (a)lipan, BH halilipan, SWY (li)lipan, IBN łalipan, łalipan;96
*bAharu ‘new’; SM, MIN baharu, baru, IBN, JKT baru.

IRREGULAR CORRESPONDENCES

In the cognate set SM dahulu, dulu, MIN dauhu, dulu, BH dahulu, SWY, JKT dulu, IBN dulu? ‘before, first, ahead’, SM, BH a preceding h corresponds to MIN a/ə, other isolects ə. From seemingly analogical cases like *bAharu and *hArimaw it would follow that +dAhulu? be reconstructed. But it is more likely that SM dahulu etc. developed from *də *hulu(?).

96Cf. Bruggeman’s wordlist of IBN as spoken in Sarawak’s Third Division (in an appendix to Scott 1956).
This assumption is supported by evidence from outside the Malayic group, e.g. Achehnese *di hleu, Toba jolo ‘before, first’. Given this assumption, the irregular development PM antepenultimate *i > SM, MIN, BH a has to be accounted for. This is done for SM by the following rule order, and the presumption that *di and *hulu(?) were still independent lexemes at the time that rule I applied.

TABLE 5: THE DEVELOPMENT FROM PM *di*hulu(?) TO SM dahulu

I PM *h > ø ʃ(C)V₁ _ V₂... (where V₁ ≠ V₂)
  e.g.  *muhara(?) > +muara
         *buhaya > +buaya
  but:  *di *hulu(?) > +di hulu(?)

II PM *V > +ə C_CVCV(C)
  e.g.  +baharu > +bəharu
         +di + hulu(?) > +dihulu(?) > +dəhulu(?)

III +ə (adjacent to +h) > a
  e.g.  +bəharu > SM baharu
         +dəhulu(?) > SM dahulu

Finally, MIN daulu, dulu, and BH dahulu must be borrowed from SM, and I reconstruct:

*di *hulu(?) ‘before, first, ahead’.

3.2 THE PM DIPHTHONGS

In the inherited vocabulary of SM, MIN, BH, SWY, and IBN, there are two diphthongs which only occur lexeme-finally, and which mutually agree in these isolects: -ay and -aw. These diphthongs correspond to JKT -é and -ô respectively. Other diphthongs (in BH, IBN or JKT) are not inherited.97 I reconstruct PM *-ay on the basis of JKT -é, other isolects -ay, and PM *-aw on the basis of JKT -ô, other isolects -aw.

3.2.1 PM *-ay > JKT -é, OTHER ISOLECTS -ay

Examples:

*supay ‘river’; SM, MIN, IBN sugay ‘river’, SWY sugay ‘small river’;
*bəŋkay ‘corpse’; JKT bəŋkê, o.i. bəŋkay;
*tapay ‘fermented rice, yeast’; SM, BH, SWY tapay, IBN tapay,98 JKT tapé ‘fermented rice’, MIN tapay ‘fermented corn’;
*lantay ‘floor of bamboo strips’; SM, MIN, BH lantay ‘floor’, SWY lantay ‘floor of an elevated house’, IBN lantay ‘strips of bamboo forming a k.o. deck’;
*hintay ‘wait for, spy upon’; SM (h)intay, MIN intay, BH hintay, JKT intey99 ‘spy upon, watch’, IBN intay ‘wait for, watch for an opportunity’;

97JKT diphthongs (viz. oy, ay, ey, and aw, see 2.6.1) do not occur in the inherited vocabulary, nor do BH and IBN -uy (which do not correspond with each other).

98Richards gives tapay and tapey; Scott gives only tapé; the forms tapé and tapey must be borrowed (from SAR, see Richards 1981).

99The phonetic realisation of this (unexplained) diphthong is unclear.
*rantay ‘chain’; JKT ranté, SWY rantay (cf. 3.7 for r-), o.i. rantay.

3.2.2 PM *-aw > JKT -o, OTHER ISOLECTS -aw

Examples:
*rantaw ‘coastland, inlet; reach of a river; foreign country’; JKT ranté, MIN rantaw ‘coastland, foreign country’, SM rantaw, SWY rantaw (cf. 3.7 for r-) ‘inlet, creek; reach of a river; foreign country’, IBN rantaw ‘reach of a river’;
*hijaw ‘green, unripe’; SM, BH hijaw, JKT ijo ‘id.’, o.i. ijaw ‘green’;
*kAr(a)baw ‘buffalo’; SM korbaw, MIN kabaw, SWY kóbaw, IBN korbaw, kóbo, JKT kórobò (cf. 3.7.5);
*panaw ‘white spots on the skin’; JKT panó (3.4.2c), o.i. panaw;
*andaw ‘day; daylight’; BH ma-landaw ‘get up late, lie abed’, and IBN apay andaw ‘father of the day’ (name of a star) (cf. 5.1.2).

IRREGULAR CORRESPONDENCES

JKT has -o in kasó ‘rafter’; other isolects have kasaw ‘rafter’, and I reconstruct:
*kasaw ‘rafter’.

3.2.3 UNEXPLAINED IRREGULAR CORRESPONDENCES: IBN DIPHTHONGS

In a number of IBN lexemes final a(C) is replaced by -ay or -aw. There are also a few cases where expected +-i(C) or +-u(C) has been replaced by -aw. In general, -ay is found instead of expected +-a, +-a?, +-ar, +-an, +-aŋ, +-al or +-ah, and -aw is found instead of expected +-ap, +-am, +-as or +-i(C).

Examples:

-ay:
tuay ‘old, mature’; SM tu(h)a, MIN, SWY tuo, BH tuha, JKT tuè;
umay ‘farm(land)’; SM (h)uma, BH huma, SWY umo ‘farm(land)’;
basaq ‘big’; SM, JKT basar, BH basar (possibly a loan: gañal is more usual), SWY basa¿ (3.7.4 IC) ‘big’;
angay < *angon (3.1.1, 3.1.1.5);
jalay ‘way, road’; o.i. jalan ‘way, road’;
pulay ‘return (v)’; BH pulañ ‘again’, o.i. pulañ ‘go home’;
datay ‘come, arrive; report (v)’; JKT datañ, o.i. datañ ‘come’;
gajay, gajah ‘elephant’; JKT gajè, SWY gaja(h), o.i. gajah (< SKT);
uday, udah ‘already, after, in the past’; SM, MIN sudah, udah, BH sudah, SWY udo, sudo, JKT udè (cf. 3.8.1 IC(1)) (< SKT cuddha- ‘cleared, pure’ and ‘acquitted, complete’, Gonda 1973:565);

-aw:
tasaw ‘cut undergrowth’; SM, BH sasap ‘hoe up weeds’, MIN sasap ‘cleared rice field’;
diaw < *diam (3.1.1, 3.1.1.5);
uraw < *uram (3.1.1, 3.1.1.5);
boraw < *boras (3.1.1.3);
bəkaw ‘trace, mark; showing trace of’; SM bəkas, MIN bakeh, BH bakas ‘trace, mark; former’, JKT bakas ‘used things, leftovers’;
kibaw ‘wave’; SM, BH kibas ‘shaking vigorously’, JKT kibas ‘shake s.th. to get the dust off’;
maw, mas ‘gold’; SM, SWY (ə)mas, MIN ameh, BH amas, JKT əmas;
tisaw, tisi ‘edge, rim’ (cf. 3.8.1 N.B. for t-); SM, MIN sisi ‘id.’;
ataw, ati ‘liver; centre of the senses, mind’; SM, BH hati, MIN, SWY ati, JKT ati? ‘id.’;
mipaw, mipis (m- unexplained) ‘thin’; SM tipis, nipis, MIN tipih, BH nipis, SWY, JKT tipis ‘thin’.

Semantically differentiated doublets of the form -aw/-ay vs -aC also occur:
kətaw ‘reaping’, and kətam ‘carpenter’s plane’ (< SM?); SM katam, BH katam ‘reaping; carpenter’s plane’, MIN katam, SWY kətam ‘carpenter’s plane’;
silaw ‘dusk’, and silap ‘conjuring’ (< SM? cf. SM silap ‘conjuring’);
lənaw ‘lost’, and lənāp ‘die (in songs)’; SM lənāp, MIN lənə ‘vanish, disappear’;
kiτay ‘we (incl.)’, and kίtə? ‘you (pl.)’ < SAR? cf. SAR kίtə? ‘you (pl.)’, and kίta ‘we (incl.)’ (Collins 1987:84), cf. also BRU kίtə? ‘you (polite)’; SM, BH kίta, SWY kίto ‘we (incl.)’, MIN kίto ‘we (incl.)'; you (sg., to people one does not know)” JKT kıtê ‘I; we’.

On the basis of the above sets I reconstruct:
*bosar ‘big, large’;
*tuha(ʔ) ‘old (of people)’;
*huma(ʔ) ‘farm(land)’ (3.4.2.5)
*jalan ‘way, road’;
*pulap ‘go back (home)’;
*daτəŋ ‘come’;
*lənəp ‘disappear, vanish’;

*basAp ‘hoe up weeds’;
*bakas ‘trace, mark’;
*kibas ‘wave (v)’;
*sisi ‘edge, rim’;
*nipis ‘thin’ (5.7 lemma 156);
*əmas ‘gold’;
*hati ‘liver, centre of senses’;
*katam ‘reap, plane’;
*kίta? ‘we (incl.)’ (3.4.2b, 3.4.2.4).

N.B. (1) In one case there are three variants, cf. tigə, tigay, tigaw, and SM, BH tiga, MIN, SWY tigo, JKT tıgē ‘three’ (see also 5.3.1, 5.3.2). (2) In one case diphthongisation of IBN +ur has occurred, cf. jambuy (also jambi) ‘expose to the sun’ (see 3.6.1.5 for the excrescent b in IBN).

3.3 SEMIVOWELS

As a rule, semivowels do not occur initially in the inherited vocabulary of the isolets at hand. The only exceptions to this are a few cases where y- originated through the loss of syllabicity of PM *i:

SM yaŋ (2.1.3);
SM yaŋ, also given as iaŋ, hiąŋ, and hiyaŋ (Wilkinson 1959) ‘divinity’ (3.9.1);
SM yaitu, BH yaitu (2.1.3);
SM yu, also given as iu and hiu, JKT yu ‘shark’ (3.9.1).

In medial position y occurs in the environment (a,u) _ (a,u). It agrees in all isolets, with the exception of MIN lexemes ending in ρ < *-r, and a few other MIN and SWY isolated cases (where *y merged with following *a and became syllabic, i.e. MIN ρ and SWY i). In other environments -y- sporadically occurs in the isolets, but it is a non-phonemic glide
when it follows a front vowel or when, in JKT, it occurs adjacent to schwa in a few lexemes which are probably all loanwords (2.6.3, including fn. 62).

Medial \( w \) is found in the environment \((a,i) _- (a,i)\) in all isolects; in SWY it is also found between \( a \) and \( o \) (\(< *-a; \) in MIN \(*-a\) also became -o, but in this environment preceding \(*w\) was lost). In some cases IBN has a corresponding \( b \) which reflects PM \(*b\) (see 3.5, 3.5.1). Medial \( w \) is well attested between \( a \)’s, but it is hard to find a strong and convincing cognate set for \( w \) in the environments \( a _- i \) and \( i _- a \). \( Kawin \) ‘marry’ is found in all isolects except IBN, but it must be a Persian loan.\(^{100}\) Five other lexemes are each found in only three isolects:

1. SM, MIN jawijawi ‘k.o. tree’, SWY jawijawi ‘k.o. wood’;
2. SM, BH, JKT giwaJ ‘earstud’ is a loan from SUN (Wilkinson 1959);
3. SM lewat, BH liwat, JKT lèwat ‘past, after; pass’;
4. SM, BH kiwa, IBN kiba7 ‘left-hand’, SWY kiwo ‘odd (number)’; here IBN reflects \(*b\); see 3.5, 3.5.1;
5. SM sewa, SWY siwa (-a unexplained: a SM loan?), IBN sua (with contraction of \(+i\) and \(+w\) ‘rent (v)’, JKT sawè (\( a \) unexplained: should probably be \( ë \) ‘hire, rent, engage for payment’ < SKT seva: (Gonda 1973:95).

(1) and (3) are regular sets which I do not recognise as loanwords; however, they form too small a basis for the reconstruction of PM \(*w\) between vowels other than \(*a\). (2) and (5) are not inherited. In (4), BH, SWY \( w \) came from \(*b\).

Dempwolff (1938) reconstructed the following PMP \(*-awi\)- and \(*-iwa\)-sequences with reflexes in the Malayic isolects:

PMP \(*kawil\) ‘fish hook’; SM, SWY, IBN kail, MIN kai7;
PMP \(*kawit\) ‘hook’; SM, BH gait ‘hook, catch on to’, kait ‘hook on to; crook-shaped; crook’, MIN kai?, SWY, IBN kait ‘hook’, JKT gaët ‘hook, catch on to’ (cf. 3.4.1.4 UIC);
PMP \(*lawi\) ‘tail feather’; SM lawi/lawi;
PMP \(*Riwaj\) ‘lose one’s balance’; SM rewaJ ‘yaw (of a ship)’, MIN rewaJ ‘without direction, not knowing where to go’;
PMP \(*tiwas\) ‘calamity’; SM tewas ‘defeated’, BH tiwas ‘one’s own fault’.

Blust (1970:120) reconstructed PMP \(*cawi\) ‘k.o. bird’, with only a reflex in SM, cawi/cawi ‘drongo’.

It appears that Malayic reflexes of PMP lexemes with \(*-awi\)- and \(*-iwa\)-sequences are well attested only for PMP \(*kawil\) and \(*kawit\), and these reflexes have lost PMP \(*w\). PMP \(*w\) must have been lost in this environment. SM rewaJ, tewas, lawi/lawi and cawi/cawi are probably loanwords, although it is not clear where they came from.

I reconstruct PM \(*y\) on the basis of \( y \) in the environments \( a _- u \), \( u _- a \), \( a _- a \), and \( u _- u \) in all isolects in lexemes with a final consonant other than \(*r\); I reconstruct PM \(*y\) on the basis of MIN \( ð \), other isolects \(-y\)- in lexemes with final \(*r\).

I reconstruct PM \(*w\) on the basis of \( w \) in the environment \( a _- aC \) in all isolects, and on the basis of MIN \( ð \), other isolects \( w \) in the environment \( a _- oð \) in MIN, SWY and \( a _- að \) in the other isolects. In final position semivowels are interpreted as second components of diphthongs, see 3.2, 3.2.1, 3.2.2.

\(^{100}\)According to Von de Wall (cf. Persian kawin, kabin ‘dower’, in Steingass 1930). In SM a (Malaysian and Classical) spelling variant ‘kahwin’ occurs, which is phonotactically aberrant.
Examples:

*bayar ‘pay’; MIN bai*, SWY baix (see below), o.i. bayar;
*layar ‘sail’; MIN lai*, SM, BH, IBN, JKT layar ‘sail’, but also SWY ba/layax (with fricative x, see 3.7) ‘fastening for roofing material at the back of a roof’;
*kAlimayar ‘millipede’; SM kalamayar, MIN kalimai*, BH kalimñar ‘id.’ IBN ambayar (with reduced antepenultimate syllables) ‘centipede’;
*layan ‘soar, be borne through the air’; a.i. layag;
*hayam ‘domesticated animal, pet animal, plaything’; SM (h)ayam, BH hayam, MIN, SWY, JKT ayam ‘chicken, hen’, IBN ayam ‘plaything, toy, pet’, uduk ayam ‘pet dog’; (< PMP *qayam i. ‘domesticated’; 2. ‘play’; cf. also KD pa-hayam-an ‘livestock’);
*dayang ‘oar’; MIN pan-dayu*, o.i. dayang;
*layu ‘withered, faded’; SM, BH, SWY, JKT layu, IBN layu*;
*guay ‘rock, sway’; SM, MIN, goya, BH guya ‘id.’, IBN guya, JKT gọya, ‘shake’;
*puyu ‘k.o. fish’; SM, MIN puyupuyu, IBN puyu;
*kayu ‘tree, wood’; IBN kayu ‘id.’, JKT kayu, o.i. kayu ‘wood’.

IRREGULAR CORRESPONDENCES

In a few isolated cases, MIN exhibits a merger of *y with following *a (comparable to the regular merger in lexemes with 0 < *r, see above):

MIN lampui ‘a ginger (used medicinally)’, SM lampoyu, lampuyu, JKT lampuyu ‘id.’, SWY lampuyuyu ‘k.o. shrub’;
MIN sai ‘cut into slices’; SM, BH, IBN sayat ‘id.’;

In two other cases merger of *y with following *a (> i) is shown in SWY:

SWY baix < *bayar, and
SWY bais ‘k.o. large nibung palm’; SM bayas, MIN bayeh, IBN (Richards 1981) bayas ‘k.o. wild palm tree’.

Reconstructions made on the basis of the above cognate sets:

*Ambuyu ‘ginger plant’;
*sayat ‘cut into slices’;
*bayas ‘k.o. palm tree’.

Examples:

*sawa ‘python’; SM, BH sawa, IBN sawa? ‘python’, MIN sao ‘snake living in swampy areas’;
*tawa?/*tapa? ‘spider’; SM tabalaba, MIN lawah (-h unexplained), IBN ampalawa, JKT labelabè ‘spider’, BH gandañ lawa ‘old spider web’;
*nawa ‘soul, life; breath’; SM, BH ñawa, MIN ñao, SWY ñawo, JKT ñawè ‘soul, life’, IBN ñawa (Richards 1981) ‘soul, life; breath’; cf. also BAC ba-ñawa ‘breathe’, SM mñawà ‘breathe heavily, as in sleep’ (PMP *ñawa ‘id.’, cf. Dempwolf 1938, and Blust 1978a:43);
*awak 'body; trunk of body; self'; SM awak 'id.', MIN awa? 'body; (formative for personal pronoun(s))', BH, JKT awak 'body', SWY 'body; (pronoun for the 1st pers.)'; IBN awak 'space, gap, vacancy' may be a cognate, but its meaning is rather deviant.

3.4 THE PM VOICELESS STOPS

3.4.1 PM VOICELESS STOPS IN NON-FINAL POSITION

In non-final position the following voiceless stops are found in the Malayic isolects: p, t, c, k, and ?. They all occur intervocalically; p, t, c, and k also occur initially and post-nasally; p, t, c, and k agree in all isolects, and on the basis of their correspondences I reconstruct PM *p, *t, *c, and *k.

Of the PM voiceless stops, *c is more weakly attested than the others. Some well-established Malayic correspondence sets containing c are borrowed (e.g. SM curietc. 'steal' and SM cium etc. 'kiss', which are borrowed from a North Indian language, cf. Adelaar 1988:62). According to Zorc (1983:12-13), SM c is a secondarily developed reflex of PMP *s or *t, strengthened by an accent pattern favouring the last syllable. This may be correct, but the development in question may have taken place before the PM stage. At any rate, all isolects have c in at least some correspondence sets which are apparently not borrowed, and although the elimination of PM *c would certainly result in some more regular PM phonotactic and morphological patterns, this is not enough evidence for its absence in PM.

In a few cases, JKT has an intervocalic ? in the inherited vocabulary: it occurs between like vowels and is not in contrast with JKT h (cf. 2.6.1).

3.4.1.1 PM NON-FINAL *p > ALL ISOLECTS p

Examples:

*pisaq 'banana'; a.i. pisaq;
*porut 'stomach, belly; intestines'; SM, JKT porut, MIN paruy?, BH parut 'stomach, belly', SWY paxut 'intestines', IBN porut 'stomach, belly; intestines' (cf. 5.7 lemma 16);
*puluh 'ten'; MIN pulu²h, SWY pulu²(h), JKT pulu, o.i. puluh;
*lipot 'fold (v,n)'; MIN lipo?, JKT lipot, o.i. lipat;
*kapur 'chalk, lime'; SM, BH kapur, MIN kapu³, SWY kapux 'id.', IBN kapur, kapu² (3.7.4 IC) 'lime';
*tipu 'cheat, deceive'; a.i. tipu;
*empat 'four', cf. 3.1.3.3;
*rumput 'weed'; MIN rumpuy?, SWY xumput, o.i. rumput;
*impi 'dream (v,n)'; SM, JKT impi, m/impi, o.i. m/impi.

3.4.1.2 PM NON-FINAL *t > ALL ISOLECTS t

Examples:

*tahun 'year'; SM, BH tahun, JKT taon, o.i. taun;
*tahi² 'excrement'; SM, BH tahi, SWY, JKT tai, IBN tai²;
*tulis 'write'; MIN tulih, o.i. tulis;
*turun 'go down, descend'; SWY tuxun, o.i. turun;
*hatap ‘roof, roofing thatch’; SM (h)atap, MIN ato?, BH hatap, SWY, IBN atap, JKT atap,
*batu ‘stone’; a.i. batu;
*datang ‘come’, cf. 3.2.3;
*mata ‘eye’; SM, BH, IBN mata, MIN, SWY mato, JKT matè;
*gantung ‘hang’; JKT gantung/pan ‘place to hang out s.th.; tools for hanging out s.th.’, MIN
gantuŋ, o.i. gantung ‘hang’;
*hantu ‘ghost, demon’; SM, BH hantu, MIN, SWY, IBN antu.

UNEXPLAINED IRREGULAR CORRESPONDENCES

(1) IBN lost *t in the following cases:
anti? ‘wait for; until’; SM, MIN nanti, tanti, SWY tanti, (rare) nanti, JKT nanti;
aruh ‘place (v)’; SM, BH taruh, MIN taruŋ, SWY taruŋ(h), JKT taro ‘place, put or keep in a
place of safety; bet’ (related to SM pogaruñ ‘influence’);

It is not clear whether PM had an initial *n or *t for SM nanti etc.; I reconstruct for the above
cognate sets:
*(nt)anti? ‘wait for; until’;
*taruh ‘place (v); keep in a place of safety’.

(2) IBN has gañjaj ‘naked’ along with talañjaj ‘naked’ < *tilañjaj (3.1.3.1).

3.4.1.3 PM *c > ALL ISOLECTS c

Examples:
*cu(I)kup ‘enough, complete’; MIN cukuy?, SWY cukup, o.i. cukup;
*pacah ‘broken’; SM, IBN pacah, MIN, BH pacah, SWY paca(h), JKT paçè;
*capat ‘quick, agile’; SM, SWY, IBN capat, MINcape?, BH capat, JKT capat;
‘abhor, shun’;
*pucuk ‘sprout, shoot; end part’; IBN pucuk ‘top of a tree; part above the unbranched
trunk’, MIN pucup, o.i. pucuk ‘sprout, shoot’;
*kañçiq ‘button, bolt’; SM, BH, SWY kañçiq, IBN kañçin (probably a SAR loan, cf.
3.6.3.3); the non-occurrence of a MIN cognate is probably due to the avoidance of a
homonymic clash with kañçin ‘urinate’.

N.B. In IBN regressive dissimilation to t- took place if two syllables began with *c, e.g.
*caçat ‘failure, spot, stain, defect’; IBN tacat ‘incomplete (of a set)’, MIN cace?, o.i. cacat
‘failure, stain, spot, defect’;
*cucuk ‘stab, pierce, prick’; SM, BH cucuk, MIN, SWY cucuŋ?, IBN tucuk, JKT çocök;
*ciçin ‘finger-ring’; IBN tiçin, SM, MIN, SWY, JKT ciçin.

IRREGULAR CORRESPONDENCES

IBN lost *c- (which would have become *t-) in ucuŋ ‘grandchild’, cf. SM, BH, JKT cucu,
MIN cuku, cukuŋ/ŋ, SWY cucuŋ/ŋ, see 5.4 for this loss, and for MIN, SWY -/ŋ. For this set I
reconstruct:
*cucuŋ ‘grandchild’.
3.4.1.4 PM NON-FINAL *k > ALL ISOLECTS k

Examples:

* _kutu_ ‘head louse’; JKT _kutu_? (3.4.2c), o.i. _kutu_;
* _k/anan_ ‘right (hand)’; a.i. _k/anan_;
* _kulit_ ‘skin, bark’; SM, SWY, IBN, JKT _kulit_ ‘id.’, MIN _kuli_? ‘bark, peel’;
* _sakit_ ‘ill, sick’; MIN _sakit_?, o.i. _sakit_;
* _ikan_ ‘fish’; BH n.c., o.i. _ikan_;
* _bukit_ ‘mountain, hill’; SM, BH, JKT _bukit_ ‘hill’, MIN _buki_?, SWY _bukit_ ‘hill, mountain’,
   IBN _bukit_ ‘mountain’;
* _aŋkat_ ‘raise, lift, move’; MIN (rare) _aŋke_?, o.i. _aŋkat_;
* _lajkah_ ‘pace, step’; SWY _lajka(h)_; JKT _lajk_?, o.i. _lajkah_;
* _bukuk_ ‘bent’; MIN, SWY _bunju_?, JKT _bǒjkōk_?, o.i. _bunjuk_.

UNEXPLAINED IRREGULAR CORRESPONDENCES

In six correspondence sets the isolects disagree in reflecting _k_ or _g_.

(1) SM, JKT _k̥ambar_, MIN, BH _k̥ambar_, SWY _gambax_, IBN _g̥mar_ ‘twin’;
(2) SM, JKT _gali_, MIN, SWY, IBN _kali_ ‘dig’;
(3) SM _gosok_, JKT _gos̥k_?, MIN _kusuk_?, _gusuk_?, _goso_?, BH _kusuk_, _gusuk_, SWY _kosu_?,
   IBN _kusuk_ ‘rub’;
(4) SM _kunday_ ‘short queue’, BH _gunday_ ‘hair’, IBN _gundy_ ‘long hair at back of head’,
   JKT _kond̥_ ‘hair knot’; (BSM _gundy_ ‘lock of hair on crown of head’);
(5) SM, BH, JKT _kumpul_, SWY _kumpul_, _kumpu_? ‘together, gathered’, MIN _kumpu_? ‘heap, collection’,
   IBN _gumpu_ ‘gather, pick’ (cf. 3.7.2 UIC);
(6) SM, BH _gaet_ ‘hook, catch on to’, _kait_ ‘hook on to; crook-shaped; crook’, MIN _kai_?,
   SWY _kait_ ‘hook’, IBN _kait_ 1. ‘crippled, deformed’ 2. ‘hook, catch’, JKT _gaet_ ‘hook, catch on to’,
   _oraŋ gaet_ ‘thief’, cf. PMP _kawit_ ‘thief’.

In case (1), it is striking that two isolects, which can hardly have had any influence on one
another, agree in having _g_. But the four other isolects have _k_-, and the corresponding PMP
form is *_k̥embar_.

In case (2) PMP has also a corresponding *k- (PMP *kali).

For (3) there is a corresponding PMP *_gusuk_ (on the basis of Toba, JV, SM _gosok_ ‘rub’,
Ngaju _mangosok_ ‘rub’, _kusok_ ‘rubbed’, Malagasy _kusuka_ ‘rub’). But the *_g_ of this
reconstruction is questionable. Firstly, its Toba and Ngaju reflexes are loans. Toba _o_
developed either from Proto Batak *e (a schwa, which came from PMP *e), or from Proto
Batak *-ow (< PMP *-ew and *-aw, Adelaar 1981:12, 18; Adelaar 1988:68 fn.7). It does
not reflect PMP * _u_, and hence Toba _gosok_ cannot have developed from PMP *_gusuk_.
Hardeland (1859) labelled Ngaju _mangosok_ as a loan from Banjarese, which was apparently
overlooked by Dempwolf. Secondly, the _k_- in Malagasy may reflect PMP * _ng_ as well as
* _nk_. Thirdly, Ngaju _kusok_ and Toba _husuk_ (with a related meaning ‘shake’) may have
developed from a PMP * _kusuk_. Moreover, JV has also _kosok_ ‘rub’ along with _gosok_, and
in Old Javanese only _kusuk_ occurs. With the elimination of the Toba and Ngaju evidence,
and in view of the indecisive role of the Malagasy and JV evidence, there is good reason to

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101 There is also SWY _kampān_ in anak _kampān_ ‘child of a prostitute’, and Salako _kampākg_ ‘commit adultery’
(Adelaar, unpublished fieldnotes): these forms may be related to SM _gampān_ ‘of little account; easy; light’; cf.
also SM anak _gampān_ ‘illegitimate (literally ‘easy’) child’.
substitute PMP *kusuk for Dempwolff's *gusuk on the basis of Toba husuk 'shake', SM gosok (dialectally also with k-), JV gosok/kosok (Old Javanese kusuk) 'rub', Ngaju kusok 'rubbed', and Malagasy kusuka 'rub'.

In (4) the correspondences are ultimately borrowed from TAM (cf. Van Ronkel 1902:112).

In (5) there is only one form with g-, and finally, in (6) there is an ancestral form PMP *kawit 'hook'.

I do not know what caused the sporadic change of PMP *k > g in the isolects. The agreement between SWY gāmbax and IBN gāmbar is probably coincidental, and the agreement between SM, BH gait and JKT gaët is probably due to borrowing. I reconstruct:

*kali 'dig';
*kāmbar 'twins';
*kait 'hook(n); hook, catch on to';
*kusuk 'rub'.

3.4.2. PM VOICELESS STOPS IN FINAL POSITION

In final position the Malayic isolects have p, t, k, and ?. -p and -t agree in all isolects except MIN, where all final stops merged in -ʔ after raising or diphthongising some of the preceding vowels (cf. 3.1.1 - 3.1.2). -k agrees in SM, BH, IBN and JKT (it is realised as a glottal stop in SM and IBN). This SM, BH, IBN, JKT -k corresponds to -ʔ in SWY and MIN. Apart from -ʔ, SWY also has a -k, and conversely, IBN and JKT also have a -ʔ each with a different origin. (IBN -k and -ʔ are both realised as [ʔ]: cf. 2.5.1 and fn. 48). In summary, we have the following regular correspondence sets:

MIN -ʔ, o.i. -p;
MIN -ʔ, o.i. -t;
MIN, SWY -ʔ, o.i. -k (realised as [ʔ] in SM and IBN).

And furthermore we have SWY -k, IBN -ʔ and JKT -ʔ which do not seem to have regular correspondences in the other isolects, and which need some further discussion.

(a) SWY

SWY -k is innovative. SWY regularly has -ʔ corresponding to -k (MIN -ʔ) in the other isolects, and in only three cases does it have -k corresponding to -k (MIN -ʔ) in the other isolects:

(1) balik 'wrong, upside down'; (cf. SM, BH balı/k, MIN baliʔ/k, JKT bölak/balik < *baliʔ 'reverse, go back', see below 3.4.2.4 UIC);
(2) luk 'curve in the blade of a knife'; cf. SM luk 'id.';
(3) tasik '(mythological) great lake around the axis of the world'; cf. SM tasik 'lake, sea', MIN (in texts) tasiʔa 'lake', IBN tasik 'sea'.

These exceptions must be loanwords. They may be borrowed from SM: the meaning of balik matches with the usual meaning of SM balik. Luk is also found in SM, and in both SM and SWY, luk is irregular in its monosyllabic shape (cf. 4.2). Tasik is only found in traditional stories (the 'andayanday'), whereas it occurs as a usual form for 'sea' or 'lake' in SM and IBN. Furthermore, in Helfrich 22 lexemes with -k also contain the non-inherited apical trill (r), whereas inherited x in combination with -k is found only in one case, where it
is, moreover, in free variation with \textit{r}: \textit{kərʊk}, \textit{kəxʊk} ‘cut or scratch out the meat of a coconut; crust in a pan’ (SWY \textit{r} is a loan phoneme, cf. 3.7). This fact strongly supports the idea that SWY \textit{-k} is innovative, and hence that SWY \textit{-r} is the regular correspondence to MIN \textit{-ʔ}, i.e. \textit{-k}. A possible objection to a SM origin of \textit{balik}, \textit{luk} and \textit{tasik} is that these lexemes should have had a \textit{-ʔ} on account of the fact that SM realises final \textit{-k} as \textit{ʔ}. But then again, SWY speakers would most likely interpret this SM \textit{ʔ} as \textit{k} on account of the fact that the preceding vowels are monophthongs. (SWY, which has \{-iʔ\}, \{-uʔ\}, \{-uk\} and \{-ik\} sequences, does not have \{-iʔ\} or \{-uʔ\} sequences, 3.1.2.)

(b) IBN

The origin of IBN \textit{-ʔ} is problematic. Zorc (1982:115) assumes that \textit{-ʔ} is the result of a merger of PAN *\textit{S} (corresponding to \textit{-s} in Formosan languages, and \textit{-h} (at morpheme boundaries) in Philippine languages), *\textit{H} (corresponding to \textit{-h} in some Formosan languages, and to \textit{-h} at morpheme boundaries in some Philippine languages), and *\textit{ʔ} (corresponding to \textit{-ʔ} in some Philippine and Formosan languages). The evidence for this theory is shown in the following correspondences (in my evaluation of Zorc’s theory I restrict myself to criticism of his IBN evidence. In order to show that JKT \textit{-ʔ} does not reflect any of the PAN laryngeals, evidence from this isolect is added to Zorc’s list, see below).

Zorc’s evidence for PAN *\textit{S}:

PAN *\textit{Cāli}S ‘line, string’ > IBN, JKT tali;
PAN *\textit{daqī}S ‘forehead’ > IBN dāi;
PAN *\textit{ku(S)}\textit{ku}s ‘fingernail’ > IBN \textit{kuku} ‘claw’, JKT \textit{kuku} ‘fingernail’;
PAN *\textit{paqa}s\textsuperscript{102} ‘thigh’ > IBN \textit{paah} (-\textit{h} unexplained), JKT \textit{pahe} (-\textit{h} unexplained);
PAN *\textit{tuqa}s ‘old (people)’ > IBN \textit{tuay}, JKT \textit{tuè};
PAN *\textit{ṭebu}s ‘sugarcane’ > IBN \textit{ṭabu}, JKT \textit{ṭabu};
PHF *\textit{Cīṇa}s ‘food particles caught between the teeth’ > IBN \textit{tiṇa}.

To these reconstructions I add *\textit{Cu:me}s and *\textit{pa:Ri}s (see below).\textsuperscript{103}

Zorc’s evidence for PAN *\textit{H}:

PAN *\textit{qūməh} ‘farm(land)’ > IBN umay;
PHF *\textit{ba:Ra}h ‘live coals’ > IBN \textit{bara}, JKT \textit{barè};
PAN *\textit{limə}h ‘five’ > IBN \textit{lima}, JKT \textit{limè};
PAN *\textit{qi:Su}h ‘shark’ > IBN \textit{iu}, JKT \textit{yu};
PAN *\textit{gu:lu}h ‘head’ > IBN \textit{ulu} ‘meaning [sic]’;
PAN *\textit{baq(e)Ru}h ‘new’ > IBN, JKT \textit{baru};
PHF *\textit{Ca:qi}h ‘facees’ > IBN \textit{tai}, JKT \textit{tai};
PAN *\textit{ba:Ru}h ‘hibiscus’ > IBN \textit{baru}.

\textsuperscript{102}The *\textit{S} in \textit{paqa}s is based only on intervocalic \textit{s} in Bunun \textit{p-in-asax} ‘thigh’. This is assumed by Zorc (1982:119) to contain an infix \textit{-in-} and to show metathesis of \textit{s} and \textit{x}. Other languages show no trace of *\textit{S}, and other Austronesians have reconstructed PAN *\textit{paqa} (Dyen 1953:11; Ferrell 1969:225).


This affects the interpretation of Zorc’s evidence in the following way: instead of two examples out of seven supporting the assumption that PAN *\textit{S} > IBN \textit{-ʔ}, there are three out of nine, and instead of 12 examples out of 18 supporting PAN *\textit{H} > IBN \textit{-ʔ}, there are now 11 examples out of 17.

In JKT, this change alters the numbers as follows: instead of one out of seven examples reflecting PAN *\textit{S} > JKT \textit{-ʔ}, there are now two examples out of eight, and instead of one out of eight examples reflecting PAN *\textit{H} > JKT \textit{-ʔ}, there now is no evidence at all for this change.

\textsuperscript{103}See fn. 102.
Zorc's evidence for PAN *-?:

PHN *a:ku? ‘admit, acknowledge’ > IBN aku?, JKT aku;
PMP *qa:RuHu? ‘casuarina’ > IBN ru?;
PHF *gilla? ‘like, note’ > IBN ila? ‘keep an eye on’;
PHN *badi? ‘knife’ > IBN badi?;
PHF *b(al)a.oa? ‘earthenware vessel’ > IBN balapa?, JKT balapè;
PHN *bapa? ‘father’ > IBN bapa? ‘father-in-law’ (but cf. also apay ‘father’, cf. 4.3.1), JKT bapa? ‘father’;
PMP *bi:Ra? ‘discharge, semen’ > IBN bira? ‘evacuate, discharge’, JKT bèrak ‘id.’;
PMP *buka? ‘open’ > IBN buka?, JKT bukè;
PHN *kaka? ‘elder sibling’ > IBN aka?, JKT kaka/q (cf. 5.4 N.B. for IBN loss of *k-, and JKT -q);

Zorc's evidence for PAN *-ø:

PAN *Cu:maH ‘body louse’ (> IBN tuma?, JKT tumè?) should be reinterpreted as *Cu:meS).104

Zorc's evidence for PAN *-ø:

PAN *máCaø ‘eye’ > IBN mata, JKT matè;

104See fn. 102.
Although Zorc's study of the PAN laryngeals is a very thoroughgoing one, and although his material, in many cases, shows a striking measure of agreement, I have some objections to his theory. Zorc considers IBN lexemes with a diphthongised last syllable to be evidence for the development of PAN *-S, *-H, and *-? to IBN -?, which is unwarranted since there is no way of telling whether earlier (undiphthongised) forms of these lexemes had -? or not. The lexemes in question are: tuay, umay, kitay, tubay, bu1)ay, and n/aday, better evidence for *kltaH is IBN kita? 'you (plural)' (if this is not a SAR loan, cf. 3.2.3). Furthermore, IBN (and also Mualang) have a fossilised suffix -?, which marks transitivity (see 6.1.1). It is a reflex of the PAN locative focus marker, and it corresponds to -i in Philippine and Formosan languages (Wolf 1973:73, 77). It is not likely that the -? in IBN -i? reflects a PAN laryngeal, since no corresponding consonant is found in Formosan or Philippine languages. But more important criticism to Zorc's sound law is that there are too many unexplained IBN exceptions. To start with, his evidence for PAN *-S > IBN -? is too weak.106 There are only three cases out of nine that support this correspondence, viz. tiga?, pari? and tuma?. In two cases the IBN reflexes do not provide evidence viz. tuay and paah (-h unexplained), and four reflexes provide counterevidence: tabu, tali, dai, and kuku. Evidence for PAN *-H > IBN -? is much stronger, although here too one is left with a considerable number of exceptions. Out of 17 examples, 11 (including kita? 'you (plural)') exemplify the change, viz. bara?, baru?, daki?, iu?, jawa?, jarani?, kita?, lima?, tai?, tapa?, and tau?, two do not provide evidence because of the diphthongisation of the last syllable (kitay not included), viz.

105See fn. 102.
106See fn. 102.
umay and tubay; one is based on an unconvincing reflex: according to Zorc, PAN *qu:luH 'head; hilt; beginning; upper part of a river basin' became IBN ulu7 'meaning', but IBN ulu 'hilt; upper part (of a river basin); to lead, guide' is semantically more sound as a reflex; finally, three examples contradict the change viz. baru ('new'), tunu, and siku. More reconstructions with final *H were provided by Tsuchida,107 but Zorc doubts their validity, because Itbayaten (a Philippine language) and IBN cognates both reflect ø. This fact, and also the fact that Formosan languages often disagree (not only with Philippine languages and IBN but also with each other) in reflecting *H also weighs against the argument for reconstructing this laryngeal.

PAN *7 > IBN -7 is well attested by a large number of cognate sets, although I do not agree with the use of the set PMP *waDa7 > IBN n/aday as evidence because of the diphthongisation in IBN. I reject PMP *ta:bi?, which is actually an erroneous reconstruction built on forms deriving from SKT ksantavya 'to be forgiven and pardoned' (Gonda 1973: 640), and I also reject PHN *bapa?. Zorc's evidence for PHN *bapa? is Lampung, JV, SM, SUN bapa?, Madurese appa? 'father', IBN bapa? 'father-in-law', Hanunoo bapa? 'uncle', Ilokano bapa? 'parent or parent's siblings' and Sambal bapa?. But PHN *bapa? is one of the exceptions to a phonotactic tendency which must have applied to PMP. The alleged reflexes of *bapa? with initial b- presented by Zorc must be borrowed from SM, although I admit that I find Sambal bapa? somewhat puzzling in this respect. The above tendency to articulation-type, harmony, and the history of SM b/apak, IBN b/apak? etc. (which derived from PM *apa(?)), are discussed in 4.3 (including fns 130 and 131).

In cases where PAN *ø is reconstructed, IBN agrees with -? in seven cases out of eight; for PAN *su:soø 'breast' it has tusu 'breast' and tusu? 'suck' (note also -nak? 'confess' along with ak? 'I'). The correspondence PMP *h > IBN -? is also well attested (PMP *h is the result of a merger of PAN *S and *H).

In the light of the above considerations it is hard to make out whether IBN supports Zorc's proposed sound law. His material supports PAN (/PHF/PHN/PMP) *7 > IBN -?, but not PAN (/PHF) *S > IBN -?; it supports PAN (/PHF) *H > IBN -? in two thirds of the examples. Another interpretation of IBN -? is that it occurs in inherited vocabulary, and that, in an earlier stage of IBN, it was a non-phonemic glottal stop heard after any monophthongic final-vowel phoneme. This situation was later on altered by the monophthongisation of original final diphthongs, and by subsequent borrowing of lexemes with final vowel: lexemes with a final vowel or diphthong which developed from a PAN diphthong (e.g. mati, padi, babi, buru, and ijaw, sugay, banskay, cf. 3.2.1, 3.2.2 and 7.1b), and loanwords, as a rule do not end with -?. The only loanwords ending in a -? are: pada? 'chief' (< SM? < SKT), kiju7 'cheese' (< SM? < POR), cuka? 'vinegar' (< SM? < SKT), cabi? 'chilli' (< SM? < SKT), tabi? 'term for) greeting' and bapa? (< SM; cf. also the more authentic IBN apay 'father' cf. 4.3.1). Finally, the apparent agreement in the occurrence of laryngeals between IBN on the one hand, and Formosan and Philippine languages on the other, may then be accounted for by the multitude of reconstructions with final laryngeals: if the majority of PAN (/PHN/PHF/PMP) reconstructions have a final laryngeal (as opposed to another consonant or ø), and if IBN -? was a phonetic glottal stop heard after each final-vowel phoneme in the history of IBN, then it is only self-evident that -? more often than not will agree with a PAN laryngeal. But if one follows the latter interpretation, one is left with a certain number of reconstructions ending in a final vowel which correspond with IBN

lexemes ending in a final vowel, and these can hardly be interpreted as loanwords (e.g. PAN *mâCaø > mata, PAN *bâtuø > batu, PAN *ku:Cuø > kutu, etc.). There are also three reflexes of PAN proto-lexemes ending in a diphthong which have a -? viz. bari? 'give' (< PAN *beRey 'id.'), pandi? 'bathe' (< PAN *anduy 'id.'), and kayu? 'wood' (< PAN *kaSiw). Another point in favour of Zorc's assumption is that Tioman Malay also exhibits a final -?, which seems to agree with the -? in IBN (Collins 1985). There are exceptions, and information on Tioman Malay is rather limited, but the agreement is still significant.

**TABLE 6: FINAL GLOTTAL STOPS IN TIOMAN MALAY AND IBN**

<table>
<thead>
<tr>
<th>Tioman Malay</th>
<th>Proto-language</th>
<th>IBN</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>[buka?]</td>
<td>PMP *bûka?</td>
<td>buka?</td>
<td>open</td>
</tr>
<tr>
<td>[ese?]</td>
<td>PHF *Sesi?</td>
<td>isi?</td>
<td>contents</td>
</tr>
<tr>
<td>[bâyò?]</td>
<td>PAN *ba:RuH</td>
<td>baru?</td>
<td>hibiscus</td>
</tr>
<tr>
<td>[nañka?]</td>
<td>PHN *nañka?</td>
<td>nañka?</td>
<td>jackfruit</td>
</tr>
<tr>
<td>[sawa?]</td>
<td>PHN *sâwah</td>
<td>sawa?</td>
<td>python</td>
</tr>
<tr>
<td>[pâñu?]</td>
<td>PHN *peñuh</td>
<td>pâñu?</td>
<td>tortoise</td>
</tr>
<tr>
<td>[nasi?]</td>
<td>PHF *Nasi?</td>
<td>asi?</td>
<td>cooked rice</td>
</tr>
<tr>
<td>[tali]</td>
<td>PAN *CâliS</td>
<td>tali</td>
<td>rope</td>
</tr>
<tr>
<td>[gutu]</td>
<td>PAN *ku:Cuø</td>
<td>kutu</td>
<td>louse</td>
</tr>
<tr>
<td>[mataø]</td>
<td>PAN *mâCaø</td>
<td>mata</td>
<td>eye</td>
</tr>
<tr>
<td>[batu]</td>
<td>PAN *bâtuø</td>
<td>batu</td>
<td>stone</td>
</tr>
</tbody>
</table>

But cf. also Tioman baii 'give', IBN bari?.

A really satisfactory explanation for the origin of IBN -? cannot be given at present. As long as I am not able to disprove Zorc's theory and to come up with a better explanation, I consider IBN -? as the reflex of PAN (PHF/PHN), *S, *H, or *?, or PMP *h, *?. If IBN exhibits -?, I reconstruct PM *?-; if IBN has -ø, I reconstruct PM *ø; if IBN has no reflex, or a reflex with -ay, corresponding to SM, BH -a, MIN, SWY -o, JKT -ê, I reconstruct PM *-(?).

(c) JKT

JKT -? is an innovation: no conditioning factor for its occurrence can be given, apart from the fact that some JKT sub-dialects show it more often and in more regular patterns than the sub-dialect of Mester. It may be due to influence from SUN, where a non-phonemic [?] is heard after all final vowels. Abdul Chaer gives quite a few variant forms from different sub-dialects. Especially in the case of lexemes reflecting PM *-a(?) and PM *-ê, Abdul Chaer gives the Kebayoran as well as the Mester forms, e.g. apa? (Kebayoran), apè (Mester) 'what'; bawa? (Kebayoran) bawè (Mester) 'carry'. In Mester -? may occur after any vowel, e.g.

- asó? take a rest
- canté? k.o. plant
- mati? dead
- nasi? cooked rice
- tumè? head louse
- kutu? body louse
- guru? teacher
- cari? look for
- jahè? ginger
- pisò? knife

Lexemes ending in è or ò often have a variant with a final è? or ò? sequence respectively (cf. 3.1.2), e.g.

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108 From the chart in the Introduction to Abdul Chaer (1976:XVIII-XIX) it appears that in Kebayoran a glottal stop is heard after every final vowel (except rame). The sub-dialect of Karet has a corresponding glottal stop, but it also lost *-h (Kebayoran still has -h), giving rise to final vowels.
ja(h)é ~ jahè? ginger
bègô ~ bègô? stupid
lègô ~ lègô? sell

JKT -? differs from IBN -? in the following ways:

(1) it is found in loanwords (which have a final vowel in the lending language), e.g.
guru ‘teacher’ (< SKT)
kunô ‘old, ancient’ (< JV)
lâmari ‘cupboard’ (< POR)
manî ‘semen’ (< AR)

But in other loanwords it does not occur, e.g.
tèmpô ‘time’ (< POR)
waktu ‘time’ (< AR)

cf. also kiju ‘cheese’, kopalè ‘head’, cukè ‘vinegar’, cabè/cabè? ‘chilli’ and tabé ‘(term of) greeting’, the correspondences of which have -? in IBN (see above).

(2) it sometimes occurs after a final vowel which developed from a PAN diphthong (cf. 7.1b), e.g.
matî ‘dead’ < PMP *matey
ati ‘liver’ < PMP *qatey
kayu ‘wood’ < PMP *kahiw

but cf. also:
padi ‘rice plant’ < PMP *pajey
buru ‘chase, hunt’ < PMP *burê
rantô ‘coastland, foreign country’ < PMP *rantaw
dami/damê ‘quiet, peaceful’ < PMP *damay ‘peace’

(3) it often has a variant with final ø, in which case the lower mid-vowels of the variant with -? usually change to higher mid-vowels (e.g. bègô ~ bègô?, ja(h)é ~ jahè?, see above).

In two cases it is found after a vowel that historically had a following +h, viz. tuju ‘seven’, and butu? ‘male sexual organ’.

Its occurrence does not correspond with the final laryngeals in PAN, as is shown in the JKT reflexes of the reconstructions given by Zorc (see above):^110

- In only two cases does JKT -? correspond to PAN *S, viz. *CebuS > tâbu? and *Cu:meS > tumê?.
- In no case does it correspond to PAN *H: in seven cases JKT has ø for PAN *H (viz. barè, baru, daki, jaramè, limè, tai, and yu), in one case it has -k (tolapak), and in one case it has both -? and ø (viz. tau ‘know’ and tau? ‘dunno’).
- In four cases JKT -? corresponds to PAN *? (viz. bapa?, datu?, nasi?, and nini?, but cf. also 5.4 N.B.); in six cases it has -ø for PAN *? (adè, ñ-aku (‘confess’), bukê, isi,

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^109 In modern Indonesian the meaning ‘need’ (mambutuhkan ‘need (v)’) is prevailing (cf. JV butuh ‘need, lack (v)’), but cf. SM butuh, BH, IBN butuh. SWY butu(h) ‘penis’, MIN butuh ‘a good-for-nothing, a jerk’.

^110 See fn. 109.
naŋkè, paku, tabè), in one case it has -ŋ (mamaŋ, a SUN loan? cf. 5.4.4), and in two cases it has -k (bèrak and tãkuk).

- In only one case does JKT have -r corresponding to PMP *h (viz. døpè?); in eight cases it has ø (viz. anu/ánò, buku, buŋè, ñilu, paku, poñì, sagu, and tuli).
- On the other hand, JKT -r corresponds to PAN ø in two cases (viz. kutu?, susu?) and it has ø in four cases (viz. batu, bòli, matè, and iè).

Considering the above discussion and the sound correspondences between the isolects, I reconstruct PM final *k on the basis of SM, BH, IBN, JKT -k, MIN, SWY -?, and PM *? on the basis of IBN -?, o.i. ø.

3.4.2.1 PM FINAL *p > MIN -?, OTHER ISOLECTS -p

Examples:
*hatap 'roof, roofing thatch' (3.4.1.2);
*hi(ŋ)isap 'inhale, suck in'; SM (h)isap, MIN iso?, BH hisap, isap,111 SWY isap, IBM insap, JKT isap;
*løtup 'burst, bang'; SM, SWY løtup, BH løtup 'burst, explode', MIN løtuy? 'crack one's joints', IBM løtup 'a bang, crack';
*sisip 'add, insert' (3.1.2, 3.1.2.1; cf. also 4.4).

3.4.2.2 PM FINAL *t > MIN -?, OTHER ISOLECTS -t

Examples:
*bolut 'crawling animal, eel'; SM, SWY bolut, MIN baluy? 'id.', IBM bolut 'worm';
*pulut 'sticky'; SM pulut, MIN puluy? 'id.', SWY, IBM pulut 'glutinous rice';
*sampit 'narrow, tight'; SM, SWY, IBM, JKT sampit, MIN sampi?
*sasat 'have lost one's way'; SM, SWY sasat, MIN sase?, BH sasat, IBM tasat (cf. 3.8.1), JKT sasat.

UNEXPLAINED IRREGULAR CORRESPONDENCE

In three cases JKT has -rcorresponding to -t in the other isolects. These cases are:
lar 'fly (n)'; MIN lale?, o.i. lalat;
pusar 'navel'; SWY, IBM pusat 'id.', SM, BH pusat, MIN puse? 'centre, focus; navel';
ular 'worm, grub, maggot'; SM (h)ulat, MIN ule?, BH hulat, SWY, IBM ulat.

Lar, pusar, and ular may be borrowed from JV (cf. JV lar, pusar, ular, with similar meanings). Another possibility is that JKT -r reflects PMP *-j, in which case a separate PM reflex should be reconstructed (possibly *-d?). But this is unlikely both because PMP *-j is otherwise reflected as -t, and because nowhere else in the material is evidence found for the reconstruction of PM lexeme-final voiced stops.

Compare also other JKT reflexes for PMP lexemes with *-j:
PMP *kunij 'turmeric' > JKT kunit 'turmeric' (cf. *kunit, 3.6.1.2IC);
PMP *ubaj 'medicine, drug' > JKT ðbat 'id.' (3.1.2.2);

111Abdul Jebar gives both hisap and isap, without specifying whether they belong to BH or to BK.
In one case JKT has a doublet with -d:

PMP *qaṇud ‘drift, float’ > JKT aṇut, aṇud, and SM (h)aṇut, MIN aṇuy?, BH haṇut, SWY, IBN aṇut ‘id.’.

I consider JKT lalar, pusar, and ulor loanwords from JV, and I reconstruct:

*lat ‘fly (n)’;
*pusat ‘navel’;
*hular ‘worm, grub, maggot’;
*haṇut ‘drift, float’.

3.4.2.3 PM FINAL *k > MIN, SWY -?, OTHER ISOLECTS -k

Examples:

*luo(ua)k/*ta/luk ‘bay, inlet; corner’ (cf. 3.10); SM, IBN, JKT ta/luk, MIN ta/luʔ?, BH luuk, ta/luk ‘deep place in a river’, SWY ta/luʔ? ‘bay, inlet’;
*miņak ‘oil’; MIN, SWY miņaʔ?, o.i. miņak;
*tatak ‘cut up’; SM, IBN tatak, BH tatak, SWY tataʔ? ‘id.’, MIN tataʔ? ‘carve, slash, delimit s.th.’ (cf. PMP *tektek ‘chop off’);
*bilik ‘wickerwork of bamboo used for making partitions in houses; such a partition; compartment, apartment’; SM bilik, MIN biliʔ? ‘room, compartment’, SWY biliʔ? ‘bedroom’, IBN bilik ‘room, especially of a longhouse’, JKT bilik ‘wickerwork of bamboo used as a screen or inner wall’.

IRREGULAR CORRESPONDENCES PM *-k > -t

In a few cases IBN has -t corresponding to MIN, SWY -?, o.i. -k. In all these cases the final-syllable vowel is i, e.g.

carədɪt, carədik ‘bright’ < *cVr(ə)dik (3.7.5);
iti ‘duck’; SM, BH itık, MIN, SWY iʔʔ?;
gundit ‘concubine’; SM, BH, JKT gundik, MIN gundiʔ?;
rubit, rubik ‘torn, frayed’; SM robek (< JV according to Klinkert), JKT rəbək;
tarit, tarik ‘pull, make taut’ < *tarik ‘pull’ (3.1.2.3).

These lexemes must be loanwords from SAR, where *-k as a rule became t after i (Collins 1987:Appendix 4).112 Other lexemes which are less likely to be borrowed show final k, like tasik, bilik, tarik (3.1.2.3), p/udik (3.5.2), etc.

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112 SAR palatalises final nasals which are preceded by front vowels (Collins 1987:35). Collins gives two examples of palatalisation of final velar stops preceded by front vowels: bai‘t ‘good’ (SM bai‘k), and naiit ‘go up, ascend’ (SM nai‘t). In two other examples it is not shown, viz. pənde‘k ‘short’ (SM pendək) and təsək ‘lake’ (SM tasik). According to Collins (pers.comm.) these lexemes are probably not inherited. Blust (who had fieldwork experience with SAR) regards IBN lexemes with palatalised final stops as loans from SAR (Blust pers.comm.).

N.B. The occurrence of Tagalog ma-ba‘it ‘good’ is possibly evidence that SAR bai‘t is not the result of palatalisation, but has developed from a PWMP form with final *t. On the other hand, it is also possible that the Tagalog root ba‘it is a loan from a Malayic isolect from North Borneo.
For the above cognate sets I reconstruct:

* gundik 'concubine';
* itik 'duck';
* rubik 'torn, frayed'.

**UNEXPLAINED IRREGULAR CORRESPONDENCES PM *-k > IBN (phonemic) -?**

(1) IBN -? corresponds to SWY -?, o.i. -k, in:

- badi? 'dagger'; SM, BH badik, MIN badi? (Van den Toorn badi?), SWY badi?
- cura? 'colour-scheme, pattern of cloth'; SM corak, MIN cura?, cora?, SWY cura?
- bai?, in bai?...pin... 'whether...or...'; SM baik in baik...maupun... 'whether...or..., both...and...';
- gamu? 'fat, stout'; SM, JKT gamuk, SWY gomu?
- sara? 'part, separate'; SM, BH sarak, SWY saka? 'separated, divorced'.

In the case of SM badik etc., it seems that the IBN correspondence is more authentic than those of the other isolects: cf. Zorc's PHN *badi? 'knife', and I reconstruct PM *badi?' 'dagger'. But for the other cognate sets I reconstruct:

* curak 'colour-scheme, pattern of cloth';
* gamuk 'fat, stout';
* sarak 'part, separate'.

(2) In one case BH and SWY have -t corresponding to IBN -?, o.i. -k:

- BH garut, SWY gaxut/garut, IBN garu? 'scratch'; SM, JKT garuk 'i.d.', MIN garu? 'rough, hoarse'. But there is also SM garu 'scraping with a blunt point', garut 'scraping against one another (of two surfaces in contact)', MIN gayu? 'scratch', BH garu 'scratch'.

The various endings of these lexemes reflect their sound-symbolic value. The variants probably already existed in PM, and slightly different meanings were associated with each of them in each isolect. I reconstruct:

* garuk/*garut/*garu? 'scratching'.

**3.4.2.4 PM FINAL *? > IBN -?, OTHER ISOLECTS ø**

Examples (taken from Zorc's evidence in 3.4.2b):

* aku? 'confess'; BH n.c., IBN aku?, o.i. aku;
* anu? 'something, someone, so-and-so' (3.6.1.2);
* baru? 'hibiscus'; SM, MIN, BH, SWY baru, IBN baru?;
* bAlana? 'earthenware vessel' (cf. 3.1.3.3);
* buku? 'joint, node'; IBN buku?, o.i. buku;
* buta? 'blind'; SM buta, MIN, SWY buto, IBN buta?, JKT butè;
* daki? 'body dirt'; IBN daki?, o.i. daki;
* datu? 'head of a clan'; SM datu/k, BH datu, MIN datu?/? ' (title used for a pangu); grandfather', JKT datu? 'grandfather', SWY datu?/? 'head of a pasar (a settlement of foreign people)', IBN datu? 'nobleman, chief' (cf. 5.4 N.B. for SM -/k, MIN, SWY, JKT -?);
* dapa? 'fathom'; SM dapa, MIN dapo, BH dapa, SWY dapo, IBN dapa?, JKT dape;
* hila? 'keep an eye on'; IBN ila? (no cognates in the other isolects, but cf. PHF *qila?);
* isi? 'meat, contents'; IBN isi? 'id.', o.i. isi (cf. 5.7 lemma 103);
*jarami? ‘rice stalk, straw’; SM, SWY, JKT jarami, MIN jarami, IBN jarami?,
*jawa? ‘millet’; SM jawa, SWY javo, IBN jawa?,
*jara? ‘warned by experience’; SM jara, MIN jaro, BH jara, SWY jəxo, IBN jara?
*kaka? ‘older sibling’; SM kaka/k, BH kaka, SWY kaka, IBN kaka, JKT kaka/I, kaka/II, (CF. 5.4. N.B. for SM -k, MIN, SWY -ʔ, JKT -ʔ, and loss of *k in IBN);
*kita? ‘(quotative particle)’; IBN kita? (cf. PHN *kenuh);
*laga? ‘sesame plant; its oil’; SM laga, BH laga, IBN laga?, JKT lənə;
*muda? ‘young, unripe’; IBN muda? ‘id.’, SM muda, MIN, SWY mudo ‘young, unripe, light (of colour)’ (cf. also 6.8);
*naŋka? ‘jackfruit’; SM, BH naŋka, SWY naŋko, IBN naŋka?, JKT naŋkè;
*nasi? ‘cooked rice’; IBN asi? (loss of *n- unexplained114), o.i. nasi;
*ni1u? ‘on edge, of teeth’; IBN ni1u?, SWY ni1u, ni1u, o.i. ni1u (IBN, SWY n unexplained: possibly palatalisation due to following i?);
*paku? (1) ‘nail’; IBN paku?, o.i. paku;
*paku? (2) ‘fern’; SM, MIN, SWY paku, IBN paku;
*palu? ‘hit, beat’; SM, MIN, SWY palu, IBN palu;
*pari? ‘ray (k.o. fish)’; SM, MIN, SWY pari, IBN pari?
*pa1u? ‘turtle’; SM, JKT pa1u, IBN pa1u? (MIN pa1u ‘seabird preying on carrion’ is probably not a cognate);
*puki? ‘vulva’; SM, BH puki, IBN puki?
*aru ‘casuarina’; SM (ə)ru, IBN ru; also BRU aru (Prentice pers.comm.);
*sawa? ‘python’ (3.3.2);
*sida? ‘they’; IBN sida? ‘they’, BH sida ‘you (polite)’ (Fudiat Suryadikara et al. 1981:196), cf. also KCI sida, Bukit Malay sida115 ‘you (sg., polite)’;
*ta1u? ‘bend (v)’; IBN ta1u? ‘id.’, SM ta1u ‘bent’, JKT ta1uk (-k unexplained) ‘fold (v)’;
*tiku? ‘bend (v)’; IBN tiku? ‘id.’, SM tiku ‘a curve, bend’;
*ti1u? ‘food particles caught between the teeth’; IBN ti1u? (cf. PHF *Ci1u, no cognates in the o.i.);
*tuma? ‘body louse’; SM, BH tuma, MIN, SWY tumo, IBN tuma?, JKT tumê?

UNEXPLAINED IRREGULAR CORRESPONDENCES SM -k, MIN -ʔ, BH -k, SWY -ʔ, JKT -k/ʔ corresponding to IBN -ʔ

In the following cases one or more isolects have -k (MIN, SWY -ʔ) corresponding to IBN ?

113 cf. SM kono/n, Tagalog kuna?; Malagasy hono ‘it is said’, JV kono ‘the thing discussed’ (Dempwolff 1938: ‘das Besagte’), Såfla anu ‘say, think’ < PMP *kunu ‘id.’.
114 Prentice (pers.comm.) drew my attention to Timugon Murut inasi ‘beer made of rice or root crop’ and Kadazan nasi ‘id.’ (where Timugon Murut in- and Kadazan n- are regular allomorphs of the infix -in- with vowel-initial roots). He suggests that SM, MIN, BH, SWY and JKT n- in nasi may be the remnant of a PM affix *in-/*in- (through weakening and loss of initial vowel). But as yet the Malayic isolects do not provide evidence for the reconstruction of such a PM affix.
115 For Banjar Bukit Malay see Abdurachman Ismail et al. 1979:100.
(1) SM, BH bali/k 'reverse, reciprocate', MIN bali/? 'rear-side, contrary, reverse; go back', SWY bali/? 'go back, do for a second time, restore', JKT bolak/balik 'vice versa, both ways'; cf. also SM, JKT kambali 'back (adv)', uan -- 'change (n)', MIN kumbali 'back (adv)';

(2) SM bera/k, BH bahira, IBN bira?, JKT bera/k 'defecate' (cf. 3.1.2.5);

(3) SM buka/k, buka, MIN, buka/?, buko, BH buka, SWY buka/?, IBN buka?, JKT bukè 'open', SWY buko 'large';

(4) SWY pala/?, SM kapala, MIN kapalo, BH kapali, IBN pala?, JKT kapalè 'head';

(5) SM pinta/k, pinta, BH pintæ 'a request', MIN pinta/?, pinto, IBN pinta?, JKT pintè 'ask, beg, request';

(6) SM tabi/k, MIN, SWY tabi/?, IBN tabi?, JKT tabé '(term for) greeting';

(7) SM tapak, töl/apak, MIN tapa?, BH töl/apak, SWY tapa?, töl/apak, IBN tapa?, JKT töl/apak 'sole, palm', furthermore BH tapak 'hit with palm of hand', and JKT tapak 'footprint'; Zorc considers IBN tapa? a reflex of PHF *dâpaH (see above);

(8) SM ti/da/k, MIN in/da?, BH ka/da, IBN ën/da?, JKT n/da/? 'no, not'.

SM tabi/k etc. (< SKT) and ti/da/k etc. are often used in isolation, one being a term for greeting, and the other a negation. Final -k/-? are often used as vocatives. Vocatives, greetings, and negations have in common that they can form a sentence in themselves, and that they are used in isolation. A possible explanation of the final -k/-? in tabi/k etc., ti/da/k etc., and kinship terms is that it was originally a syntactic marker for words occurring in isolation (cf. 5.4 N.B. for -k/-? in kinship terms). For the cases 1-5 and 7 no (tentative) explanation is available. In all these cases IBN has -?; in the other isolects no regular pattern can be found in the occurrence of -k/-?. SM kopal et al. is borrowed (from SKT). IBN tapa? as a reflex of PHN *dapaH is problematic, because the initial t in IBN (and in the other isolects) does not match with PHF *d-. Furthermore, IBN tapa? does not match with the other isolects, which all have -k/-? corresponding to IBN -?. On the basis of the above correspondences I make the following reconstructions:

*bali? 'reverse; go back';
*buka? 'open';
*pinta?/*pintak 'a request; request (v)';
*tapak(?,k) 'sole, palm';
*da? 'no, not'.

3.4.2.5 PM FINAL *($) > IBN A DOUBLET, OR NO REFLEX, OTHER ISOLECTS Ø

In case of doubt PM *($) is reconstructed, i.e. when IBN has a doublet, when dipthongisation applies to the IBN correspondence, or when there is no IBN correspondence. Examples:

*ada(?) '(not) exist, there is (not)'; SM, BH ada, MIN (usually in texts) ado, JKT adè 'exist, there is', IBN n/aday '(there is) no, not';
*buña(?) 'flower, blossom'; SM buña, MIN, SWY buño, IBN buñay (cf. 3.2.3), JKT buñè;
*hulu(?) ‘head; upper part; upriver; handle’; SM (h)ulu, BH hulu, MIN ulu ‘hilt; begin, first one; upstream area’, SWY ulu ‘begin, first one; upstream area’, IBN ulu? ‘meaning’, but ulu ‘handle, upper part; upriver’;
*huma(?) ‘farm(land)’ (3.2.3);
*mama(?) ‘uncle (mother’s brother)’; SM mama/k ‘uncle/aunt on mother’s side’, MIN mama/? ‘uncle on mother’s side’, SWY mama/?, JKT mama/? ‘uncle’ (cf. 5.4 N.B. for SM /k, MIN, SWY, JKT -?);
*susu(?) ‘breast’; IBN tusu, JKT susu?, o.i. susu, but also IBN tusu? ‘suck’;
*tuba(?) ‘(plant providing) fish poison’; SM, BH tuba, MIN, SWY tubo;
*tuha(?) ‘old (of people)’ (3.2.3).

UNEXPLAINED IRREGULAR CORRESPONDENCE

IBN has -h corresponding to -ø in the other isolects in: IBN paah ‘thigh’; SM, BH paha, MIN pao, JKT pahè (-h- unexplained), for which set I reconstruct:

*paha(?) ‘thigh’.

3.4.2.6 PM *-Vø > ALL ISOLECTS - Vø

In other cases given by Zorc ø is reconstructed (i.e. if IBN has a final vowel).

Examples:

*aku ‘I’; SM, BH, SWY, IBN aku;
*dahi ‘forehead’; SM, BH dahi, MIN dai, IBN (poetic) dai;
*ia ‘(3rd pers. sg.)’; SM, IBN ia, MIN io,116 BH hiæ117 (h- unexplained), JKT iè (cf. PAN *iøø);
*kami ‘we (excl.)’; JKT n.c., o.i. kami;
*kuku ‘claw, nail’; IBN kuku ‘claw’, JKT kuku?, o.i. kuku ‘claw, nail’;
*siku ‘elbow, angle’; (JKT sikut < JV), o.i. siku;
*tali ‘rope, string’; a.i. tali;118
*tabu ‘sugarcane’; SM, SWY, IBN tabu, MIN tabu, JKT tabu?,
*tunu ‘roast’; SM, SWY, IBN tunu.

3.5 THE PM VOICED STOPS

The voiced stops that are found in the isolects are b, d, j, and g. They occur initially, intervocally, and post-nasally (see 3.6.2). They agree in all isolects in all positions, except for IBN b in the environment a a which, as a rule, corresponds to w in the other isolects. On the basis of these correspondences PM *b, *d, *j, and *g are reconstructed. The correspondence IBN b, o.i. w in the environment l a a is reconstructed as PM *b: a change of PM *b to SM, MIN, BH, SWY, JKT w (with a decrease of closure) is phonetically more plausible than a change of PM *w to IBN b; furthermore, IBN b in this environment is a retention from PMP (Blust 1981:459).

116 See Van der Toorn (where it is written ‘jo’ (yo)).
117 Written ‘hiya’ in Abdul Jebar.
118 Written ‘tapi’ in Abdul Jebar.
3.5.1 PM *b > IBN b, OTHER ISOLECTS w | a _ a; ELSEWHERE *b > ALL ISOLECTS b

Examples:

*bulat ‘round’; SM, BH, SWY bulat, MIN bul?, JKT bulat;
*bari? ‘give’; SM, JKT bari, MIN, BH bari ‘give’, IBN bari? ‘s.th. given’;
*bintag ‘star’; a.i. bintag;
*bubu ‘bamboo basket trap for fish’; SM, BH, IBN, JKT bubu;
*labih ‘more, surplus’; SM, IBN labih, MIN lab?h, BH labih, SWY labi?q(h), JKT labi;
*tobu ‘sugarcane’ (3.4.2.6);
*tum/buh ‘grow’; SM, BH, IBN tumuh, SWY tumu?q(h), JKT tumuh;
*tambah ‘increase’; SWY tamba(h), JKT tambê, o.i. tambah;
*gambar ‘picture, image’; MIN gamba, SWY gambax, o.i. gambar,
*lambut ‘soft, weak’; SM, SWY, IBN lambut, MIN lambuy?, BH lambut;
*kaban ‘companion, follower; herd, group’; SM, JKT kawan, BH kawal (-l unexplained)119
‘friend, supporter, companion’, MIN kawan ‘companion, slave’, SWY kawan ‘follower, comrade; shoal, herd, group’, IBN kaban ‘(human) relation; group, company, shoal, herd’;
*taban ‘carry off, take prisoner’; SWY tawan/an ‘prisoner of war’, IBN taban ‘carry off, carry with’; o.i. tawan ‘take prisoner, detain’;
*laban ‘adversary, rival; fight, oppose’; SM, MIN, BH, SWY lawan ‘id.’, IBN laban 1. ‘opposed to, against’; 2. ‘because, on account of, by’, JKT lawan 1. ‘adversary, enemy’; 2. ‘s.o. who joins in eating rice’;
*bah/*babah ‘(position) under, below’; SM, MIN, BH bawah, SWY bawa(h), IBN bah (Richards 1981), JKT bawè; cf. also SAR bah (Collins 1987:83), KD ka-babah (Dunselman 1949:62) ‘under, below’.

UNEXPLAINED IRREGULAR CORRESPONDENCES

In a few cases IBN does not reflect *b-:

antu? ‘come to s.o.’s assistance’; SM, MIN, BH, JKT bantu;
aris ‘division, boundary’ (along with baris ‘row, line’, garis ‘line, boundary’, and taris ‘line’); SWY baxis, o.i. baris ‘straight line’;
ağıkaruq ‘grass lizard’; SM bąkar, MIN biŋkaruŋ, BH biŋkaruŋ/an, (Wilkinson 1959 also Kedah Malay maŋkaruŋ, caŋkaruŋ);
isan ‘relatives of child-in-law’ < *ba/is(a)n (3.1.2, 3.1.2.5);
isik ‘whisper’; MIN, SWY bisip?o, o.i. bisik;
ukay ‘no, not; is not’ (along with bukay ‘other’); SM, MIN, SWY bukan, MIN bukan, ukan, JKT bukan (a loan? see below).

A possible explanation for this loss is backformation, that is to say, *b was reinterpreted in IBN as a prefix b(3) -, which yielded the current lexemes. Another explanation is that IBN reflects the original state, and that the other isolects contain a petrified prefix b-. This may be the case with isik/bisik, since this lexeme often has the intransitive verbal prefix (cf.IBN b- isik, SM bar-bisik, etc.). But it would not apply to SM bąkar or SM baris etc., these being nouns that refer to something concrete. SM bukan etc. has cognates in many languages outside the Malayic group. These cognates all reflect PMP * in the final syllable, cf. PMP *beken (Blust 1970) and *beken (Blust 1980). In view of these proto-forms I interpret JKT bukan as a SM loan. On the basis of the above cognate sets I reconstruct:

119 An orthographic error? or a form corresponding with SM kawal ‘guard, escort’ (< TAM, Van Ronkel 1902:111)?
*bantu* 'help, assist';
*baris* '(straight) line';
*bakarung* 'grass lizard';
*(b)*isik 'whisper (v)';
*bukan* 'no, not; other' (cf. OM *bukan* 'other', Čeëdès 1930:39-40, 78).

3.5.2 PM *d > d*

Examples:
*dada* 'breast, chest'; SM, BH, IBN *dada*, MIN, SWY *dado*, JKT *dadè*;
*duri?* 'thorn'; SWY *duxî*, IBN *duri?*, o.i. *duri*;
*hidug* 'nose'; SM, BH *hidug*, MIN *iduŋ*, o.i. *idug*;
*m/andî?* 'bathe'; IBN *pandi?* (with *p-* through backformation), o.i. *mandi*;
*pindah* 'move, change place'; SWY *pinda(h)*, JKT *pindê*, o.i. *pindah*;
*tadi?* 'just now; previously'; IBN *tadi?*, JKT *tadî, tadè*, o.i. *tadî*;
*tanda* 'sign, mark'; MIN, SWY *tando*, JKT *tandê*, o.i. *tanda*;
*m/udi/k* 'go upstream, go back against the current'; SM, BH *m/udi/k*, MIN, SWY *m/udiʔ?,* IBN *p/udi/k* (backformation) 'go upstream', JKT *m/udi/k* 'go south; go back to one’s native village' (see 5.2); for *m/-* and */-k* see 6.8).

**UNEXPLAINED IRREGULAR CORRESPONDENCE**

SWY has *g-*., IBN ø-, corresponding to o.i. *d-* in SWY *gaxi*, IBN *ari*, o.i. *dari* 'from'; for this I reconstruct:

*dari* 'from'.

3.5.3 PM *j > ALL ISOLECTS j*

Examples:
*jahat* 'evil-hearted, bad' (3.1.1.5 IC);
*jalan* 'way, road' (3.2.3);
*jual* 'sell'; a.i. *jual*;
*tajam* 'pointed, sharp'; JKT *tajam*, o.i. *tajam*;
*tujuh* 'seven'; MIN *tujəh*, SWY *tujuʔ(h)*, JKT *tujuʔ?* (3.4.2c), o.i. *tujuh*;
*iŋjam* 'borrow'; SM, SWY *p/iŋjam*, BH *iŋjam*, IBN *iŋjaw*, JKT *p/iŋjam*;
*tuŋjuk* 'show (v); index finger'; SM *tuəluŋjuk*, SWY *tuŋjʉʔ?,* JKT *təluŋjuk* 'index finger', MIN *tuŋjʉʔ?,* BH, IBN *tuŋjuk* 'point out, indicate; finger', SM *tuŋjuk* 'point out, indicate'.

N.B. In IBN regressive dissimilation to *d* took place if two subsequent syllables began with *j*, e.g.:

*jaŋji* 'promise, agreement'; IBN *daŋji* 'agreement', JKT *jaŋji* (3.6.2), o.i. *jaŋji* 'promise, agreement, term';
*jiŋjir* 'row, line'; SM *jejer* 'orderly line', IBN *nijjir* (dijjir) 'put in a row'.

3.5.4 PM *g > ALL ISOLECTS g*

Examples:
*dagīŋ* 'meat, flesh'; *MIN dagīŋ, (IBN dagin from SAR, see 3.6.3.3 IC) o.i. dagīŋ;
*gigi* 'tooth'; a.i. gigi;
*goli* 'eerie feeling'; SM, SWY, JKT gali, MIN gali, IBN goli;
*sangul* 'bun of women's hair'; SM, BH, SWY, IBN sangul, MIN sangu;
*tanga* 'house ladder, staircase'; SM, BH tanga, MIN, SWY tango, IBN tanga?, JKT tangè.

3.6 THE PM NASALS

3.6.1 INITIAL AND INTERVOCALIC NASALS

In initial and intervocalic position four nasals agree in all isolects: *m, n, n,* and *ŋ*; on the basis of their correspondences PM *m, *n, *ŋ,* and *ŋ* are reconstructed.

3.6.1.1 PM INITIAL AND INTERVOCALIC *m > ALL ISOLECTS m*

Examples:

*ma/buk* 'intoxicated, mad, excited'; MIN, SWY mabu?, JKT mabèk, o.i. mabuk;
*ma/kan* 'eat'; IBN makay (cf. 3.2.3), o.i. maken;
*ma-la(hø)øm* 'night'; JKT maløm, o.i. malam (cf. 5.1.4);
*kami* 'we (excl.)' (3.4.2.6);
*lømah* 'soft, weak'; SM lømah, MIN, BH lamah, SWY lømah(h), IBN (only in songs) lømah, JKT lømè;
*rumah* 'house' (3.1.1.3).

3.6.1.2 PM INITIAL AND INTERVOCALIC *n > ALL ISOLECTS n*

Examples:

*naik* 'go up, ascend'; SM, BH naik, SWY nai?, IBN tik/i? (3.1.3.2 N.B.), JKT naèk;
*nannah* 'pus'; SWY nana(h), JKT nane, o.i. nanah;
*nibuŋ* 'k.o. palm'; SM, SWY, IBN nibuŋ, MIN nibuŋ;
*anu*? 'something; someone, so-and-so'; IBN anu?, JKT anu, anó, o.i. anu;
*kana*? 'hit, affected; right, suitable'; SM kana, MIN kanay (-y unexplained), BH kana, SWY kano, IBN kana?, JKT kanè;
*panas* 'solar heat'; MIN paneh, o.i. panas.

IRREGULAR CORRESPONDENCES palatalisation of +n preceding +i

MIN usually has a doublet with a palatal nasal in lexemes with *n* preceding *i* or *ŋ*, e.g.

*baŋph, baniŋ* '(plant-)seed' < *bænih (3.1.2.3);
*ŋiŋph, ninŋph* 'grandmother' < *ninŋ* (3.1.2.1);
*kaŋŋph, kan appré* '(eye-)brow' < *kæniŋ (3.1.2.3);
*barani, barani* 'daring; dare, venture'; SM, IBN, JKT bərani, SWY bəxani.

In one case there are variants with a palatalised and a non-palatalised nasal not directly preceding *i*:

*ŋamiŋ, namŋh* 'almost, all but' (no correspondences).
In jaño, jà/no ‘says she/he’ and tiño, ti/no\textsuperscript{120} ‘all right, let it be’ no palatalisation is involved: these doublets reflect two variants of the MIN possessive suffix (-ño and -no, which themselves are reflexes of PM *-ña (see 5.5.1.3)). In a few other cases SWY has n before i corresponding to doublets with n and ñ in the other isolects:

\textit{niux} ‘coconut’; MIN ñiur, niur, SM, BH, IBN ñiur;
\textit{buni} 1. ‘sound’ 2. ‘hidden; hide’; MIN buñi, buni 1. ‘sound’ 2. ‘not straight (in talking)’, SM buñi 1. ‘a sound’ 2. ‘hidden’, BH buñi ‘sound, voice’, IBN, JKT buñi ‘sound, noise’; (also SM, JKT sambuñi, MIN sambuñi, sambuni ‘hide; hidden’);
\textit{suni} ‘quiet, empty, unoccupied, lonely’; MIN suñi, suni, SM, BH, IBN suñi.

In one case MIN has doublets with ñ and n corresponding to a palatal nasal in the other isolects:

\textit{kuñi}, kuñi? ‘turmeric’; SM, SWY, IBN, JKT kuñit; cf. also BAC kuñit ‘yellow’.

For all the above cases I reconstruct an alveolar nasal. Palatalisation of alveolar nasals before a high front vowel is much more probable than the change from *ñ to n in this position. Moreover, Dempwolf (1938) reconstructed *n in PMP lexemes on the basis of SM bûnih, nene/k, kûnîg, bûrani, ñiur, buñi (2. ‘hidden; hide’), and kuñit. He reconstructed PMP *buñi ‘announcement’ on the basis of SM buñi ‘sound’ and two other reflexes which however are not valid: Tagalog bûnî ‘celebrity’ (a loan, as he indicated himself; probably from a Malay isolate; cf. also Wolff 1976:357) and Ngaju nambuñi ‘announce confidentially’ whose meaning is closer to buñi (2) than to buñi (1). Therefore it is very weak evidence for PMP *buñi. The following reconstructions are made on the basis of the above cognate sets:

*bañani ‘daring; dare’;
*buni ‘s.th. that is not seen (s.th. hidden, or a sound)’;
*kûnit ‘turmeric; yellow’ (cf. 5.7 lemma 150);
*niur ‘coconut’;
*suni ‘quiet, deserted’.

UNEXPLAINED IRREGULAR CORRESPONDENCES

IBN does not reflect *n- in:

asi? ‘cooked rice’ < *nasi? (3.4.2.4).

For IBN ini? < *nini?, see 5.4.2.

3.6.1.3 PM INITIAL AND INTERVOCALIC *ñ > ALL ISOLECTS ñ

Examples:

*ñamañ ‘pleasant, nice, comfortable’; SM, BH, JKT ñamañ, IBN ñamay (cf. 3.2.3);
*ñamuk ‘mosquito’; MIN, SWY ñamu², o.i. ñamuk;
*ñaua ‘life, soul’ (3.3.2);
*añam ‘weave, plait’; MIN añam, ayam, BH ayam (MIN, BH y unexplained),\textsuperscript{121} o.i. añam;
*kañañ ‘satisfied (hunger)’; MIN, BH kañañ, o.i. kañañ.

\textsuperscript{120}Short for ka-anda? ati-ño-lah ‘as she/he pleases, whatever she/he likes’ (literally ‘the desire of her/his heart’).

\textsuperscript{121}Due to regressive dissimilation of nasality? cf. the substandard pronunciation [sampiyon] of DU champignon ‘mushroom’ (< French).
*taflaʔa sk'; SM taña, MIN, SWY taño, IBN taña?, JKT tañè.

3.6.1.4 PM INITIAL AND INTERVOCALIC *ŋ > ALL ISOLECTS ŋ

Examples:

*gaga(ʔ) ‘agape’; SM, BH gaga, MIN, SWY gagə, JKT gagè;
*gori? ‘afraid, panic-stricken’; SM, JKT gorı, MIN gorı ‘id.’, IBN gorı? ‘downhearted’;
*gilu? ‘on edge, of teeth’ (3.4.2.4);
*lapit ‘sky’; MIN lapı?, o.i. lapit;
*haŋat ‘(non-solar) heat’; SM, BH haŋat, MIN ageʔ, SWY aŋat, JKT aŋat ‘id.’, IBN aŋat ‘heat (also solar)’;
*saŋat ‘sting (of venomous insect)’ (3.1.1.2).

3.6.1.5 EXCRESCENCE122 OF VOICED STOPS IN IBN

IBN has developed a homorganic voiced stop after intervocalic nasals followed by a vowel + final r (i.e. in lexemes with an original +CVNVr-structure),123 e.g.

bandir ‘buttress of a tree’; SM, BH bani, MIN baniʔ, SWY banix;
bangar ‘rotten, rotting’; SM bangar ‘putrid’, SWY banax ‘rotten smell’;
bondar ‘true, real’; SM banar, MIN bana, BH banar, SWY banax, JKT banar;
dambar ‘resin’; SM, BH damar, MIN dama, SWY damax;
ingar ‘loud’; SM, BH iŋar, SWY ipax;
jambuy, jambi ‘expose to the sun’ < *jamur (3.2.3 N.B.2);
jungur ‘snout’; SM jųgur, jųgor, MIN jųguʔ ‘id.’, SWY jųgux ‘upperlip’;
langir ‘tree bearing edible fruit; its bark (used for soap)’; SM lapir ‘k.o. shrub used for shampoo’, SWY lapix ‘all that is used to wash one’s hair’;
sambar ‘a splint, fish (for strengthening posts etc.)’; SM sambar ‘piece of wood lashed to a carrying-pole to strengthen it’.

A few lexemes have not undergone this development: timur ‘east’ (a loan, see 5.2.1), umur ((<SM?) < AR), amur ‘dust, mud’, jųgur/jųgur ‘look with an expression of dislike’, lumur 1. ‘anoint, smear’ 2. ‘number’ (lumur (2) < DU nummer?), pamur ‘cloudy, of water’, and rapor (Bruggeman, see fn. 83 in this chapter) ‘collide’. Excrecence of voiced stops also occurs in other isolects, but not on a regular basis (cf. 6.3.7 last N.B., and Adelaar 1988).

The following reconstructions are made on the basis of the above cognate sets:

*banir ‘buttress of a tree’;
*baŋar ‘putrid’;
*baŋar ‘true, real’;
*damaɾ ‘resin’;
*iŋar ‘loud’;
*jųgur ‘snout’;
*lųgir ‘tree bearing edible fruit; its bark (used for soap)’.

122 The term ‘excrescence’ is from Anttila (1972:68), who assigns it to the origin of voiced stops in, for example, English finger, number, thunder, etc.
123 This is the only environment in which excrescence can be observed. I did not find the same phenomenon in IBN lexemes of a CVNVI-structure.
3.6.1.6 HOMORGANIC NASAL SUBSTITUTION FOR STOPS IN ANTEPENULTIMATE SYLLABLES

In antepenultimate syllables stops are sometimes (and in IBN as a rule, cf. 3.11b) weakened to their homorganic nasals under the influence of a following nasal, e.g.

MIN binataŋ, minataŋ, SM, BH, SWY, JKT binataŋ ‘animal’ (3.1.3.1 UIC): *b/ìn/antu ‘child-in-law’, MIN binantu, minantu, SM, IBN mànantu, BH minantu, SWY nantu (3.1.3.1), cf. PMP *binantu.

This phenomenon is also shown in the correspondence set MIN kamanakan ‘relative, kin, family, esp. uterine heirs under Minangkabau law’ (Wilkinson 1959), BH kamanakan, JKT kapònakan ‘one’s sibling’s children’, but kapònakan is a loan (according to Wilkinson 1959), and no reconstruction is made.

3.6.2 PRECONSONANTAL NASALS

Preconsonantly, nasals occur before stops or s. As a rule, they are homorganic to a following stop. However, there are some exceptions in JKT, where heterorganic nasal + stop clusters are found; the nasal is usually a velar one. These clusters could occur in lexemes which originally (i.e. in pre-PM) had heterorganic clusters, e.g.

diŋdį (only one variant; PMP *DiŋDiŋ) ‘wall’;
bunbun, bumbun (PMP *bunbun) ‘cylindrical vessel made of a joint of bamboo’;
juŋjun, juŋjun (PMP *unjunj, SUN junjun) ‘carry on the head’;
bunbunan, bumbunan (PMP *bunbun) ‘fontanelle’.

But in other cases they have developed from homorganic consonant clusters, as in some loanwords and inherited lexemes, e.g.

dʌŋdɛ, dʌndɛ (< SKT; SUN daŋda) ‘punishment’;
tʌntu, tʌntu (< Old Javanese; SUN tʌntu) ‘certain(ly)’;
tɔntɔn, tɔntɔn (< JV; SUN tɔntɔn) ‘watch (a movie, play)’;
janį (only one variant; PMP *zanzi; SUN janji, JV janji, jaŋji) ‘promise, agreement’.

As can be seen from the above examples, most of the forms with these clusters have variants with a cluster consisting of a homorganic nasal + stop. Furthermore, the same phenomenon is seen in SUN and, to a lesser extent, in JV. Notherofer (1975:99, 194) reconstructs PMJ *-ŋC- on the basis of these languages. It is not inconceivable that these JKT heterorganic consonant clusters are a retention from a stage prior to PM (and hence should be reconstructed for PM), but for the time being I prefer to interpret them as an innovation. There are several reasons for this. Firstly, these JKT clusters are sometimes the result of a tendency to dissimilate nasals in homorganic consonant clusters, as can be seen in loanwords like dʌŋdɛ/dʌndɛ, tʌntu/tʌntu, or in inherited lexemes like janį. Secondly, if JKT heterorganic clusters were a retention, PMP reduplicated root morphemes like e.g. *gemgem ‘make a fist’ and *DemDem ‘keep quiet’ would have become JKT +gągmąm and +dąmąm. But gągmąm ‘hold tight’ and dąmąm ‘long for; grudge’ are found instead, and also, the heterorganic clusters almost invariably have a velar nasal, and rarely m or n. Thirdly, most of the lexemes that exhibit a heterorganic cluster have a variant with a homorganic one. The variants with a heterorganic cluster may be loans from neighbouring languages, or
otherwise, the tendency to velarise the nasal may be due to an areal feature in West Java. This feature would first have originated in SUN, and would gradually have spread in neighbouring languages. Finally, JKT is the only isoelect which exhibits heterorganic nasal clusters: the other isoelects unanimously show homorganisation of the nasal (except for -ps-). The ultimate decision as to whether these heterorganic clusters have to be interpreted as retentions or as innovations depends on more insight into the sociolinguistic situation in JKT.

On the basis of JKT m, η, other isoelects m, I reconstruct PM *m before a homorganic stop (*b or *p). See 3.4.1.1 and 3.5.1 for examples. On the basis of JKT n, η, o.i. n, I reconstruct PM *n before *d and *t. See 3.4.1.2 and 3.5.2 for examples. On the basis of JKT ń, η, o.i. ń, I reconstruct PM *ń before a homorganic stop (*j or *c). See 3.4.1.3 and 3.5.3 for examples. On the basis of η in all isoelects, I reconstruct PM *η before a homorganic stop (*g or *k). See 3.4.1.4 and 3.5.4 for examples. s is usually preceded by η in SM, BH, SWY and JKT, and by n in MIN and IBN.124 Since these clusters probably reflect a PAN cluster *-ηs-",125 I reconstruct PM *-ηs- on the basis of this correspondence. See 3.8.1 for examples.

UNEXPLAINED IRREGULAR CORRESPONDENCES

In the following cases the isoelects disagree in showing prenasalisation:

SWY cuŋkup, o.i. cukup ‘enough, complete’ < *cu(ŋ)kup (3.4.1.3);
SM muntah, MIN, IBN mutah, SWY muta(h), JKT mutê ‘vomit (v)’;
SM otak, BH utak, SWY otaʔ, IBN untak, JKT őtak (a unexplained; 3.1.1A) cf. PMP *u(n)tek ‘id.’;
IBN sämpaʔ (-ʔ unexplained, cf. 3.9.3UIC), SM səpah, MIN, BH sapah, SWY səpa(h) ‘betel cud’;
BH, IBN undaŋ, o.i. udaŋ ‘prawn, crayfish’;
SM məntah, MIN matah, BH mantah,126 SWY mata(h), IBN mataʔ (3.9.3UIC), JKT məntê (in Wilkinson 1959 also Kedah, Negeri Sembilan matah) ‘uncooked, unripe’.

These cognate sets yield the following reconstructions:

*m/u(n)tah ‘vomit (v)’;
*undaŋ ‘prawn, crayfish’;
*u(n)tok ‘brain’;
*sə(m)pah ‘betel cud’;
*m/əntah/*m/atah ‘raw, unripe’.

3.6.3 FINAL NASALS

In final position m, n and η occur in all isoelects. None of the isoelects has final ń; n and η agree in all isoelects, and PM final *n and *η are reconstructed. Final m agrees in all isoelects but MIN, where lexemes only have -m when it is preceded by a; otherwise they have a corresponding -n. I reconstruct PM final *n on the basis of all isoelects -m, and furthermore on the basis of MIN n, other isoelects m, if the preceding vowel is i, e, u or o.

124 According to Moussay 1981:23) n is an apico-dental. (Moussay 1981:25) describes MIN s as an alveolar, and so does Asmah 1964:1) for IBN. s). It is also noteworthy that Moussay (1981:32) has -ns- clusters corresponding to -ns- clusters in Van der Toorn and Thaib, cf. bənsə ‘people’ (Moussay) vs banso ‘id.’ (Van der Toorn, Thaib). Moussay’s description is based on the MIN isolect of Padang.
126 In Abdul Jebar ‘mantan’ is found, which is probably a misprint.
3.6.3.1 PM Final $^m > \text{MIN } n$, Other Isolects $m | (i,e,u,o) _\#$; Elsewhere $^m >$ Other Isolects $m$

Examples:

*bəłum ‘not yet'; SM bəłum, MIN balun, alun, BH balum, SWY bəłum, lum, JKT bəłəm, bəłən;
*kirim ‘send’ (3.1.2, 3.1.2.1; cf. also 4.4);
*anəm ‘six’; SM, SWY, IBN anəm, MIN, BH anəm, JKT anəm;
*tanəm ‘plant (v)’; JKT tanəm, SM, MIN, BH, IBN tanam;
*hitəm ‘black, dark’; SM hitam, MIN, SWY itam, JKT itəm.

3.6.3.2 PM Final $^n > \text{All Isolects } n$

Examples:

*bulan ‘moon, month’ (3.1.2.2);
*simpən ‘keep, store, save’; JKT simpən, SM, MIN, BH, IBN simpən;
*anin ‘wind’ (3.1.2.3);
*ambun ‘dew’;
*puhun ‘stem, origin, basis; beg, ask (forgiveness)’ (3.1.2.4).

3.6.3.3 PM Final $^g > \text{All Isolects } g$

Examples:

*linduŋ ‘shaded, protected, covered’; SM, BH, SWY, JKT linduŋ ‘id.’, MIN linduŋ ‘shadow, protection against the sun’; ‘shaded, protected, covered’, IBN linduŋ ‘shaded, screened, covered’;
*uləŋ ‘repeat’; SM, BH, SWY uləŋ ‘repeatedly; repeat’, MIN, IBN uləŋ ‘repeat’;
*dindip ‘wall, partition’; MIN dindip, JKT dindip, o.i. dindip.

IRREGULAR CORRESPONDENCES

In a number of cases IBN exhibits -n corresponding to -ŋ in other isolects. In all these cases IBN -n is preceded by i. This points to borrowing from SAR, where original final nasals preceded by i became alveolar (Collins 1987:35; cf. also 3.4.2.3IC).

Examples:

dagιn ‘meat, flesh’ < *dagiŋ (3.5.4);
kaŋcιn ‘button, bolt, lock’ < *kaŋcιŋ (3.4.1.3);
pusiŋ ‘turn around’; SM, BH pusiŋ, MIN pusiŋ ‘id.’, JKT pusiŋ ‘be dizzy, have a headache’;
antin ‘earring’; SM antin, JKT antin/antin ‘pendant, hanging down and swinging’; also SM, BH, SWY, JKT antin/antin, MIN antipŋ/antipŋ ‘earring’;
kambiŋ ‘goat’; SM, SWY, JKT kambiŋ, MIN kambiŋ;
guntin, guntip ‘scissors’; MIN guntip, o.i. guntip;
daciŋ ‘steelyard’; SM, BH, SWY dacιŋ, MIN dacιŋ, JKT dacιŋ (-n unexplained);
sworth ‘stocking’, and bolakin ‘tar’ (from ‘blackening’) are from English.
IBN usually has -iŋ corresponding to PM *-iŋ (in lexemes which are not suspect of borrowing), cf. dîndîŋ < *dîndîŋ, kâniŋ < *kâniŋ (3.1.2.3), and kalîlîŋ < *kulîlîŋ (3.1.3.1). On the other hand, dacin, kambin, satukin, and bolakin are obviously loanwords, dacin being from Chinese, satukin and bolakin from English, and kambin referring to a domestic animal among coastal Malays, and not among the Ibans (Richards 1981). These loanwords must have come into the language through SAR. Compare also doublets pîrin ‘saucer’ and pîriŋ 1. ‘an offer’ 2. ‘distribute’, the former of which has the same meaning as SM, BH, SWY, JKT pîriŋ, MIN pîriŋ (and probably also the same meaning as a supposed SAR *pîrin?). Pîriŋ maintained the final velar, but has a quite divergent meaning. Pîrin must be borrowed from SAR, and pîriŋ with its divergent meaning must be the regular cognate of SM pîriŋ.

Reconstructions:

*antiŋ ‘pendent, hanging down and swinging’;
*guntiŋ ‘shears, scissors’;
*pîriŋ ‘s.th. to offer with, saucer’;
*pusiŋ ‘turn around’.

3.7 THE PM LIQUIDS

Three liquids are found: all isolects have l and r, and SWY also has x (2.4.1). l, which occurs in inherited lexemes in initial, intervocalic, and final position, agrees in all isolects in initial and intervocalic position. In final position it agrees in all isolects except MIN, which has a corresponding ø. But if a corresponding MIN form is suffixed with -i or -an, a morphophonological -l- reappears (2.2.2 B). PM initial and intervocalic *l is reconstructed on the basis of l in all isolects, and PM final *l is reconstructed on the basis of SM, BH, SWY, IBN, JKT -l, MIN -ø (or -l- at morpheme boundaries). Initial and intervocalic r agrees in all isolects but SWY, which has a corresponding r and x. Final r agrees in all isolects but MIN and SWY. MIN has a corresponding ø, and SWY a corresponding x and r. If a corresponding MIN form is suffixed with -i or -an, a morphophonemic -r- reappears (2.2.2 B). As to SWY x and r, the question arises whether they are reflexes of proto-phonemes that have merged everywhere else in the isolects, or whether their distinction is an innovation. In the latter case they may be the result of a split, or one of them is a loan phoneme. For PMP, a velar *R and an apical trill *r were reconstructed. If these proto-phonemes really existed (which recent research has been making increasingly doubtful), they must have merged in the Malayic isolects. At any rate, SWY x and r do not reflect the distinction between *R and *r: it turns out that x is inherited, and that r is a loan phoneme.

Compare the following list which contains all PMP lexical items with *R and *r from the 200-item basic wordlist (Blust forthcoming) that have a SWY reflex (where the SWY reflex differs semantically from PMP, the meaning of this reflex is added next to it):
<table>
<thead>
<tr>
<th>PMP</th>
<th>SWY</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. *ka-wiRi</td>
<td>kiri</td>
<td>left side</td>
</tr>
<tr>
<td>23. *DaRaq/*DaReq</td>
<td>daxa(h)</td>
<td>blood</td>
</tr>
<tr>
<td>25. *liqeR</td>
<td>liax</td>
<td>neck</td>
</tr>
<tr>
<td>41. *kaRat</td>
<td>kaxat gəxman</td>
<td>‘gnash one’s teeth’</td>
</tr>
<tr>
<td>44. *degeR</td>
<td>dəjar/daŋax</td>
<td>hear</td>
</tr>
<tr>
<td>48. *(ma-)tiDuR</td>
<td>tidur</td>
<td>sleep (v)</td>
</tr>
<tr>
<td>52. *DiRi</td>
<td>dixi</td>
<td>stand (v)</td>
</tr>
<tr>
<td>25. *liqeR</td>
<td>liax</td>
<td>neck</td>
</tr>
<tr>
<td>41. *kaRat</td>
<td>kaxat gəxman</td>
<td>‘gnash one’s teeth’</td>
</tr>
<tr>
<td>44. *degeR</td>
<td>dəjar/daŋax</td>
<td>hear</td>
</tr>
<tr>
<td>48. *(ma-)tiDuR</td>
<td>tidur</td>
<td>sleep (v)</td>
</tr>
<tr>
<td>52. *DiRi</td>
<td>dixi</td>
<td>stand (v)</td>
</tr>
</tbody>
</table>

It appears that for the 25 proto-lexemes with *R, SWY has 16 reflexes with x, four with r, three with ø, and two with variants with x and r. For the two PMP proto-lexemes with *r SWY has only reflexes with x. In other words, it seems that most inherited SWY lexemes have x, and the SWY distinction between x and r does not reflect the distinction of PMP *R and *r. This has already been pointed out by Prentice and Hakim Usman in their discussion of KCI hand r: the lexical distribution of KCI hand r does not match that of PMP *R and *r, nor does the lexical distribution of SWY x and r (Prentice and Hakim Usman 1978:131-132). From this and on the following grounds it must be concluded that the SWY distinction is not inherited:

127 An additional difficulty with the comparison of SWY x/r and KCI h/r with PMP *R/*r is that many reconstructions with *r are actually based on borrowings (Wolff 1974), and although in some cases this is quite evident (cf. many of Dempwolf’s reconstructions on the basis of SM and Ngaju, Dyen 1956), it is not so in many other cases. A thorough study of borrowing among Austronesian languages would give a better insight into the PMP *R/*r distinction.
(a) More than 135 known loanwords in Helfrich have \( r \), whereas only four of the SWY lexemes known to me as loanwords have \( x \)\(^{128}\) viz. \( \text{pi}k\text{i}x \) ‘think’, \( \text{k}\text{x}t\text{a}x \) ‘paper’, \( \text{k}\text{a}b\text{a}x \) ‘news’ (all from AR), and \( \text{s}\text{a}t\text{x}\text{o} \) ‘silk’ (\(<\text{SKT}\)). Also, in many cases there are minimal pairs with \( x \) and \( r \) with related meanings, and of which the member with \( r \) agrees in meaning with a SM correspondence, e.g.

\( \text{x}\text{ap}\text{a}t \) ‘often, over and over’ and \( \text{r}\text{ap}\text{a}t \), SM \( \text{r}\text{ap}\text{a}t \) ‘closely packed, fitting closely’;
\( \text{x}\text{o}\text{b}a\text{a}(h) \) ‘hanging down, as a full rice ear’ and \( \text{r}\text{o}\text{b}a\text{a}(h) \), SM \( \text{r}\text{o}\text{b}a\text{h} \) ‘fall down (of heavy things)’;
\( \text{x}\text{a}m\text{p}a\text{s} \) ‘cut the grass very short (with a particular k.o. knife)’ and \( \text{r}\text{a}m\text{p}a\text{s} \), SM \( \text{r}\text{a}m\text{p}a\text{s} \) ‘rob, take with force’;
\( \text{x}\text{a}n\text{j}a\text{w} \) ‘construction for catching tigers’ and \( \text{r}\text{a}n\text{j}a\text{w} \), SM \( \text{r}\text{a}n\text{j}a\text{w} \) ‘caltrop’.

Furthermore, \( x \) and \( r \) are often not distinguished (Helfrich 1904:99), and in Helfrich’s wordlist there are many variants (e.g. \( \text{d}\text{I}\text{j}a\text{T}/\text{d}\text{I}\text{j}a\text{x}, \text{b}a\text{x}a\text{I}\text{I}l\text{b}a\text{I}j, \text{e}tc\).\(^{129}\)).

(b) Three SWY affixes have an \( x \) (viz. \( \text{b}\text{x}-, \text{p}\text{x}- \) and \( \text{t}\text{x}- \)), whereas none has \( r \).

(c) PMP \(*\text{D} \) is reflected as SWY \(-x\) (MIN \(-\sigma/(-r)\), o.i. \(-r\)), e.g. PMP \(*\text{bayaD} \) ‘pay’ > SWY \( \text{b}a\text{i}x \), and \(*\text{wakaD} \) ‘root’ > SWY \( \text{a}k\text{a}x \) ‘root, creeper’ (see 7.1e). For a change from a retroflex apical stop to a velar or uvular fricative one would expect the intermediate stage of an apical trill (i.e. PMP \(*\text{D} > +\text{r} > \text{SWY}\; x\) ); if SWY \( r \) (which also occurs in final position) were inherited, one wonders why it did not change into \( x \), whereas PMP \(*\text{D} \) did.

(d) In contradistinction to \( x \), \( r \) often co-occurs with (non-inherited) \(-k\) (cf.4.3.2).

As to the origin of SWY \( r \), it is interesting to compare it to the apical trill in KCI and Lampung. As in SWY, in these isolecets \( r \) occurs mainly in loanwords, whereas KCI \( h \) and Lampung \( x \) belong to the inherited phonemes (Prentice & Hakim Usman 1978:129-132; Walker 1976:3-4). Walker says about \( r \) in Lampung as spoken in Way Lima:

The trill \( r \) occurs in unassimilated loanwords. Most of these have an alternate in which \( r \) is replaced by \( x \). Speakers differ as to how much \( r \) is used in the Indonesian words which are freely used in Lampung contexts. Some speakers reproduce the Indonesian \( r \); others automatically substitute \( x \) in almost every instance...

It is very likely that the south Sumatran languages originally had a fricative (which became KCI \( h/\phi \) by subsequent decrease in closure) and that the apical trill was introduced through borrowing from SM and/or other isolecets. In this process some inherited SWY and KCI forms may also have been replaced by SM forms containing \( r \). This resulted in the confusing picture found in present-day SWY and KCI, where a few frequently used loanwords have acquired the inherited reflex (e.g. SWY \( \text{pi}k\text{i}x \) ‘think’; KCI \( \text{ka}h\text{a}y? \) ‘friendly, intimate’ (\(<\text{AR}\; \text{qar}\text{i}:\text{b}i\) ), and where SWY \( x \) and KCI \( h \) may have been obligatorily or optionally replaced by an apical trill in some lexemes (e.g. SWY \( \text{d}a\text{g}a\text{x}/\text{d}a\text{g}a\text{r} \) ‘hear’; \( \text{k}a\text{r}a\text{m} \) ‘sink’; KCI \( \text{ka}m\text{a}h\text{h}\text{a}/\text{k}a\text{ma}r\text{a}\text{r} \) ‘drought’; \( \text{j}a\text{r}\text{e}w\text{\j} \) ‘needle’). In this way are also explained cases like \( \text{xurut/rurut} \) ‘pull, jerk (\( v \)\)’, where \( x \) and \( r \) occur simultaneously within one lexeme.

\(^{128}\)There is also \( \text{a}x\text{a}g \) ‘charcoal’ which must be borrowed because it does not reflect \( d \) for PMP \(*\text{j} \)in PMP \(*\text{gajep} \), but as all other Malayic isolecets show a corresponding \( r \) instead of \( d \), \( \text{a}x\text{a}g \) must be a very early loan.

\(^{129}\)Moreover, Helfrich himself is not always consistent about writing \( x \) and \( r \), cf. (p.79) \( \text{k}i\text{r}n\text{m} \) and (p.212) \( \text{k}i\text{ix}m \) ‘send (s.th.)’. 
### Table 7: The Distribution of SWY r, SWY x, KCI r, and KCI h

<table>
<thead>
<tr>
<th>SWY</th>
<th>KCI</th>
<th>(language of origin)</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>x : r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gox/man</td>
<td>garmen</td>
<td>PMP *geraqam</td>
<td>molar tooth</td>
</tr>
<tr>
<td>kuxus</td>
<td>kurawh</td>
<td>PMP *kurus</td>
<td>thin (people)</td>
</tr>
<tr>
<td>jaxami</td>
<td>jaramoy</td>
<td>PMP *Zarami</td>
<td>straw, stubble</td>
</tr>
<tr>
<td>texus</td>
<td>tarawh</td>
<td>PMP *terus</td>
<td>straight, through</td>
</tr>
<tr>
<td>jaxum</td>
<td>jarëwë</td>
<td>PMP *Zarum</td>
<td>needle</td>
</tr>
<tr>
<td>r : h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>känduri</td>
<td>kanuhay</td>
<td>Persian</td>
<td>religious feast</td>
</tr>
<tr>
<td>karip (relative)</td>
<td>kahay</td>
<td>AR</td>
<td>friendly, intimate</td>
</tr>
<tr>
<td>mura(h)</td>
<td>muhah</td>
<td>JV</td>
<td>cheap</td>
</tr>
<tr>
<td>karam</td>
<td>kahaŋ</td>
<td>PMP *kaRem</td>
<td>sink (v)</td>
</tr>
<tr>
<td>r/x : h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>caray/çaxay</td>
<td>çâhe</td>
<td>PMP *kirim</td>
<td>separate (v)</td>
</tr>
<tr>
<td>kirim/kixim</td>
<td>kihayn</td>
<td>PMP *kirim</td>
<td>send</td>
</tr>
<tr>
<td>x : h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>koxiq</td>
<td>kəhayn</td>
<td>PMP *keriŋ</td>
<td>dry</td>
</tr>
<tr>
<td>piqix</td>
<td>pikë</td>
<td>&lt; AR</td>
<td>think</td>
</tr>
<tr>
<td>säxaxo</td>
<td>sutō</td>
<td>&lt; SKT</td>
<td>silk</td>
</tr>
<tr>
<td>uxaŋ</td>
<td>uhaŋ</td>
<td>PMP *uRaŋ</td>
<td>human being</td>
</tr>
<tr>
<td>axi</td>
<td>ahay</td>
<td>PMP *waRi</td>
<td>day</td>
</tr>
<tr>
<td>r : r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>timur</td>
<td>timur</td>
<td>PMP *hatimuR</td>
<td>east (probably &lt; SM, cf. 5.2.1)</td>
</tr>
<tr>
<td>guqiq</td>
<td>guroyn</td>
<td></td>
<td>fry</td>
</tr>
<tr>
<td>burqiq</td>
<td>burewn̄</td>
<td></td>
<td>bird</td>
</tr>
<tr>
<td>pira?</td>
<td>pira?</td>
<td></td>
<td>silver</td>
</tr>
<tr>
<td>suaro</td>
<td>suarō</td>
<td>&lt; SKT</td>
<td>voice</td>
</tr>
</tbody>
</table>

Dempwolff gives PMP *buruŋ ‘bird’ and *pirak ‘silver’, but these are doubtful reconstructions (cf. also Adelaar 1989).

The fact that x and r are often interchanged makes one refrain from drawing a sharp line between inherited lexemes and loanwords along the distinction of x and r. Although, generally speaking, lexemes containing r are likely to be loanwords, they should not a priori be considered as such and be discarded as a basis for lexical reconstruction. The occurrence of SWY x and r, and their casual interchangeability should rather be seen as the effect of a sound shift at work (in this case from a velar fricative to an apical trill).

In initial and intervocalic position SWY x/r agrees with r in the other isolects, and on the basis of this correspondence I reconstruct PM initial and intervocalic *r. Lexeme finally, SWY x/r agrees with MIN -o/- (r- at morpheme-boundaries), other isolects r, and on the basis of this correspondence I reconstruct PM *-r.

PM *r was a (velar or uvular) fricative. Collins (1986b:181-183) observes that PMP *R (which was probably a velar fricative) and *r have merged and are reflected as a fricative in the peninsular Malayic isolects; isolects outside the peninsula mostly have an apical trill.
According to Collins it is most probable that the Malayic isolects outside the peninsula fronted an original velar fricative to an apical trill, whereas the peninsular Malayic isolects remained more faithful to the original pronunciation. This fits in well with the fact that SWY x is the regular reflex of PMP *R and *r. The remark by Collins about the majority of the non-peninsular isolects having an apical trill as a reflex of PMP *R/*r is a little overstated. In fact almost all local Malayic isolects of Sumatra have a fricative. Fokker (1895:27-28), who made a study of the SM phonology, recorded a “guttural r” for the area where he did his research (West Borneo). Collins himself recorded a velar fricative for SAR, and he regards this sound as a retention from ‘Proto Malay’ (Collins 1987:41-42). Fokker (1895:27-28) furthermore mentioned (quoting Klinkert) a guttural r in the Riau archipelago, and (referring to Helfrich) the x and r in Middle Malay. A uvular r is reported for Deli Malay (spoken in and around Medan, Sumatra) by Roolvink (1953:6).

In Van der Toorn and Moussay’s descriptions, MIN has an apical r, but Tamsin Medan (1980:89-90, 153-155) showed that 16 out of the 25 regions into which he divided the MIN area have a velar fricative, against nine with an apical trill. The regions where apical r occurs are coastal areas, and the extreme north. The MIN isolect of Koto Gadang, which formed the basis of Van der Toorn’s study, is spoken in one of the areas that have an apical trill (the area of Koto Tuo in Tamsin Medan’s dialectography).

So, apparently coastal Malayic isolects of western and northern Borneo and most Malayic isolects of Sumatra also have a fricative as the regular reflex of PMP *R and *r. (BH has an corresponding apical trill, and has a fricative in some sound-symbolic lexemes: Durdje Durasid pers.comm.). That Bahasa Indonesia has an apical trill instead finds its explanation in the fact that for quite a long period it has been a lingua franca in large areas outside its native domain (especially Java). Most of its recent developments have been taking place in these areas. Speakers of BI usually have another language as their mother tongue, and the most important of these, JV and SUN, have an apical trill. Many eastern Indonesian Malayic isolects also have an apical trill. With the exception of BAC, they also are lingue franca in areas where they are not native.

SWY x/r, SM, JKT r is also found as first component of a consonant cluster, as is seen in Table 8. The examples in this table show that lexemes with a preconsonantal r or x (hereafter pre-C-R) sometimes have a variant with a vowel (usually schwa) breaking the consonant cluster. It is also seen that, corresponding to a pre-C-R in SM, SWY, and JKT, MIN has in inherited lexemes, and -ra- in loanwords. In loanwords, BH has a corresponding -ra- or (in kartas and sarbu) a pre-C-R, and IBN has -ra-. According to Richards (1981:XV), penultimate schwa in IBN trisyllables like tarabay and karaja (< SM < SKT) is not pronounced, and is written as a spelling convention. Due to the small number of examples, it is difficult to determine what correspondence BH and IBN have in inherited lexemes. In the light of some inherited lexemes like BH tajun, kabat, IBN cəłag, kədîl, and moreover of

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130 Although the title of his study (Malay phonetics) does not suggest this the use of the term ‘phonetics’ here is in agreement with the nineteenth century terminology.

131 He even asserted that he had heard this sound in JKT: “I have heard this sound in West Borneo, at Singapore and Batavia [now Jakarta]. Of course at Batavia, the pronunciation of Sundanese and Javanese people cannot be taken into account. Europeans born in that place very seldom give the guttural its particular value, generally substituting for it a strong palatal” (Fokker 1895:27).
<table>
<thead>
<tr>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bôrkas</td>
<td>--</td>
<td>--</td>
<td>bôxsas</td>
<td>bôrkas</td>
<td>bôrkè</td>
<td>bundle</td>
</tr>
<tr>
<td>bôrkat</td>
<td>barakat</td>
<td>barakat</td>
<td>bôrkat</td>
<td>bôrkat</td>
<td>bôrkè</td>
<td>blessing (&lt; AR)</td>
</tr>
<tr>
<td>bôrnas, bôranas</td>
<td>--</td>
<td>barunas</td>
<td>bôxnas</td>
<td>--</td>
<td>--</td>
<td>rice ears</td>
</tr>
<tr>
<td>bôrsi, bôrasi, bôrasih</td>
<td>barasi^h</td>
<td>barasih</td>
<td>--</td>
<td>bôrsi</td>
<td>bôrasi, bôrasi</td>
<td>clean</td>
</tr>
<tr>
<td>bôrsin</td>
<td>basin</td>
<td>--</td>
<td>bôxsin</td>
<td>bôrasin</td>
<td>--</td>
<td>sneeze (v)</td>
</tr>
<tr>
<td>bôrtih</td>
<td>bati^h</td>
<td>--</td>
<td>bôxti^h(AR)</td>
<td>bôrasi</td>
<td>--</td>
<td>roasted rice</td>
</tr>
<tr>
<td>côrdik</td>
<td>cadi^p</td>
<td>--</td>
<td>côrdip^p</td>
<td>côrdip (SR)</td>
<td>côrdik</td>
<td>clever, bright</td>
</tr>
<tr>
<td>côrlan</td>
<td>--</td>
<td>--</td>
<td>côrlan, côrlan</td>
<td>côlan</td>
<td>--</td>
<td>wide open (eyes)</td>
</tr>
<tr>
<td>côrmîn, (Klinkert)</td>
<td>camin</td>
<td>caramin</td>
<td>côrmîn</td>
<td>caramin</td>
<td>--</td>
<td>mirror</td>
</tr>
<tr>
<td>jôrnih, jônih</td>
<td>jani^h</td>
<td>jaranih</td>
<td>jôxani^h(AR)</td>
<td>--</td>
<td>--</td>
<td>pure</td>
</tr>
<tr>
<td>kôrâbat, kôbat, kôrâbat</td>
<td>kabe?</td>
<td>kabat</td>
<td>kôbat</td>
<td>kôbat</td>
<td>--</td>
<td>bind, lash together</td>
</tr>
<tr>
<td>kôrbaw</td>
<td>kabaw</td>
<td>--</td>
<td>kôbaw</td>
<td>kôrábo, kôrâbaw</td>
<td>kôbô, kôrâbó</td>
<td>buffalo</td>
</tr>
<tr>
<td>kôrdîl, kôrâdîl</td>
<td>kadi, kadhîh</td>
<td>--</td>
<td>kôdîw</td>
<td>kôrdîl</td>
<td>kôrdî</td>
<td>stunted</td>
</tr>
<tr>
<td>kôrudut, kôrudut</td>
<td>--</td>
<td>--</td>
<td>kôdut</td>
<td>kôrât, kôdut</td>
<td>--</td>
<td>crease, wrinkle</td>
</tr>
<tr>
<td>kôrtas</td>
<td>karateh</td>
<td>kartas</td>
<td>kôxtas</td>
<td>kôrâtas</td>
<td>--</td>
<td>paper (&lt; AR)</td>
</tr>
<tr>
<td>pôrûcik, pôrûcit</td>
<td>(paca?)</td>
<td>puracit</td>
<td>--</td>
<td>pôrâncit, pôrâncit</td>
<td>--</td>
<td>squirt (v)</td>
</tr>
<tr>
<td>sórbu</td>
<td>--</td>
<td>sarbu</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>attack, invade</td>
</tr>
<tr>
<td>tôrâba</td>
<td>tôrâba</td>
<td>tôrâba</td>
<td>tôrâba</td>
<td>tôrâba</td>
<td>tôrâba</td>
<td>fly (v)</td>
</tr>
<tr>
<td>tôrbit</td>
<td>tabi?</td>
<td>--</td>
<td>taxbit</td>
<td>tôrâbit (Richards)</td>
<td>tôrbit</td>
<td>emerge</td>
</tr>
<tr>
<td>tôrjân/tôrjân</td>
<td>--</td>
<td>tira</td>
<td>tôrjân</td>
<td>tôrjân</td>
<td>tôrjân</td>
<td>kick (v)</td>
</tr>
<tr>
<td>tôrjûn</td>
<td>tajun</td>
<td>tajun</td>
<td>tôrjûn</td>
<td>tôrjûn</td>
<td>--</td>
<td>leap down</td>
</tr>
<tr>
<td>bôr-</td>
<td>ba-</td>
<td>ba-</td>
<td>bôx-</td>
<td>ba(r)-</td>
<td>bôr-</td>
<td>(verbal affix)</td>
</tr>
<tr>
<td>por-</td>
<td>pa-</td>
<td>pa-</td>
<td>pôx-</td>
<td>pôx(r)-</td>
<td>por-</td>
<td>(verbal affix)</td>
</tr>
<tr>
<td>tôr-</td>
<td>ta-</td>
<td>ta-</td>
<td>tôx-</td>
<td>tôx(r)-</td>
<td>tôr-</td>
<td>(verbal affix)</td>
</tr>
</tbody>
</table>
BH and IBN reflexes of *(mb)Ar-, *pAr-, and *tAr- (cf. 6.1 - 6.2) I assume that BH and IBN have lost a pre-C-R. But for some other lexemes a different explanation is required. Most loanwords found in BH as well as in IBN must be borrowed from SM, since SM is the most probable source for lexical borrowing common to BH and IBN, and as a lingua franca it has been very influential in other languages. BH forms like barunas, tirajaŋ, puracit, and IBN forms like tarajaŋ and paraŋcit, have (penultimate or antepenultimate) vowels which do not occur in SM. It is possible that these vowels are due to secondary developments, but as yet there is no evidence for this. For the forms containing them (and perhaps also for BH tarabag, IBN tarabay, which has a cognate in all other isolects) the hypothesis of a trisyllabic PM reconstruction with a *-rV-sequence is more appropriate.

The pre-C-R in SM, SWY, and JKT may then be explained by syncope of the following vowel as a result of the tendency to disyllabic form of lemmes (4.5). This tendency, together with a counteractive tendency to avoid heterorganic consonant clusters, is probably the reason for the occurrence of variants, one with a pre-C-R, and the other with a breaking the consonant cluster (e.g. SM bœːnas/bœːnas; SWY sœːkit/sœːkit ‘wooden spoon’). Another reason for assuming that pre-C-R’s originated through syncope of the following vowel is that (in SM, SWY, JKT) they are always preceded by a. This a may be the result of antepenultimate neutralisation in an originally trisyllabic form. As yet I do not know what the situation in PM was, and for the time being I reconstruct:

(a) *-r(ə)- if BH and IBN have a corresponding a;
(b) *-rV- if BH and/or IBN have a following vowel (other than IBN a).

I also reconstruct *-rV- if SM, SWY, or JKT have a variant form with a vowel other than a between the pre-C-R and the following consonant (cf. SM kœːdut/kœːdut). In both cases MIN has a corresponding a. As for the antepenultimate vowel, I reconstruct *i/*u on the basis of BH i/u, (MIN a), other isolects a, and *A on the basis of BH (and MIN) a, other isolects a. If no BH cognate is available, I reconstruct *V.

3.7.1 PM NON-FINAL *I > ALL ISOLECTS /

Examples:

*lamaʔ ‘long (time), old (things)’; SM lama, MIN, SWY lamo, IBN lamaʔ, JKT lamè;
*lîmaʔ ‘five’; SM, BH lîma, MIN, SWY lîmo, IBN lîmaʔ, JKT lîmè;
*laki ‘husband’; BH, JKT laki ‘husband; male’, o.i. laki ‘husband’;
*baloːs ‘reply, reciprocate; revenge (v)’; MIN baleh, JKT balos, o.i. balas;
*malu ‘shy, ashamed’; a.i. malu;
*tulaŋ ‘bone’; a.i. tulaŋ.

3.7.2 PM FINAL *I > MIN a (AT MORPHEME-BOUNDARIES -I-) , OTHER ISOLECTS /

Examples:

*gatəl ‘itch, itchy; sensual’; JKT gatəl, MIN gata, o.i. gatal;
*jæŋkal ‘span of thumb and middle finger’; SM jæŋkal, MIN jæŋka, BH jæŋkal;
*tæbəl ‘thick’; JKT tæbəl, MIN taba, BH tabal, o.i. tabal.
UNEXPLAINED IRREGULAR CORRESPONDENCES

(1) In a few cases SWY has -? corresponding to -l (MIN ø) in the other isolects. SM and MIN sometimes agree with this reflex in having -k and -? respectively, or in having doublets with -k/-? and -l (MIN ø). In the one case where IBN has a cognate, it ends with -?. The cases with SWY -? are:

ambi? ‘take, get, fetch’; IBN ambi?, SM ambil, ambik, MIN ambi?, ambe?, BH, JKT ambil (cf. also IBN sambi? ‘get in exchange’, MIN s/ambi?, o.i. s/ambil ‘simultaneously, along with’);

kacik? ‘small’; SM kacil, kacik, MIN kacip?, BH kacil, JKT kacil, kacit (-unexplained);
kumpulk? (also kumpul) ‘together, gathered’; SM, BH, JKT kumpul ‘id.’, MIN kumpul? ‘heap, collection’, IBN gumpul ‘gather, pick’ (3.4.1.4; cf. also SM kalompok ‘group’; SWY kalompuk must be a loan, see 3.4.2a).

I do not have an explanation for these correspondences. Judging by the low frequency of inherited lexemes with final -il/-P in the isolects, one may assume that this ending is not in favour in SWY, (pre-) MIN and IBN. The SWY and IBN reflexes should also be seen in the light of the change *-r > -? in these isolects (see next paragraph). On the basis of the above sets I make the following reconstructions:

*ambil/*ambik ‘take, get, fetch’;

*kacik/*kacik ‘small’;

*kumpul/*kumpuk ‘together; gather’.

(2) In one case IBN has -r corresponding to -l in the other isolects:

rumba? ‘race, contest’; SM lomba, lumba, MIN lomba/n (< +lumba? + +an; see 4.5), BH lumba, JKT lombé.

Besides lagi? 1. ‘later on’ 2. ‘more’ IBN has also agi? ‘more’ < *lagi? (3.1.2, 3.1.2.3). On the basis of SM lomba etc. I reconstruct:

*lumba? ‘race, contest’.

3.7.3 PM NON-FINAL *r > SWY x/r, OTHER ISOLECTS r

Examples:

*rusa? ‘sambhur deer’; SM rusa, MIN ruso, SWY xuso, IBN rusa?, JKT rusè;

*rusuk ‘side, flank’; SM, IBN, JKT rusuk, MIN ruso?, SWY xuso?, ruso?,

*raup ‘scoop with both hands’; SWY xaup, raup, o.i. raup ‘id.’, MIN (sa-)rauy? ‘a handful’;

*raja? ‘disorderly mass of dry wood’; SM, BH raja, MIN rabo, SWY xabo, IBN raba?,

*rindu? ‘like, long for’; SM, MIN, JKT rindu, SWY xindu, rindu ‘long for’, IBN rindu? ‘like, be gladened’;

*barat ‘heavy, important’; SM, IBN, JKT barat, MIN bare?, BH barat, SWY bəʁat;

*burug 1. ‘bird’; 2. ‘omen’;[132] IBN burug ‘id.’, MIN (rare) buruŋ (5.7(97)), o.i. buruŋ ‘bird’;

[132]In Achehnese burug means ‘spirit of a woman who died in childbirth; tormentor of women in childbed’. It is not improbable that burug etc. with the meaning of ‘bird’ is borrowed; most AN languages have a reflex of PAN *manuk for ‘bird’, and the r in many languages is not the regular correspondence to SM r. Compare Ngunjy buruyen, Malagasy vorona, SWY burug, KCl burug, whereas SM r : Ngunjy h : Malagasy ã/ɔ : SWY x : KCl h; the SWY and KCl reflexes suggest that burug etc. (for ‘bird’) is also innovative within the Malayic
*kurang* ‘less, short of, lacking’; SWY *kurang*, (rare) *kuxang*, o.i. *kurang*;
*darah* ‘blood’; SWY *daxis(h)*, JKT *darè*, o.i. *darah*.

**UNEXPLAINED IRREGULAR CORRESPONDENCE**

IBN reflects *-r* for *-r* in:

`asay` ‘feel; feeling’; SM, BH *rasa*, MIN *raso*, SWY *xaso*, *raso*, JKT *rasè* ‘feeling, flavour; feel, taste’ (< SKT).\(^{133}\)

3.7.4 **PM FINAL *-r* > MIN *∅* (AT MORPHEME BOUNDARIES -r-), SWY x/r, OTHER ISOLECTS r

**Examples:**

*liur’s aliva’*; SM, BH *liur*, MIN *liu⁷*, SWY *liux*;
*tampar* ‘slap with the hand’; MIN *tampa*, BH *tampar* ‘hit with the fist’, SWY *tampax*, o.i. *tampar* ‘slap with the hand’;
*haur* ‘k.o. bamboo’; SM *(h)aur*, BH *haur*, MIN *au̯⁷*, SWY *aux*, IBN *aur*.

**IRREGULAR CORRESPONDENCES**

In the following cases IBN and/or SWY have *-r* corresponding to a final *-r* in the other isolects, e.g.

SWY *ayi⁷*, IBN *ai⁷* ‘water’; SM *air*, *ayar* (cf. 2.1.3), BH *air*, MIN *ai⁷*, JKT *aèr*;\(^ {134}\)

SWY *basar* ‘big’ < *basar* (3.2.3);

SWY *bunta⁷* ‘round’; SM *buntar*, MIN *bunta*;
IBN *buntur* ‘dead, bloated (of fish)’; SM *buntur* ‘oversatiated, completely “full”’ (Blust 1980 a);

IBN *galar* ‘nickname’; SM, JKT *galar*, MIN *gala*, BH *galar* ‘title, surname’;

SWY *iku⁷*, IBN *iku⁷* ‘tail’; SM *ekor*, MIN *iku⁷*;

IBN *ili⁷* ‘downstream’; SM *(h)ilir*, BH *hilir*, MIN *ili⁷*, SWY *ilix* ‘id.’, JKT *ilir* ‘north’;

IBN *kapur*, *kapur* ‘lime, chalk’ < *kapur* (3.4.1.1);

IBN *sala⁷* in *bau sala⁷* ‘smell of roasting flesh’; SM *salar* ‘branding’, MIN *sala*, *sająla* ‘broiling, cooking at an open fire’ (cf. 4.6);

IBN *talu⁷* ‘egg’ < *talar* (5.7 lemma 98);

SWY *tidu⁷* ‘sleep (v)’; SM, JKT *tidur* ‘id.’, MIN *tidu²* ‘lie down; sleep’ (IBN *tinduk* ‘sleep (v)’ is a loanword from the Tamanic languages, Adelaar in press a)

These correspondences may point to a shift of *+-r* to *∅* in SWY and IBN. On the basis thereof the following reconstructions are made:

*air* ‘water’;

*buntar* ‘round’;

*galar* ‘title, surname’;

\(^{133}\) Although it is conceivable that the split of PM into the different Malayic isolects postdated the introduction of the first SKT loan-words, I prefer not to conjecture on this possibility, and not to make a reconstruction on the basis of correspondence sets that were ultimately borrowed from SKT.

\(^{134}\) Abdul Chaer’s ‘aer’ (without diacritic) is probably a misprint.
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*ikur ‘tail’;
*hilir ‘flow down; downstream’;
*sag(ə)lar ‘fry without oil’ (cf. 4.6);
*tidur ‘sleep’.

UNEXPLAINED IRREGULAR CORRESPONDENCE

IBN reflects -s for *-r in:
bugas ‘virgin, first (fruits)’ (cf. also 3.6.1.5); SM, JKT bugar, MIN buŋa.

On the basis of SM bugar etc. I reconstruct:
*bugar ‘first fruits’.135

3.7.5 PM *r > SM, JKT r, SWY r, x, BH, IBN Vr, MIN ə \_ *(V)C

Examples (see above for correspondence sets):

*bVr(ə)kas ‘bundle’  
*bArish ‘clean’  
*bArunas ‘rapidly growing (of rice ears, etc.)’
*bVr(ə)sin ‘sneeze’  
*bVr(ə)tih ‘roasted rice’
*cVr(ə)dik ‘clever, bright’
*cVr(ə)lag ‘wide open (eyes)’
*cAr(ə)min ‘mirror’
*jAr(ə)nih ‘pure, transparent’

3.8 THE PM SIBILANT

The sibilant s occurs and agrees initially, intervocally, and post-nasally in all isolects, and in these positions PM *s is reconstructed. The nasal preceding s in clusters is n in SM, BH, SWY, and JKT; it is n in MIN and IBN. In final position s occurs in all isolects but MIN, where a corresponding -h is found. On the basis of SM, BH, SWY, IBN, JKT -s, and MIN -h, PM *s is reconstructed. Most vowels directly preceding PM *-s underwent a change in MIN: *a, *ə > e (3.1.1, 3.1.1.3, 3.1.1.5), and *u > uy (3.1.2, 3.1.2.4).

3.8.1 PM NON-FINAL *s > ALL ISOLECTS s

Examples:

*sarag ‘nest’; IBN sarag ‘container’, and sarag mañi ‘bee’s nest’, SWY saxaŋ, o.i. sarag ‘nest’;
*sayap ‘wing’ (3.1.1.3);
*sumpah ‘oath, ordeal; imprecation’; JKT sumpè, SWY sumpa(h), o.i. sumpah;
*(b)isik ‘whisper’ (3.5.1 U1C);
*tasik ‘sea’ (3.4.2.3);

135But cf. Proto South-Sulawesi *bugas ‘first fruits’ (Mills 1975 vol.2).
*isi? 'contents, flesh' (3.4.2.4);
*bunsu 'youngest born'; SM, SWY bunsu, bonsu, MIN bunsu, bonsu, BH bunsu, IBN bunsu;
*langsat 'k.o. tree with sour fruits (Lansium domesticum)'; SM, SWY, BH langsat (in Wilkinson 1959 and Klinkert also SM lansat), MIN lanse?, IBN lansat (unexplained); (JKT langsap is probably not a cognate (< JV langsab 'id.'));
*langsug 'direct(ly), straight'; SM, BH, JKT langsug 'id.', MIN langsug 'finished, ended'.

N.B. In IBN regressive dissimilation took place if two syllables began with *s, e.g.

*ungsat 'upsidedown, against the grain'; SM sonsat, MIN sonsat, IBN tunsat, o.i. sunsat;
*sasat 'have lost one's way' (IBN tasat, 3.4.2.2);
*solasay 'settled'; SM salasay, MIN salasay, SWY (so-)lasay (apparently reanalysed as a derived form with prefix so-), IBN talasay, JKT salasè;
*sisik 'fish scale'; SM, BH, JKT sisik, MIN, SWY sisik, IBN tisik.

UNEXPLAINED IRREGULAR CORRESPONDENCES

(1) Sporadic loss of JKT s-. In JKT s- is often omitted in some frequently occurring lexemes. In only one case (ajè) is the variant with +s- lost altogether; in some cases the meanings have diverged. For example:

ampè 'until', and sampè 'complete, arrived, reached'; o.i. sampay 'arrived, reached; until';
atu, satu 'one' < +s-batu, cf. 5.3.2);
ayè, sayè '(1st pers. sg.)', SM saya, sahaya, MIN, SWY sayo, 'servant, slave; (1st pers. sg.) < SKT;
amè 'with, and; by (actor preposition); to(wards)', cf. SM, BH, IBN sama, MIN, SWY samo, JKT samè 'together, same, equal', < SKT;
ajè 'only', SM saja, sahaja, SWY saja 'only; on purpose', MIN saja, IBN saja?, aja? 'only, simply'; also SM saŋaja, MIN saŋajo, siŋajo, BH saŋaja 'on purpose' < SKT sahaja 'innate, by nature' (Gonda 1973:390);
udè, sudè 'already', but this lexeme has cognates with and without s-, cf. SM sudah, MIN sudah, udah, SWY udo, sudo, and IBN uday, udah ( < SKT, cf. 3.2.3).

(2) In one case JKT has s- corresponding to MIN ø-, SM s- or d-, o.i. d-:

SM, JKT sampiŋ 'side, flank, border', and SM, BH, SWY dampiŋ 'close, near(by)', MIN ampipŋ (Wilkinson 1959 hampiŋ) 'id.'.

It is likely that SM, JKT s-, and SM, BH, SWY d- reflect earlier clitics, and I tentatively reconstruct:

*(h)ampiŋ 'close (to), near(by)'.136

(3) Sporadic change of *s to BH h-. In initial position BH sometimes has h- for s- in the other isolects, or it has variants with both s- and h-, e.g.

BH hígal (cf. 3.1.1.2 UIC for i), SM, JKT ságal, IBN ságak (-k unexplained) 'out of breath, breathing with difficulty';
BH hual, SM soal, MIN sua, JKT sóal 'problem, affair, question' ( < AR).

136cf. d/- in dari < *ari (3.5.2 UIC), da/hulu, d/ulu < *di *hulu? (3.1.3.3), and IBN alam, o.i. dalam/dalâm < *(d-)alâm (3.1.1, 3.1.1.5).
cf. also sagan/hagan ‘for’, sidin/hidin ‘(3rd pers. sg. honorific)’ (Abdul Jebar p.18). In view of the number of unexplained correspondences in səŋal/hɪŋal etc., no PM reconstruction is made.

3.8.2 PM FINAL *s > MIN -h, OTHER ISOLECTS -s

Examples:

*atas ‘on, above; upper part’; MIN ateh, o.i. atas;
*hans ‘thirst(y); worn out’; SM (h)aus, BH haus, MIN auyh ‘thirst(y); worn out, eroded’, SWY aus ‘thirst’, IBN aus, JKT aus, aós ‘thirst(y)’;
*ruas ‘internode’; MIN rueh, SWY xuas, o.i. ruas.

UNEXPLAINED IRREGULAR CORRESPONDENCES: sporadic change of *-s to -h.

In a number of cases some isolects reflect -h instead of -s (in these cases, the last-syllable vowels in the corresponding MIN forms indicate that the following -h came from ++-h rather than from +-s), e.g.

SM raih, MIN raih ‘draw towards oneself, scoop in, annex’, BH raih ‘ask a young person to marry one’s child’, SWY mə-rai(h), mə-xai(h), IBN raih, raih ‘cock a gun, take off the safety catch’;
SM təlah, MIN lah, SWY la(h) ‘already’, BH laas ‘finished, used up’ (cf. 3.10 and 4.5; cf. also JV talas ‘finished, used up’, and SUN laas ‘lose colour, become tasteless; solve, cease to exist’);
SM, MIN, BH tarah, SWY taxa(h), IBN (Richards 1981) taras, tarah ‘plane with an adze, shape, do some rough-hewing’;
SM ubas, IBN ubah, ‘k.o.tree used for firewood’.

I do not have an explanation for this change; palatalisation of final *-as-sequences and/or the change from *-s to -h is seen as a regular change in many peninsular Malay isolects, and in many (Malayic and other) isolects in Sumatra (including Achehnese, MIN, KCI). On phonetic grounds it is likely that in the above cases final *s must be reconstructed. But for SM pəras etc. there are PMP forms available with *-s and with *-q (PMP *q > PM *h), and in this case I reconstruct PM doublets.

On the basis of the above sets I reconstruct for PM:

*laəas ‘finished, used up’ (see also 3.10);
*pəras/*parah ‘squeeze, press’;(cf. PMP *peReqes, PMP peRaq);
*rais ‘draw towards oneself, scoop in’;
*tarAs ‘plane with an adze, shape, do some rough-hewing’.

137The same variation can in some cases be observed between Malayic and JV or Toba, cf. PM *habis ‘all, entirely; used up, done with, finished off’ vs JV kəbeh ‘all’ (cf. 3.1.2.3 and 5.7 lemma 191); SM lamah ‘soft, weak, slack’ vs JV lamas ‘supple, flexible; weak; elegant’; SM luruh ‘dropping, being shed, especially of leaves and fruit’ vs Toba rurus ‘fall off (leaves), fall out (hair)’. 
3.9 THE PM GLOTAL SPIRANT

The glottal spirant *h occurs in all isolects; in SWY *h occurs in final position in Helfrich, but is left out in the more recent publication of Aliana et al. (1979) Compare Table 9:

**TABLE 9: THE DISTRIBUTION OF *h IN THE MALAYIC ISOLECTS**

<table>
<thead>
<tr>
<th></th>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
</tr>
</thead>
<tbody>
<tr>
<td>initially</td>
<td>(h)</td>
<td></td>
<td>*h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>between like vowels</td>
<td><em>h</em></td>
<td><em>h</em></td>
<td><em>h</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>between unlike vowels</td>
<td>(h)</td>
<td><em>h</em></td>
<td><em>h</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>finally</td>
<td></td>
<td><em>h</em></td>
<td><em>h</em></td>
<td>(h)</td>
<td><em>h</em></td>
<td></td>
</tr>
</tbody>
</table>

This table shows that *h* is most common in final position: SM, MIN, BH, and IBN show it, while SWY reflects it in older sources. JKT lost -h in the sub-dialect of Mester (see Chapter 1), but from the comparative wordlist of JKT sub-dialects in the introduction to Abdul Chaer (pp.XVIII - XIX) it appears that in Kebayoran there is a final -h in (at least) those cases where SM, MIN, SWY (Helfrich) and IBN have a corresponding -h. On the basis of SM, MIN, BH, IBN -h, SWY -(h), and JKT -φ (Kebayoran -h), PM final *h* is reconstructed. Table 9 also shows that *h* between like vowels occurs in SM, MIN, BH, and JKT (in JKT a corresponding _-h_ is sometimes found, which is not in phonemic contrast with _h_, cf. 2.6). In SM, MIN, and JKT, however, two like vowels never occur adjacently, whereas in BH, they do. In this environment SM, MIN, and JKT *h* does not necessarily reflect a proto-phoneme, and its presence may be motivated by a phonotactic constraint. Finally, it appears that initially and intervocally between unlike vowels, *h* only appears in SM and BH; in SM it is, moreover, almost always lost or optional in these environments, even when retained in the spelling. Since

1. the occurrence of BH *h* between like vowels is not conditioned by a phonotactic constraint (see also 3.10),
2. BH *h* in all positions is a stable phoneme which as a rule (and contrary to SM) never alternates with φ, and finally,
3. BH *h* reflects PMP *q*, whereas BH φ between like vowels does not (see 3.10),

I will use BH as a test language for PM non-final *h*. If BH has *h*, PM *h* is reconstructed, but if BH has φ (in Abdul Jebar’s orthography sometimes an apostrophe, 2.3.1) in correspondence with SM, MIN, and JKT *h* between like vowels, PM *φ* is reconstructed (see 3.10). If no BH cognate is available, *h* is reconstructed initially and between unlike vowels when a corresponding *h* is attested in SM, and *(h)* is reconstructed when SM, MIN, JKT have *h* between like vowels.

3.9.1 PM NON-FINAL *h > BH h, SM h, φ, OTHER ISOLECTS φ (EXCEPT BETWEEN LIKE VOWELS)

Examples:

*halu* ‘pounder, pestle’; SM, MIN, IBN _alu_, BH _halu_, JKT _alu_?

Kebayoran in some cases also has -h corresponding to φ in the other isolects, e.g. sayah ‘I’, _spē dah_ ‘bicycle’, _diah_ (3rd pers. sg.), _apah_ ‘what?’. As a rule it has a non-phonemic glottal stop after final vowels. Karet agrees with -h in so far as it shows a final glottal stop wherever Kebayoran does, and it has φ wherever Kebayoran has -h (Abdul Chaer 1976:XIX).
*hulat ‘worm, maggot’; SM (h)ulat, MIN ule?, BH hulat, SWY, IBN ulat (cf. PMP *qulej; JKT ular must be a loan, cf. 3.4.2.2UIC);
*hirup ‘lap up, absorb’; SM (h)irup, MIN iruy?, BH hirup, SWY, JKT irup ‘id.’, IBN irup ‘drink (v)’;
*hiu? ‘shark’; SM (h)iu, yu (3.3), MIN, SWY iu, BH hiu, IBN iu?, JKT yu (3.3);
*hiaŋ ‘divinity’; SM (h)iaŋ,139 MIN iaŋ ‘id.’, IBN (Richards 1981) yaŋ ‘tutelary spirit appearing in dreams or visions’; cf. also *sambah-*hiaŋ ‘pray to (the) god(s)’ (3.1.3.1 N.B.);
*hAlu-an ‘bows, forepart of a vessel’ (3.1.3.3);
*sahut ‘answer (v, n)’; SM, BH, SWY140 sahut, MIN sau?, IBN, JKT sath;
*tiaŋ ‘mast, post, pillar’; BH tiaŋ, o.i. tiŋ;
*tuha(?) ‘old, mature (of people)’ (3.2.3).

3.9.2 PM *h > SWY, IBN ø, OTHER ISOLECTS h (BETWEEN LIKE VOWELS)
(cf. also 3.1.1.5 IC for the assimilation of *ə to a)

Examples:
*dAhak ‘phlegm, mucus’; MIN daha?, SWY daha?,141 IBN daak, o.i. dahak (cf. 3.1.1.5 IC);
*tahan ‘strong, able to endure; keep, detain’; SWY, IBN taan, o.i. tahan;
*pahat ‘chisel’; SM, BH, JKT pahat, MIN pae?, SWY, IBN paat;
*gaham ‘molar tooth’ (3.1.1.5IC);
(see also *puhun (3.1.2, 3.1.2.4) and *jahot (3.1.1.5IC)).

3.9.3 PM FINAL *h > SWY (-h), JKT ø, OTHER ISOLECTS -h

Examples:
*labuh ‘fall, hang down’; SM, BH labuh, MIN labuh ‘let down, lower by means of a strong rope or cable’, SWY labuh(h) 1. ‘be anchored’ 2. ‘fall (rain)’ 3. ‘start, begin’ 4. ma-labuh(h)-ka(n) hukuman ‘pass sentence’, JKT polabuan (also SM pa-labuh-an, MIN pa-labuh-h-an) ‘anchorage, harbour’;
*pilih ‘choose’; MIN pilih, SWY pilih(h), JKT pili, o.i. pilih;
*susah ‘difficult, troublesome’; SM susah, SWY susa(h), JKT susè ‘id.’, MIN (rare) susah ‘trouble, worry, burden’, BH susah ‘poor’, IBN tusah ‘troubled, sad’ (< PMP *suqsaq; Dempwolff reconstructed *susaq, but cf. Karo suhsah ‘difficult, troublesome’).

UNEXPLAINEd IRREGULAR CORRESPONDENCES
In the following cognate sets one or more isolects do not reflect *-h:

(a) SM, with -k:
SM bɔŋik ‘catch in the breath’, and sakit bɔŋik ‘fowl tuberculosis’, JKT bɔŋək ‘bronchial asthma’; IBN bɔŋih ‘have a dry cough’;

139 SM also has orthographic variants ‘yang’ and ‘hiyang’.
140In some instances Helfrich's orthography seems to be inconsistent, especially when he uses one lexical entry for both SWY and BSM (in BSM h sometimes occurs intervocally).
141See fn. 140.
(b) SWY, with θ:

SWY *sudo*, *udo* 'already, after, in the past' (ultimately < SKT, cf. 3.2.3);

(c) SWY, with -ʔ:

SWY *limpa* 'flow over'; SM, MIN *limpah*;

(d) SWY and IBN, with -ʔ and -k respectively:

SWY *pandu?* 'burn up brushwood', IBN *tugun panduk* 'a heap of sticks etc., for burning';

SM *pandu, panduh* 'burn up brushwood';

(e) IBN, with -ʔ:

IBN *basu?* 'wash'; SM *basuh, MIN basuʔ, SWY *basuʔ(h)*, JKT *basu* (ultimately borrowed from JV);142

IBN *bapədʔi?, popədʔi?* 'smart (v,n)'; SM *pədʔi, MIN pədʔi, BH pədʔi, SWY pədʔi(h);

IBN *kəmiʔ* 'urinate'; SM *kəmiʔ, BH kəmiʔ, SWY kəmiʔ(h)*, JKT *kəmiʔ* (-h unexplained; probably a loan, cf. Table 4 (31)).

IBN *lalaʔ* 'fall asleep'; SM *lalaʔ, JKT *lalə* 'tired, exhausted', BH *bə-lalaʔ* 'walk without direction' (a cognate?), SWY *lala(h)* 'pant from exhaustion';

IBN *ŋə-luaʔ* 'spit out'; SM, MIN *luah*;

IBN *mataʔ* 'uncooked, unripe' < *məntah/*mətah (3.6.2 UIC);

IBN *sməpaʔ* 'what is rejected after chewing betel' < *sa(m)pah* 'betel cud (3.6.2 UIC);

IBN *ayaʔ* 'uncle'; SM *ayah* 'father (polite)', MIN *ayah* (rare, according to Van der Toorn) 'father', BH *ayah*, JKT *aiə* 'father'.

In one case SM has -h/ŋ where other isolects have -θ:

SM *contoh, conto* (with a variant cinto; these variants are ultimately from CHI, cf. Klinkert), BH *cuntu*, IBN *cunto* (a loan, cf. 3.1.2b), JKT *cōntō* 'model, example, pattern'.

In one case IBN has -h where SM has -θ:

SM *dura* 'anxiety, disquiet', IBN *durah/durah* 'make a lot of noise, out of fear of s.th.'.

On the basis of these correspondences I reconstruct:

*bənjii(hk)* 'have difficulty in breathing, cough'  
*pədii(h)* 'smart (v,n)'  
*dura(h)* 'disquiet, anxiety'  

*limpa(hk)* 'flow over'  
*luah* 'spit out'  
*ayah* 'father'

142Dempwolff reconstructed PMP *basuʔ* 'wash' with support from JV wasdʔ, SM basuh 'id.', and Fijian savu-i, savuya 'clean the canoe'. In view of its similarity in meaning and form with PMP *baseq* 'wet', the formally deviant Fijian reflex, and the fact that JV -dʔ may reflect PMP *-eq* as well as *-uq (see below), *basuʔ must be discarded as a PAN/PMP reconstruction. Dyen (1965:295-296) gives additional support from Atayal dialects (*mahuq* and *mahuʔ*, Paiwan dialects (*v-in-tuʔ* and *v-in-atuq*), and Paezhe (*ba-batsuʔ*) all meaning 'wash (clothes)'. But Atayal and Paezhe *u* may reflect PMP *-e* as well as *-u*, whereas Paiwan *u* < PAN *-u*. So only Paiwan provides evidence for PAN *basuʔ*. Dyen obtained his information from Ogawa and Asai's The myths and traditions of the Formosan native tribes (Taihoku 1935), a source which is not available to me. Ferrell (1982), however, gives Paiwan *wñ/ateq* (from vateq), and I suppose the last-syllable *u* in *v-in-duʔ* and *v-in-atuq* are due to misprint or wrong perception in Ogawa and Asai. I believe that SM *basuh* etc. is borrowed from JV, and that JV wasdʔ is a cognate of SM basah 'wet' etc. Nother (1975:77 + n.48) points out that PMP *-e* regularly becomes JV -oh. He considers JV basah 'dissolve' a loan. However, for some reason he does not continue this line of reasoning, and he does not reinterpret JV wasdʔ as a reflex of PAN/PMP *baseq*. He reconstructs PMJ *Bassah* as well as *Bassuʔ* (p.185). (His evidence from Old Javanese viz. wasah 'washed' versus ag-wasah 'wash' are two variants of the same word, as is shown by the large number of variants of *u* and *a* in the Old Javanese dictionaries).

As to the correspondence JV *w*-: SM *ba*, the change from semivowel to homorganic stop in SM borrowed lexicon is not unusual, cf. JV *wolanda* 'Netherlands; Dutch' > SM *bolanda*; DU *wipkel* 'shop' > SM *pekkel* 'workshop'; DU *warol* 'carrot' > SM *bortol*; DU *yun* 'June' > SM *june*; DU *yenevar* 'Dutch gin' > SM *jenewar*; DU *yas* 'coat' > SM *jas*; ENG *yard* > SM *yar*, *jar*; ENG *waistcoat* > SM *beskat.*
N.B. In the above reconstructions PM *-h agrees with PMP *-q. For SM ayah etc. I reconstruct *ayah\(^{143}\) because of PWMP *ayaq (Blust 1979). PWMP had a vocative suffix *-q; the proto-phoneme *q in final position is generally reflected as h in the Malayic isolects (see 7.1.i). Blust (1979:234-235) assumes that at the time PWMP *-q became *-h (and in this way would have lost its force as a vocative marker), SM resisted this sound change in many vocatives. It is possible that IBN did so too, and even retained the glottal stop in ayah\(^7\) whereas SM, MIN, BH did not (they reflect PWMP *-q in ayah, which may be due to the fact that it became a polite term, and therefore would not be used as a vocative any more).

3.10 PM (INTERVOCALIC) *∅

BH provides the strongest evidence for PM *h (3.9); it has retained *h in all positions and its occurrence is never optional. Moreover, its occurrence between like vowels is not determined by a phonotactic rule, and here BH distinguishes h and ∅.\(^{144}\) For two reasons this distinction is relevant for the reconstruction of PM. Firstly, the other isolects either allow only h (i.e. SM, MIN, and JKT) or ∅ (i.e. SWY and (phonetically as a long vowel) IBN), or have contracted the adjacent vowels after affixation (4.5). Secondly, the BH h : ∅ distinction seems to reflect the distinction between PAN/PMP *q and PAN *S (/PMP *h) (7.1.i).

I reconstruct PM *∅ on the basis of ∅ between like vowels in BH (corresponding to SM, MIN, JKT h, SWY, IBN ∅). The function of *∅ is to indicate that in its place there was no PM phoneme, although it is likely that there was a (non-phonemic) glottal stop, as is the case in BH (2.3.1).

Only a few examples reflect PM *∅:

*ba∅ah ‘flood’; SM bah (with vowel contraction),\(^{145}\) BH, IBN baah;
*la∅as ‘finished, used up’ (3.8.2 UIC);
*tu∅ot ‘knee’ (3.1.1.1IC);
*lu∅(uo)k ‘bay, inlet; corner’ (3.4.2.3);
*p∅(uo)t ‘vagina’; SM, IBN am/put, MIN am/puy? ‘copulate’, BH puut ‘vagina’ (according to Klinkert, SM amput also occurs with meaning ‘vagina’ in some literary texts; cf. also P(W)MP *pue(Cl) ‘bottom, buttocks’ (Blust 1970)).

N.B. From the little material available on KD (all taken from Dunselman (1949, 1950) it appears that this isolect also distinguishes between PM *h and PM *∅ between like vowels, or between vowels one of which is ∅. Whereas PM intervocalic *h became KD h, PM *∅ between like vowels (or between vowel and *∅) became glottal stop (written as an

\(^{143}\)Cognates of SM ayah etc. are found in some other AN languages, and they refer to various kinship relations of parental generation (Blust 1980c:224-225). On the other hand, the southern Dravidian languages have the following correspondence set: TAM ayya: ‘father, respectable man’, Malayalam ayyan ‘father, lord’, Kannada ayya, aya ‘father, grandfather, master, lord, teacher’, Telugu ayya, aya ‘father’ (Burrow & Emeneau 1961:15 (entry no. 163)). It would be interesting to know more about the possible relationship between these southern Dravidian lexemes and SM ayah etc.

\(^{144}\)Abdul Jebar sometimes writes an apostrophe for a non-phonemic glottal stop in BH (2.3.1).

\(^{145}\)The non-occurrence of -h- is probably due to a phonotactic constraint, as there are no inherited lexemes with a CVhVh- sequence in the Malayic isolects.
apostrophe) in one example. This example unfortunately does not have a cognate in BH. Compare:

KD bu?uk ‘hair of the head’ (Dunselman 1949:81); MIN a/bu?, BH buuk; Wilkinson (1959) also gives BRU buhuk; cf. also Urak Lawoi’ Malay (spoken in Southwest Thailand) bo?, cf. PAN *buSek.

Compare also KD tuha (Dunselman 1949:62) < *tuha(?) (3.9.1); KD tahutn (1949:148) < *tahun (3.4.1.2); nahut (1949:149) < *sahut (3.9.1); puhutn (1949:64, 161) ‘tree’ and ‘owner’ < *puhun (3.1.2.4). For bu?uk etc. I reconstruct:

*bu6(ua)k ‘hair of the head’.

3.11 CHANGES IN IBN ANTEPENULTIMATE SYLLABLES AND IN ADJACENT CONSONANTS

(A) In IBN original homorganic nasal + stop clusters following an antepenultimate vowel were reduced to their homorganic nasal, e.g.

togalam ‘sink’, cf. SM, SWY tangalam, MIN, BH tingalam, JKT tangalam;
jomatan ‘jetty; a bridge’ (< *jambat-an ‘bridge (with handrail), jetty’, 3.1.3.1);
ramutan ‘the rambutan, Nephelium lappaceum’, cf. SM, BH, JKT rambutan, MIN rambutan, rambuy’tan, SWY rambutan;
sambi/an, also sambi/an ‘nine’ < *(a)sam abilit-an (see 5.3.1, 5.3.2).

N.B. cf. also the following loanwords (which must have been introduced via SM or SAR):

jónila ‘(western type) window’ < SM jandela < POR janela;
manira ‘flag’ < SM bandeira < POR bandeira;
sambilih ‘slaughter ritually’ (Richards 1981) < SM sambilih;146
sambako ‘tobacco’ (+t- > s unexplained) < SM tambakaw < POR tabaco;
sañata ‘weapon, armour’ < SM sañjata < SKT).

The above correspondence sets yield the following PM reconstructions:

*tuŋgal ‘single, alone’;
*tingalam ‘sink’;
*rambut-an ‘Nephelium lappaceum’.

(B) Nasal assimilation of stops takes place between the initial consonant of the antepenultimate and penultimate syllables: when one of them is a nasal and the other a stop, the latter is replaced by its homorganic nasal, e.g.

nagori ‘town, city’ < SM nagori < SKT;
mauwa ‘country, home country, district’, cf. SM banua ‘continent’, BH banua ‘place of birth, village’, BSM banua ‘island’ (Helfrich); MIN banu9 (instead of expected +banuo) remains unexplained).

N.B. (1) The same nasalisation process is seen in trisyllabic verbs, e.g.

ñamilik ‘live together’ from sa-bilik ‘the inmates of one bilik’;

146 According to Dempwolff (1937:45). SM sambilih derives from AR b’ismilla:hi ‘in the Name of God’. (For a phonological and semantic justification of this etymology, see also Adelaar 1989:5-7).
ämaray 'cross; swim across', cf. sə-bəray ‘the opposite side’. These trisyllabic verbs are derived from compounds consisting of sə- ‘one’ (5.3.1) + a noun; the same nasalisation process is sometimes seen in Malaysian SM, cf. məŋətapikən, məŋəsəmpikən ‘push aside, discard (as irrelevant)’, (Indonesian SM məŋətapikən, məŋəsəmpikən), from kə tapi ‘to the edge, side, border’, and kə səmpiiŋ ‘to the side’.

(2) In one case an original homorganic nasal + voiceless stop became homorganic nasal + voiced stop:

kəmbu/an ‘keep, possess’, cf. SM əmpu/ña 1. ‘owner’ 2. ‘own (v)’ 3. ‘possession’, MIN pu/ño ‘have, be the owner of’, nam/pu ‘the one who owns’, am/pu ‘owning, owner of’, SWU əmpu-o ‘owner (of)’, JKT pu/né ‘belonging to’.

The above correspondence sets yield the following PM reconstructions:

*bAnua ‘land, home country’;
*(əm)pu ‘owning, owner of, belonging to’.

(C) Original initial vowels or *hV- were lost, e.g.

luan ‘bows, forepart of a vessel’ < *hAlu-an (3.1.3.3);
rimaw ‘tiger’ (also SM rimaw) < *hArimaw (3.1.3.3);
ban/an ‘(prematurely) white-haired’ < *huban (3.1.2.2) + *-an; cf. IBN uban ‘grey or white hair’, b/uban ‘white-haired’;
laman, təŋah lamən ‘(in) the open space before the house’, cf. SM, BH halaman, MIN (Van der Toorn), JKT alaman ‘front yard, page of a book’, SWY laman ‘front yard, village square’;
liə ‘ginger’, cf. SM (h)alia (also Urak Lawoi’ liya, SD ahiə? ‘id.’ (with regular metathesis of liquid and h, and subsequent loss of +l, cf. Adelaar forthcoming);
piun ‘opium’ < SM apiun < AR afyu:n 1. ‘opium’ 2. ‘(name of a city in Turkey, where opium is cultivated)’.

N.B. (1) Rian ‘durian, Durio zibethinus’ probably originated through antepenultimate neutralisation, subsequent assimilation of *d to *r, and apocope: *durian > *dərian > +r(ə)rían > rian; cf. SM, MIN, BH duri/an (JKT durèn < JV); cf. also *dur? ‘thorn’ (3.5.2).

(2) The same apocope is sometimes also seen in other isolects, e.g. SM dəp/an ‘ahead, next’ < *hadəp (3.1.1.5) + *an; SWY laman, ximaw (see above).

The above comparisons lead to the following PM reconstructions:

*halaman ‘open space before the house, front yard’;
*haliə ‘ginger’.

3.12 SUMMARY OF CHAPTER 3

Comparison of the phonemes in the six isolects yields the following PM phoneme inventory: PM had four vowels, *a, *ə, *i, and *u. *ə did not occur lexeme finally (but it did occur in final syllables). It is not clear whether *a and/or *ə occurred in antepenultimate syllables. There were two diphthongs (*-ay and *-aw): both occurred lexeme finally only, and both are analysable as *a + a semivowel. There were two semivowels: *y occurred intervocally adjacent to *a or *u, and lexeme finally following *a; *w occurred intervocally between *a’s, and lexeme finally following *a.
There was a series of voiceless stops (*p, *t, *c, *k, and *q) and a series of voiced stops (*b, *d, *j, *g): *q occurred in final position only, and its reconstruction is uncertain. Voiced stops and *c did not occur in final position.

A series of nasals (*m, *n, *n̪, *ŋ) occurred in initial and medial position, and, except for *n̪, also in final position. In medial position they occurred intervocally and before homorganic stops.

There were two liquids (*r and *l), and two fricatives (*s and *h). *h between like vowels (or between vowels one of which was a schwa) must be distinguished from ø.

For a summary of PM consonant clusters, see 4.2: for a phoneme chart, see 4.1.
CHAPTER 4

PROTO MALAYIC WORD STRUCTURE

4.1 THE PM PHONEME SYSTEM

The following proto-phonemes were reconstructed in the previous chapter:

VOWELS

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<thead>
<tr>
<th></th>
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<th>back</th>
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</thead>
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<tr>
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<td>*i</td>
<td>*u</td>
</tr>
<tr>
<td>mid</td>
<td>*ə</td>
<td></td>
</tr>
<tr>
<td>low</td>
<td>*a</td>
<td></td>
</tr>
</tbody>
</table>

(diphthongs: *-ay, *-aw)

CONSONANTS

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<th>alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
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<td>*p</td>
<td>*t</td>
<td>*c</td>
<td>*k</td>
<td>*ʔ</td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td>*b</td>
<td></td>
<td>*d</td>
<td>*j</td>
<td>*g</td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>*m</td>
<td></td>
<td>*n</td>
<td>*h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fricatives</td>
<td>*s</td>
<td>(4.3.2)</td>
<td>*h</td>
<td></td>
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<tr>
<td>liquids</td>
<td>*l</td>
<td></td>
<td>*y</td>
<td></td>
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</table>

4.2 THE PM CANONICAL SHAPE AND PHONOTACTIC CONSTRAINTS

Most PM lexemes are disyllabic; there are also monosyllabic, trisyllabic, and even tetrasyllabic reconstructions, but the great majority are disyllabic:

* [C V(N)] [C V(N)] C V (N)) C V C

The following phonotactic constraints apply to this canon:

1. Final C is never a voiced stop (3.5) or a palatal (3.4.2).
2. *ʔ occurs only as final C (3.4.1, 3.4.2).
3. Any C can be ø, e.g. *aku, *mata, *daun, *tuəot, etc.
4. Consonant clusters consist of a nasal + homorganic stop, or a velar nasal + *s; they occur only intervocalically (3.6.2).
5. Semivowels only occur intervocalically: *w occurs only between *d's, and *y occurs between vowels other than *i or *ə (3.3.1, 3.3.2); in final position semivowels are treated as part of a diphthong.
6. *ə only occurs as V2 if C3 is a *ʔ, ø (2.6.3 and 3.1.1), or *h.
Diphthongs only occur lexeme finally (i.e. as $V_2$, and if $C_3 = \emptyset$).

Initial schwa, or schwa preceded by initial *$h$, is never followed by a stop.¹⁴⁷

4.3 ARTICULATION-TYPE HARMONY

4.3.1 ARTICULATION-TYPE HARMONY APPLYING TO HOMORGANIC STOPS, NASALS AND SEMIVOWELS IN INITIAL AND MEDIAL POSITION

In an article on Malay consonant-harmony (Adelaar 1983), I assert that in an earlier stage of SM there must have been a tendency to articulation-type harmony which disallowed initial stops followed by medial homorganic nasals or homorganic stops differing in voice. For instance, lexemes with a structure like that of *papan, bibit, mamak, cucu, jajar, nānī, kikir etc.

are usual, but lexemes with a structure like that of *bomoh, bepaj, paman, kaņa, kugah etc.

are not. The tendency did not apply to combinations of $t$ with $d$ or $n$, which may be due to the fact that, being a supradental, $t$ is not homorganic to $d$ and $n$, which are alveolars. There were nine unexplained exceptions to this constraint: *bapa ‘father’, *bepaj ‘k.o. sweetmeat’,


That the constraint also applied to combinations of homorganic stops or nasals with semivowels seems likely, but there are still a few unexplained counterexamples. This tendency to articulation-type harmony was probably already at work in PMP. Although Chrétien never formulated this tendency, it is borne out by his lexicostatistical study of the PMP morph ( Chrétien 1965 and Adelaar 1983:63-65). Adelaar (1983) did not include other Malayic isolects, which are therefore inspected in this study in the hope of determining to what extent articulation-type harmony was operative in PM. I will do so by giving all disyllabic lexemes in each isolect with a cognate in at least one other isolect, which are exceptional to the consonant-harmony constraint. (A full list of exceptions in each isolect is given in Appendix 1.) As in Adelaar (1983), I organise the lexemes according to the pattern to which they belong.

These patterns are defined as follows:

I initial stop followed by homorganic stop differing in voice (e.g. *bapa);

II initial stop followed by prenasalised homorganic stop differing in voice (e.g. SM *bimpaw ‘handkerchief, towel’, <$ \text{CHI}$);

III initial stop followed by homorganic nasal (e.g. SM *danaw, *pamah);

VI initial nasal followed by (prenasalised) homorganic stop (e.g. SM *mabuk, *mimpi);

V initial stop or nasal followed by homorganic semivowel (e.g. SM *bawaj).

¹⁴⁷ This observation is based on the following considerations:

Initial schwa (or *na-) is never followed by a stop in SWY (2.4.3) and IBN (2.5.3), and it is only in a very few cases by a stop in SM (2.1.3) and JKT (2.6.3). On the other hand, initial schwa is regularly followed by a homorganic nasal + stop cluster (and sometimes by a liquid or nasal) in these isolects. PMP forms with a *CV(C) pattern in the SWY, IBN and JKT, and a *NCVC(C) in BH.

As all isolects have reflexes with a homorganic nasal, nasal accretion must already have taken place in PM, cf. PMP *hepat > PM *hepat, PMP *ampat > PM *ambun, PMP *e(N)tut > PM *kantut (cf. 7.2.5).

An exception to this phonotactic rule is SM *ajan, MIN *ajan, BH *hajan ‘squeeze out by pressure’ (which has a variant rajan, see Chapter 2 fn.2). Dyen reconstructed PMP *eZen ‘squeeze’ on the basis of SM *ajan and Toba *oden, JV *ad an ‘id.’ (as a correction to *eden in Dempwolff 1938, Dyen 1951:536-37). On account of BH hajan this reconstruction has to be readjusted to PMP *qeZen.
The only Malayic cognate set belonging to Pattern I is SM b/apa, b/apa/k, b/apa/h, MIN apa?, b/apa?, pa?, BH b/apa, SWY b/apa?, JKT b/apa? ‘father’, IBN b/apa? ‘father-in-law’ and apay ‘father’. No cognate sets belong to Pattern II. The cognate sets belonging to Pattern III are (1) SM pamah ‘low-lying (land)’, SWY pama(h) ‘swamp’; (2) a.i. (except JKT) danaw ‘lake, pool’; (3) MIN ja/iio, BH ja-iia (and also KD ja-iia, Dunselman 1949:69) ‘what she/he says, his/her words’; in BH (and KD) this is still a morphologically complex form (cf. BH ja-ku ‘my words, what I say’).

The cognate sets belonging to Pattern IV are (1) SM, BH, JKT m/ampus, MIN m/ampuyh ‘dead, wiped out (coarse)’; also SM (h)ampus ‘id.’, MIN (Van der Toorn) ampuyh ‘wiped out’; (2) SM, MIN m/umbag ‘coconut in its earliest stage of growth’; (3) a.i. m/imp/ ‘dream (v, n)’; also SM, JKT impi ‘dream, hope for, fancy; vision, illusion’; (4) SM, BH, IBN mabuk, MIN, SWY mabu2, JKT mabok ‘intoxicated’.

The cognate sets belonging to Pattern V are (1) a.i. bawan ‘onion’; (2) SM, JKT bawal ‘k.o. fish’; (3) SM p/awaI, MIN p/awaI, pu/awaI ‘guide, shipmaster; expert in any art believed to need the use of magic’; this is originally a contracted form (*pu + *awaI), as can still be seen in MIN puawaI (Adelaar 1983:61). From the 11 correspondence sets given above two must be discarded, because they are historically complex: one is MIN ja/iio, BH ja-iia, and the other is SM p/awaI, MIN pu/awaI.

So there are actually nine correspondence sets which are not subject to the consonant-harmony constraint, and which yield the following PM lexemes: SM b/apa/k etc., SM danaw etc., SM pamah etc., SM m/ampus, hampus etc., SM m/umbag etc., SM m/imp/ etc., SM ma/buk etc., SM bawal etc., and SM bawan etc.

SM b/apa/k etc. developed from a proto-form without b-. This proto-form was probably PM *apa(?), but it may also have been a TAM loanword. b- remains problematic. It is observed in some other kin terms and may be a fossilised prefix, but its exact nature is not clear.

148 cf. Tioman Malay ya dia ‘(s)he said’. These forms are possibly from *+ia + a personal pronoun (*+ia, cf. 5.5.1, 5.5.1.2), with desyllabification in Tioman Malay, MIN, BH, and KD, and subsequent change from *y- to j- in MIN, BH, and KD (analogous to the change of *y- to j- in loanwords, cf. fn. 125). Another possibility is that they are allegro forms for *+jar + a personal pronoun, cf. Selako ja-ku, jar-e ‘(s)he said’.

149 According to Asmah Haji Omar (1975), the TAM terms amma: ‘mother’, appa: ‘father’, and ayya: ‘father, respectable man’ are the sources for SM ama/k, b/apa/k and mama/k respectively. She found the terms in Burrow and Emeneau (1961), which has furthermore mama: ‘mother’s brother’. These four TAM kin terms have cognates throughout the Dravidian language family (Burrow & Emeneau 1961). PM has *a(ama(?), *apa(?), *ayah and *mama(?) respectively (3.4.2.5; 3.9.3 UIC)), and at least *ama(?) and *apa(?) have replaced PMP terms (viz. PMP *ma ‘mother’ and PMP *ama ‘father’). These facts suggest that *ama(?) and *apa(?) were borrowed from Dravidian languages. This either implies that TAM already had an influence on PM, or, if not, that the four kin terms in question cannot be reconstructed for PM on account of their being borrowed.

150 Apart from IBN apay, MIN apa? and Madurese apa? ‘father’ (3.4.2b) there are many other correspondences of SM b/apa/k without initial b-, cf. Toba, Ngaju apa ‘(one’s own) father’, Soboyo n-apa ‘grandmother’, Kapuas apa/h ‘father’, Mualang apay ‘father’ (Adelaar 1983:59 n.9), Malagasy z/afy (< *i-ape) ‘descendants’, SD apâ? (speaker’s own) father (Adelaar unpublished fieldnotes), SUN apa, bapa ‘father’. The notion of ‘one’s own father’ is prevalent in these correspondences, and it is opposed to a wider meaning of father (other people’s father, father-in-law) in the correspondences with b-/ or in other available terms, cf. IBN bapa/ ‘father-in-law’, Toba ama- h ‘father, a term which can be used towards young people, and hence by a father to his son’ (Van der Tuuk), Ngaju bapa, SD bapa? ‘someone else’s father’, Maranoo bapa/ ‘uncle, father-in-law’, Hanunoo bapa/ ‘uncle’. In Mualang and in several other languages (including some Moluccan ones) bapa/k occurs with the meaning ‘father’, but it is felt as a borrowing.

An initial b-/ as in SM b/apa/k etc. is also observed in a number of other kin terms, or in terms which are associated with this semantic category (such as domestic, maidservant, or female (of animals)). Compare: b/uda/k ‘lad, lass’ (also ‘domestic, slave’) and *m/uda ‘young, unripe’ (3.4.2.4), and furthermore SD kamuda ‘youngster’, SM ma/uda ‘mother’s younger sister’ MIN uego ‘older brother’ [sic].
The etymologies of the terms related to Dutch: Indo-European) languages). Note also that correspondences to French: respectively:

Compare the terms that are related to German:

English:

Bulgarian:

Spanish:

Italian:

Russian:

Swedish:

The different varieties of onion and garlic were introduced into Southeast Asia from India, China and Europe, and most of these varieties do not grow very well on the wet soil of Malaysia and the Archipelago (Burkill 1966:99-103). It is possible that SM bawag developed from a PM *babag 'bulb', and was later on borrowed from one or more Malayic isolots into languages all over Indonesia and the Philippines (in the Philippines its specific meaning may be derived from SM bawag putih 'garlic'). In this context it is worth mentioning that in European languages there is a similar confusion in the etymology of terms for 'garlic' and 'onion'.

Dempwolff reconstructed PMP *bawar 'onion' on the basis of Tagalog bawar 'garlic', Toba baoag, JV, SM, Ngaju bawar 'onion'. But Toba baoag is not inherited (Adelaar 1981:13), and JV has also brambag 'red onion'. Ngaju bawar is ambivalent, and could be from *bawag as well as *babag. It is likely that the reflexes of Dempwolff's *bawar are loanwords from SM, and that SM bawar developed from PM *babag (or *bafag). At present

b/esa/n 'the relationship of persons who have intermarried', and SD isän 'term of address or reference for siblings of those who are married to one's siblings' (one is in a ba-isän relationship with the siblings of those who are married to one's siblings); (the same absence of b/ and the same meaning is observed in the corresponding form in several other isolots in western Borneo); b/iras 'wife's sister's husband, husband's brother's wife', Tagalog iras 'id.' (but probably borrowed from SM), and Manobo iras 'spouses of two people who are related to one another (congenerationally). Timugon Murut iras 'husband's brother's wife'; probably related to SUN g/iras 1.' do s.th. in combination with s.th. else, combine two functions 2. (also na-hiras) 'ask other people's assistance for work one cannot perform alone (e.g. construction work, harvesting); b/a/ba/n/na 'female (of animals)' and PMP *tina 'mother, *t-tina '(id., as a term of reference)'

ba/bu 'maid-servant' (in Old Javanese and in dialectal SUN it occurs as 'mother' or as 'servant'); possibly related to SM ibu, bu, JV mbob 'mother'?

Embolah (a Tamanic language of West Kalimantan) b/ak? 'grandfather' (a Malayic borrowing) and PM *aki? 'grandfather'.

In b/a/pa/k,b/uda/k,b/tda/n (and ba/bu?) the variants with *b(a)- seem to convey the notion of 'one who acts as', or is considered as - [the one designated with the variant without *b(a)-]. Whether this is evidence for a fossilised prefix is a matter of further investigation.

Borrowing of words for 'onion' has crossed the divisions into Romance, Germanic and Slavonic languages. Compare the terms that are related to 1. oignon (French) 2. Zwiebel (German) 3. luk (Russian), all meaning 'onion', in ten European languages (in the list below, (1), (2) and (3) should be read 'related to 1, 2, 3' respectively):

French: oignon 'onion' (1), ail 'garlic' (none of 1,2,3);

Spanish: cebolla 'onion' (2), ajo 'garlic' (none of 1,2,3);

Italian: cipolla 'onion' (2), aglio 'garlic' (none of 1,2,3);

English: onion (1), garlic, leek (3);

Swedish: lök 'onion' (3), vilok 'garlic' (3);

Dutch: ui, (Flemish) ajn (1), Eastern Dutch (vernacular) siepel (2) all meaning 'onion', and knollook, (Flemish) look 'garlic' (3);

German: Zwiebel 'onion' (2), Knoblauch 'garlic' (3);

Polish: cebula 'onion' (2), czosnek 'garlic' (none of 1,2,3);

Bulgarian: luk 'onion' (3), byal luk 'garlic' (3), cesn 'id.' (none of 1,2,3);

Russian: luk 'onion' (3), cesn 'garlic' (none of 1,2,3).

The etymologies of the terms related to 1, 2, 3, are (1) Latin unio, unionis 'unity, union, a k.o. large pearl, a single onion', (3) Old Teutonic *lauko- 'onion' (The Shorter Oxford English Dictionary revised and edited by C.T. Onions), and (2) Latin cepsa, a diminutive of cepa 'onion' (Duden). Note that Bulgarian byal luk and Swedish vilok literally mean 'white onion', cf. SM bawarputh (also a common circumscript in other (non-Indo-European) languages). Note also that correspondences to luk (3) mean 'garlic' as well as 'onion'.

References:

Dempwolf f reconstructed PMP *bawar 'onion' on the basis of Tagalog bawar 'garlic', Toba baoag, JV, SM, Ngaju bawar 'onion'. But Toba baoag is not inherited (Adelaar 1981:13), and JV has also brambag 'red onion'. Ngaju bawar is ambivalent, and could be from *bawag as well as *babag. It is likely that the reflexes of Dempwolff's *bawar are loanwords from SM, and that SM bawar developed from PM *babag (or *bafag). At present
there is not sufficient evidence to discount each of the nine PM lexemes which do not conform to the articulation-type harmony of homorganic consonants, although it is clear that there was a tendency to such a consonant constraint in PM (or at least in a not-too-remote period preceding PM).

4.3.2 AN ARTICULATION-TYPE HARMONY APPLYING TO *s AND PALATALS

It is worthwhile extending the line of questioning followed above by investigating whether PM had a constraint on combinations of *s and palatalts in initial and intervocalic position. If it had, it is probable that PM *s was a palatal. An original palatal value of *s is also suggested by the fact that nasalisation of initial *s results in its replacement by n in all isolects. (On the other hand, PM *-ns- was reconstructed on the basis of a nasal + *s cluster in the isolects (cf. 3.6.2).

The data however do not allow a definite conclusion (see Appendix II). They show that:

(1) none of the isolects have inherited lexemes containing an initial palatal stop or nasal in combination with intervocalic s;

(2) IBN has only combinations of initial s with intervocalic y;

(3) combinations of initial s and intervocalic palatal stops or nasals are particularly rare in BH and SWY;

(4) the following correspondence sets exist:

| SM  | sajak, soňjak, MIN saja?, JKT sajak (sořaj) ‘since’; |
| SM  | saja, MIN sajũ? ‘cold, fresh’; |
| SM, JKT | saňum, MIN saňũn ‘smile (v)’; |
| SM, JKT | soňap ‘deserted, lonely’, SWY soňap ‘dizzy, stupefied, numb’; cf. also BK seňap (soňap?) ‘deserted, lonely’; (MIN saňo? ‘id.’ is only in local use, Van der Toorn); a.i. (except IBN) sayap ‘pining, longing, pitying; love, affection’;
| SM, SWY, IBN, JKT | sayap, MIN sayo? ‘wing’ < *sayap (3.1.1.3); |
| SM, BH, IBN, JKT | sayur ‘vegetable(s)’; |
| SM, BH, IBN | sayat ‘cut, slice off’ < *sayat (3.3.1e). |

Of the above examples one set contains too few examples to yield a PM reconstruction (SM saja, MIN saja?). The sets SM saja, etc., soňap etc., and saňum etc. have each three or more reflexes, but none of them has a BH or IBN reflex. Moreover, the co-occurrence of forms like SM tiňjak ‘tread on’ and SM jojak ‘trample on’ (labelled as JKT, and ultimately as a borrowing from JV or SUN, in Wilkinson 1959) strongly suggest that saja was originally polymorphemic. But then again, if it ever was, it is not clear whether it was still in PM or only in a period prior to it.

Although apart from IBN each isolect has some lexemes with a combination of initial s and an intervocalic palatal stop or nasal, the only well-attested combination in all Malayic isolects is initial s with intervocalic y. It is very likely that PM contained lexemes with this combination. It is also likely that PM did not have a constraint on the combination initial *s and intervocalic palatal stop or nasal, unless an explanation is found for the occurrence of saja etc., saja etc., and saňum etc. (such an explanation may be that these lexemes were morphologically complex, but as yet there is no sufficient evidence for this). On the other hand, no inherited lexemes with initial palatal consonant and intervocalic s are found in any of the isolects, and it is very probable that PM did not have lexemes containing this
combination. This information is not sufficient to make definite conclusions about the phonetic character of PM *s. Although there may have been a structural relationship between the ancestor of s on the one hand and the ancestors of c, j, and ŋ on the other, it is not clear what this relationship was, or if it existed at the PM level or only prior to it. On the basis of s in all isolects (which is an alveolar) I assume that PM *s was also an alveolar.

Reconstructions:

*saya* 'pinning, longing, pitying';
*sayur* 'vegetable(s)';
*sañhap* 'deserted, lonely';
*sajak* 'since';
*sañum* 'smile (v)'.

4.4 A CONSTRAINT ON FINAL LABIALS PRECEDED BY *i

The evidence presented here is not sufficient to state the existence of such a rule as a fact, but it is rather striking that:

(a) Only one correspondence set was found for the reconstruction of PM *-im*, viz. *kirim* (3.1.2.1). But *kirim* has an irregular IBN reflex *kirum*, whereas the usual IBN term for 'send' is *pait*. SM and JKT do not have other inherited lexemes with *-im/-em* (JKT *-im/-em*), and SWY has only *udim* 'faeces'. BH has *siim* 'quiet, desolate', and *pijim* 'close the eyes'. In IBN no final *-im* sequences occur, nor in MIN, where *-m* became *n* after a high vowel (3.6.3, 3.6.3.1). (cf. also SM *kalim* etc. in 3.1.1.2 UIC (2.).

(b) Reflexes of *-ip* are infrequent in the isolects, although they are not as exceptional as reflexes of *-im*. No full correspondence set yielding a sound PM reconstruction was found, and the only examples which reflect *-ip* in more than one isolect are:

(1) SM, BH, SWY, JKT *kacip*, IBN *kacit* 'betel-nut scissors'; this is a JV loan according to Wilkinson (1959) and Van der Tuuk (Von de Wall 1880, II:475);

(2) SM, JKT *cicip* 'taste (v)', BH *cicip* 'examine';

(3) SM *lañcip, liñcip*, BH *liñcip*, JKT *lañcip* 'smooth and pointed';

(4) SM (*h)*intip, BH, JKT *intip* 'spy, lurk', which is given as a JV loan in Wilkinson (1959) and Klinkert;

(5) SM *sisip* 'insert', MIN *sisi*? 'add' (3.1.2.1);

(6) SM, JKT *sirip*, BH *sirit* 'fin';

(7) SM, JKT *kutip* 'extract (v)';

(8) SM, JKT *kôdip, kalip* 'flicker, blink'.

In Dempwolf (1938) there are three PMP reconstructions with *-ip* that are reflected in one or more Malayic isolects:

(1) PMP *sisip* 'insert', cf. SM *sisip*, MIN *sisi*?;
(2) PMP *ketip 'squeeze between the fingernails', which became SM *katip 'nip or bite, of small insects';
(3) PMP *quDip 'live', which became SM (h)idup, MIN iduy?, BH hidup, SWY, IBN, JKT idup 'id.' (the vowels were metathesised, a feature in which the Malayic isolects distinguish themselves from most other AN languages). In summary, (1) there is only one possible reconstruction with a final *-im sequence (and a weak one at that), (2) there are only eight poorly represented correspondence sets which reflect *-ip, and (3) there is a metathesis of vowels in the only PMP reconstruction with *-ip that is well represented in the isolects viz. PMP *quDip > *hidup. These arguments clearly point to a PM constraint on final labials preceded by *i.

4.5 VOWEL CONTRACTION IN PM LEXEMES OF MORE THAN TWO SYLLABLES

Original trisyllables with laryngeals separating like vowels, or separating schwa and another vowel, were contracted to PM disyllabic lexemes. This process involved loss of the PAN/PMP laryngeal, and the development of a new PM vowel with the same colouring as the contracted vowels if these were like ones; PAN/PMP combinations of *a or a high vowel with *ə were reduced to PM *a or a high vowel respectively, e.g.

PMP *bəreqat 'heavy'
*tuqela(ŋ,ŋ) 'bone'
*qaheleu 'pistle'
*pereqes 'squeeze'
*qijuhun 'nose'

PAN *tinu?un 'weave'
*b(ɪ)n(ɪ)aHi154 'woman'
*bineSiq/*beneSiq156 'planting) seed'

Contraction of vowels also happened in PAN reconstructions which have more than two syllables through affixation or doubling of the root morpheme, e.g.
PMP *ma-kaʔen 'eat'
*ka + *wanan 'right(-side)'
>(pre-PM *ka + *anan)

PAN *ka + *luSeq 'tear (n)'
PWMP *(dD)ehuk(-(dD)ehuk)158 'sit, dwell'

Contraction of vowels also happened in PAN reconstructions which have more than two syllables through affixation or doubling of the root morpheme, e.g.
PMP *ma-kaʔen 'eat'
*ka + *wanan 'right(-side)'

PWMP *(dD)ehuk(-(dD)ehuk)158 'sit, dwell'

Achehnese (peu'ct). The Kadazan form suggests that these cognates originally reflect a causative form (cf. Kadazan -ovit 'bring, carry', popo-ovit ('cause to be brought, carried =) send'.

According to Blust (1981:463), the only other non-Malayic languages with a reflex of PMP *quDip with metathesised vowels are Rejang (idup 'living, alive') and SUN (hirup, living, alive'), and hurip 'revive; flourish, thrive (as vegetation'). However, Balinese and Sasak idup 'live' also show this metathesis.

153Blust originally reconstructed *bineSiq (1982a:289), but in Blust (1984a) he gives a doublet *beneSiq (on account of Manobo bemy)."
In one PM lexeme contraction did not take place (although it did take place in the individual isolects), i.e.

PMP *baqeRu 'new' > *bAharu (3.1.3.3)

PAN/PMP trisyllables with differing vowels other than schwa which were adjacent, or were separated by a laryngeal, remained trisyllabic in PM, e.g.

PMP *kaluaŋ 'bat' > *kAluaŋ
*buqaya 'crocodile' > *buhaya
*baŋkuan 'k.o. plant' > *bAgkuan
*be(r,R)uaŋ 'bear' > *biruaŋ (3.1.3.1)
*ka + *wiRi 'left(-side)' > pre-PM *ka + *iri > *kA/iri (cf. 5.7 (2) and 7.1c)

Contraction of adjacent vowels in trisyllables (or tetrasyllables) has also been an ongoing process in the isolects after the PM stage. All isolects contracted adjacent vowels of original polymorphemic or reduplicated PM forms. In many cases the uncontracted and morphologically non-complex root morpheme still occurs. For example:

SM lu/tut, MIN lu/tuy?, SWY an/tuat 'knee', and BH tuut (3.10);
BH am/pun 'apology, forgiveness; ownership, property', o.i. 'pardon, forgiveness', and SM mohon, MIN puhun, JKT muhun 'beg, request' (also SM poḥon 'tree' etc., 3.1.2.4);
SM, JKT ta/luk, MIN ta/luy?, BH ta/luk, SWY ta/luy? 'bay, inlet', and BH luuk 'bay; cavity under water' (3.10);
SM, IBN am/put, MIN am/puy? 'copulate', and BH puut 'vagina' (3.10);
MIN a/bu\?, IBN buuk 'hair of the head', cf. also KD bu'uk 'id.' (Dunselman 1949:81; 3.10).

SM, SWY, JKT bąban, MIN baban 'load', and SM, BH bawa, MIN bao, SWY bawo, IBN bai? 'bring, take, carry', which yields PM *ba(?)' bring, take, carry'; this proto-lexeme acquired the (now fossilised) suffix -i? in IBN (cf. 6.1.1), and was reduplicated in the o.i.; bąban, baban is the result of reduplication of *ba(?)+ suffixification of the nominal affix *-an, thus *ba(?)+*ba(?)+*an, which became +bąba(?)an > SM, SWY, JKT bąban, MIN baban.

As there is no way of telling whether contraction in the above examples had already taken place in PM or took place in each isolect independently, I reconstruct a complex form with vowel contraction when both the complex form and the root morpheme are reflected in one and the same isolect. For example, *tAluk is reconstructed along with *luo(u)k because both are reflected in BH, and *ampun is reconstructed along with *puhun because most isolects reflect both of them.

N.B. The following cognate set must have developed from *(am)pu - *hiaŋ 'Lord God; ancestor' (cf. *(am)pu (3.11B) and *hiaŋ (3.9.1)), with loss of *h and desyllabification of intervocalic *i to y:

SM mo/yaŋ 'great-grandparent', MIN pu/yay (Van der Toorn) 'great-grandmother', SWY po/yaŋ 'great-grandfather, ancestors; patriarch', IBN aki?-pu/yaŋ 'great-grandfather', JKT nene/k-mo/yaŋ (also SM nene/k-mo/yaŋ 'ancestor'); also (in Wilkinson 1959): po/yaŋ (Sumatra) 'patriarch, old man', (MIN) 'shaman'.

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4.6 SYNCOPE OF THE PENULTIMATE VOWEL OF TRISYLLABLES

Blust (1982a) describes a historical development in SM phonology which involved the loss of penultimate schwa in original PAN trisyllables, and the subsequent assimilation or elimination of one of the components of the resulting consonant cluster ("cluster-reduction"). He (p.285) calls this development "shwa-syncope." For example:

PAN *qalesem 'sour, acid' > SM, BH, SWY (m-)asam 'sour fruit', M/asam 'sour fruit';
PAN *patelaq 'spotted, striped' > SM palaq 'striped, banded';
PAN *qageliC/*qagSiC 'burning smell' > SM (h)aqit 'foul-smelling (dirty linen, dung, armpits etc.)', MIN aqit, BH, SWY aqit 'burning smell', IBN aqit 'fragrance' (cf. Blust 1980b:37-38).

In two of Blust's examples a penultimate high vowel (instead of schwa) is lost:

PAN *paJ)uDaN 'pandanus' > o.i. pandan;
PAN *qaNiCu 'ghost, spirit of the dead’ > SM hantu ‘generic for invisible spirits of evil that work in darkness or secrecy’, MIN, SWY, IBN aitu 'ghost, demon'.

A third, originally polymorphemic example may be added here:

PAN *C-um-ubuq 'grow' > *t/um/buh 'id.' (3.5.1; 5.6.4).

Comparison of SM with the other isolects shows that in most of Blust's examples schwa-syncope has taken place in pre-PM. But in two of his examples the isolects disagree in reflecting a trisyllable, or a disyllable with a consonant cluster, e.g.

PAN *timeRaq 'tin, lead' > SWY tima(h), JKT timè, o.i. timah; but MIN also has timarah, timbarah 'tin foil'; MIN timah is assumed to be a loan (from SM), and MIN timarah, timbarah are explained as reflections of a Proto Minangkabau-Malay *timrah in which a schwa (> MIN a) was inserted to break an unusual heterorganic consonant cluster. In timbarah the insertion of schwa was preceded by an excrescent b (or "obstruent-insertion", Blust 1982a:288 fn.8).

A few other cognate sets can be added to these two:

PM *pura(ii)ci(kt) 'squirt' > SM parcik, parcii, BH puracit, IBN pøæçit, pøæçit, JKT parcik (3.7, 3.7.5);
PM *tirajañ 'kick (v)’ > SM tøajæn, tøajæn, BH tirajañ, IBN tøajañ, JKT tøanjañ, tøanjañ (3.7, 3.7.5);
PM *bArunas 'full, of rice ears' > SM bøønas, bøønas, BH barunas, SWY ßæxnas (3.7, 3.7.5);

From the reflexes in the Malayic isolects for PAN *timeRaq,*sagelaR, and for PM *pura(ii)ci(kt), *tirajañ and *bArunas, it appears that syncope was still an ongoing process in PM.

Although almost all of the examples given in Blust (1982) show the elimination of schwa, I prefer the term ‘vowel-syncope’ to ‘shwa-syncope’ because of PM *pura(n)ci(kt), *tirajañ and *bArunas in addition to PAN *pajuDan and *qaNiCu.
On the basis of the above cognate sets I reconstruct for PM:

*asəm 'sour fruit', and
*m- asəm 'sour, acid';
*pəlaŋ 'striped, banded' (only in SM);
*haŋit 'smelling as if burned';
*pandan 'pandanus';
*hantu 'ghost, spirit of the dead';
*tim(o)rah 'tin, lead';
*pVr(o)lak 'garden' (cf. Toba pəlak 'id.').
CHAPTER 5

PROTO MALAYIC LEXICON

In this chapter an attempt is made to reconstruct parts of the PM basic lexicon pertaining to well-defined semantic fields. These fields are: times of the day (5.1); directional terms (5.2); numerals (5.3); basic kinship terms (5.4); pronouns (5.5); parts of the body (5.6).

This chapter also includes a modified Swadesh 200-item basic wordlist for PM (5.7) built on evidence of 200-item basic wordlists for the six isolects as well as on additional information. The list is meant to be a tool for measuring the relative position of other isolects vis-à-vis PM, and for counting the lexical retention rate of the six isolects.

5.1 TIMES OF THE DAY

Four major parts of the day are distinguished in the isolects: morning (5.1.1); noon, middle of the day (5.1.2); evening (5.1.3); night (5.1.4).

5.1.1 MORNING

Pagi is the regular term for 'morning' in all isolects except BH, which has ba/isuk/an. The root isuk is probably from JV (cf. JV ésok 'morning', from which probably also originated SM b/esok 'tomorrow'). As a PM term for 'morning' I will reconstruct *pagi.

5.1.2 NOON, MIDDLE OF THE DAY

The term for 'noon, middle of the day' agrees in all isolects: SM (Malaysian) tanah hari, MIN tanah ari, BH tanah159 hari, SWY tanah(h) ari, IBN tanah ari, JKT tanri (with sandhi); cf. also 'tamahahi' in Pigafetta’s 1,521-word basic wordlist, which is the oldest western source for Malay (Pigafetta 1972:67). SM (Indonesian) and JKT siang are sometimes used for 'middle of the day (c. 11 a.m. - 2 p.m.)', but in all isolects (see Aliana et al. p.86 for SWY) it means 'daylight (as opposed to the dark)', and (except in JKT) it also means 'clear, limpid, bright, clean' and (in derivations) 'weeds, clear (woods, bushes, etc), clean'.

For PM 'noon' *tanah *hari is reconstructed; *siang is reconstructed with the meaning 'bright, clean; clean, weed (v)'. An interesting cognate set in this context is BH malandaw 'oversleep', IBN s/andaw in gaway s/andaw ari (loss of +l- unexplained) 'k.o. festival ending at midday', and (Richards) andaw 'rise late, lie abed (from laziness)', apay andaw 'father of the day' (name of a star) (< *andaw, 3.2.2). BH landaw and IBN andaw seem to reflect PMP *qalejaw 'day, daylight', although the sound correspondences are irregular.

159Durdje and Djantera 1978:45.
Either BH \( l \)- reflects PMP \( *l \)-, and PMP \( *qa \)- was lost (cf. 3.1.3.3), which asks for an explanation of PMP \( e > \) IBN \( a \) and PMP \( *l > \) IBN \( o \), or PMP \( *e \)- was lost through syncope, and BH \( l \)- remains unexplained. Moreover, it is not clear why BH and IBN have a cluster -nd-.

5.1.3 EVENING

SM and SWY have \( p\text{ataj} \), MIN \( p\text{ataj} \) for ‘late afternoon, evening’; this meaning must also be secondary, since in IBN and JKT, as well as outside the Malayic group, \( p\text{ataj} \), \( p\text{ataj} \), (JV \( p\text{ataj} \)) means ‘dark, obscure’. BH has \( k\text{am/ari/an} \) ‘evening, yesterday’, which must be a contraction of \( *\text{k}\text{-}\text{a-l}(\text{h})\text{o}\text{am} + *\text{hari} \). IBN has \( \text{lam/ay} \) which is from \( *(k\text{alo}(\text{h})\text{o})\text{am} + *\text{hari} \)- the loss of \( *r \) is unexplained, but cognates from other Ibanic isolects (in West Kalimantan) clearly show the development, cf. (in kabupaten Sanggau) Ketungau \( m\text{alay} \), Kerabat \( m\text{alay} \) (both with metathesis), Mahap \( m\text{ari} \), Benawas \( m\text{ay} \), Taman \( b\text{omay} \), (in kabupaten Kapuas Hulu:) Suhait \( g\text{alomay} \) (Adelaar unpublished fieldnotes). SM (BI) \( \text{sore} \) and JKT \( s\text{dore} \) is a loan from JV.

Most likely, \( *p\text{ataj} \) originally meant ‘dark, obscure’, and its reflexes were later on used metaphorically for ‘evening’ in SM, MIN, and SWY. This shift of meaning is analogous to that of SM, MIN, and JKT \( s\text{iaj} \). The PM term for ‘evening’ was presumably a compound \( *\text{k}\text{-}\text{a-l}(\text{h})\text{o}\text{am} + *\text{hari} \) which is still reflected in BH \( k\text{am/ari/an} \) and IBN \( \text{lam/ay} \); in other isolects this compound is still reflected in the term for ‘yesterday’, cf. SM \( k\text{am/ari/n} \), \( k\text{am/are/n} \) (3.1.2.5), \( k\text{alam/ari/n} \), \( k\text{alam/are/n} \), SWY \( k\text{am/axi} \), JKT \( k\text{am/are/n} \) ‘id.’; cf. also ‘calamari’ in Pigafetta’s list (p.71), and BRU \( k\text{amai} \) ‘yesterday’ (in Wilkinson’s (1959) presentation \( k\text{amai} \) has a schwa, but according to Prentice, schwa does not occur in BRU).

5.1.4 NIGHT

All isolects agree in having \( m\text{alam} \) (JKT \( m\text{alam} \)) for ‘night’, which points to PM \( *m\text{alam} \). But it is likely that \( m\text{alam} \) etc. is related to \( *\text{k}\text{-}\text{a-l}(\text{h})\text{o}\text{am} \), and I reconstruct a PM etymon \( *\text{ma-l}(\text{h})\text{o}\text{am} \).\(^{160}\)

5.2 DIRECTIONAL TERMS

No terms for cardinal points of the compass are reconstructable for PM. This is not surprising if one compares the isolects with other languages all over the world: terms for cardinal points as a rule originate as secondary semantic developments in lexemes primarily referring to (1) celestial bodies and rising/setting of the sun (as a consequence of this, midday/night, coming/going, etc.); (2) atmospheric features (warm/cold, names of winds); (3) other, more general directions (‘up’ vs ‘down’, ‘upriver’ vs ‘downriver’, ‘right’ vs ‘left’ etc.); and (4) environment-specific features (mountains, cliffs, rocky places, rough country etc.) (C.H. Brown 1982:5).

\(^{160}\)BH \( h\text{alam} \) ‘yesterday, earlier’ and Salako \( \text{a}\text{apm} \) ‘morning’, Mualang \( \text{lam} \) ‘early morning’ may be related.
In what follows here I first give the terms for cardinal points in the isolects, and show that they are not suitable for the reconstruction of PM cardinal points (5.2.1). Then I give other directional terms on the basis of which PM directional terms can be reconstructed (5.2.2).

5.2.1 CARDINAL POINTS

NORTH

All isolects except JKT have a SKT loan to denote ‘north’: SM, IBN (Richards), SWY (Aliana et al.) utara, MIN utaro (SWY -a and IBN pre-penultimate p point to very recent borrowing, undoubtedly via SM). JKT ilir ‘north’ developed from *hilir ‘downstream’ (3.7.3 IC): the JKT term for ‘south’, u dik, also means ‘rural, provincial’ and developed from *udi/k ‘upstream, upriver area’, cf. also SM udi/k ‘upstream area’, BH udi/k ‘countryside, place of origin’, and BSM udi/? ‘upstream area’. The use of lexemes referring to the course of a river to denote ‘north’ and ‘south’ is related to the north-south orientation of rivers in the area around Jakarta (which is situated on Java’s north coast).

SOUTH

SM salat/an developed from a morphologically complex directional term referring to the Strait of Malacca (cf. SM salat ‘strait, narrows’ < *salat 3.1.1.5). SWY, IBN salatan and MIN salatan are very likely SM loans, since the coincidence of ‘south’ and ‘straits’ is only evident from the geographical position of the inhabitants of the Malay Peninsula (and, in theory, of the inhabitants of Banjarmasin). JKT udik < *udi/k, see above.

EAST

Timur occurs in SM, BH, SWY, and IBN, and timu?p occurs in MIN; the usual term for ‘east’, however, is uju? in MIN and mata ari idup or mata ari tumuh in IBN. IBN timur must be borrowed, because this lexeme did not undergo excrescence of a voiced stop after a nasal before -r (3.6.1.5). In SWY timur as well as barat ‘west’ have an apical trill and are probably borrowed (3.7), just as utara and salatan are (see above; cf. also Semende (another Middle Malay isolect) mataxi idup ‘east’ and mataxi mati ‘west’). It is likely that timur/timu?p in the other isolects is borrowed from SM. The meaning ‘east’ of timur/timu?p is innovative and developed from PMP *hatimuR ‘south-east monsoon’. With an innovative meaning ‘east’ in SM and BH, and no inherited correspondences in the other isolects, no PM etymon meaning ‘east’ can be reconstructed. PM *timur (as a descendant of PMP *hatimuR and still reflected in at least SM timur) must still have meant ‘south-east monsoon’. JKT wet/an < JV wet/an ‘east’.

WEST

Barat is found in SM, MIN, SWY, and IBN (Richards), but it is clearly a loan in MIN (where +bare? would be expected instead of barat). More usual terms for ‘west’ are puhun and mata ari mati, mantari mati (Van der Toorn) in MIN, and mata ari turun or mata ari mati in IBN. SWY barat is probably a loan (see above). JKT kul?on < JV k/ulo/n ‘west’. SM
barat is a reflex of PMP *habaRat ‘north-west monsoon’. PM *barat should be reconstructed with the same meaning as PMP *habaRat; as it appears that none of the other isolects has an inherited reflex of PMP *habaRat, the shift of meaning to ‘west’ can not be attributed to PM and must be considered as a SM innovation.

So it appears that in most isolects terms for cardinal points are borrowed or have originated through semantic extension in lexemes of a primary meaning closely associated with a cardinal point.

5.2.2 OTHER DIRECTIONAL TERMS

Important directional terms in AN languages are reflexes of PMP *lahud ‘towards the sea’ and *Daya ‘towards the interior’, and furthermore reflexes of PMP *habaRat and *hatimuR indicating the directions from which the seasonal winds blow. Since the meanings ‘east’ and ‘west’ are innovative and cannot be attributed to PM, the PM ancestor of SM barat and timur must have maintained the meaning ‘north-west monsoon’ and ‘south-east monsoon’ respectively (5.2.1). As to PMP *lahud and *Daya, *lahud changed its meaning to ‘sea’ in the isolects, whereas *Daya only survived in compounds such as barat-daya ‘south-west’ and orang daya/k ‘Dayak (= inhabitant of the interior of Borneo)’. Nevertheless, the old directional meanings can still be reconstructed for PM. The terminology of the SM compass card becomes logically more consistent if we presume that the terms utara and salat/an have replaced earlier terms *laut ‘north’ and *daya ‘south’ (Brandes 1884:102; Adelaar 1989:10). That this happened is still witnessed by the presence of the terms timur-laut ‘north-east’, barat-laut ‘north-west’ and barat-daya ‘south-west’: these are compound terms consisting of the closest directional terms in the original SM compass card system. The substitution must have taken place after the Malay power centre moved from South Sumatra to the west coast of the Malay Peninsula.

In the Palembang area of South Sumatra (where Srivijaya was presumably located), the sea is in a northern direction, as opposed to the land, which is in a southern direction. On the other hand, in Malacca, which became the Malay political and cultural centre later on, the sea (and the Strait of Malacca) is to the south (salat/an), and the interior is to the north (utara).


IBN laut means ‘Malay’.\footnote{\textsuperscript{161}}

5.3 NUMERALS

5.3.1 RECONSTRUCTION OF THE NUMERALS

\footnote{\textsuperscript{161}In IBN (and in many other Bornean languages) laut means ‘Malay (i.e. coastal people)’. The SM term for ‘south-east’ is tongara. The origin of this term is unknown (it could be a TAM loan, where ten-kara means ‘south bank’, Menon [Govindankuttty] pers.comm.).}
### TABLE 10: THE NUMERALS

<table>
<thead>
<tr>
<th></th>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
<th>PM</th>
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<tr>
<td>1</td>
<td>(s)atu, (s)sa, sa-</td>
<td>cie?, sa-</td>
<td>asa, sa-</td>
<td>so, sa-</td>
<td>sa?, sa-</td>
<td>(s)atu, sa-</td>
<td>*asa?, *sA-</td>
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<td>2</td>
<td>dua</td>
<td>duo</td>
<td>dua</td>
<td>dua</td>
<td>dua</td>
<td>dua</td>
<td>dua(?)</td>
</tr>
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<td>3</td>
<td>tiga</td>
<td>tigo</td>
<td>tigo</td>
<td>tiga</td>
<td>tiga</td>
<td>tigè</td>
<td>*talu</td>
</tr>
<tr>
<td>4</td>
<td>ampat</td>
<td>ampe?</td>
<td>ampat</td>
<td>ampat</td>
<td>ampat</td>
<td>ampat</td>
<td>ampat</td>
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<td>limo</td>
<td>lima</td>
<td>limo</td>
<td>lima?</td>
<td>limè</td>
<td>*lima?</td>
</tr>
<tr>
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<td>anam</td>
<td>anam</td>
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<td>anam</td>
<td>anam</td>
<td>*anam</td>
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<td>7</td>
<td>tujuh</td>
<td>tuju²h</td>
<td>pitu</td>
<td>tuju²(h)</td>
<td>tujuh</td>
<td>tuju?</td>
<td>*tujuh</td>
</tr>
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<td>8</td>
<td>(da)lapan</td>
<td>(sa)lapan</td>
<td>walu</td>
<td>dälapan</td>
<td>(da)lapan</td>
<td>dälapan</td>
<td>*dua(?) alap-an</td>
</tr>
<tr>
<td>9</td>
<td>sambilan</td>
<td>sambilan</td>
<td>sanja</td>
<td>sambilan/ sajan</td>
<td>sambilan</td>
<td>sambilan</td>
<td>*asa? ambil-an/</td>
</tr>
<tr>
<td>10</td>
<td>sa-puluh</td>
<td>sa-puluh²</td>
<td>sa-puluh</td>
<td>sa-puluh²(h)</td>
<td>sa-puluh</td>
<td>sa-puluh</td>
<td>*sA-puluh</td>
</tr>
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<td>11</td>
<td>sa-balas</td>
<td>sa-baléh</td>
<td>sa-walas</td>
<td>sa-balas</td>
<td>sa-balas</td>
<td>sa-balas</td>
<td>*sa-balas</td>
</tr>
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<td>dua baleh</td>
<td>dua walas</td>
<td>dua bolas</td>
<td>dua bolas</td>
<td>dua bolas</td>
<td>*sA-puluh dua(?)</td>
</tr>
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<td>tigo baleh</td>
<td>tulu walas</td>
<td>tiga bolas</td>
<td>tiga bolas</td>
<td>tigè bolas</td>
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<tr>
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<td>dua puluh²</td>
<td>dua puluh</td>
<td>dua puluh²(h)</td>
<td>dua puluh</td>
<td>dua puluh</td>
<td>*dua(?) puluh</td>
</tr>
<tr>
<td>21</td>
<td>dua puluh satu</td>
<td>dua puluh²(h) cie?</td>
<td>sa-likur</td>
<td>dua puluh²(h) so†</td>
<td>dua puluh satu</td>
<td>dua puluh satu</td>
<td>*dua(?) puluh asa?</td>
</tr>
<tr>
<td>22</td>
<td>dua puluh dua</td>
<td>dua puluh² h duo</td>
<td>dua likur</td>
<td>dua puluh²(h)</td>
<td>dua puluh dua</td>
<td>dua puluh dua</td>
<td>*dua(?) puluh dua(?)</td>
</tr>
<tr>
<td>23</td>
<td>dua puluh tiga</td>
<td>dua puluh² h tigo</td>
<td>tulu likur</td>
<td>dua puluh²(h) tigo†</td>
<td>dua puluh tiga</td>
<td>dua puluh tiga</td>
<td>*dua(?) puluh tulu</td>
</tr>
<tr>
<td>30</td>
<td>tiga puluh</td>
<td>tigo puluh²</td>
<td>tulu puluh</td>
<td>tigo puluh²(h)</td>
<td>tiga puluh</td>
<td>tiga puluh</td>
<td>*tulupuluh</td>
</tr>
<tr>
<td>100</td>
<td>sa-ratus</td>
<td>sa-ratum</td>
<td>sa-ratus</td>
<td>sa-ratum</td>
<td>sa-ratus</td>
<td>sa-ratus</td>
<td>*sA-ratus</td>
</tr>
<tr>
<td>200</td>
<td>dua ratus</td>
<td>dua ratuyh</td>
<td>dua ratus</td>
<td>dua ratus</td>
<td>dua ratus</td>
<td>dua ratus</td>
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</tr>
<tr>
<td>1,000</td>
<td>sa-ribu</td>
<td>sa-ribu</td>
<td>sa-ribu</td>
<td>sa-ribu</td>
<td>sa-ribu</td>
<td>sa-ribu</td>
<td>*sA-ribu</td>
</tr>
<tr>
<td>2,000</td>
<td>dua ribu</td>
<td>dua ribu</td>
<td>dua ribu</td>
<td>dua ribu</td>
<td>dua ribu</td>
<td>dua ribu</td>
<td>*dua(?) ribu</td>
</tr>
</tbody>
</table>

† Helfrich gives so likur 'twenty-one', duo likur 'twenty-two', tigo likur 'twenty-three', etc. along with forms on the basis of puluh²(h).
5.3.2 EXPLANATION OF THE RECONSTRUCTIONS

‘1’ – *asa?, *sA-. All isolects agree in having at least a free and a cliticised form for ‘one’. The cliticised form in all isolects reflects a proto-form *sA-. The free forms show more variety: SM satu, suatu agree with IBN satu and JKT (s)atu (3.8.1). Satu ‘one’ and suatu ‘a (certain)’ have undergone a semantic differentiation. Brandes (1884:162) derived SM suatu from *sa- + *batu ‘one stone’. Gerth van Wijk (1889:198-199) supposed that SM suatu originated from JV sa-watu ‘one stone’ (rather than from a pre-SM *sa- + *batu). But supposing a JV origin is unnecessary on account of the fact that in the history of SM (and JKT), (1) *b underwent lenition between *a’s, (2) PM antepenultimate *a was neutralised to schwa and subsequently lost, and (3) finally, following *w was vocalised to u (Blust 1974a:134), and apparently also in JKT. Thus: *sa-batu > *sawatu > *swatu > *suatu > SM s(u)atu, JKT (s)atu. BH asa agrees with SWY so and IBN sa7, and also with SM sa ‘1’, asa ‘One (in reference to “God’s Unity”)’, which leads to a reconstruction *asa?(in SWY and IBN initial a never occurs before consonants other than nasals, 2.4.3 and 2.5.3). The origin of MIN cie? is obscure.

‘2’ – *dua(?). Final *(?) is reconstructed on account of the IBN derivations pàdua?/bàdua? ‘divide’ along with dua.

‘3’ – In spite of the agreement among the isolects in reflecting tiga etc., *talu is reconstructed on account of OM, KD talu, BAC tolu. *talu is not reconstructed with *-(?) because KD does not have a final glottal stop whereas it usually agrees with IBN in showing one. BH also has talu but this is considered a JV loan, see ‘8’ below. In SM *talu is still retained in buah keras talu ‘a hard fruit with three pips’, and buah salak talu ‘a salak fruit with three pips’.

‘7’ – BH pitu agrees with PMP *pitu, but it is considered as a JV loan (see ‘8’ below). BAC also has pitu, which remains unexplained here.

‘8’ – The BH numeral system was heavily influenced by JV, e.g. talu, pitu, walu, saga, and the formant likur. Whereas talu and pitu could as well have developed from PMP *telu and *pitu, this is not the case with walu and saga. A Malayic reflex of PMP *walu would have lost its initial semivowel, and saga (which formally agrees with JV saga) does not agree in form with *siwa. On the other hand, BH walu cannot derive directly from JV wolu, but was probably borrowed from JV in a period when the latter still had a in the penultimate syllable of this lexeme (cf. Old Javanese wwalu). In any case, lexemes with initial w are not inherited in the Malayic isolects.

The form for ‘eight’ in the other isolects developed from an original compound which underwent contraction. This can still be seen from the archaic SM variant du/alap/an (Gerth van Wijk p.198; Wilkinson (1959) referring to the Classical Malay text Bustâ:n us-Salâ:ti:n), from BAC du/alap/aŋ, from KD du/alap/atn (Dunselman 1950:322) and from ‘duolapan’ and dualap'an in Pigafetta’s Malay wordlist (Pigafetta 1972:72). *dua(?) alap-an originally meant ‘two taken away (from ten)’, and *asa?-alap-an ‘one taken away (from ten)’, cf. Kedah Malay alap ‘gather fruit by means of long pole to which a knife or hook is attached’ (Wilkinson 1959) < PMP *alap ‘take’. Blust (1981:467 n.6) gives the following explanation for MIN s/alap/an ‘eight’: ancestral forms of s/ombil/an and s/alap/an were originally synonymous for ‘nine’, and MIN s/alap/an ‘eight’ is the result of a change of meaning after

162 cf. MIN and Negeri Sembilan Malay suaraŋ ‘joint property of husband and wife’, < *sa + *baraŋ (baraŋ ‘thing, wares, stuff, something’); cf. also JV sjun ‘one’, which consists of sa- + wji ‘one seed’. 
the loss of function of the original morphology of these forms. This must also be the case
with the SWY doublet s/olap/ an 'eight'. Initial l- in IBN l/olap/an is due to antepenultimate
assimilation, cf. 3.11.

'9' – SM s/ambil/an and its cognates must have developed from a compound form *osa? ambil-an ('one taken away (from ten)' = nine, cf. Klinkert). This compound form has
replaced PMP *siwa, and is sometimes circumscribed in SM as kuran øsa or kuran satu
'minus one'; such a circumscription is also used in larger numbers with 'nine' as the last
component, e.g. so-ratus kuraŋ øsa or so-ratus kuraŋ satu 'ninety-nine', and kuraŋ øsa ampat
puluh 'thirty-nine' (Gerth van Wijk p.205). BH saŋa is a JV loan (see '8' above), and in
IBN s/ambil/an the original *-mb- was weakened to -m- (3.11A). BAC has s/olap/øæ 'nine',

'11' - '19' – All isolects exhibit bölas etc. for the formation of numbers between ten and
twenty. Nevertheless I reconstruct *sA-puluh with a following cardinal number for PM
numerals between ten and twenty, on account of OM, BRU and BAC. In OM 'twelve'
occurs in the following line of the Kedukan Bukit inscription (Palembang):

daan jalan saribu thrutus sapulu dua vãnãk-ña
with infantry 1,000 300 ten two quantity-their
with an infantry of 1,312 soldiers in number (Çoedès 1930:34)

According to Prentice (pers.comm.) in BRU numbers between ten and twenty are formed
with sapulu + cardinal number (although Ray gives them on the basis of bolas, Ray
1913:62). In BAC one finds sapulu sabua, sapulu dua, sapulu tolu for ‘eleven’, ‘twelve’,
‘thirteen’ etc. (Stokhof 1980:97-98). These three isolects agree with PMP, where teens are
formed with *sa-puluq + a cardinal number.

'21' - '29' – BH (and optionally SWY) likur in compounds denoting numbers between
twenty and thirty must be from JV: apart from BH and SWY, likur sometimes also occurs in
SM, and, outside the Malayic group, in Maanyan Dayak, Ngaju, and Balinese. In Maanyan
Dayak (and Ngaju?) likor is not inherited.163

5.4 BASIC KINSHIP TERMS

In this section those kinship terms are reconstructed which cover well-defined concepts in
the isolects, and for which strong comparative evidence is available. No attempt is made to
reconstruct the PM kinship system, that is, the set of relations that hold together in a
structural whole the concepts that are denoted by PM kinship terms. The following concepts
are investigated: ancestors (5.4.1); grandparents (5.4.2); parents (5.4.3); aunts, uncles,
cousins, nephews, nieces (5.4.4); siblings (5.4.5); children, grandchildren, great-
grandchildren (5.4.6); in-laws (5.4.7).

N.B. In many cases kinship terms underwent formal changes. SM kinship terms originally
ending in a vowel (< *Vø, or < *V?) acquired a -k which is described as a fossilised vocative

163Likor as a formant of numbers between 20 and 30 in Barito languages is a JV loan (probably introduced via
Banjarese). As has been pointed out by earlier scholars, JV likur had an original meaning ‘behind’ (< PMP
*likud ‘back’), and formations like ro-likur, talu-likur etc. literally meant ‘two after (twenty), three after
(twenty) etc., or two, three, etc. back again *Ngaju rikor, likor must be borrowed, as this language has likut
‘back, behind’ as a regular reflex of PMP *likud. Maanyan likor must also be borrowed, because in the
inherited vocabulary of this language, PMP *-li- became -dr- (Dahl1951:54-55), and Maanyan lexemes
containing -li- sequences must have been borrowed after this change had ceased to be operative.
suffix by Blust (1979). Blust reconstructed PWMP *-q as a vocative marker. He argues that after the change of PMP *q to h in JV and SM, the vocative forms in these languages would have lost much of the efficiency inherent in a final glottal stop in calling. For this reason a final glottal stop was reintroduced (which is phonemically -k, cf. 2.1.1). MIN, SWY, and JKT also have reflexes of this fossilised suffix (cf. MIN, SWY -?, JKT -k and -??). The same suffix is found in reflexes of *datu? (which is also a kinship term in some isolects, see below). It is possibly the same suffix as in negations and in tabi/k etc., in which case the suffix may be interpreted as a syntactic device used for words in isolation (including vocatives, negations, and greetings, cf. 3.4.2.4 UIC).

Examples:

*nini?* ‘grandparent’ > SM nene/k, MIN nini?/?, nini?/?, JKT nene?/? vs BH nini, IBN ini? (3.1.2.1);
*kaka? ‘older sibling’ > SM kaka/k, MIN kaka?/?, kaka, vs BH kaka, IBN aka? (3.4.2.4);
*datu? ‘head of a clan’ > SM datu/k164 MIN, SWY datu?/?, JKT datu?/? vs BH datu, IBN datu? (3.4.2.4);
*apa? ‘father’ > SM b/apa/k165 MIN (b)apa?, SWY, JKT b/apa? vs BH b/apa, IBN apay ‘id.’, b/apa? ‘father-in-law’;
*mama? ‘maternal uncle’ > SM mama/k, MIN, SWY mama?/? vs JKT mama/ŋ (see below) (3.4.2.5); (see below for *ma(?) and *adi).

There are also other vocative suffixes: SM, MIN, SWY, and JKT exhibit a sporadic -ŋ, e.g. SM kaka/ŋ, bapa/ŋ, datu/ŋ, cucu/ŋ, indu/ŋ (especially in Old Malayo-Javanese literature, Wilkinson 1959; cf. also ana/ŋ ‘child’); MIN cucu/ŋ, BH adi/ŋ, cucu/ŋ (3.4.1.3IC), SWY adi/ŋ, ibu/ŋ (see below), cucu/ŋ (3.4.1.3IC), JKT mama/ŋ (3.4.2.5), kaka/ŋ. Another suffix, SM -(a)nda, is honorific (cf. 5.5.1.3 N.B.). In IBN these fossilised suffixes do not occur, but in this isolecet another formal change is observed: PM kinship terms of which the first and the second syllable are similar in structure lose their initial consonant, e.g. *cucu?> ucu? (3.4.1.3); *nini?> ini? (3.1.2.1); *kaka?> aka? (3.4.2.4); *cicit ‘great-grandchild’ > icit (see below).

5.4.1 ANCESTORS

Most isolects have a cognate of SM mo/yang to denote ‘ancestor’ or ‘great-grandparent’, which yields *(om)pu - *hiy ‘Lord God; ancestor’ (4.5 N.B.). SM datu/k-nene/k ‘ancestors’ also occurs (Klinkert), but datu/k comes from *datu? ‘head of a clan’ (3.4.2.4) (< PMP *datu ‘id.’) ; cf. 3.1.2.1 for nene/k.

5.4.2 GRANDPARENTS

For ‘grandparent’ *nini? is reconstructed (3.1.2.1). Reflexes of *datu? (3.4.2.4) meaning ‘grandfather’ also occur in SM, MIN, SWY (with unexplained -k in Aliana et al. p.86), and JKT, but except for JKT, in none of the isolects is this the primary meaning. *nini? was not distinguished for sex (and still is not in Malaysian SM): SM aki, IBN aki?

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165 See fn. 164.
occur with the explicit meaning ‘grandfather’, yielding *aki? ’id.’ (< PWMP *aki/*laki, Blust 1979:211). SM kake/k, JKT kakè/? ‘grandfather’ are from JV (Klinkert 1916; Wilkinson 1959).

5.4.3 PARENTS

For ‘father’ *apa(?) was reconstructed (4.3.1) as well as *ayah (3.9.3ICe). Reflexes of *ayah are not as common as those of *apa(?), and they are mainly used as a polite form, so it is likely that the common term for ‘father’ was *apa(?) in PM. Other lexemes for ‘father’ are BH abah, SWY ba?, and JKT babè. For ‘mother’ the isolects have: SM (a)ma/k, ibu, indu/k, MIN (m)anday, ama?, indu (?), BH uma, SWY ma?, andu (?), IBM inday, JKT aña?, ibó/ibu. SM ibu (and hence also JKT ibó/ibu) used to be a polite form next to the more usual ama/k. Nowadays ama/k has been replaced by ibu, and it survives only in Malaysian SM. JKT aña? is a Chinese loan (Kähler 1966). I do not know the origin of MIN (m)anday, nor do I know the explanation of u- in BH uma. On the basis of SM (a)ma/k, MIN ama?, BH uma, and SWY ma?, *(a)ma(?) ‘mother’ is reconstructed. Two other words for mother can be reconstructed. *indu? has reflexes in SM (indu:? ‘dam’), MIN (indu/k ‘dam’), and IBN (indu? ‘woman; female’). The fact that its reflexes in SM and MIN do not refer to a mother of humans is not an impediment: a constant devaluation of old terms of address (from formal to informal and rude), and a constant creation of new ones, is observed in the isolects. *ina is reflected in IBN ina ‘mother’ (less usual than inday), and furthermore (with a semantic shift and fossilised affixes) in SM ina/ŋ ‘donna, governess of an unmarried girl of high rank’, MIN, SWY ina/ŋ ‘look after, nurse (children)’, IBM ina/ŋ ‘nurse (children), rear (animals)’ (Wilkinson 1959) also gives JKT iña ‘child’s nurse’, which is not found in Abdul Chaer), and in SM ba/t/ina, MIN ba/t/ino, SWY ba/t/ino, t/ino ‘female (of animals)’ (according to Aliana et al. t/ino means ‘woman’). The more usual IBN term for ‘mother’, inday, may also be a reflex of *ina, although I do not have an explanation for its -d-.

5.4.4 AUNTS, UNCLEs, COUSINS, NEPHEWS, NIECES

Apart from *mama(?) ‘mother’s brother’ (3.4.2.5) no specific terms for parent’s siblings, cousins, or sibling’s children can be reconstructed. These concepts are denoted by different terms and/or circumscriptions. Compare the following list (which is not exhaustive):

(a) parent’s siblings:
SM pa/k sawdara ‘father’s brother’, bapa/k muda ‘father’s brother next in age’, pa/k tua ‘father’s older brother’, sawdara ma/k ‘mother’s brother’, ma/k sawdara ‘mother’s sister’, ma/k (k)a)cik ‘mother’s younger sister’, bibi ‘id.’ (< JV or Balinese, Wilkinson 1959), ua(k) ‘father’s older sister’; cf. also mama/k for which Wilkinson gives ‘maternal uncle; (loosely) any uncle’, and for which Klinkert gives ‘aunt (in general)’, and paman ‘uncle (in general)’ (< JV);
MIN (m)anday ‘mother’s sister’ (also ‘mother’), mama/k ‘mother’s brother’, bapa/k, apa/k, pa/k ‘father’s brother’ (also ‘father’);
IBM ibu? ‘aunt’, aya? ‘uncle’;

166The u in BH uma may be due to rounding of *a as a result of assimilation to a following labial nasal, cf. BH jumbatan, gumalan (3.1.3.1 N.B.).
JKT (in order of frequency, cf. Grijns 1980:208-209) ua?, aïcaŋ, änöde, bapa/? (gâdë) 'parent's older brother', ua?, aïcaŋ, òma? gâdë, (òma/?) änöde 'parent's older sister', mama/?, aïci/?, mama/?, aïci/? 'parent's younger brother', aïci/?, aïci/? 'parent's younger sister'. Mama/?, mama/? also occur with the restricted meaning 'mother's older brother in some parts of Jakarta (mama/? could be a SUN loan, cf. SUN mama/? 'term of address for parent's younger brother'); Abdul Chaer also gives òm 'uncle' and tanta¹⁶⁷ 'aunt' (both from DU).

(b) cousins:
SM sawdara sa/pupu, MIN dan/s/anak (also 'siblings' and 'nephews / nieces'), BH sa/pupu (Durdje & Djantera 1978:42), SWY moanay b/apa/? 'father's brother's son', kâlaway b/apa/? 'father's brother's daughter (man speaking)', moanay ându/? 'mother's sister's son (woman speaking)', kâlaway ându/? 'mother's sister's daughter (man speaking)', ibu/? 'mother's younger sister's child', ua? 'mother's older sister's child' (other terms for cousin relations are not given in Helfrich), IBN patupgal, JKT (in order of frequency, cf. Grijns 1980:208-209) misan/an, kaponakan, misan, ponakan (these terms are also used for sibling's children, see below).

(c) sibling's children:
SM anak sawdara, anak panakan, anak s/anak, kaponakan (< JV), kamanakan (< MIN); MIN dan/s/anak, s/anak (specifically for 'sister's child (man speaking)'; kamanakan; SWY ana? bâlay 'sister's child (man speaking)', ându/? bâ/dâgan s/anâ 'brother's child (man speaking)' (no other terms were given by Helfrich); IBN indu/? 'niece', akan 'nephew'; JKT (in order of frequency, Grijns 1980:209): kaponakan, ponakan, misanan.

5.4.5 SIBLINGS

Reflexes of *kaka? 'older sibling' agree in all isolects but MIN (3.4.2.4). In MIN kakö, kaka/? means 'older sister', and ambo is used for 'older brother'.¹⁶⁸ In some Malayic isolects (SM as spoken in Java (Wilkinson 1959), SAR (according to Blust pers.comm.), a reflex *kaka? (> SAR kaka?) refers to 'older sister', whereas abag refers to 'older brother'. JKT also has abag meaning 'older brother'. In MIN, BH, and SWY, no cognate of abag is found. IBN abag is a term of address to Malay men, and so is BRU âway (Prentice pers.comm.). *adi? 'younger sibling' is reconstructed on the basis of SM adi/k, MIN adi, adi/?, BH, SWY adi/?, IBN adi?, JKT adë, adi/k.

Cross-siblings are only found in SWY: moanay 'brother (woman speaking)', and kâlaway 'sister (man speaking)'. At least one of these terms has a PAN ancestor (moanay < PAN *maRuanay 'id.', Blust 1980c:238-239). Cross-sibling terms are a general Austronesian phenomenon, and their occurrence in SWY could be a retention. In that case *mÅA(r)/wjanay 'brother (woman speaking)' should be reconstructed. Although the concept must have existed, no reconstruction is made for SWY kâlaway. This form apparently has no cognates within the Malayic group, and outside the Malayic group it has a correspondence only in Rejang (LeBar 1972), which is spoken in an area directly bordering on the SWY area.

¹⁶⁷Abdul Chaer has tanić, but the diacritic here is a misprint.
¹⁶⁸According to De Josselein de Jong (1951:44-45); according to Van der Toorn ambo occurs only regionally. Moussay (1981:159) gives uda/udo.
5.4.6 CHILDREN, GRANDCHILDREN, GREAT-GRANDCHILDREN

For ‘child, offspring’ *anak was reconstructed (3.1.1.3), and for ‘grandchild’ *cucu? (3.4.1.3IC). SM, BH cicit, MIN cici?,169 and IBN icit ‘great-grandchild’ yields *cicit ‘id.’. JKT also has buyut ‘id.’, but in SM and BH buyut means ‘ancestor (in the fourth and fifth generation)’ (no cognates in the other isolects).

5.4.7 IN-LAWS

The term for ‘parent-in-law’ is as follows in the isolects: SM mǝntua, MIN mantuo, mintuo, BH mintuha, SWY an tuo, IBN (m)ǝntua, JKT mǝntue; JKT mǝntue must be from JV (JV mǝntua ‘parent-in-law’), and PM *mintuha ‘parent-in-law’ is reconstructed.

The PM term for the tie between parents-in-law of a married couple was *ba/isa(a)n (3.5.1UIC); BH has waraŋ (< JV waraŋ ‘id.’). On the basis of reflexes in all isolects *b/in/antu ‘child-in-law’ was reconstructed (3.1.3.1).

The general term for ‘sibling-in-law’ in all isolects is ipar (MIN ipa, SWY (Aliana et al., p.86) ipax, (Helfrich) pax buntiv ‘(term of address to a bride, used by older sister of bridegroom)’, hence *ipar ‘sibling-in-law’ (< PMP *hi(N)paR ‘the other side; (those of the other side =) sibling-in-law’, Adelaar 1988:72).

N.B. SM biras refers to ‘wife’s sister’s husband; husband’s brother’s wife’. It has an IBN cognate which differs semantically: biras ‘one who, unable to discharge a debt, was taken as a servant by his creditor; the descendants of a biras in relation to the descendants of his master’. The other isolects do not have cognates (in Tagalog bilas170 is found, with the same meaning as SM biras). But IBN has a term which is equivalent to SM biras, viz. ipar duay ‘spouse of sibling-in-law’; cf. also IBN ipar sombar ‘sibling-in-law where brothers have married sisters (?)’ [sic].

5.5 PRONOUNS

5.5.1 PERSONAL PRONOUNS

<table>
<thead>
<tr>
<th>1ST PERSON</th>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
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169According to Thaib; other sources define cici? further back (cf. Van der Toorn ‘great-grandchild’; cf. also De Josselin de Jong 1951:45).

170However, this is probably a Malayic loan, since other Philippine and Bornean cognates of SM biras generally do not reflect SM b-, cf. among others Manobo izas ‘spouses of two people who are related to one another (co-generationally)’, Timugon Murut ilas ‘husband’s brother’s wife’ (Prentice pers.comm.).
2ND PERSON

<table>
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<tr>
<th>Case</th>
<th>Personal Pronouns</th>
<th>Clitic</th>
<th>Dual</th>
<th>Plural</th>
<th>Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>(əŋ)kaw (dikaw) tuan, tuanhamba</td>
<td>mega, migakawa(-)</td>
<td>kaw/-mu -mu, -kaw</td>
<td>kamu (əŋkaw + sakalian) +kalian</td>
<td>-mu</td>
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3RD PERSON

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<tr>
<th>Case</th>
<th>Personal Pronouns</th>
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<th>Dual</th>
<th>Plural</th>
<th>Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>ia (dia) baliaw</td>
<td>ña</td>
<td>ia (dia) baliaw</td>
<td>iña sidin, hidin</td>
<td>ña</td>
</tr>
</tbody>
</table>

General Remarks

(1) In SM, MIN, and SWY many personal pronouns are not marked for number, and in JKT number distinction was lost in the entire pronoun system. In JKT the plural of a subject is indicated by putting *padè before the verb (Muhadjar 1981:41). IBN is the only isolect that makes a systematic distinction between singular and plural; it also has a dual series.

In many AN languages there is an ongoing process of replacement by plural personal pronouns of singular ones that were felt to be too familiar, too impolite and/or too direct. It is quite possible that already in PM distinctions like polite versus familiar played a crucial role. However, a singular/plural distinction is reconstructed for PM because it also apparently existed in PMP, and because the PMP plural personal pronouns are reflected in the isolects with retention of their plural meaning (viz. all isolects except JKT reflect PMP *(i)kita, and PMP *(i)kami, Classical Malay and SWY reflect PMP *(i)kamu, and IBN reflects PMP *si-iDa, all with retention of the plural notion).

(2) In Classical Malay there occurs a series of personal pronouns viz. daku, dikaw, and dia, which is a variant of the series aku, əŋkaw and ia (dia is still a very frequent variant of ia).
The members of this series are used as direct objects, as emphatic forms, and after the prepositions akan and dia (in modern SM ia is restricted to subject position and to the written language, while dia is universal). The vowel difference in the pair økaw and dikaw raises the question whether *økau(?) , *kau(?) , or *ikau(?) must be reconstructed. Both *økau(?) and *ikau(?) would result in SM økaw, the latter after (1) antepenultimate neutralisation and (2) nasal insertion between initial ø and following stop (4.2 + fn.128). In each case the last vowel would have become a diphthong to yield a disyllabic form. But an original *økau(?) cannot account for dikaw, nor for MIN kau ‘you (to women)’ or BH kau ‘you’ (Asfandi Adul 1976:145-146); dikaw must have developed from *ikau(?) (with diphthongisation of *-au- , and prefixation of *(d)i-), or from *kau(?) (with prefixation of *di- , and subsequent diphthongisation of *-au- ). But the reconstruction of *ikau(?) assumes (unexplained) loss of the initial vowel in MIN and BH (where kau occurs).

Most likely, *kau(?) was the ancestor of SM økaw, di/kaw, MIN, BH kau, and SM øk/kaw acquired an epenthetic øN- after its disyllabic was lost in fast speech.

5.5.1.1 FIRST PERSON

*aku ‘(1st pers. sg.)’ was reconstructed on the basis of evidence from four isolects (3.4.2.6). Clitic forms of aku occur in three isolects (SM, BH, SWY), and *ku-/*-ku are reconstructed. *ku- 171 was an agentive pronoun precliticised to a verbal base, and *-ku a postclitic used as an object (with a verb) or a possessive pronoun (with a noun).

SM saya, sahaya, MIN, SWY sayo, JKT sayè, ayè, MIN ambo, and BH ulun, originally mean ‘slave, servant’ (saya etc. < SKT). JKT guè is borrowed from Hokkien Chinese (Wilkinson 1959; Leo 1975:5), and -anè from Arabic. The original meaning of SM awak, MIN, SWY awa? is ‘body’ (cf. *awak, 3.3.2); it is sometimes used as, or in combination with, a personal pronoun (in SM as a first or second person, in MIN as a first, second, or third person, in SWY as a first person).

SM beta is found in classical literature, and it is still used in Malayic isolects of eastern Indonesia. Its original meaning is ‘slave, servant’. According to Wilkinson it is borrowed from Hindi/Urdu, but its form suggests a connection with *kita. 172

The origin of BH unda is obscure.

PM *kami ‘(1st pers.pl. excl.)’ was reconstructed on the basis of kami in all isolects except JKT (3.4.2.6); *kita ‘(1st pers.pl. incl.)’ was reconstructed on the basis of evidence from all isolects (3.2.3 and 3.4.2.4).

5.5.1.2 SECOND PERSON

SM økaw, MIN, BH kau, yield *kau(?) (cf. 5.5.1). Cliticised variants are found only in two isolects: SM kaw-, an actor prefix before patient-oriented verbs, and SM -kaw, BH -kau (or -kaw?), an object pronoun or a possessive pronoun.

171 In contradistinction to *-ku, no reflex of *ku- is attested in the OM inscriptions, which may be an indication that *ku- is a later (post-PM) development.

172 Klinkert has a variant beta along with beta. Remy Haaksma (1933:22) derived these forms from *(a)ba (> SM awak ‘person; body, (one)self’, and > Toba iba ‘person; one(self); 1’) + *ita. I find a connection with +ita
Kamu (2nd pers.pl) is not attested in MIN, BH, IBN, or JKT, but it is found in BAC and in many languages outside the Malayic group (cf. PMP *(i)-kamu (id.), Blust 1977a:11). Therefore PM *kamu(?) is reconstructed. A postclitic variant (but unspecified for number) -mu occurs in SM, BH, and SWY (as an object or possessive pronoun), and *-mu(?) (2nd pers. pronominal postclitic (unspecified for number) indicating object or possessor) is reconstructed. (The use of SM kamu as a singular pronoun is a recent development).

The origins of SM mega (classical texts; related to mareka, marika?), MIN ag 'you (to men)', and IBN nuan, di? are unknown to me (cf. also Perak Malay mika (2nd pers.sg.)'. MIN ag has a correspondence hanj in Kedah and Perlis (cf. also Han Tuah, the name of a Malay culture hero); IBN nuan is possibly related to SM tuan.

The origins of ikam, kaba(n), and kuti are obscure. BH ikam may be a cognate of kamu, but it could also be borrowed from one of the Dayak languages (Kayan also has ikam '2nd pers. pl.'); Blust 1977b:100). Kaba(n) may somehow be derived from *kaban 'companion, follower; herd, group' (3.5.1); kuti is also found in Lampung (the Wai Lima isolect of Lampung has kuti '2nd pers.pl.'), Walker 1976:43).

Other terms were borrowed or originally had another meaning which became secondary, e.g. SM, MIN tuan 'lord, master; you', tuan/hamba 'your servant's lord, my lord, you', aŋkaw səkalian, (short) kalian 'you all, you together' (səkalian 'all, together'). BH sampian (pian), andika < JV (JV sampé(y)an, andika). JKT (a)lu < Hokkien Chinese (Wilkinson 1959; Leo 1975:6); énté < AR; disitu is a polite form originally meaning 'there'.

5.5.1.3 THIRD PERSON

For the third person SM and JKT have variant forms (SM dia/ia, JKT diè/fè) of which one member agrees with IBN ia, and the other with SWY dio. SWY dio, JKT diè may originally have had a distribution parallel to that of SM dia; it is also possible that they were borrowed from SM. The MIN and BH forms are problematic: they may have have developed from a morphologically complex pre-PM form *i-ni-ia, or from a (post-?) PM combination *ia + *ña with contraction of *ia to i (or to a in MIN año/ano; pronouns are often subject to irregular shortening and contraction), cf. SM diaña '3rd pers. sg./pl.' (Gerth van Wijk p.221; Klinkert). *ia was reconstructed for the third person singular (3.4.2.6), which is also in agreement with PMP *si-ia (Blust 1977a:11).

A clitici sed form of the third person is SM, BH -ña, MIN -ño/-no/-o/-e; in IBN the full form is used. SM, MIN, BH, SWY, and JKT reflect *-ña, the PMP ancestral form of *-ña is *ni-a (Blust 1977a:10-11) in which a merger of the alveolar nasal with following *i into a palatal nasal had not yet taken place. Some isolects have a third person plural pronoun. One of these, IBN sida?, reflects PMP *si-Da (Blust 1977a:11), and PM *sida? is reconstructed.

The other pronouns are later developments: SM mareka (itu)/marika (itu) does not occur in early Classical Malay texts, nor does it have correspondences in other isolects that are not felt to be originally SM. Marika is described as 'a people' in Howison (1801) and as 'people, persons; an armour-bearer, esquire' in Marsden (1812). It may be borrowed from Old Javanese, which has marika, an emphatic article which apparently also functioned as a

very likely, but the connection of b- with *(a)ba is too conjectural. Beta and beita may be analysed as a derivation from an (unidentified) element *bA + *ita.
third person pronoun. BH *bubuhanña* (with epenthetic *h?*) 'they; her/his group, family' is derived from *bubu* 'group, family' (Durdje & Djantera 1978:43; Abdul Jebar 1977).

N.B. OM has three other postcliticised personal pronouns. According to De Casparis *-ma:mu* is a second person possessive pronoun (De Casparis 1956:35), *-ta* is "probably a second person polite form" (p.21), and *-da* (*-nda* after vowels) is "a honorific equivalent of -ña" (p.3). A semantic shift from first person plural (incl.) to second person was already shown in BRU *kita*? '(2nd pers. polite)', IBN and SAR *kita*? '(2nd pers. pl. )' < *kita?* (3.2.3). *-(n)da* is also found in SM, where it became a polite style marker suffixed to kinship terms in (archaic) formal language (especially in letter writing). Compare anak-*da* or ana-*nda*, ibu-*nda*, bapa-*nda*, cucu-*nda*, etc. As cliticised pronominal forms were already attested for PMP (Blust 1977a:11), it is likely that PM had them as well, and that *-ma:mu*, *-ta*, and *-(n)da* are reflexes of these clitics. But it is not clear whether *-ma:mu* already occurred in PM as a suffix in its present shape or whether it was a complex form which developed into a single suffix after PM. Nor is it clear if the semantic shifts shown in *-ta* and *-(n)da* took place before or after PM. I reconstruct PM *-(ma)mu(?), *-ta? and *-(n)da?, to which I tentatively attribute the meanings '(2nd pers. pl.)', '(1st pers. pl. incl.)', and '(3rd pers. pl.)' because of their formal agreement with *kamu(?), *kita? and *sida? respectively.

**TABLE 11: THE RECONSTRUCTED PERSONAL PRONOUNS**

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<thead>
<tr>
<th></th>
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<th>(clitic)</th>
<th>plural</th>
<th>(clitic)</th>
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<td>*kita? (incl.)</td>
<td>*-ta?</td>
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<td>*-mu(?)</td>
<td>*kamu(?)</td>
<td>*-mu/ *-(ma)mu(?)</td>
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### 5.5.2 OTHER PRONOUNS

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<td></td>
</tr>
<tr>
<td>(this)</td>
<td>ini</td>
<td>iko/ko</td>
<td>ini/ni</td>
<td>ini</td>
<td>tu?</td>
<td>ini/ni</td>
</tr>
<tr>
<td>(that)</td>
<td>itu</td>
<td>itu/tu</td>
<td>itu/ni</td>
<td>itu</td>
<td>ſna?</td>
<td>itu/tu/tó/(òndò)</td>
</tr>
<tr>
<td>(yonder)</td>
<td>nu(n)</td>
<td></td>
<td></td>
<td></td>
<td>ſnin</td>
<td>(òndò)</td>
</tr>
<tr>
<td>locative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(here)</td>
<td>-sini</td>
<td>siko</td>
<td>sia/sini</td>
<td>sinu</td>
<td>ditu?</td>
<td>sinu/mari</td>
</tr>
<tr>
<td>(there)</td>
<td>-situ</td>
<td>situ</td>
<td>situ/ni</td>
<td>situ</td>
<td>dia?</td>
<td>situ</td>
</tr>
<tr>
<td>(yonder)</td>
<td>-sana</td>
<td>sinan</td>
<td>sana</td>
<td>sano</td>
<td>diin</td>
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<td>na(N)</td>
<td>naŋ</td>
<td>ſno</td>
<td>ti/ka</td>
<td>yan/ŋian/ŋen</td>
</tr>
</tbody>
</table>

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173 Zochtmulder gives for Old Javanese *marika* 'emphatic article, including *ika*', and for *ika* 'demonstrative pronoun: that, those (of what is at some distance from the speaker); often: he, she, it (equivalent to a personal pronoun of the third person)'.

---
interrogative
(what) apa apa, apa (tu)apo nama apê
(which) mana mano/ma mana mano ni manê
(where) -mana -mano/-ma mana -mano -ni -manê
(who) siapa siapo/sia siapa siapo sapa siapê
(when) -bila/kapan bilo bila kâbilo kâmaya kapan
(how much, how many) bôr/apapa bar/a sa?apa bôxapo bôr/apapa masak

indefinite anu anu anu anu anu? anu/anô

5.5.2.1 DEMONSTRATIVE PRONOUNS

Most isolects have a bipartite series of demonstratives, but it is likely that PM had a tripartite series: this would be in analogy with the locative pronouns (5.5.2.2) and with the IBN demonstratives. Whether JKT had three demonstratives is uncertain: the sources are not clear as to whether ãnô is a variant of itu/tû/tô, or is in series with it (and with ini/ni). OM has inan 'that' (Çœdès 1930:66). This agrees with the MIN locative s/inan, and points to *inan 'yonder' along with *(i)ni(?) 'this' and *(i)tu(?) 'that'. Another possibility is that the last part of the reflexes for 'yonder' in SM, BH, and SWY (di-s/ana, s/ana, and s/ano respectively) reflect PM *ana(?) 'that (yonder)'. (JKT ãnô must be borrowed because of the irregular vowel correspondences).

More dialect material is required to determine the shape of this third demonstrative pronoun, and for the time being I reconstruct *(i)ni(?) 'this', *(i)tu(?) 'that' and *(i)na(n) or *(a)na(?) 'that (over there)'. The final *(n) in *(i)na(n) was possibly a suffix, which would unify this form with *(a)na(?). The origin of MIN iko (ko) is unclear (in JV ika occurs, but this means 'that (yonder)' and is probably not a source). Nor do I have an explanation for the IBN demonstratives (note their agreement with Tagalog, which has itô referring to things close to the speaker).

5.5.2.2 LOCATIVE PRONOUNS

In all isolects, locative pronouns are derived from demonstratives. In IBN this happened through prefixation of di-, and in the other isolects through prefixation of s-; in SM locative pronouns are usually precliticised by a locative preposition (viz. di 'in, at', kô 'to(wards)'), and dari 'from'). This leads to the following reconstructions:

*(?)-(i)ni(?) 'here';
*(?)-(i)tu(?) 'there';
*(?)-(i)na(n)/*(?)-(a)na(?) 'yonder'.
5.5.2.3 RELATIVE CLAUSE MARKER

The relative clause markers disagree in most isolects: SM and JKT have \textit{yaŋ}, which must have developed from \(^{+}t\a + ^{-}\eta\) (2.1.3, 3.3, 6.1.2); JKT \(\tilde{\eta}ŋ\) and \(\tilde{n}ŋ\) are probably variants of \(yaŋ\).

MIN \(\tilde{n}N\) has a final nasal that varies according to the initial phoneme of the following word.\(^{174}\) \(\tilde{n}N\) may be related to \(s/\tilde{i}nan\), as its shape suggests; but it could also be related to BH \(nåŋ\). The origin of BH \(nåŋ\) is also uncertain.

SWY \(\tilde{n}o\) is probably a secondary development of the third person possessive pronoun. Finally, the origin of IBN \(t\i\) and \(k\o\) are obscure; \(t\i\) must be a contracted form, since in MUA \(t\a\)y (written ‘tai’) is found. No attempt at a reconstruction is made (the lack of comparative agreement makes it quite likely that PM did not have a relative clause marker).

5.5.2.4 INTERROGATIVE PRONOUNS

Along with full interrogative pronouns, MIN has a series of short forms (\(a, m\a, b\a/\) etc., written ‘\(\acute{a}\)’, ‘\(\acute{m}\)’, ‘\(\acute{b}\)’ etc. in Van der Toorn). \(*a\pa\) ‘what (interrogative)’ was reconstructed on the basis of reflexes in all isolects (3.1.1.4; IBN has \(a\pa\) (< SM or SAR?) besides \(n\ama\)). \(*m\ana(?)\) ‘which’ is reconstructed on the basis of regular correspondences in all isolects but IBN. It should, however, be pointed out that MIN \(\acute{a}\) could also be a contraction of an earlier \(+\a\ha\). This would correspond with SUN \(a\ha\) and KD \(a\he\) ‘what?’ and would eventually lead to a PM form \(*a\ha\).\(^{175}\)

In all isolects, the interrogative pronoun referring to place consists of a locative preposition prefixed optionally in SM to the interrogative pronoun meaning ‘which’, hence \(*m\ana(?)\) ‘where’.

\(*s\i-a\pa\) ‘who’ has been reconstructed on the basis of evidence from all isolects (3.1.3.2). Alongside \(*s\i-a\pa\) \(s\i\) ‘id.’ is also reconstructed on the basis of KD \(s\a\); it is not found elsewhere in the Malayic group, but cf. PMP \(*s\a(y)i\) ‘id.’.

SM \(b\i\)la etc. < SKT \(v\e\)la ‘time, moment’; (Indonesian) SM, JKT \(k\a\pa\) < JV \(k\a\pa\) ‘when’; I do not know the origin of IBN \(k\am\a\). No reconstruction is made for this meaning.

SM, \(b\o/\a\pa\), MIN \(b\o/\a\), SWY \(b\oa\pa\), JKT \(b\o/\a\pa\) ‘how much, how many’ derive from PM \(*b\a\)ra? ‘(a marker of uncertainty or indefiniteness of object or number)’ + \(*a\pa\). \(*b\a\ra?\) and \(*a\pa\) did not yet form a compound in PM (Adelaar in press b). IBN \(b\o/\a\pa\) is borrowed from SM and occurs along with an apparently more original \(m\a\)sak. \(*b\a\ra?\) seems to be reflected in IBN \(b\a\ra?\) ‘not serious, frivolous’.

5.5.2.5 INDEFINITE PRONOUN

\(*a\nu?\) ‘something; someone, so-and-so’ has been reconstructed (3.4.2, 3.4.2.4, 3.6.1.2).

\(^{174}\) Generally speaking \(n\N\) becomes \(nåŋ\) before initial velars, \(n\a\)m before initial labials (including \(m\?-\)), \(n\a\)n before initial \(t, d, c, j\) and \(s\), and \(n\a\) before liquids and vowels (Van der Toorn 1899:39-40), but the examples (Van der Toorn, p.40) are not quite in agreement with this.

\(^{175}\) The final vowel in KD \(a\he\) replaced an earlier \(+\a\). The substitution of \(-\e(\?)\) for \(+\a(\C)\) is seen in a number of other KD (and sometimes SD) forms, cf. KD \(g\a\)ro? (SD \(g\ar\a\p\m\)) ‘salt’ < \(+\a\)gar\(\p\m\) < SM \(g\a\p\m\) ‘napa? (SD \(n\a\p\a\)) ‘not yet’ < \(+n\a\p\a\) < \(+\a\)d\a\p\a\, SD \(s\a\p\e\) ‘who?’ < \(+s\i-a\pa\). Seeing that KD SD changed original diphthongs to monophthongs, this seems to be basically the same phenomenon as the substitution for final \(+\a(\C)\) syllables in IBN (3.2.3).
Compare also SM barə/ŋ 1. ‘thing, object’ 2. ‘marker of indefiniteness or uncertainty’ 3. ‘marker of possibility or hope’ (as in barə/ŋ-barə/ŋ ‘may it happen that’, barə/ŋ/kali ‘perhaps, maybe’). Barə/ŋ consists of reflexes of PM *baraʔ (5.5.2.4) and PM *-ŋ, which was still a ligature after quantifiers and after pronouns introducing a relative clause. Barə/ŋ is, however, a post-PM derivation (Adelaar in press b).

5.5.2.6 SYNOPSIS OF THE RECONSTRUCTED PRONOUNS (OTHER THAN PERSONAL PRONOUNS)

**demonstrative pronouns:** *(i)niʔ* ‘this’,
*(i)tuʔ* ‘that’,
*(i)na(n)/*(a)naʔ* ‘that (yonder)’;

**locative pronouns:** *(ʔ)-(*)-niʔ* ‘here’,
*(ʔ)-(*)-tuʔ* ‘there’,
*(ʔ)-(i)na(n), *(ʔ)-(a)naʔ* ‘yonder’;

**interrogative pronouns:** *apa* ‘what’ (? *aha* ‘id.’), *manaʔ* ‘which’,
*-manaʔ* ‘where’,
*si-apa, *sa*i ‘who’;

**indefinite pronoun:** *anuʔ* ‘something; someone, so-and-so’.

5.6 PARTS OF THE BODY

5.6.1 INTERNAL BODY PARTS

The following terms for internal body parts have been reconstructed:

*hati* ‘liver’ (3.2.3);
*parut* ‘belly, stomach; intestines’ (3.4.1.1);
*u(n)taʔ* ‘brain’ (3.6.2UIC);
*tulaŋ* ‘bone’ (3.7.1);
*darah* ‘blood’ (3.7.3);
*dagin* ‘meat, flesh’ (3.5.4), and *isiʔ* ‘meat, contents’ (3.4.2.4) (see also 5.7 lemma 103);
*hAmpdu* ‘gall bladder’ (3.1.3.3).

Other PM terms for internal body parts that can be reconstructed are:

*jantuŋ* ‘heart’; MIN jantuŋʔ, o.i. jantuŋ;
*kuraʔ* ‘spleen’; SM, BH kura, MIN kuro, SWY kuxo, IBN kuraʔ, JKT kure;
*tian* ‘uterus’; SM, MIN, BH tian;
*urat* ‘vein, sinew’; MIN ureʔ, SWY uyat, urat, o.i. urat.

5.6.2 EXTERNAL BODY PARTS: GENERAL

Two reconstructions belong to this category:

*kulit* ‘skin, bark’ (3.4.1.4);
*bulu* ‘body hair, fur, feather’, which is based on bulu ‘id.’ in all isolects.
5.6.3 EXTERNAL BODY PARTS: THE HEAD

Parts of the head for which PM terms have already been reconstructed are:

*bibir ‘lip; rim, edge’ (3.1.2.3)

*bulu(?) ‘head; upper part of river; hilt’ (3.4.2.5);

*buω(ω)k ‘hair of head’ (3.10);

*lihear ‘neck’ (3.1.2, 3.1.2.1);

*dahi ‘forehead’ (3.4.2.6);

*mata ‘eye’ (3.4.1.2);

*gaHom ‘molar tooth’ (3.9.2);

*mulut ‘lips, mouth’ (3.1.2.4);

*giK ‘tooth’ (3.5.4);

*tAli(?) ‘ear’ (3.1.3.3).

Other reconstructions:

*rambut ‘hair of the head’; SM, BH, JKT rambut, MIN rambuy?; *rambut and *buω(ω)k both have the same meaning: *buω(ω)k is a regular reflex of PAN *bu Sek, but a reflex of *rambut is found more often within the Malayic group;

*dilah ‘tongue’; SM, MIN lidah, SWY lida(h), IBN dilah, JKT lidë (lidah, lida(h) and lidë have undergone metathesis, cf. PMP *dilaq);

*pipi(?) ‘cheek’; SM, MIN, BH pipi, JKT pipi? (no SWY word for ‘cheek’ was found; IBN has kuyu?);

*dagu7 ‘chin’; SM, BH, SWY dagu, MIN dagu? (? unexplained), IBN dagu?.

For other concepts no strong cognate sets are available, e.g.

SM rahap, IBN raap ‘jaw’ (no correspondences in other isolates);

BH muha, IBM mua ‘face’176 (SM has muka, MIN muko, JKT mukè < SKT; SWY has dai ‘face’ < *dahi ‘forehead’ (3.4.2.6));

SM, BH bahu, MIN, IBM bau ‘shoulder’ < SKT;

SM ubun/ubun, MIN bubun/bubun, BH bumbun/an, IBN bubun/aji, ubun/aji, JKT bumbun/an, bunbun/an (3.6.2) ‘fontanelle’; the ancestral form is uncertain, and a doublet is reconstructed: *bu(m)bun/*ubun ‘fontanelle’.

5.6.4 EXTERNAL BODY PARTS: THE TRUNK

Terms for parts of the trunk that have already been reconstructed are:

*awak ‘body’ (3.3.2);

*pusat ‘navel, centre’ (3.4.2.2UIC);

*dada ‘breast, chest’ (3.5.2);

*pupj ‘testicle’ (3.1.2.3);

*puki7 ‘vulva’ (3.4.2.4);

*susu(?) ‘breast’ (3.4.2.5).

Other terms that can be reconstructed are:

*bAlakaI ‘back’; SM, SWY, IBM balakañ, BH balakañ (see also 5.7 lemma 13);

*buω ‘hair (on the skin)’ (5.6.2);

*buth ‘penis’; SM, BH, IBM butuh, SWY butu(?) ‘penis’, MIN butu(?)h ‘a good-for-nothing, a jerk’;


176 Muha, mua may also derive from SKT mukha, through BH and IBN having maintained h (which became IBM ρ) instead of k (as found in the other isolates). Another possibility is that muha and mua (and, for that matter, Balinese mua ‘id.’) are inherited, and are cognates of Proto Oceanic *muqa ‘front, to precede’ (Milke 1968: 158), which would yield PMP *muqa ‘front, to precede’.

Another reconstruction for ‘body’ is:

*tubuh; SM, BH, IBN tubuh, MIN tubu’h, SWY tubu’h, JKT tubu (*tubuh and *t’um/buh ‘grow’ are related, the former reflecting PAN *Cubuq ‘(shoot? growing body?)’ and the latter reflecting the PAN verbal derivation *C-um-ubuq ‘grow’, cf. 4.6).

A term for ‘armpit’ was only found in SM (katiak) and BH (katiak).

5.6.5 EXTERNAL BODY PARTS: THE LIMBS

Terms for parts of the limbs that have already been reconstructed are:

*buku? ‘joint, node’ (3.4.2.4);

*siku ‘elbow’ (3.4.2.6);

*kuku ‘claw, nail’ (3.4.2.6);

*tuœt ‘knee’ (3.10);

*paha(?) ‘thigh’ (3.4.2.5UIC);

*ruas ‘internode’ (3.8.2);

Other reconstructions are:

*batis ‘part of leg between knee and ankle’; MIN batih, SM, SWY, IBN batis ‘id.’ (Indonesian SM ‘calf’), BH batis ‘leg’, JKT batis ‘calf of leg’;

*buah batis ‘calf of leg’; SM, IBN (Richards 1981) buah batsis, MIN buah batih;

*tulaj *batis ‘shin’; SM, IBN (Richards 1981) tulaj batsis, MIN tulaj batih;

*tumit ‘heel’; SM, BH, SWY, IBN tumit, MIN tumiti?

*jari ‘finger’; SM, MIN, JKT jari, SWY jaxi, jari ‘id.’, IBN jari ‘hand’ (see also 5.7 lemma 1);

*kaki ‘leg, foot’; SM, MIN, IBN, JKT kaki (see also 5.7 lemma 4);

*kalińkiń ‘little finger’; SM, JKT kalińkiń, MIN kalińkińg ‘id.’, IBN kalińkińg (penultimate ń unexplained);

*lagen ‘arm (from shoulder to wrist); sleeve’; SM, SWY, IBN lagen, MIN lagen, cf. PMP *legen;

*tagan ‘hand’; IBN tagan (probably a loan, jari is usual, see above), o.i. tagan.

5.6.6 BODY PARTS OF ANIMALS

In this category the following terms have already been reconstructed:

*ikur ‘tail’ (3.7.4 IC, 5.7 lemma 105);

*jujur ‘snout’ (3.6.1.5);

*sayap ‘wing’ (3.1.1.3, 5.7 lemma 100);

*sawat ‘sting of an insect’ (3.1.1.2);

*sisik ‘fish scale’ (3.8.1N.B.).

5.7 A 200-ITEM BASIC WORDLIST FOR PROTO MALAYIC

This list is Hudson’s variant of the Swadesh 200-item basic wordlist as modified by Blust in his forthcoming study on Austronesian lexicostatistics (Hudson 1967; Blust forthcoming). Its purpose is to provide a tool for measuring the relative affinity of other isolects, languages, or language groups with Proto Malayic. Through comparison of closely related isolects it is
possible to eliminate a number of lexical innovations which are not common to all these isolects, and in this way to make a basic wordlist for the proto-language with more retentions than corresponding wordlists for each of the isolects. Of course such a list requires much critical insight and a great knowledge of as many dialectal variations as possible. Moreover, the result will always be hypothetical in more than one respect: (1) it consists of proto-lexemes, and (2) the relative frequency of each proto-lexeme is also hypothetical. Therefore the list presented here should be seen as a first attempt. Hopefully other scholars will amplify and improve it, or develop an alternative and more reliable means for testing the relative position of PM and the Malayic group within the Austronesian language family.

The list is built on comparative evidence from basic wordlists for each of the isolects forming the basis of this study. These wordlists were collected as follows:

- For SM I made one myself, and took my own knowledge as a guide;
- For MIN, BH and JKT, lists filled out by native speakers were used; these lists were collected by Blust, who will use them in his lexicostatistical study (Blust forthcoming);
- For IBN I made a list on the basis of Richards (1981) and, to a very limited extent, on the basis of the English-Iban phrase book (Borneo Literature Bureau 1967). The use of Richards yielded reliable results, because each entry includes synonyms (if any) with the most frequently occurring one in capitals;
- For SWY part of the list could be drawn from the vocabulary included in Aliana et al. (1979), and for the other part I used my own judgement in collecting lexical items from Helfrich. Where I was not certain or did not find a convincing item, I left a blank in the wordlist.

The PM 200-item basic wordlist is built up in the following way:

(a) Loanwords are not considered as evidence. In the list, they are shown between brackets. The source language of a loan word may be indicated either in the list or in the explanation which follows the list (see 5.7.1). The source language is given in the explanation when the identification of a particular lexeme as loan word requires more support, or when this is convenient (as in the case of 'think' (21) where ultimately the whole set derives from AR fikr).

(b) When three or more isolects have corresponding lexemes, this yields a reconstruction in the wordlist, unless these lexemes are loanwords or unless the evidence militates against a reconstruction in any other way. Such cases will be discussed in the explanation.

(c) If in a particular set a lexeme does not have correspondences but there is sufficient evidence from outside the six isolects to suppose that it had a PM ancestor belonging to the basic vocabulary, this ancestor is (also) given in the list, e.g. 'other' (190): SM, MIN, BH, SWY lain, JKT luën, but IBN bukay: *bukan is given, because IBN is assumed to retain (with some alternations) the original PM form for this concept. In two cases a reconstruction without reflexes in the lists for each isolect is given: *hulu(?) (5.7.1 lemma 24) and *talu (5.7.1 lemma 199).
<table>
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<th>SWY</th>
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<td>ba-jalan, tulak</td>
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<td>(di)jatch</td>
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<td>(di)bawah, barnę́h</td>
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<td>(di)bawah</td>
<td>(di)bawah</td>
<td>(di)bawah, barńeh</td>
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*Note: The symbols used in the table represent phonetic spellings or specific terms in the language.
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<th>No.</th>
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<th>JKT</th>
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<td>tu?</td>
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<td>n̄a?</td>
<td>on̄o</td>
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<td>dake?</td>
<td>parak</td>
<td>dampir</td>
<td>dampir, dampir</td>
<td>dake</td>
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<td>jau</td>
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<td>dimana</td>
<td>aku</td>
<td>(di)mano</td>
<td>dini</td>
<td>lu &lt; CHI</td>
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<td>den, ambo</td>
<td>ika</td>
<td>aku</td>
<td>aku</td>
<td>gu &lt;</td>
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<td>i̇h</td>
<td>bubuhan-ña</td>
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<td>nama</td>
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<td>bukay</td>
<td>laen</td>
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<td>abis, magań</td>
<td>samuę</td>
<td>*habis</td>
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<td>dan</td>
<td>jo, dan</td>
<td>lawan &lt; JV</td>
<td>lawan, lawan(ja)</td>
<td>amę &lt; SKT</td>
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<td>kalaw, jisko</td>
<td>kaya apa &lt; JV</td>
<td>amun, jakalaw</td>
<td>amun, jakalaw</td>
<td>--</td>
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<td>kapa</td>
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<td>tidak</td>
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<td>hituŋ</td>
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<td>hituŋ, bilan</td>
<td>hituŋ, hituŋ</td>
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<td>asa</td>
<td>so</td>
<td>sa?</td>
<td>atu</td>
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<td>*ampat</td>
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5.7.1 EXPLANATION

2. SM, JKT k/iri, BAC ka/iri < PMP *ka-wiRi; BH kiwa, IBN kiba? < PMP *kiwa (cf. 7.3.7 N.B. (d) for IBN unexpected -b-); MIN kida, SWY kido (loss of -I unexplained) have a JV correspondence kidal, and a SM one (SM kidal ‘left-handed’, which is used on Java; a loan?).

4. Cognates of BH batis refer to the part between knee and ankle (cf. *batis, 5.6.5).

5. *(mb)Ar- : see 6.1.1.

9. *(mb)A-ranag is not attested outside the Malayic group. Inside the group, it is found with an irregular sound correspondence in SWY, and it does not occur in BH or IBN. It may be a reflex of PMP *lanuy ‘swim’ which, in many languages, has a reflex with initial n (and has therefore been reconstructed with a doublet *naguy, cf. Blust forthcoming). PMP *(ln)anuy would have become *lanji or *nani in PM, and, when *(mb)Ar- was prefixed, it may have lost through backformation its final i, after the latter was reinterpreted as an out-of-place transitive-marking suffix. Thus: PMP *(ln)anuy > PM *(mb)Ar- + *(ln)ani > +bōr-nani > +bōr(ə)nani-i > SM bōranag. IBN sōmaray is a backformation on the basis of sōmar ‘across, on the other side’ (which becomes nōmaray after prefixation of N-, 3.11b).

11. BH habu, o.i. abu ‘ash, dust’ < *habu (3.1.2.4).

13. In modern Indonesian, pungguŋ has taken the meaning ‘middle part of the back’, but in modern Malaysian and in Classical Malay balakag refers to ‘back’ and pungguŋ to ‘buttocks’ (Howison 1801; Marsden 1812; Klinkert 1916).

16. No separate reconstructions are made for ‘belly’ and ‘intestines’, cf. 3.4.1.1; cf. also SM porut muda, MIN paruy? mudo, SWY paxut mudo ‘intestines’, and SM porut bāsar, SWY paxut bāsa? and MIN paruy? kapuy? ‘belly, stomach’.

18. cf. 3.4.2.5.

19. Bahu etc. < SKT; pundak etc. < JV; bakix < ?

21. Pikir etc. < AR.

24. SM kāpala etc. are borrowed from SKT. SWY, IBN pala? (-? unexplained) (with loss of the same syllable) must derive from the same source. All isolects have a reflex of PM *hulu(?) ‘head; head of a river, upriver; hilt’ (3.4.2.5). Presumably *hulu(?) was the original term for ‘head’, and it retained mainly a metaphorical meaning after kāpala, pala? etc. came into use (in SM hulu is also still used for the head of a royal person).

26. Although rambut etc. occurs more often within the Malayic group, *buḍ(ua)k is a regular reflex of PMP *buh(ue)k (cf. also BAC buok, KD bu’uk).

28. SM, JKT napas < AR. IBN ńawa < *ńawa ‘soul, life; breath’ (3.3.2).

29. SM cium etc. is a North Indian borrowing (3.4.1).

33. *tawa? is reconstructed without prefix indicating unintentionality, because the isolects do not agree in the use of such a prefix.

38. No further differentiation of meaning between *kuiah and *mamah can be given on the basis of the (often contrary) descriptions of the reflexes in the isolects.

39. *m/asak ‘cooked, done, ripe’; *tanok ‘cook rice’.
SM, MIN, BH m/asak ‘cooked, ripe’, and tanak ‘cook rice’. SWY tanaʔ ‘cook rice’ (for masaʔ, Helfrich only gives ‘ripe, done’). IBN has sumay ‘cook, boil’ (2nd Division of Sarawak; cf. SD human ‘id.’ Ina Anak Kalom & Hudson 1970:290) and panduk (used elsewhere); IBN does not distinguish between rice cooking and other cooking. Nor does JKT: masak also applies to rice, and no reflex of *tanak is given. The final *o in *tanak is based on evidence from outside the Malayic group (cf. PMP *tanek ‘cook, prepare food’).

40. The SM, MIN, SWY and JKT fossilised prefix m/- is not reflected in BH, which has k/- instead. BH k/inum may be borrowed from one of the neighbouring Barito languages (cf. Dusun Lawang kinum ‘drink (v)’ in Hudson 1967). Other possibilities are that PM had a variant form *k/inum which occurred along with *m/inum, and which was retained in BH, or that PM still had a living affix *-um-/*(u)m- which is still reflected in SM, SWY and JKT m/inum, MIN m/inun (cf. 6.8).

44. IBN di1a is possibly a reflex of PMP *di1a ‘hear’ (Blust 1984a), but it could also be borrowed from another (non-Malayic) isolect from Borneo. (Correspondences are found in the north-east Barito isolects, cf. Lawangan di1a, Tabojan ɗid!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1ɗ!1茚
60. The origin of SM *baba, JKT babə* is unclear; it is often associated with the Chinese in Malaysia and Indonesia.

63. *Nama* etc. < SKT; BH *garan* < JV (*gəran* < PMP *ajaṇa*). No reconstruction for 'name' can be made; but there is *galar* 'title, surname' (3.7.2 IC; cf. Proto Batak *galar* 'id.' on the basis of Toba *goar*, Simalungun *goran* (with contraction of +ο + ά), Dairi *gorar*, Karo *galar* 'name (in general)'), Adelaar 1981:passim).

64. cf. also SM *tutur*, MIN *tutu*? ‘talk, speak’, SWY *tutux* ‘address s.o. by his/her surname’.

66. MIN *kabe?, SWY *kabat* seem to be equivalent in meaning to *ike?, ikat*, but in SM and IBN *kabat* means ‘wrap, bind’ as against *ikat* ‘tie, bind’. On the basis of SM, IBN *kabat*, BH *kabat* ‘wrap, bind’, MIN *kabe?, SWY *kabat* ‘wrap, tie, bind’, I reconstruct *kabAt* ‘wrap, bind’.

73. BH *cuntan* must be a style variant of +*curi* (cf. fn. 82). JKT *curi* does not occur in Abdul Chaer, who gives *cōloŋ*. *Curi* etc. is a North Indian loanword (3.4.1), and its occurrence is restricted to Malayic isolates; *maliŋ* is widespread outside this group, cf. SM, BH, JV, Ngaju *maliŋ* ‘thief by night’, Malagasy *madina* ‘be careful’ (< PMP *maliŋ*).

78. *tatak* ‘hack, carve, cut’; cf. also SM *tatak* ‘id.’, MIN *tata?* ‘delimit, fence off; carve, cut’, cf. PMP *tektek* ‘hack, hew, cut’. *tarAs* ‘plane with an adze; shape, do some rough-hewing’ (3.8.2 UIC). SM *potọŋ*, (MIN *potọŋ* a loan? cf. 3.1.2 N.B. (2)), BH *putuŋ*, JKT *pọtọŋ* ‘cut, slice’ < *putuŋ*.

83. SM *karja* (mɔ̃-nɔrja-kan), MIN *karajo*, JKT *kəɾje* < SKT. BH *ba-huma* and IBN *b-umay* derive from *huma(?)* and refer to working a field.

86. See 5.6.4 for the relation between *t/um/buh* and *tubuh*.

88. JKT *paras* must be an Indonesianism in the informant’s speech (Mrs Montolalu, see Blust forthcoming). Abdul Chaer gives *paras* and *pərə* (3.8.2 UIC).

91. According to Abdul Jebar (1977:2) and Fudiat Suryadikara et al. (1981:22) BH *hurup* is usual, and *tukar* is BK; cf. BAC *taka?* ‘buy’, MIN *tuka* ‘(ex)change, swap; buy’; cognates in the other isolates mean ‘(ex)change, swap’, viz. SM, IBN *tukar*, *tukax*, JKT *tukəɾ*, *tukar*, hence *tukəɾ* ‘(ex)change, swap’.

93. IBN *tutuk*: cf. PMP *tuktok* ‘id.’, and SWY *tutu?* *tampi* ‘plant dry rice field plot by plot’.

95. *labuh* is reconstructed along with *jatuḥ*, as it is well attested outside the Malayic group.

96. IBN *asu?* reflects PMP *asu* ‘dog’; cf. also SAR *asu(?)* (Collins 1987:81), and SM *gniŋ* ‘canine teeth’. SM *gniŋ* etc. agrees in form with SD *eŋeŋ* ‘domestic pig’, which suggests a proto-form *gniŋ* ‘domestic animal’. Outside the Malayic group, *gniŋ* only has a correspondence in SUN (*SUN gniŋ* ‘id.’).

97. According to Wilkinson MIN *ungeh* was preferred to *buruŋ* after the latter acquired the connotation of ‘penis’.

100. BH *halar* must be a loan from JV: the form maintained *h* which was lost in modern JV (but still present in older forms of JV, including Old Javanese), cf. also BH *hābaŋ* ‘red’ < JV *abaŋ*, BH *haŋar* ‘new’ < JV *añar*, BH *hiran* ‘black’ < JV *iruŋ*. SM, BH *harap*, MIN *aro?*, SWY, IBN *arap*, JKT *arəp* ‘hope (v)’ must also have been borrowed from JV at a stage
where this language still exhibited *h- for PMP *q-. Compare Old Javanese harap 1. ‘the front, fore part’ 2. ‘(to stand before), to wish, desire, be on the point of (about to)’: harap reflects PMP *qadep, which in PM developed into *hadap ‘(be) in front of, before’ (3.1.1.5). (From this interpretation it follows that I reject PMP *qarep ‘like (v)’.

102. MIN manci?, IBN cit derive from an onomatopoeia for the sound which a mouse/rat makes.

103. IBN dagin < SAR (3.6.3.3 IC). IBN isi? has many cognates outside the Malayic group, whereas dagin meaning ‘meat, flesh’ is only found in JV (in the Batak isolects it is also found with the meaning ‘body’, cf. Toba, Karo dagin).

104. *lamak ‘fat, grease (n)’ < PMP *lemek. *gamuk ‘fat, stout’: 3.4.2.3 UIC (1).

105. BH and JKT buntut may be loans from JV (JV buntut ‘tail’). SM buntut ‘butt, posterior, fag-end; stern (of a ship)’, MIN buntuy? ‘female sex-organ’, SWY buntut ‘behind of animals or people’, IBN buntut ‘end, inmost part’ yield PM *buntut ‘butt, posterior, end’.

107. cf. SWY cacin ‘intestinal worm’; SWY ulat ‘worm, maggot, insect’ (3.4.2.2UIC); IBN bolot < *bolot ‘crawling animal, eel’ (3.4.2.2). *bolot is a generic for worms, maggots of the caterpillar type, and *cacin refers to snakelike types of worms (cf. Wilkinson (1959) for SM ulat and cacin).

109. According to Thaib and Van der Toorn, MIN ḳamū? is ‘mosquito’ and ṛañi? is ‘gnat’, which conforms to the meanings of cognates in other isolects; cf. SM, JKT ṛañit, BH ṛañit, SWY ṛañit, ṛañit ‘minute fly’; PM *ṛañit ‘id.’.

111. MIN lauk? and SM, BH, IBN lauk ‘fish (or meat) as a side-dish to rice’, hence *lauk ‘id.’, and *ikan ‘fish (in general)’.


113. cf. PMP *daqan ‘branch’. JKT caban: cf. SM cawan, caban, IBN cabar ‘branch, prong, bifurcation’, SWY caban ‘forked branch; anything with the shape of a forked branch’, yielding *caban ‘forked branch’.

123. MIN ali? ‘slippery (of a path)’. ili? < *hilir ‘flow down; downstream’ (3.7.3 IC).

124. SM tasik originally meant ‘sea’; the meaning ‘lake’ is a recent development; *laut ‘towards the sea’ (5.2.2).

125. Pigafetta gives ‘garan sira’ for ‘salt’ (Pigafetta 1972:66; ‘-n’ is a result of Pigafetta’s Italian perception of -m in garam). Bausani’s assumption that ‘garan’ and ‘sira’ are synonyms is wrong (Pigafetta 1972:78): both words form a compound which must literally have meant ‘grain of salt’, and therefore PM *garam ‘grain’ (3.1.1B and 3.1.1.5) and PM *sira ‘salt’ (< PMP *qasīʔRa ‘id.’) are reconstructed. In Sasak garam retained the meaning ‘grain’, and some Malayic isolects (among others BM) still have a reflex of *sira (cf. sira(h) in Wilkinson 1959).

126. See lemma 124 for SM tasik.
127. MIN *utan occurs only in written language (Van der Toorn). In SM, BH, SWY and JKT, *hutan/utan refers to ‘wood(s)’, and *rimba etc. to ‘(virgin) forest’; IBN *rimba? ‘forest cut but not yet burnt’; PM *rimba? ‘virgin forest’.

144. SM, SWY banam, MIN banam ‘immerse in water or mud’, PM *banam ‘id.’; BH banam must be borrowed from JV (cf. JV banam ‘roast under hot ash; lay in ashes, burn down’). SM, SWY, IBN tunu ‘burn up’ < *tunu.

148. IBN *putih ‘white’ also occurs.

149. SM merah, JKT mèrè, and MIN sirah possibly derive from the same proto-form (*irah?); but a segmentation of sirah requires an explanation of its initial constituent (*s(i)-), which is not available. BH habaI and SWY abaI are probably borrowed from JV (cf. lemma 100 for the h- in habaI ‘wing’).

150. SM, SWY, IBN, JKT *kuñit, MIN *kuñit, kuni? ‘curcuma’, BAC *kuñit ‘yellow’ < *kunit ‘tumeric; yellow’ (3.6.1.2IC). It is likely that BAC *kuñit is inherited and that kuni? etc. is a loan: judging from its phonological shape, kuniI etc. must be a loan from Karo (PMP *-j > -ŋ in Northern Batak isolects, Adelaar 1981:13-14).

152. Correspondences of BH halus have a different meaning: SM (h)alus, MIN aluyh, JKT alus ‘refined, fine, delicate’, SWY alus ‘fine, tender, decent’, IBN alus ‘smooth, fine, small’. Halus may be borrowed from JV (JV, Old Javanese alus ‘refined, fine, delicate’; Old Javanese alus is still analysable as a derivation from lus, a noun). On the other hand, if halus etc. < JV/Old Javanese alus, then (SM), BR h-remains unexplained. SWY kaci? underwent palatalisation of *t due to following *i. IBN mit has a cognate in BRU damit, both may be related to SM (da)damit ‘ghost (“orang halus”)’ (Prentice pers.comm.).

153. MIN gadaI: cf. also KCI gädéng (Prentice & Hakim Usman 1978:124). In Sumatra and Negeri Sembilan gadaI is a general term for ‘big’, whereas basar means ‘magnate’, cf. orang basar ‘id.’ (Wilkinson 1959). BAC has ra: which must be a cognate of SM raya (Collins 1986a:142), and hence of IBN raya (and of KD aya?, with unexplained loss of *r-). In contrast to basar, raya has many cognates outside the Malayic group (cf. PMP *Raya ‘id.’). Compare also SM raya, MIN rayo, JKT rayè ‘great’, SWY rayo ‘big, strong (of build); (excessive marker)’.

154. In this doublet sound-symbolic vowel variation is involved. As other scholars pointed out before, in a number of Malayic lexemes, front vowels are associated with smallness, whereas back vowels are associated with moderate size, and a with very large size.

156. SM (Indonesian), SWY, JKT t- originated through backformation.

159. Laweh has a SM cognate lawas ‘spacious, broad’ (BH lawas ‘long (time)’ must be from JV, cf. JV lawas ‘id.’). Luas has the following cognates: SM, JKT luas ‘clear, open, unobstructed (of an open field)’, BH luas ‘wide’, IBN luas ‘open space; spacious, cleared’; PM *luas ‘clear, spacious, unobstructed (of an open field)’.

161. BH supan has the following correspondences: SM, MIN, JKT sop/an ‘showing respect (through courtesy, modesty or timidity)’. As suggested by Blust (1980a:142), sop/an is possibly a contraction of *saup + *-an, cf. IBN saup ‘help, assistance’. But contrary to Blust, I consider sop/an as a Malayic, and not a JV, form (cf. 3.1.2.5): it occurs neither in

177A Karo origin for kunig ‘yellow’ was suggested earlier by Aichclc.
Old Javanese, nor in old dictionaries of JV (sopan does not occur in Gericke and Roorda (1901), Jansz (1913), or Pigeaud (1938); it is found in Horne (1974)).

163. BH hañær < JV (cf. JV añär ‘id.’). BH maintained initial and intervocalic h in JV loanwords, whereas this h was lost in modern standard JV.

164. SM elok, MIN eloʔ, SWY iluʔ? ‘beautiful, pretty; good, right’; JKT élloʔ ‘beautiful, pretty’, PM *iluk ‘beautiful, pretty, nice’.

170. SM bilamana < bila + mana (5.5.2.4); SM bila etc. < SKT vela ‘time, moment’ (Klinkert 1916). SM (Indonesian), JKT kapan < JV k/apa/n ‘when’.

171. The first syllable in SM, JKT sambuñi, BH sambuñi remains unexplained.

176. JKT koloʔ literally means ‘space under s.th. (usually a Malay house)’, cf. JV, SUN, SM koloʔ ‘id.’. MIN baruʔh originally meant ‘land below’, as SM baruʔ still does; hence *baruʔ ‘land below’.

179. cf. also BAC dampiŋ ‘near, adjacent’ (SM, BH dampiŋ, MIN dampiŋ: cf. 3.8.1 UIC (2)).

188. IBN nama is related to SM nama ‘name’ and it is ultimately derived from SKT (cf. also Urak Lawoi’ nama ‘what’). The same semantic change also occurs in other Austronesian languages (cf. also Tok Pisin wanem ‘what’ < English ‘what name’).

190. *bukon is given on the following grounds:

(a) Reflexes meaning ‘other’ are still found in IBN and in OM inscriptions (Çoedès 1930:39-40, 78).

(b) Outside the Malayic group, reflexes meaning ‘other’ occur in Borneo, Philippines (Blust 1980a:119; Prentice 1974:58), and in Chamic languages. But the Malayic isoleccts differ from other languages (with the exception of the Chamic ones) in that they have penultimate u (in other languages PMP *e is reflected).

(c) BAC has ma-lain ‘other’ and KD, SD have lain ‘id.’, but these must be loans because of their -n (PM *-n > BAC -ŋ, cf. dipiŋ ‘cold’ < *dijin, yan ‘with’ (with apocope of first syllable) < *dagan, and tahug ‘year’ < *tahun; PM *-n > KD, SD -tn, cf. *tahun ‘year’ > KD, SD tahutn, and *bukan ‘other’ > KD buktan, SD buktan). In other isoleccts there is no such device for differentiating between inherited and borrowed lexemes.

(d) Some applications of SM bukan like bukan/bukan for ‘nonsense; nonsensical’ are understood better if one assumes ‘other’ as the original meaning; also, bukan is not used as a complete negation (except in a one-word reply), but as a contrastive negative requiring or implying an alternative predicate, e.g.

Bukan ayah-na ma/lain/kan Ahmad yaŋ məməngil-ña.
not father-his but Ahmad who call-him

It was not his father, but Ahmad, who was calling him.

The same semantic shift as between IBN bukay, OM bukan ‘other’ and other isoleccts bukan ‘not’ must have taken place between SM lai/n etc. ‘other’ and SUN lain ‘not’ (= SM bukan). See Adelaar (1988:71) for the origin of lai/n.

Lee reconstructed Proto Chamic *tukOn ‘other’ on the basis of Roglai tutet and Rhade mkan, but this should be reinterpreted as Proto Chamic *bukOn on account of Cham bukan, bikan, bakan (Aymonier & Cabaton 1906:334), Jarai pokOn, and on account of the initial labial in Rhade.
191. SM səmua, BH samua, sumunaan, JKT somuè < SKT. SWY sagaloyo, gagaloyo (as well as SM sogala, MIN sagalo, BH sagala, JKT sagalè 'id.', IBM sagala 'round, whole' are borrowed from SKT via TAM (< TAM sagala < SKT sakala 'complete, entire, all', Gonda 1973:162). MIN sadoño < +sa-ado-no. IBM abis and MIN (Van der Toorn) abih have, along with the meaning 'finished, used up' (which they share with their cognates in other isolects) also the meaning 'all, complete',\(^{179}\) hence the reconstruction *habis 'all, complete; used up, finished'. Other cognates are Proto Chamic *ʔabih 'all' (Lee 1966), Achehnese (h)abeh 'finished, completed, used up; complete(ly), the whole of', Malagasy avy 'all' and Old Javanese hawis 'finished, completely gone, nothing left' (modern JV wis 'already; enough'). Dempwolff (1938) reconstructed PMP *abiq 'all' on the basis of JV k/abeh and Malagasy avy 'all', but with the above evidence a PMP form *qabis is more justified.

192. cf. also JKT dəgon 'with'. MIN jo may be an allegro form of juo 'also; only'. The origin of IBM əngaw is unclear (possibly < *dəgon, with unexplained loss of *d, and with (equally unexplained) excrecent g). SWY ṣan must be short for dəgan 'with'. The same origin was suggested by Aichele (1942-43:42 footnote 3) for SM dan, which would have developed from dəgan (originally 'companion'), in the same way as JV lan 'and' from lawan 'partner, adversary; with'. The different local varieties of SAR have ṣan or dəgan for 'and' (Collins 1987:84). Collins (unpublished fieldnotes) supposes that BAC ḡañ 'and' derives from *dəgon. Another origin of SM, MIN dan may be *dua(?)-(a)n, cf. KD dua 'and'; such an etymology would also have a parallel in JV, viz. JV ro 'two' and ka/ro 'with, and'.

193. (jikalaw), kalaw, kalo < jika (< SKT) + AR law 'if'; jika is still found as jaka in old manuscripts and as joko in MIN (Wilkinson 1959).

194. SM bagai/mana, JKT bagi/mane < *bagay 'kind, variety, species' (< TAM) + *mana 'which, what' (5.5.2.4, 5.5.2.6). MIN baa < +ba + a 'what' (5.5.2.4). IBM kati < ?.

195. The common element in this correspondence set (minus JKT) is the last syllable -da/-do (to which SM -k, MIN -ʔ is attached, see 5.4 N.B.). I do not have an explanation for the different first syllables (but cf. Deli Malay (East Sumatra) tei, Urak Lawoi' iɛt and, outside the Malayic family, Malagasy tsy, all with the meaning 'no(t)' (Adelaar 1989:42 n.40).

196) Bilaŋ ‘count (v)’ is found in all isolects; in SM, MIN, and JKT it also means ‘say’ (a very common semantic development); on the basis of this set PM *bilaŋ is reconstructed.

\(^{179}\)This range of meanings is also found in other languages, cf. German alles ‘everything’ and alle ‘all (adjective)’ versus alle ‘used up, finished’.
CHAPTER 6

PROTO MALAYIC AFFIXES

In this chapter some of the affixes that occur in the Malayic isolects are treated. Only the affixation of certain word classes, namely that of verbs and nouns, is discussed; reduplication is not treated.

Ongoing research has yet to produce a watertight set of criteria for word-class membership in SM, and this topic needs much further investigation in each of the isolects. I restrict myself here to a syntactical definition of verbs and nouns in SM. The implicit application of these definitions (and that of precategorials, see below) to other isolects has proven to be satisfactory for the aims pursued in this chapter. In SM, verbs are defined as lexical entities which can be modified by the negation marker tidak.

Verbs are divided into two main categories:

(a) transitive verbs (VTR), which can occur in object-oriented constructions and which govern an object (O);

(b) intransitive verbs (VI), which do not occur in object-oriented constructions. Intransitive verbs are further subdivided into dynamic intransitive verbs (VDI) which refer to an action, a process, or a change of state, and stative intransitive verbs (VSI) which refer to a state of affairs.

Syntactic differences between VSI s and VDI s include the following:

(1) VSI s cannot be modified by the aspect markers talah, akan, and sadañ (denoting perfect, non-commenced, and ongoing action respectively; other aspect markers such as sudah (completed action) occur with both VSI s and VDI s).

(2) Unlike VSI s, VDI s cannot modify nouns directly, but must be placed within a relative clause (cf. anak nakal, anak yañ nakal 'naughty child', but *anak tidur vs anak yañ tidur 'sleeping child').

(3) VDI s cannot function as complements of (man)jadi 'become' (to be distinguished from jadi 'succeed, manage').

Nouns are lexical entities that can be subject or object of a sentence, that can occur following a preposition, and that can be modified by other nouns, VSI s, demonstratives, numerals, and relative clauses. Verbs sometimes also occur in positions reserved for nouns: when they do, they are considered as nominalised verbals that refer to the process as such. Lexemes in the Malayic isolects usually belong to a certain word class (or more than one word class). But they do not always do so: many occur only as the base of a derivation, in which case only the derivative has word-class membership. They may also occur unaffixed, but only as

\[180\]

180 The concepts VSI and VDI, as well as the definitions of VSI s, VDI s, VTRs and nouns, and the descriptions of some of the SM affixes presented here are from Prentice (1987, n.d.). The idea of distinguishing between
an element of a compound. These lexemes are called precategorials. Since precategorials are usually the base of verbal and nominal derivations, they will be included here. Precategorial bases will be indicated by a preceding hyphen, and their meanings will be given between brackets.

Other verb classes are not distinguished. Apart from VTRs and VDIs, Muhadjir (1981:13), in his treatment of word classes in JKT, also distinguishes “semi-transitives” along with adjectives, intransitive verbs, and transitive verbs (which are comparable to VSIIs, VDIs, and VTRs respectively in this study). Semi-transitives have co-constituents, but these are complements, not objects: since the semi-transitives have no object-oriented form these complements can only be made subject by the use of transitive (derived) verb forms. The co-constituents are often introduced with amè (also translatable as ‘with, towards’). Reciprocal verbs all belong to the category of semi-transitives because they usually also have co-constituents. Muhadjir’s “semi-transitives” could be distinguished on the same terms for SM as for JKT: SM also has a class of verbs which can govern a complement which, however, cannot function as subject vis-à-vis these verbs (e.g. suka ‘like (s.th. or s.o.)’, tahu ‘know (s.th.)’, balajar ‘study, learn (s.th.)’, barbicara ‘speak (a language)’; these verbs do not require a preposition). Rather than adding another subclass of verbs to the ones already distinguished here, I prefer to consider Muhadjir’s semi-transitives as a subclass of VDIs that have the faculty of taking a complement (which may or may not be introduced by a preposition), which is in correlation with their semantics.

As far as PM is concerned, I do not make any attempt to reconstruct the word-class system although I assume that comparable word classes must have existed. The precategorials in particular have an uncertain status in PM.

I confine myself here mainly to the study of living affixes, although I give a short discussion of the evidence from some fossilised affixes in 6.8. There are verbal and nominal affixes. Verbal affixes are derivational or inflectional (the latter are focus-markers); nominal affixes are derivational. Cliticised reflexes of *sa? (> MIN, BH sa, o.i. sa-) are treated in 5.3.2; reflexes of the clitic *-ña (> SM, BH -ña, MIN -ño, -no, -o, -e, SWY -ño, -o, JKT -nè) are treated in 5.5.1.3. Transitivising affixes (SM -i, -kan, BH -i, -akan, SWY -i, -ka(n)/-ka, IBN -ka, JKT -in, SM (man)por-, MIN (man)pa-, BH (ta)pa-, IBN p(a)) and reflexes of PM *(mb)Ar- (> SM bər-, MIN, BH ba-, o.i. bə-) have already been treated in Adelaar (1984a); a short account of this treatment is given below in 6.1.1, 6.1.2.

Verbs can be either simple or derived. For instance, transitive verbs are either transitive sui generis or secondarily derived from nouns or other verbs. Derived transitive verbs are subject to some of the same morphological processes as primary verbal bases (the derivative

VDIs and VSIIs by testing their valency with the verb mañjadi ‘become’ is from Hein Steinhaus. Prentice and Steinhaus’s criteria are tentative, and have not yet been tested systematically.

The definition of precategorials differs from one author to the other. For instance, Muhadjir’s definition includes root morphemes with multiple-class membership, components of (partial or entire) roots that do not occur in other environments (e.g. kurè, grak and cOdal would be root morphemes in the words kurèkure ‘turtle’, grakgrikgruk ‘sound like one who has a cough or a cold’, and cOdal ‘bat’), lexemes denoting a unit of money such as perak ‘rupiah’, and even loanwords deriving from prepositional phrases in the lending language (cf. alakadar ‘what is available (adv.)’ < AR ʿalā qadr ‘commensurate with, according to’). I prefer to narrow down the definition of precategorials to roots that do not occur in isolation, that is, roots which only occur in derivations and in compounds. I see no need to make a further segmentation of loanwords which derive from morphologically complex forms, compounds or prepositional phrases in the lending language, at least not if they are fully lexicalised in the borrowing language, as is the case with AR ʿalā qadr > SM, JKT alakadar.

Other fossilised affixes are SM -ar-, and -ay-, and their correspondences. Although admittedly they also deserve attention in the study of Proto Malayic, I will not treat them here.
affixes are usually lost in these processes). So there is an ordering of derivational rules, and verbal derivation occurs prior to other derivations. This rule ordering is implicit in the description of the Malayic affixes. For example, in SM, *basar ‘big’ is a VSI, which becomes nominalised through circumfixation of *ka-_-_an (kabosaran ‘largeness, greatness’); *air ‘water’ is a noun. *Basar and *air become VTRs through suffixation of -kan and -i respectively, and as such they can become abstract nouns, i.e. nouns referring to the act or event as such in the same way as *kirim ‘send’ (a VTR), viz. through affixation of paN-_-_an (6.7.3). Thus:

<table>
<thead>
<tr>
<th>adjective</th>
<th>verb</th>
<th>nominal derivative</th>
</tr>
</thead>
<tbody>
<tr>
<td>*basar ‘big’</td>
<td>*basarkan ‘enlarge (O)’</td>
<td>pombasaran ‘enlargement’</td>
</tr>
<tr>
<td>*air ‘water’</td>
<td>*airi ‘irrigate (O)’</td>
<td>ponaldar ‘irrigation’</td>
</tr>
</tbody>
</table>

In what follows here derivations like *basarkan and *airi will be considered as VTRs, and pombasaran and ponaldar as nouns derived from these VTRs (the fact that they ultimately derive from the VSI *basar and the noun *air is not relevant for the paN-_-_an derivation). There are many shortcomings in the following presentation of the morphology of the six isolects. These are mainly due to the lack of information for some isolects, to the variety of methods used for describing data in the individual isolects, and to the inadequacy of some of these descriptions. The handicaps were felt most in the BH and SWY material, but they also play a role in the treatment of the other isolects.

### 6.1 EARLIER RECONSTRUCTIONS


#### 6.1.1 THE PM INTRANSITIVE AND TRANSITIVE VERB MARKERS

Ras argued that SM -kan is a relatively recent suffix compared to -i (and -an) on account of differences in their morphophonemic behaviour in some (Northern) peninsular isolects. Also, in these isolects -kan (Kelantan -ke) is productive, whereas -i is unproductive and survived only as a fossil.

Collins compared SM -kan to Banjarese -akan and BAC -akaŋ and akaŋ. He concluded that a preposition *akan has to be reconstructed for this correspondence, and that Banjarese and BAC reflect intermediate stages of the development from this preposition into a suffix as in SM.

In Adelaar (1984) I check the findings of both Ras and Collins against evidence from the other isolects. I agree with Ras that SM -kan etc. is younger than SM -i etc., and with Collins that a preposition has to be reconstructed as the PM ancestor of SM -kan. However, this preposition should be *akAn instead of *akan on account of data from languages outside the Malayic group and the fact that PM retained schwa in last syllables (cf. PAN *aken,
### TABLE 13: THE AFFIXES COMPARED IN CHAPTER 6

<table>
<thead>
<tr>
<th>Affix Type</th>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(verbal) prefix denoting unintentionality</td>
<td>6.2</td>
<td>ūa-</td>
<td>ūa-</td>
<td>ūa-</td>
<td>ūa-</td>
<td>ūa-</td>
</tr>
<tr>
<td>focus-marking prefixes</td>
<td>6.3</td>
<td>maN(1)-</td>
<td>maN(1)-</td>
<td>maN(1)-</td>
<td>(ma)N(1)-</td>
<td>N-</td>
</tr>
<tr>
<td></td>
<td>6.3</td>
<td>ō-</td>
<td>ō-</td>
<td>ō-</td>
<td>ō-</td>
<td>ō-</td>
</tr>
<tr>
<td></td>
<td>6.3</td>
<td>di-</td>
<td>di-</td>
<td>di-</td>
<td>di-</td>
<td>di-</td>
</tr>
<tr>
<td>intransitive verbal prefix</td>
<td>6.3</td>
<td>maN(2)-</td>
<td>maN(2)-</td>
<td>maN(2)-</td>
<td>(ma)N(2)-</td>
<td>N(2)-</td>
</tr>
<tr>
<td>subjunctive suffix†</td>
<td>6.4.1</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>transitive affix†</td>
<td>6.4.2</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>(verbal and nominal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>suffix denoting plurality of subject, diffuse action, reciprocity</td>
<td>6.5</td>
<td>-an(1)</td>
<td>-an(1)</td>
<td>-an(1)</td>
<td>-an(1)</td>
<td>-an(1)</td>
</tr>
<tr>
<td>nominalising suffix referring to goal or place of an action</td>
<td>6.5</td>
<td>-an(2)</td>
<td>-an(2)</td>
<td>-an(2)</td>
<td>-an(2)</td>
<td>-an(2)</td>
</tr>
<tr>
<td>circumfix denoting unintentionality nominalising circumfix referring to a quality, process, event</td>
<td>6.6.1</td>
<td>kō- -an(1)</td>
<td>kō- -an(1)</td>
<td>kō- -an(1)</td>
<td>kō- -an(1)</td>
<td>kō- -an(1)</td>
</tr>
<tr>
<td></td>
<td>6.6.2</td>
<td>kō- -an(2)</td>
<td>kō- -an(2)</td>
<td>kō- -an(2)</td>
<td>kō- -an(2)</td>
<td>kō- -an(2)</td>
</tr>
<tr>
<td>(nominal) agent- and instrument-prefixes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>circumfixes forming abstract nouns and nouns referring to place (or actor, goal, instrument)</td>
<td>6.7.1</td>
<td>pāN-</td>
<td>pāN-</td>
<td>pāN-</td>
<td>pāN-</td>
<td>pāN-</td>
</tr>
<tr>
<td></td>
<td>6.7.2</td>
<td>por-</td>
<td>pa-</td>
<td>pa-</td>
<td>(por-)</td>
<td>--</td>
</tr>
<tr>
<td>fossilised affixes</td>
<td>6.8</td>
<td>m/-, -/am/-</td>
<td>m/-, -/um/-</td>
<td>m/-</td>
<td>m/-, -/am/-</td>
<td>m/-</td>
</tr>
</tbody>
</table>

†only reflected in KD (-a?), SD (-a?), and Old Malay (-a)

‡only reflected in KD, SD and Old Malay (makə)
The reasons I give for reconstructing a PM preposition are that in SM a preposition *akan* still exists and, preceded by a VSI or VDI, is often interchangeable with a derived VTR with -*kan* (especially in Classical Malay texts). BH -*akan* still shows the full form of the original preposition (before the loss of *a-*). Moreover, BH -*akan* can also be suffixed to a verb that already has a suffix -i, whereas the opposite (suffixation of -i to a verb that already has -*akan*) does not occur. Other indications for not reconstructing a suffix is that there is no formal agreement among the correspondences of -*kan*, cf. SM, MIN -*kan*, BH -*akan*, SWY -ka(n)/-kə, IBN -*ka*, JKT -*in*. Moreover, IBN -*ka* is a clitic that still occurs independently in some sources (e.g. Scott 1956), whereas the older suffixes are lost in IBN (it is not improbable that SWY -ka(n)/-kə are also cliticised forms of a preposition kə ‘to(wards); in order to’). JKT -*in*, which combines the functions of -*kan* etc. and -i in the other isolects, is formally identical with -*in* in Balinese (from which it borrowed heavily); it is probably a loan morpheme from Balinese. Finally, there are sometimes formally different correspondences between closely related (sub)dialects: most regional forms of MIN have -*an* instead of -*kan*, and KD, which is very close to IBN, has -*an* or -*an* corresponding to IBN -*ka*.

I reconstruct *-i* on the basis of SM, MIN, BH, SWY -*i*, and IBN (fossilised) /-i?/. *-i* was a locative-oriented transitivising suffix; when added to transitive verbal bases, it could also add the notion of multiple action or plurality of object or subject.

Roolvink found that in Classical Malay texts *bar-* was originally transitive, and that it corresponded to *par-* in passive constructions. Before the end of the eighteenth century *bar-* and *par-* became disconnected, the former now being an intransitive verbal marker, and the latter acquiring an active counterpart in *mampør-* (= məN- + *par-*). In the light of comparison with the other isolects (and with Kedah, Pattani and Jakun Malay) I agree with this opinion in-so-far as I reconstruct *(m)bAr-* as a prefix forming transitive verbs, and *(m)b)Ar-* as one forming intransitive verbs, and assume that there was a paradigmatic relation between *(m)bAr-* and *(m)b)Ar-. *(m)bAr-* occurred affixed to adjectives (but not exclusively so) to form causatives, and affixed to nouns it conveyed the meaning 'treat or use O as a (noun), turn O into (noun)'. *(m)b)Ar-* occurred with intransitive verbs and nouns. With nouns it must have meant ‘possess, contain, wear, use, produce, acquire (noun)’ or, if the noun referred to a profession or mutual relationship, ‘assume the quality of (noun)’. The initial consonant in *(m)b)Ar-* is uncertain because of the correspondence of OM *mar*- with evidence from outside the Malayic group (cf. Toba *mar*, Old Javanese *mar*, Tagalog *mag*), which points to *(m)b)Ar-* (against evidence in all contemporary Malayic isolects pointing to *(m)b)Ar*.

Traces of a paradigmatic relationship between *(m)bAr-* and *(m)b)Ar-* are to be found in the isolects:

(a) In the formation of deverbal nouns, SM *bar-* is replaced by *par-* and MIN *ba-* is replaced by *pa-* e.g. SM *barjānjī* ‘promise, make an agreement’, and *parjānjīn* ‘promise, agreement, testament’, MIN *bajalān* ‘walk, go’, and *pajalānan* ‘trip, journey; distance covered (during a journey)’; *par-/pa-* also applies when a deverbal noun is formed on the basis of a verb with *(mam)par-/(mam)pa-*, e.g. SM *(mam)parkācil* ‘make smaller’ and

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183Despite the IBN reflex I do not reconstruct a final glottal stop for this proto-suffix, since Formosan cognates of /-i/ -? do not exhibit a corresponding -s, -h or -?; nor do Philippine cognates have a corresponding -h or -? (Adelaar 1984a:419). Timugon Murut has a referent-focus suffix -? (used in phrases with atemporal aspect; Prentice 1971). A final glottal stop after vowels is shown in many Bornean languages, and it is quite possible that this is an areal feature (which, as an alternative explanation for IBN ?, affected IBN as well).
parakcilan 'minimising, reducing in size', MIN (mam)padamaykan 'reconcile, pacify' and padamayan 'reconciliation; place of reconciliation'.

(b) The unproductive BH prefix tapa- expresses unexpected or involuntary action. It is probable that it originally consisted of *ta- + *pa-, and that the second part of this sequence was an alternant of +ba- in this particular environment, cf. bahurup 'exchange'\(^{184}\) and tapahurup 'exchanged (by accident, erroneously)'; bahual 'be quarrelling' and tapahual 'get into a fight (unasked for)'.

(c) IBN ba- in combination with -ka yields transitive verbs; when these verbs are object-oriented (which includes verbs in the imperative mood) ba- alternates with pa-, e.g. bajalay 'walk, go, move' and bajalayka 'make O go, move O'; pajaJaya! 'move it!', dipajaJayka 'be moved'.

6.1.2 A PM LINKER

The PM (or ligature) *ŋ was apparently used between quantifiers and following nouns, and after pronouns introducing relative clauses: these are at least the positions in which SM maintained a fossilised remnant of this linker, cf. SM bara/ŋ (5.5.2.5) and SM ya/ŋ (2.1.3, 3.3, 5.5.2.3). PM *ŋ apparently developed from PMP *ŋ, but its use became very restricted. Reflexes of PMP *ŋ are found in a good many other Austronesian languages, where they often also occur in numeral compounds (between digits and higher order numerals). In some languages they are used as a linker between the constituents of almost any kind of noun phrase, as in Tagalog. That PM *ŋ was not yet fossilised can be deduced from the fact that ya/ŋ and bara/ŋ cannot be reconstructed for PM (Adelaar in press b).

6.2 SM tar- AND ITS CORRESPONDENCES

6.2.1 SM

With VDIs and VTRs, tar- denotes an 'accidental' state, process or action; the term accidental is used to cover such concepts as involuntary, unmotivated, agentless, sudden, and unexpected action (or state resulting therefrom). Prefixed to VDIs and precategorials tar- forms active verbs, and prefixed to VTRs it forms verbs that are active or passive, depending on the context in which they occur. The transitivising suffixes are almost always elided. For example:

*tidur 'sleep' tartidur 'fall asleep';
*pokik > momakik 'scream' tarpokik 'scream involuntarily';
*hormati 'respect (n,v)' > hormati 'respect, pay homage to' tarhormat 'respected, esteemed';
*buka 'open' tarbuka 'open(ed); opened (by mistake)';
*dapat 'acquire, get' > dapati 'come across, catch, find' tardapat 'occurring'.

Compare also the constructions used in the following examples:

(1) tarbawa apin
tar- + carry wind
taken by the wind

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\(^{184}\)cf. Abdul Jebar; bahurup also means 'buy', cf. 5.7 lemma 91.
(2) *Saya tarbawa hujung atap itu.*
I *tar-*+ carry end roof that
I took by accident a straw from the roof with me.

(3) *Targali -lah ia kopada tajaw.*
*tar-*+ dig -*lah* he on vase
While digging, he hit upon a vase.
(-lah is an emphatic particle, also used to mark a fronted predicate.)

(4) *Ia tawardawasordawa soparti tagar buñi-ña.*
he *tar-*+ burping(ing) like thunder sound-its
He burped with the power of thunder.

N.B. In Indonesian SM *tar-*+ a transitive verbal base is only used as an object-oriented form, but in Malaysian SM and in Classical Malay texts this construction is also used with agent-orientation, as in the second and third sentences given above.

On the basis of VTRs *tar-* can also denote a potential action, and consequently an impossible action if the resulting form is preceded by a negation. In Gerth van Wijk’s examples the resulting form is object oriented if the base is a VTR, e.g.

(5) *Kaki-ña tidak tarąŋkat.*
leg-her not *tar-*+ lift
She couldn’t lift her leg.

(6) *Hati-ña tiada tartahan.*
liver-his not *tar-*+ restrain
His heart185 could not be restrained.

(7) *barang yang tarbawa oleh so-orang*
good which *tar-*+ carry by a/one-person
goods that can be carried by one person

(8) *tiada tarkatakan*
not *tar-*+ say
unspeakable, indescribable/not to be said, ineffable (of blasphemies etc.)

(9) *Papan itu səmua-ña tərpaŋat.*
plank that all-its *tar-*+ use
Those planks can all be used.

Prefix to VSIIs, *tar-* denotes a superlative degree, e.g.

| *baik* ‘good’ | *tarbaik* ‘very good, best’ |
| *kociil* ‘small’ | *tərkociil* ‘very small, smallest’ |
| *baru* ‘new’ | *tərbaru* ‘very new, newest’ |

6.2.2 MIN

MIN *ta-* prefixed to VDIIs and VTRIs is equivalent to SM *tar-*. It denotes that the subject either commits the act involuntarily, or is affected by the act. The will or motivation to

185 *Hati* is translated as ‘heart’ in this context, as the liver is considered the centre of emotions in Malay culture.
perform the act is beyond the subject. Forms prefixed with ta- are irrespective of agent/object-orientation or tense (-i and -kan are not elided when ta- is prefixed), e.g.

(10)  \textit{Ura}\textit{n} tu \textit{tajua}.
person that \textit{ta}+ sell
That person is selling/has sold (by accident) (or That person is sold/was sold).

(11)  \textit{Kudo} tu \textit{tajua}.
horse that \textit{ta}+ sell
That horse is sold/was sold.

(12)  \textit{Pupuy}\textit{?} lah sudah \textit{tapabue}?.
flute \textit{lah} already \textit{ta}+ make
The flute has been made.

(13)  \textit{Inda}\textit{?} tanantikan do \textit{di den}.
not \textit{ta}+ wait for particle by \textit{me}
I cannot wait for you.

(14)  \textit{Lah} \textit{ba}\textit{\=na}\textit{?} taju\textit{\=a} tajalani, \textit{ba}\textit{\=na}\textit{?} lah kara\textit{\=n} tali\textit{\=e}\textit{?}i.
\textit{(particle)} many bay \textit{ta}+ go by many particle rock \textit{ta}+ see \textit{O}
Many bays were passed, many rocks were seen.

N.B. \textit{Lah} preceding a verb is a perfect tense marker; in other positions it is an emphatic particle.

Prefix to a noun, \textit{ta-} means 'be affected by / affect (noun) (irrespective of one's own will); fall, lapse into (noun); succeed in acquiring (noun)', e.g.

(15)  \textit{Takudokudo} sam\textit{\=p}\textit{n} pa\textit{\=ncarian-\=no}.
\textit{ta}- + horse + reduplication all earning-his
Everything he earns is lost on horses.

(16)  \textit{Sa-bulan} \=no yo bakuli, lah takabaw di \=no.
one-month he indeed work.as.a.coolie particle \textit{ta}+ buffalo by him
He's been a coolie for a month, and he's already got hold of a buffalo.

(17)  \textit{Tatula}\textit{\=g} sak\textit{\=i}-\textit{\=no} di ambo tu.
\textit{ta}+ bone pain-its on/\textit{by me}
It hurts me very much (right to the bone I feel the pain of it).

(18)  \textit{Barulah} tabatu ambo kali, ambo antikan.
as.soon.as \textit{ta}+ stone I dig I stop (with \textit{O})
As soon as I hit upon a stone, I stopped digging.

Prefix to VSI\textit{s} \textit{ta-} denotes an excessive degree, e.g.

\textit{sinjke}\textit{\=?} 'short' \hspace{1cm} \textit{tasinjke}\textit{\=?} 'too short'
\textit{dalam} 'deep' \hspace{1cm} \textit{tadalam} 'too deep'
\textit{kuni\textit{\=p}} 'yellow' \hspace{1cm} \textit{takuni\textit{\=p}} 'too yellow'
\textit{labi\textit{\=h}} 'more' \hspace{1cm} \textit{talabi\textit{\=h}} 'too much'

N.B. According to Van der Toorn \textit{ta-} can also mean that the subject acquires, or is affected by, the quality of the VSI, irrespective of the subject's own will. It is more probable that forms with this meaning are derived from inchoative VDI\textit{s} which in turn were derived from VSI\textit{s}. For example:
(19)  
Tasirah muko-ño.
ta- + red  face-her  
She turned red (all of a sudden) (cf. mañirah ‘turn red’).

(20)  
Taputiñh gigih-ño sadaj ño gala?.
ta- + white tooth-his while he laugh  
When he laughs the white of his teeth appears.

6.2.3 BH

Like SM tar-, BH ta- denotes unintentionality when prefixed to VDIs and VTRs; when prefixed to VTRs[^13] it also denotes feasibility. In most of Asfandi’s examples the subject of ta- forms is in the object role, but there are some exceptions (-i and -akan are maintained when ta- is prefixed), e.g.

<table>
<thead>
<tr>
<th>VDI</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>lihati ‘see (O)’</td>
<td>talihati ‘see (O) by coincidence’</td>
</tr>
<tr>
<td>tulak ‘go’</td>
<td>tatulak ‘go after all’ (‘jadi pergi’, Asfandi 1976:27)</td>
</tr>
<tr>
<td>padahakan ‘tell, report’</td>
<td>tapadahakan ‘told, reported’</td>
</tr>
<tr>
<td>padahi ‘advise’</td>
<td>tapadahi ‘be advised, receive advice’</td>
</tr>
</tbody>
</table>

Prefix to VSIs ta- denotes a comparative degree, e.g.

<table>
<thead>
<tr>
<th>SAI</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>baik ‘good’</td>
<td>tabaik ‘better’</td>
</tr>
<tr>
<td>kurus ‘slim’</td>
<td>takurus ‘slimmer’</td>
</tr>
<tr>
<td>haban ‘red’</td>
<td>tahaban ‘redder’</td>
</tr>
</tbody>
</table>

6.2.4 SWY

SWY ta- (with variants ta-, to-) has the same functions as SM tar-. It denotes either involuntariness or feasibility of a performance when prefixed to VTRs or VDIs, and it denotes a superlative degree on the basis of VSIs. No examples of ta- forms with a subject in the agent role are given in Helfrich.

6.2.5 IBN

IBN ò- (with its variant t-) is equivalent to SM tar- when prefixed to VDIs and VTRs. Depending on the context, it denotes non-intention, ability and possibility (Asmah 1977:87). It does not occur with VSIs.

[^13]: On the basis of VTRs consisting of VSIs, VDIs, and nouns + a combination of the VTR markers -i + -akan, ta- can also express a request, e.g. 

diam ‘stay’, diami ‘stay on O’, tadiamiakan ‘ask O to stay’;
kurag ‘less’, kuragi ‘diminish’, takuragiakan ‘ask for a bit less O’;
bahu ‘water’, bahu ‘give water’, tabahuikan ‘ask for O to be given water (or to be watered)’;
hatap ‘roof’, hatapi ‘roof O’, hatapiakan ‘make a roof on behalf of O’, tahatapiakan ‘ask to roof (s.th.) for O’.  
(No intermediate forms *diamiakan, *kuragiakan, or *bahuikan were found in Asfandi’s data.)
6.2.6 JKT

JKT to- is not productive; it is in the process of being replaced by kə- and kə- -an (which are treated in 6.6.1).187 to- occurs with VDIs and VTRs, and it expresses unintentionality or feasibility, e.g.

- tidur ‘sleep’
- tarasè ‘feel’
- tawè ‘(laughing)’
- lambat ‘(delayed, slow)’
- pandan ‘look at’
- bōŋkar ‘take apart’
- plēsèt ‘(stumbling)’
- bukè ‘open’, bukain ‘open s.th.’

N.B. According to Muhadjir (1981:36) tarasè, tawè, and bukè are probably alternants coming from Indonesian SM.

6.2.7 DISCUSSION OF SM to- AND ITS CORRESPONDENCES

All isolects have a cognate of SM to-. These cognates agree in their function of denoting unintentionality or potentiality of action, process or state when they are prefixed to a VTR or a VDI (or a precategorial). In SM, MIN, BH, and IBN, the subject of a to-/ta/-tə- form is (involuntarily) agent or object of the performance. In SWY, the subject of a form with to- is always the object (in the examples in Helfrich and in Aliana et al.). In JKT (and in Indonesian SM) the subject of a to-( /ter-) form is always object if the base is a VTR. JKT to- forms are not productive.

I presume that the PM ancestral form of to- etc. was a prefix denoting unintentionality and potentiality of a performance, and that the active or passive meaning of this ancestral form depended on the context.188 That the semantics of to- etc. should not be associated with passivity is even more clear from its application in Classical and Malaysian SM, where sentences like saya tərmakan laJat ‘I swallowed a fly (by accident)’ (with a subject in the agent role) are accepted. In Indonesian SM the same message would be expressed as LaJat tərmakan oJeh saya.

The prefix to- and its cognates are also prefixed to VSIIs: in SM and SWY they form superlatives, in MIN excessives, and in BH comparatives. In IBN and JKT to- does not occur with VSIIs. There are two possible underlying causes of this situation: either (1) to-/-ta/-tə- extended its valency to VSIIs in SM, MIN, BH, and SWY, or (2) constructions of IBN and JKT to- + VSIIs were replaced by periphrastic constructions. If (1) applies, then to- + VSIIs is innovative. In case (2) a PM form which also occurred with VSIIs must be reconstructed. Such a form may have denoted a higher degree, which later on developed into clearcut meanings such as comparative, superlative, or excessive. But it could also have

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187 According to Ikranagara (1980:137) no cognate of SM to- occurs in JKT.
188 Wouk (1980:84) stresses the unintentional and involuntary aspect of to- in Indonesian SM: “The implications of state and unexpressed outside agency cause this construction – and by extension to- in general – to be associated with the concepts of stativity and passivity, leading to some confusion about its underlying significance.”
had an excessive meaning, which later on weakened into superlative in SM and SWY, and into comparative in BH. Positing an original excessive meaning has the advantage of putting the origin of *tar*- etc. + VSIs more in line with *tar*- etc. + VTRs, VDIs or precategorials (i.e. with *tar*- with an unintentional meaning). This means that only one PM prefix would need to be reconstructed for both, with an unintentional and excessive meaning combined with a potential one; this prefix would have occurred with all verbs (VSIs, VDIs, VTRs, precategorials). But with the evidence at hand it is safer to limit oneself to what can actually be reconstructed with certainty. That is a PM prefix *tAr-*, which occurred at least with VTRs and VDIs (including precategorials), and which conveyed the notion of unintentionality and potentiality. The subject of a *tAr-* form was either object or (involuntary) agent of the performance.

6.2.8 RECONSTRUCTION OF *tAr-*

I reconstruct *tAr-*, which contributed the notion of unintentionality or feasibility to the VTR or VDI to which it was affixed. It is unclear whether *tAr-* also occurred on the basis of VSIs (with the meaning of a degree marker).

6.3 THE FOCUS-MARKING AFFIXES maN(1)-, ø-, AND di-, AND THE INTRANSITIVE VERBAL PREFIX maN(2)-, AND THEIR CORRESPONDENCES

6.3.1 SM

Prentice distinguishes maN(1)- and maN(2)- in SM: maN(1)- is an (inflectional) transitive verbal prefix indicating orientation towards the agent of an action. maN(1)- corresponds to ø and di-:

ø applies when the verb is object-oriented and the agent is a first or second person (which includes verbs in the imperative mood);189

di- is prefixed to object-oriented verbs, when the agent is a third person.190

Examples:

(ikut) maN(1)-ikut 'follow (O)': ikut(lah)! 'follow (O)!' (-lah is a clitic denoting emphasis),

(kujikut, (kaw)ikut 'be followed (by me, you)', diikut 'be followed (by third person)';

(parhatikan) maN(1)-parhatikan 'observe (O)', parhatikan(lah)! 'observe (O)!', (kuparhatikan, (kaw)parhatikan 'be observed (by me, you)', diparhatikan 'be observed (by third person)';

(bayar) maN(2)-bayar 'pay (O)', bayar(lah)! 'pay (O)!', (kubayar, (kaw)bayar 'be paid (by me, you)', dibayar 'be paid (by third person)';

(makan) maN(2)-'eat (O)' (with frequently occurring verbs beginning with m- the prefix is usually omitted), makan(lah)! 'eat (O)!', (kumakan, (kaw)makan 'be eaten (by me, you)', dimakan 'be eaten (by third person)'.

maN(2)- is a derivational prefix forming VDIs on the basis of VDIs, VSIs, nouns and precategorials. On the basis of VDIs it does not add to their meaning in a systematic way; it is sometimes omitted in colloquial speech. In some cases it is interchangeable with bar-, e.g.

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189In Indonesian SM ø- occurs when the agent is not a common noun (i.e. it may also occur with a third person pronoun in the agent role).

190In Indonesian SM di- may also occur when the agent is a first or second person pronoun preceded by oleh 'by'.

With VSI s it forms inchoative verbs, e.g.

- kunu ‘yellow’  
  mənunu ‘turn yellow’
- tətap ‘fixed, regular’  
  mənətap ‘settle, establish oneself’
- jauh ‘far’  
  mənjuauh ‘withdraw’
- gələp ‘dark’  
  məngələp ‘become dark’

With nouns it forms verbs denoting ‘behave like, resemble (noun), move towards (if (noun) is a place or direction), collect or produce (noun), use or consume (noun)’, e.g.

- batu ‘stone’  
  məmbatu ‘turn to stone, be rock-hard’
- puńcak ‘peak’  
  mənuńcak ‘peak, rise to a climax’
- səmut ‘ant’  
  mənəsumut ‘swarm (like ants)’
- təpi ‘edge’  
  mənəpi ‘go to the edge, move aside’
- kiri ‘left’  
  mənjiri ‘move, keep to the left’
- dərat ‘dry land’  
  məndərat ‘go ashore, land’
- rotan ‘rattan’  
  mənrotan ‘collect rattan’
- sajak ‘poem’  
  mənəjak ‘compose poetry’
- rumput ‘grass’  
  mənrumput ‘cut grass; graze (of cattle)’
- tuba ‘fish poison’  
  mənuba ‘fish with tuba poison’
- kopi ‘coffee’  
  mənpipi ‘drink coffee’

It occurs with precategorials, where it is also sometimes interchangeable with bər-, e.g.

- tənis ‘(weeping)’  
  mənənis ‘weep’
- təri ‘(dancing)’  
  mənəri ‘dance’
- ənala ‘(blazing, flaring)’  
  mənala, bənala ‘blaze, flare up’
- ənəni ‘(singing)’  
  mənəni, bənəni ‘sing’

6.3.2 MIN

MIN maN(1)-, ø-, di- have the same functions as SM maN(1)-, ø-, di-, but their distribution is different in one detail: a second person agent expressed by the pronouns əŋ, awa? or kito, may follow an object-oriented verb with di- prefixed (no examples are given in Van der Toorn). maN(2)- is similar to SM maN(2)-, but prefixed to a noun denoting a place, it conveys the meaning ‘(be) on (noun)’, e.g.

- pasiŋ ‘sand, beach’  
  jalan mamaşiŋ ‘a journey along the beach’
- təpi ‘edge, rim’  
  mənapi ‘be on/go along an edge’
- rumput ‘grass’  
  marumput ‘sit on the grass’

Prefixed to VSI s it sometimes yields causative VTRs, e.g.

- sirah ‘red’  
  mañirah ‘make (O) red’
- itam ‘black’  
  maitam ‘blacken (O)’

Prefixed to VDI s it denotes a state or movement which is brought about by the subject’s own will, cf. the following sentences:
(21) *Tupay maŋatuᵢh.*
squirrel *maN-* + fall
The squirrel let itself fall.

(22) *Di bukiᶒ urag lah manajuᵢn.*
at mountain person particle *maN-* + jump
People jumped down from the mountains.

(23) *Teŋju-no lapeh den manduduᵢ?*
fist-his let loose I *maN-* + sit
When he hit me, I went and sat down.

cf. also *tiɗuᵢ* ‘sleep, lie down’ and *maniduᵢ* ‘go and lie down’.

6.3.3 BH

BH *maN(1)-, ø-, di-* are equivalent to SM *maN(1)-, ø-, di-*. They can also form a VTR on the basis of a noun referring to a tool, e.g.

*gargaji* ‘saw (n)’  *mangargaji* ‘saw (O)’  *digargaji* ‘be sawn’
*pahat* ‘chisel (n)’  *mamahat* ‘chisel (O)’  *dipahat* ‘chiselled’
*kuwiki* ‘key’  *maŋwiki* ‘lock (O)’  *dikuwiki* ‘locked’

*maN(2)-* also forms VDIs on the basis of VSLs and nouns, but the resulting forms sometimes differ in meaning from their SM equivalents.

Prefixed to VSLs *maN(2)-* conveys the meaning ‘become as if, act as if (VSI)’, e.g.

*pintar* ‘clever’  *mamintar* ‘act as if clever, try to be clever’
*kuniŋ* ‘yellow’  *maŋuniŋ* ‘turn yellow’
*tuli* ‘deaf’  *manuli* ‘play deaf, act as if deaf’

Prefixed to nouns it means ‘use or work with (noun), trade in, make, look for (noun) as a means of living’, or ‘look like (noun), be oriented towards (noun)’, e.g.

*tanguk* ‘landing net’  *mananguk* ‘use a landing net’
*banih* ‘rice’  *mambanih* ‘trade in rice’
*wday* ‘cake’  *mawday* ‘make cake’
*iwak* ‘fish’  *maiwak* ‘look for fish’
*tampiray* ‘basket trap’  *manampiray* ‘use a basket trap’
*rumah* ‘house’  *marumah* ‘like home, be a stay-at-home’
*raka* ‘king’  *maraka* ‘(be) like a king’
*tikus* ‘mouse’  *manikus* ‘(be) like a mouse’
*hatap* ‘roof’  *mahatap* ‘fit roofs (as a profession)’

6.3.4 SWY

SWY *(ma)N(1)-, ø-, di-* are equivalent to SM *(ma)N(1)-, ø-, di-*. According to Helfrich, the clitic -*a(h)* as a rule\(^{[191]}\) is added to verbs in the imperative mood, e.g.

\(^{[191]}\)In SM -*a(h)* is also often postcliticised to verbs in the imperative mood, but it is not a marker as such of the imperative mood, as is suggested by Aliana et al. for SWY -*a(h)*.
ambip‘take (O)’
barsip(h)ka‘clean (O)’
xumputi‘weed (O)’

According to Aliana et al., the imperative form may also be preceded by di-, as in the following examples:

minum ‘drink (O)’
bata‘carry, take (O)’

(kupi) itu diminumla(h)! ‘drink that coffee!’
(bara) itu dibata?la(h)! ‘take those goods!’

(mə)N(2)- is equivalent to SM məN(2)-.

6.3.5 IBN

IBN N-, ø-, di- are equivalent to SM məN(1)-, ø-, di-. (N- is realised as homorganic nasal substitution, see 2.5.2). Some transitive verbs (especially those with initial c) can also have øN- (in free variation with N-) prefixed, e.g.

cabaw ‘cut, mow’
cabik ‘tear to pieces’

øN- (nasal accretion, with an epenthetic ø preceding the resulting consonant cluster) is used to form VDIbs (Asmah 1977:82). It forms VDIbs on the basis of VDI bases, nouns and precategorials (according to the examples given by Asmah); e.g.

səput ‘breath, life’
pəkap ‘cackling (of hens)’
-kalik, kalikkalik ‘dangle or swing continuously’

øN- is to some extent comparable with SM məN(2)- although apparently it does not occur on the basis of VSIbs, and alternates with the transitive marker N- in a few cases (see above).

6.3.6 JKT

JKT N(1)-, ø-, di-, are equivalent to SM məN(1)-, ø-, di-. N(1)- has several variants: məN(1)-, N(1)-, and şə(1)-. məN(1)- is in most cases interchangeable with N(1)- and seems to be favoured in formal speech (Muhadjir 1981:46). N(1)- and şə(1)- are partly in complementary distribution and partly in free alternation: şə(1)- is a morphophonemic alternation of N(1)- before a liquid or a semivowel, or if the base is monosyllabic, and it is in free variation with it before voiced stops (cf. 2.6.2). di- is also favoured in imperative sentences, e.g.

(24) Tu sayur jaga: digadöin!
that vegetable don’t di- + eat.s.th.without.rice
Don’t eat those vegetables without rice!

(25) Diminum tu té-ñe!
di- + drink that tea-your (polite)
Please drink your tea!

The distribution of N(2)- and its variants məN(2)- and şə(2)-) is equivalent to that of SM məN(2)- and its variants.
6.3.7 Discussion of SM *maN(1)-, *ø-, *di-, and maN(2)-, and their correspondences

In Malayic isolects, there occur correspondences of SM *maN(1)-, or simply nasalisation of the beginning of a stem, or a combination of both. In all isolects but IBN, there are correspondences of SM *maN(2)-, which are formally identical to correspondences of SM *maN(1)-, and which all form intransitive verbs. Further, the morphophonemic alternations of SM *maN(1)-, SM *maN(2)-, and their correspondences, and of mere nasalisation, also differ from one isolect to the other. So there are three problems involved in the reconstruction of PM ancestors of SM *maN(1)- etc. and SM *maN(2)- etc.:

(1) did they have the form *maN- or *N-?
(2) what morphophonemic alternations did they exhibit?
(3) were there any formal or functional differences between them?

These three problems will be considered in turn.

(1) SM *maN(1)- and MIN, BH *maN(1)- reflect PM *mAN(1)-; SWY has a correspondence *maN(1)- as well as N(1)-, but the sources do not state explicitly what the distribution of these allomorphs is. Apparently, *maN(1)- occurs before liquids and is favoured before nasals (where it alternates with ø, as in SM in certain cases). JKT has N(1)-, na(1)-, and *maN(1)-. na(1)- may be due to SUN influence, where ga- as an alternant of N- occurs in similar circumstances (Ikranagara 1980:135). JKT *maN(1)- either reflects an unproductive older affix now being replaced by N(1)/na(1)- or it is a loan morpheme from SM.

IBN is the only isolect now that does not have a reflex of *mAN(1)-; it is also the only isolect in which a different process for the nasalisation of VDs and VTRs is involved (see below).

I presume that *mAN(1)-, rather than only *N- was the original proto-form from which emanated the contemporaneous reflexes. First, if one proceeded from PM *N(1)-, there would be no way to account for the occurrence of *maN(1)-/maN(1)- in the contemporaneous isolects. Moreover, formally an original *mAN(1)- fits in better than *N(1)- in a pattern *pAr- : *(mb)Ar-//*pAN- : x (see 6.1.2 and 6.7). The reduction of *mAN(1)- to *N(1)- can be explained by the tendency to disyllabicity, and by the fact that no loss of functional load or danger of homonymy was involved in this reduction.

Correspondences of both *maN(1)-/maN(1)- and N(1)- are found in many other Austronesian languages, although correspondences of *maN(1)-/maN(1)- are restricted to languages of Indonesia, the Philippines and Madagascar. In languages from this area correspondences of *maN(1)-/maN(1)- or N(1)- developed into a verbal morpheme. Dahl takes this as a subgrouping argument for a western Austronesian branch, against a northern (= Formosan) and an eastern (= Pacific) Austronesian branch. For the different correspondences he finds an original Proto Western-Austronesian *maN- more likely than *N- because it matches better with Proto Western-Austronesian *paN-. Wolff (1973:72) claims that many PAN affixes are in their deep structure composed of combinations of derivational and inflectional affixes. In this way PAN *maR- can be analysed as a combination of a derivational *paR- with an (inflectional) *-um-, thus *maR- < *paR- + *-um- (with regular loss of first syllable if the initial consonant is a *b or *p); and *maN- < *paN- + *-um- (the last example is not given explicitly by Wolff).

Wolff's assumptions are based on evidence from Philippine and Formosan languages, where reflexes of PAN *maR- and *paR- are still analysable as deep-structure combinations of (reflexes of) *paR- and *paN- with (reflexes of) *-um-. The same situation is also found in other languages (cf. Tondano, Sneddon 1975:208ff.; Timugon Murut, Prentice
1971:128). If this view is sound, then an original (and complex) *maN- must be reconstructed for PAN, and hence also for Dahl's PWA.

With the present knowledge of PAN grammar it is not possible to take any view with certainty, but scholars agree that *maN- must be reconstructed for proto-languages which at least include Indonesian and Philippine languages. On the basis of the correspondences of SM maN(1)- in other Malayic isolects I reconstruct PM *mAN(1)-. For the exact function of this proto-phoneme, see (3) below.

(2) The following chart shows the various morphophonemic changes in the isolects of maN(1)/maN(1)/N(1)- (cf. Chapter 2 for a fuller treatment):

<table>
<thead>
<tr>
<th>initial phoneme</th>
<th>SM</th>
<th>MIN</th>
<th>BH</th>
<th>SWY</th>
<th>IBN</th>
<th>JKT</th>
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<tr>
<td>p</td>
<td>məm</td>
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<td>mənc</td>
<td>manc</td>
<td>manc</td>
<td>əc</td>
<td>ən</td>
<td>(mə)əc/ən (2.6.2)</td>
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<tr>
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<td>maŋj</td>
<td>maŋj</td>
<td>maŋj</td>
<td>əŋj</td>
<td>əŋj</td>
<td>(mə)əŋj/əŋj</td>
</tr>
<tr>
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<td>mb/m</td>
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<td>(mə)mb/ənb</td>
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<td>maV</td>
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</tr>
</tbody>
</table>

N.B. (1) In Aliana et al.'s description of SWY all initial stops undergo nasal substitution; (2) IBN əə- and JKT əə- are also prefixed to monosyllabic roots.

The morphophonemic changes of maN(2)- etc. are identical to those of maN(1)- etc. except for IBN, where əN- has the following alternations: əm- before initial p-, ən- before initial t- and s-, ən- before initial c-, and əŋ- before initial k- (see 2.5.2 C).

From the above chart it appears that all isolects agree in showing homorganic nasal substitution for initial p, t, k, and palatal nasal substitution for s, and no change at all before initial nasal. Except for IBN, they all agree in showing homorganic nasal accretion before initial voiced stops (in SWY homorganic nasal accretion is still found in Helfrich's description, whereas voiced stops are replaced by homorganic nasals in Aliana et al.; cases with homorganic nasal replacement of voiced stops in Helfrich are incidental, 2.4.2). One could argue that nasalisation originally did not occur before liquids, and that it appeared in this position in IBN and JKT because of the need for a formal indication of agent-orientedness.

But it is not possible to reconstruct a sound set of morphophonemic alternations for *mAN(1)- apart from that of homorganic nasal accretion before voiced stops, homorganic nasal substitution for initial *p, *t, *k, palatal nasal substitution for initial *s, and loss of the *N in *mAN(1)- before an initial nasal.
As for *mAN(2)-, it apparently had the same morphophonemic alternations as *mAN(1)-: only IBN has a different set of alternations, but since the IBN distinction between nasal substitution and nasal accretion as an indication of transitivity and intransitivity respectively is not found elsewhere among Malay isolects, it will not play a part in the reconstruction of PM. The difference between PM *mAN(1)- and *mAN(2)-, then, was only a functional one.

(3) It seems that the function that must be attributed to *mAN(1)- is that of agent-oriented verb marker, since this is the function of its reflexes in the isolects. By the same token, the function of intransitive verb marker must be attributed to *mAN(2)-. As the PM ancestor of di- was not yet a prefix (as will be seen below), there is no reason to consider it as the object-oriented counterpart of PM *mAN(1)-. The only difference between *mAN(1)- and *mAN(2)- was that one was prefixed to VTRs and the other to VDIs. For this reason it is simpler to reconstruct only PM *mAN- as an active verb marker which was prefixed to both VDIs and VTRs, and to regard the functional differentiation as a later development.

However, it is relevant in this respect that in KD and SD, the function of N(1)- (corresponding to SM maN(1)- etc.) is not primarily that of marking agent-orientedness. N- also occurs in object-oriented verbs: N- conveys here the realis mood, that is, it indicates that an act is really taking place, or has really taken place. Conversely, the absence of N- in object-oriented verbs indicates that the act has not (yet) taken place, or will not take place (which includes negative sentences, imperatives and subjunctives). (N- is also absent in series of consecutive verbs which are used for describing a process.) In the examples below all sentences are in the realis mood except for (27), which expresses an intention. This irrealis-realiss distinction may be an exclusive innovation in KD and SD, but it is also reminiscent of the PAN morphological distinction between independent and dependent verbal forms (cf. Wolff 1973).

SM di- and its correspondences is prefixed to object-oriented verbs when the agent is a third person. The correspondence of SM di- in the other isolects is also di-. There are, however, some important reasons not to reconstruct a prefix for this correspondence set:

(a) di- is the only prefix that did not undergo unexpected antepenultimate neutralisation in SM, SWY, IBN and JKT;

(b) in KD and SD di- is not only cliticised before the verb itself, but also before the agent if it precedes the verb. Compare the following examples (in KD and SD object-oriented verbs, as indicated above, nasalisation indicates realis mood):

KD (Dunselman 1949:70; I have modified Dunselman's spelling in the following way: ng : g; ' : ?, nj : ñ; j : y; dj : j; tj : c; oe : u; é : e)

(26) (Kamuda?) di-ña-nurun-an ka-tanah.
child by-him-go.down-causative to-ground
The child was put down on the ground by him.

(27) S-eko? jiba di-ku-kurukŋ.
one-(classifier) soul by-me-cage
One soul I hold captive.

(28) di-ujatn nazar
by-rain attacked
be caught in the rain
N.B. The locative preposition *di* is also used as an agent marker in MIN, e.g.

(31) *Di* kawan-*ñ*o *di*-cilo? *pitih.*
by friend-his be-stolen money
Money was stolen by his friend.

(32) *Si* Amin *di*-pang*ti* *di* tuan.
(personal article) Amin be-called by lord
Amin is summoned by his master.

In SWY it may occur (instead of *li*?(*h*)) as an agent marker (particularly in imperative constructions; Helfrich 1904:211).

(c) *di*- has only a limited spread outside the Malayic group: it occurs in Lampung and Batak isolects, in JV and SUN, and apparently also in languages of Sulawesi (Teeuw 1959:143). In JV *di-* is an innovation: Old Javanese does not have it (it has *-in-* instead), and if it were inherited in JV it would have undergone antepenultimate neutralisation.

(d) OM does not have a prefix *di-*: it has *ni-* instead (see N.B. below).

Summarising the above arguments, I conclude that the PM ancestor of *di-* was not yet a prefix. Two possible explanations present themselves. It could have been a reduced form of a (post-PM) pronoun *+d*-ia which was cliticized to (SM?) object-oriented verbs, then became a marker of object-orientedness, and finally was borrowed into other Malayic and non-Malayic isolects later on. This explanation is supported by the fact that *di-* was originally only compatible with a third person agent. It may also have developed from the (SM) locative preposition *di*, which then extended its function to that of a marker of object-orientedness, and gradually became cliticized to the following verb. In MIN, SWY, KD and SD, it also became an agent marker. The main support for this assumption would come from KD and SD. No reconstruction is made on the basis of *di*.

N.B. OM has an object-oriented verb marker *ni-*: In contrast to the traditional use of *di-*s, *ni-* is also compatible with agents of the first and second person. De Casparis (1956:24) believes that *ni-* is a cognate of *di-* and that its initial consonant was denasalised in other Malayic isolects. Teeuw (1959:141-144), although he does not accept the evidence provided by De Casparis, basically agrees with him and favours the possibility of denasalisation in the Malayic contemporaneous isolects of the first consonant of the ancestral forms of both OM *ni-* and *mar-* (thus: PM *ni-* > OM *ni-* SM etc. *di-*; PM *mAr-* > OM *mar-* SM etc. *bar-, ba-, ba-, ba*-). Teeuw rejects Aichele's assumption that *di-* developed from a preposition and replaced an inherited *ni-* and that *mar-* was borrowed from Batak isolects. He criticises
Aichele for taking SM too much as a point of reference in his study, and thereby for using Batak influence as an explanation for the occurrence of characteristics in OM which are not found in more recent forms of Malayic. I agree with Teeuw's last two criticisms. OM mar-seems a regular reflex of PMP *maR-, and the fact that contemporaneous Malayic isolects have bar- etc. is no decisive reason to take mar- for a Batak loan. It is conceivable that OM had retained PMP *maR- (and hence PM *mAr-), while in other forms of Malayic *m became b under the influence of the following +r. As in a large majority of cases *mAr- was prefixed to disyllabic lexemes and was never stressed, it may have been realised as a consonant cluster (as is also often the case with SM bar- etc.). This may have given rise to a b, possibly through an intermediate stage where +m was still realised but had acquired an epenthetic +b, that is, *mAr- > +m(A)r- > +mbAr- > +bAr- > bar-, ba-, etc. The development of an epenthetic stop is common enough in the history of the Malayic isolects, cf. excrescent stops in IBN, and PM *tim(ə)rah > MIN timbarah, AR jumlah > JKT jumbelè. But I also agree with Aichele that di- could have originated from a former preposition. The KD and SD evidence and the use of di as an agent marker in MIN and SWY, added to the fact that di- is the only prefix in the contemporaneous Malayic isolects with a vowel other than a (MIN, BH a), give some ground for this assumption. As to OM ni-, this may be an inherited prefix of which the cognates were lost in the contemporaneous Malayic isolects. I will reconstruct PM (*ni-) as an agent-oriented verbal prefix which seems to reflect PMP *ni-, which had an allomorph *in- and was a perfective aspect marker. As none of the other Malayic isolects have a reflex of this proto-affix, I write it between brackets.

6.3.8 RECONSTRUCTION OF PM *mAN-

On the basis of the SM agent-oriented verb marker maN(1)-, the SM VDI marker maN(2)-, and the cognates of these prefixes in the other isolects, I reconstruct PM *mAN-. *mAN- was apparently an agent-oriented verb marker prefixed to VTRs and VDIs. It formed VDIs on the basis of precategoricals, adjectives, and nouns. The KD and SD reflex of *mAN- suggest that its use in some cases involved a modal (realis-irrealis) distinction as well (but this requires further investigation).

*mAN- underwent morphophonemic alternations according to the initial phoneme of the verb to which it was affixed. The exact alternations are difficult to trace, but it is likely that the -*N- of this prefix was realised in at least the following ways:

(a) homorganic nasal accretion before initial voiced stops;
(b) homorganic nasal substitution for initial *p, *t, and *k;
(c) palatal nasal substitution for initial *s;
(d) ə before initial nasals and liquids.

6.4 EVIDENCE FROM OLD MALAY AND MALAYIC DAYAK

6.4.1 RECONSTRUCTION OF A PM SUBJUNCTIVE MARKER *-a?

KD has a suffix -a? to which Dunselman (1949:61) attributed a 'voluntative' function. Compare examples (8) and (9) (Dunselman 1949:62-63):

     if you cook +a? thing at-I better you cook at-kitchen other
     If you intend to cook that stuff here, you'd better go to another kitchen.
Dah habis hal-ňa ñian Ne? Do?akñ minta balajar-a?
already done event- its this Ne? Do?akñ ask for learn + -a?
bajalatn-a? laki ka apa?-ňa.
go + -a? man to father-his
After this had happened, Ne? Do?akñ asked his father for permission to learn to
go his way as a man (= to go hunting).

This suffix also occurs in SD, compare examples (35) and (36) (Ina Anak Kalom & Hudson 1970:289, 293):

(35) Ia mau muru-a? Baruk ari hujatn darakñ.
He (= ńambakñ) want chase-away + -a? Baruk sun rain hot
Ngambakñ wanted to chase Baruk away but it was still raining (with sunshine).

(36) Jaji s-eko? papalima kayo aapkao ... mau tarajutn-a? kadaapm kubu.
then one192 warrior enemy that want jump + -a? into fort
Then one enemy warrior... was about to jump down into the fort.

Finally, the suffix -a in OM expresses future or irreality (De Casparis 1956:344), as is
seen in the following sentence from the Telaga Batu inscription in South Sumattra (De
Casparis 1956:33 line 10):

(37) ... athavā kadāci kāmu māti malān mamrūrū-a: athavā kāmu
or if you dead not.yet succeed + -a? or you
larī-ya mamlarīya lai kāmu nivunuḥ kāmu sumpaḥ.
run.away + -(y)a let.flee + -(y)a other(s) you be.killed you curse
...or if you die before having succeeded (in destroying my palace) or flee or help
others to flee, you will be killed by the curse.

Wolff (1973:90) reconstructs a PAN subjunctive suffix *-a on the basis of evidence from
Atayal and JV: Atayal -a expresses subjunctivity, and JV -a expresses the subjunctive and
imperative mood. In these languages subjunctivity 'ranges in meaning from the optative and
hortatory...to the concessive and even resultative'.193 So there are two witnesses within the
Malayic group for the reconstruction of a PM subjunctive suffix, and this reconstruction is
supported by evidence from outside the Malayic group. (KD and SD are too closely related
to be considered as separate witnesses.) I reconstruct PM *-a?, a subjunctive-marking
suffix.

192S-eko? (‘s-eko’ in Ina Anak Kalom & Hudson) derives from eko?, the SD word for ‘tail’. A numeral
classifier for counting people on the basis of a word for ‘tail’ seems unusual, but it is also found in KD (cf.
Dunselman) and other Bornean languages. It probably represents a generalisation of an earlier classifier for
animals to all living beings.

193Reflexes of PAN *-a with divergent meanings occur in Malagasy and Javanese and in languages
of Formosa, the Philippines, Sulawesi, and Borneo. Wolff reconstructs its subjunctive meaning on the basis of
the semantically agreeing JV and Atayal reflexes (both being subjunctive markers). He reconstructs PAN *-a (>
JV -a, Atayal -a) and PAN *-ay (> JV -(n)y, Atayal -ay) as subjunctive markers which are active and local
passive respectively. Reflexes of PAN *-a and *-ay with divergent meaning are for instance Timugon Murut -o?
(> PAN *-a) and -i? (> PAN *-ay) being suffixed to respectively object-oriented and referent-oriented verbs
in atemporal aspect (which is used with imperatives, narrative mode, and serial verbs; the referent-focus
includes beneficiary- and location-orientedness in Timugon Murut; Prentice 1971:218).
6.4.2 RECONSTRUCTION OF A TRANSITIVE MARKER (*maka-*)

KD and SD have a prefix *maka-* which forms transitive verbs, both with a causative meaning. It is found in only two examples:

**KD** *maka-lalu molot* (SD *maka-lalu moot*) 'keep one’s promise, act according to what one has said’;

**SD** *maka-rehetn* ‘make light (particularly a punishment)’, cf. *rehetn* ‘light’.

A corresponding prefix *maka-* with a usually (but not always clearly) causative meaning is found in Old Malay, cf.

*maka-lagit* ‘make disappear’
*maka-gila* ‘make crazy’ (De Casparis 1956:39 fn.24)

A corresponding prefix with different meaning is found in other Austronesian languages, cf. Philippine languages *maka-*; Malagasy *maha-* ‘able to do [base]’, and Old Javanese *maka-* ‘consider/ have/ use as [base]’ (Zoetmulder 1983). I reconstruct PM *maka-*, a transitive marker which occurred on the basis of VSI and VDI derivations. The causative notion of *maka-* VSI derivations seems to be a secondary effect of the transitivisation of VSI bases.

6.5 SM -an(1), SM -an(2), AND THEIR CORRESPONDENCES

The functions of -an are rather diverse, and, on the basis of what is generally found in the isolects, I prefer to distinguish two suffixes -an:

- **-an(1)**: a (nominal and verbal) suffix denoting (with verbs) diffuse action, plurality of subject, reciprocity, and (with nouns) collectivity and similarity;
- **-an(2)**: a noun-forming suffix occurring with VSIs, VDIIs, and VTRs.

6.5.1 SM

Verbs with -an(1) always have *bør-* prefixed. With VDIIs, *bør- an(1)* denotes diffuse action, or plurality of object. The base is sometimes doubled in order to put more emphasis on the notion of diffuse action or plurality, e.g.

- **lari** ‘run’  
  **borlari(lari)an** ‘run (of many people, or in different directions)’
- **hañut** ‘float’  
  **borhañutan** ‘float (of many things); float around’
- **hambur** ‘scatter’  
  **borhamburan** ‘scattered all around’
- **suka** ‘be cheerful’  
  **borsuka(suka)an** ‘be cheerful together, celebrate’
- **borgantun’ hang’  
  **borgantun’an** ‘hang (of many things)’

Affixed to (derived or underived) VTRs, *bør- an(1)* forms reciprocal verbs. The notion of reciprocity may already be conveyed by *bør- only, in which case competing forms may occur (cf. *børkirim* or *børkiriman* ‘correspond with each other’, *bortembak* or *bortembakan* ‘shoot at each other’). Doubling of the base is used to put more emphasis on the reciprocal action. -i and -kan are deleted when *bør- an(1)* is suffixed, e.g.

194 De Casparis (1956:347) translates this derivation as 'making impotent' on account of JKT *lagit* 'indolent, lazy (with the underlying implication of making money by sly means or without working)', but I prefer 'make disappear' on account of Old Javanese *lagiit* 'vaguely visible in the distance, vanishing from sight' and SD *anit*, KD *lagit*, SUN *lujit* 'disappeared', and I reconstruct PM *lagit* 'disappeared, vanished' on the basis of this evidence.
bunuh ‘kill (O)’

sahut ‘answer (O)’

suapi ‘feed (O)’

panahi ‘shoot arrows at (O)’

On the basis of a noun (often reduplicated), -an(1) adds the notion of collectivity or similarity, e.g.

darat ‘shore, land’

laut ‘sea’

kayu ‘tree; wood’

daun ‘leaf’

rambut ‘hair of the head’

oran ‘human being’

jamban ‘vase’

anak ‘child’

-daratan ‘mainland’

-lautan ‘ocean’

-kayukayuan ‘trees (collective)’

-daundaunan ‘foliage’

-rambutan ‘k.o. fruit with a hairy skin’

-oranranan ‘statue; puppet; pupil (eye)’

-jambanran ‘flowerpot, flower stand’

-anakan 1. ‘puppet’

2. ‘interest (e.g. on loan)’

-kan occurs with VSls, VDls, and VTRs. Suffixed to VSls it forms nouns with the meaning ‘something that has the quality of (VSI)’, e.g.

-manis ‘nice, sweet’

-luar ‘outside, out’

-kuniran ‘yellow’

-manisan ‘sweetmeats’

-luran, in oran luran ‘foreigner’

-kuniran ‘brass’

Suffixed to VDls (and precategorials) it forms verbal abstracts, that is, nouns referring to the performance as such denoted by the underlying form, e.g.

-tanis ‘(weep)’

-nani ‘(sing)’

-roboh ‘fall, crash’

-bartakan ‘lean, press’

-tanisan ‘crying, weeping’

-naninan ‘singing, song’

-robohan ‘collapse (n)’

-takanan ‘pressure, suspense, stress, emphasis’

From VTRs it forms nouns referring to (1) the object of an act, (2) the place where the act is performed, (3) the instrument used to perform the act. -i and -kan are deleted when -an(1) is suffixed, e.g.

-kirim ‘send’

-kan ‘know (a person)’

-aqkat ‘lift, raise’

-pukul ‘hit, strike’

-kumpulkan ‘collect (O)’

-timban ‘weigh’

-sumban ‘contribute’

-sindir ‘mock’

-suruk ‘hide, conceal, by crouching or drawing back’

-gantuj ‘hang’

-kiriman ‘parcel, present’

-kanalan ‘acquaintance’

-aqkatan ‘s.th. raised, e.g. generation, troops of an army’

-pukulan ‘blow, strike’

-kumpulanan ‘collection’

-timbanan ‘balance, weighing machine’

-sumban ‘contribution’

-sindiran ‘mockery, satirical poem’

-surukan ‘hiding place’

-ganturban ‘hanger’

-anak -- ‘gallows bird’
6.5.2 MIN

MIN -an(1) on the basis of verbs co-occurs with ba-, and has the same functions as SM bar- an(1), e.g.

(38) *Ba-a kalian ba-cali?-an juo?*
    why you (plural) ba- -an(1) + look only
    Why are you all looking (like that)?, Why do you keep looking?, or Why are you looking at each other?

(39) *Uran\s tu lah lamo baintayan.*
    person that already long (time) spy
    Those people have been spying on each other for a long time.

(40) *Baru ti\raran musu\w h ka dataj, lah baintayan*
    just audible enemy will come, already ba- -an(1) + spy
    yo ka dalam sama? nan-tun.
    3PL into bushes those
    As soon as they heard the enemy coming, they went spying in the bushes.

-an(1) + a noun refers to ‘a place where (noun) is found in great store’, or ‘a place which is entirely occupied by (noun)’, (with reduplication) to ‘a diversity of (noun)’, or to ‘something resembling (noun)’, e.g.

*utherford ‘squirrel’
urh ‘human being’
baru ‘flower’
duri ‘thorn’

-an(2) is suffixed to VSIs, VDIs, and VTRs. The resulting forms have the following meanings:

With VSIs they refer to ‘something that has the quality of (VSI)’. They have the same meaning as corresponding forms in SM, although van der Toorn (1899:4-5) describes them as ‘the place where (base) is found’, e.g.

*manih ‘sweet’
dalam ‘deep’
*manisan ‘s.th. sweet, sweetmeat, sweetness’
darah dalaman ‘coagulated blood under the skin, blood blister’

With VDIs they refer to the place where the action is performed, e.g.

*tingia ‘perch (of birds)”
lumpe? ‘jump’
basanda ‘lean’
*tungi\ran ‘place where birds perch’
lumpe?an ‘place where one jumps’
sandaran ‘place to lean, support’

With VTRs they refer to the result, goal, or instrument of the action, or to the place where the action is performed, e.g.

*tambah ‘add’
saso ‘drink (impolite)’
runi? ‘talk, discuss’
kuku? ‘rasp (v)’
tambahan ‘addition, appendix’
saso\ran ‘drinking place for animals’
rundi?an ‘conversation, matter discussed’
kuku?ran ‘rasp (n)’
6.5.3 **BH**

BH -an(1) suffixed to verbs has the same functions as SM bar- -an(1): with VDIs it denotes plurality of subject or diffuse action, and with VTRs\(^{195}\) (in combination with ba-) plurality of the subject or reciprocity. Transitive suffixes (-i and -akan) are elided, e.g.

<table>
<thead>
<tr>
<th>Verb</th>
<th>-an(1) Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>datan' come'</td>
<td>dataan 'come (of many people)'</td>
</tr>
<tr>
<td>bukah 'run'</td>
<td>bukah'an 'run (of many people); run in all directions'</td>
</tr>
<tr>
<td>badiam 'be quiet'</td>
<td>badiam'an 'all be quiet'</td>
</tr>
<tr>
<td>sariki 'be angry at (O)'</td>
<td>basarikan 'get angry with each other, all get angry'</td>
</tr>
<tr>
<td>jul 'sell'</td>
<td>bajar 'sell to each other'</td>
</tr>
<tr>
<td>iñjam 'borrow'</td>
<td>baiñjam'an 'borrow from each other'</td>
</tr>
<tr>
<td>babulik 'go home'</td>
<td>babulikan 'all go home' (Asfandi); 'come back to each other'</td>
</tr>
<tr>
<td>buliki 'come to, visit (O)'</td>
<td>other (of a divorced couple)' (Abdul Jebar)</td>
</tr>
<tr>
<td>baradiu 'have a radio'</td>
<td>baradiuan 'all having a radio'</td>
</tr>
</tbody>
</table>

Sometimes there is no difference in meaning between forms with -an(1) and those without (although they are listed separately in Asfandi, see p.52 and p.56). This is the case with some forms with a noun as their primary base, e.g.

<table>
<thead>
<tr>
<th>Noun</th>
<th>-an(1) Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>baju 'shirt'</td>
<td>babaju, babajuan 'wear a shirt'</td>
</tr>
<tr>
<td>darah 'blood'</td>
<td>badarah, badarahan 'bleed'</td>
</tr>
</tbody>
</table>

There are also -an(1) forms that have sig- cliticised. These forms have an intensive meaning, and are usually preceded by kada 'not', e.g.

<table>
<thead>
<tr>
<th>Verb</th>
<th>-an(1) Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>datan' come'</td>
<td>kada sigdataan 'just not coming'</td>
</tr>
<tr>
<td>gurin 'sleep'</td>
<td>kada siggurin'an 'not being able to sleep'</td>
</tr>
<tr>
<td>baduit 'have money'</td>
<td>kada sigduitan 'be without a penny'</td>
</tr>
<tr>
<td>badarahan 'bleed'</td>
<td>kada sigdarahan 'not bleeding at all'</td>
</tr>
<tr>
<td>haban 'red'</td>
<td>singhabaran 'very red'</td>
</tr>
<tr>
<td>parak 'close by'</td>
<td>sinparakan 'very close'</td>
</tr>
</tbody>
</table>

Suffixed to a noun, -an(1) forms a noun denoting 'something resembling (noun)', 'a collectivity of (noun)' or 'an area where a collectivity of (noun) is found', e.g.

<table>
<thead>
<tr>
<th>Noun</th>
<th>-an(1) Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>hutan 'forest'</td>
<td>hutanan 'forested area, jungle'</td>
</tr>
<tr>
<td>gunun 'mountain'</td>
<td>gununan 'mountainous area; s.th. resembling a mountain'</td>
</tr>
<tr>
<td>kampuñ 'village'</td>
<td>kampunan 'area where people live'</td>
</tr>
<tr>
<td>kayu 'wood, tree'</td>
<td>kayuan 1. 'tree'</td>
</tr>
<tr>
<td></td>
<td>2. 'many kinds of wood'</td>
</tr>
</tbody>
</table>

-an(2) is suffixed to VTRs and to some VSl's denoting a colour: with a VTR,\(^{196}\) -an(2) forms a noun referring to the place where the act is performed, or to the goal or result of the act, e.g.

<table>
<thead>
<tr>
<th>Verb</th>
<th>-an(2) Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ulah 'do'</td>
<td>ulahan 'product'</td>
</tr>
<tr>
<td>lipat 'fold (v)'</td>
<td>lipatan 'fold (n)'</td>
</tr>
</tbody>
</table>

---

\(^{195}\)In Asfandi -an(1) is described as a suffix occurring with VDIs and denoting plurality of actor, but from the examples as presented here (some of which are taken from Abdul Jebar) it appears that -an(1) has a wider application.

\(^{196}\)Asfandi does not specify whether -an(2) is suffixed only to VTRs or also to VDIs.
tabuk 'dig'

Tabukan 1. 's.th. that is dug up'
2. 'pit, canal'

antas 'take a short cut'

Antasan 'short cut; canal to short cut, meanders'

Asfandi gives three examples of -an(2) on the basis of a VSI denoting a colour; the resulting forms are nouns referring to entities which somehow agree in colour with (VSI), e.g.

kuniñ 'yellow'
kuniñana 'brass'
haban 'red'
habanan 'menstruation'
hiran 'black'
hiranan 'k.o. black monkey'

6.5.4 SWY

From Aliana et al. it appears that -an(1) in combination with bo- is equivalent to SM bar- -an(1). But bo- -an(1) also occurs on the basis of VSIs, and then means 'up to, until becoming (VSI)', e.g.

rusa? 'broken'

borsa?an 'until broken'

xamas 'broken'

baxamasan 'until broken'

With nouns -an(1) forms nouns or VSIs. The resulting nouns refer to a variety of (noun); the first syllable of these nouns is reduplicated (with antepenultimate neutralisation of the reduplicated syllable), e.g.197

bua(h) 'a fruit'

boba(h)an '(all kinds of) fruit'

bupo 'flower'

bobupoan '(all kinds of) flowers'

buni 'noise'

bobunian '(all kinds) of noises'

The resulting VSIs have the meaning 'to be affected by (noun)', e.g.

dabu 'dust'

dabuan 'dusty'

dxui 'thorn'

duxian 'thorny'

daxa(h) 'blood'

daxa(h)an [daxa:n] 'bloodstained'

-an(2) is suffixed to VSIs and VTRs: suffixed to VSIs it forms nouns with the notion of 'having the quality of (VSI)', e.g.

kuniñ 'yellow'

kuniñana 'brass'

manis 'sweet'

manisan 'sweets, sweetness' (Aliana et al.)

cabip 'torn'

cabīpa?an 'second-hand textile' (Aliana et al.)

Suffixed to VTRs it forms nouns referring to the result or goal of an act, or to the place where the act is performed; when -an(2) is suffixed, the transitive suffixes -i and -ka, -kan are deleted, e.g.

kixim 'send (O)'

kiximan 'present'

bali 'buy (O)'

balian 'purchase (n)'

pulip(h) 'obtain (O)'

pulip(h)an 'profit, revenue, acquisition'

puput 'blow away (O)'

puputan 'bellows; forge, smithy'

pipis 'grind (O) between two stones'

pipisan 'stone on which is ground'

197 No examples with an initial phoneme other than b were found in Aliana et al.
6.5.5 IBN

IBN no longer has a living suffix -an. However, a fossilised -/an still occurs, which appears to have been suffixed to verbs and nouns. The examples I was able to find all correspond to SM -an(2) etc. except for gaam, gom/an, and saraj, saram/an. Compare:

<table>
<thead>
<tr>
<th>Verb (O)</th>
<th>IBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>gantuŋka 'hang'</td>
<td>gantuŋan 'gibbet, gallows'</td>
</tr>
<tr>
<td>kukux 'scratch'</td>
<td>kukuxan 'grater'</td>
</tr>
</tbody>
</table>

- an(1) occurs on the basis of VSIs, VDIs, VTRs and nouns. On the basis of VSIs it denotes a comparative degree, e.g.

<table>
<thead>
<tr>
<th>Stem</th>
<th>IBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>lomah 'weak'</td>
<td>loma/an 'mishap, trouble'</td>
</tr>
<tr>
<td>rabah 'fall'</td>
<td>roba/an 'felled timber not yet fired'</td>
</tr>
<tr>
<td>œŋkan/i? 'feed'</td>
<td>œŋkan/an 'rice for eating'</td>
</tr>
<tr>
<td>main 'do'</td>
<td>pin/an 'a pet' (cf. 3.1.3.2 N.B.)</td>
</tr>
<tr>
<td>gaam, in noli?</td>
<td>gom/an, in noli? 'back teeth'</td>
</tr>
<tr>
<td>kurup 'enclose'</td>
<td>korup/an 'cage for chickens, coop'</td>
</tr>
<tr>
<td>saraj 'container'</td>
<td>saram/an 'sheath, nest'</td>
</tr>
<tr>
<td>tugal 'dibble'</td>
<td>tagal/an 'farmland after burning and before sowing'</td>
</tr>
</tbody>
</table>

6.5.6 JKT

In JKT the suffix -an has many applications. It is possible to distinguish a verbal -an(1), with a far wider application than -an(1) in the other isolects, and a noun-forming -an(2), which is comparable with -an(2) in the other isolects.

- an(1) occurs on the basis of VSIs, VDIs, VTRs and nouns. On the basis of VSIs it denotes a comparative degree, e.g.

<table>
<thead>
<tr>
<th>Stem</th>
<th>IBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>gade 'big'</td>
<td>gaden 'bigger'</td>
</tr>
<tr>
<td>pintar 'smart'</td>
<td>pintaran 'smarter'</td>
</tr>
<tr>
<td>polit 'stingy'</td>
<td>politan 'stingier'</td>
</tr>
</tbody>
</table>

According to lkranagara (1980:137, 141) this -an(1)-construction (which has no parallel in the other isolects) is probably due to influence from Balinese or SUN. It is also often used in imperative sentences, e.g. rajinan dɔŋl! 'work harder!' (rajin 'industrious', dɔŋ '(emphatic particle)').

- an(1) with VSIs also denotes a reciprocal act, e.g.

<table>
<thead>
<tr>
<th>Stem</th>
<th>IBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>baęk 'good'</td>
<td>baęk'an 'be good to each other'</td>
</tr>
<tr>
<td>mare 'angry'</td>
<td>marēan 'be angry with each other'</td>
</tr>
</tbody>
</table>

Suffixed to VDIs it adds an aspect of stativity and durativity, e.g.

<table>
<thead>
<tr>
<th>Stem</th>
<th>IBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>rabé 'lie down'</td>
<td>rabaan 'lying down (continuously)'</td>
</tr>
<tr>
<td>tidur 'sleep'</td>
<td>tiduran 'sleeping continuously, lying around'</td>
</tr>
<tr>
<td>cəmburu 'be jealous'</td>
<td>cəmburuan 'having a jealous character'</td>
</tr>
</tbody>
</table>
On the basis of VDIs which can have a complement introduced by the preposition amè, it adds an element of reciprocity to the meaning (Muhadjir calls these VDIs semi-transitives, cf. 6), e.g.

\[ \text{doman (amè)} 'like, love' \quad \text{doman\textsubscript{an} (amè)} 'be in love with each other' \]

\[ \text{konal (amè)} 'be acquainted with, know' \quad \text{konal\textsubscript{an} (amè)} 'get to know each other' \]

Suffixed to VTRs it adds an aspect of stativity and continuity, e.g.

\[ \text{jual 'sell (O)'} \quad \text{jual\textsubscript{an} 'sell (O) (habitually)'} \]

\[ \text{p\textsubscript{a}gan 'hold (O)'} \quad \text{p\textsubscript{a}gan\textsubscript{an} 'hold on to (O)'} \]

Suffixed to nouns it forms VDIs with the meaning ‘produce, grow (noun)’, or, if the noun denotes a physical condition, ‘suffer from (noun)’, e.g.

\[ \text{jeng\textsubscript{ot} 'beard'} \quad \text{jeng\textsubscript{otan} 'have or grow a beard'} \]

\[ \text{j\textsubscript{u}s 'snot'} \quad \text{j\textsubscript{u}s\textsubscript{an} 'have a runny nose'} \]

\[ \text{p\textsubscript{a}no\textsubscript{198} 'skin disease'} \quad \text{p\textsubscript{a}no\textsubscript{an} 'suffer from a skin disease'} \]

\[ \text{k\textsubscript{or}\textsubscript{en} 'sores'} \quad \text{k\textsubscript{or}\textsubscript{engan} 'have sores'} \]

It also forms adverbs with the meaning ‘more to the (noun)’ if the noun refers to a place or direction, e.g.

\[ \text{d\textsubscript{a}pan 'front'} \quad \text{d\textsubscript{a}panan 'more to the front'} \]

\[ \text{p\textsubscript{i}g\textsubscript{ir} 'edge'} \quad \text{p\textsubscript{i}g\textsubscript{iran} 'more to the edge'} \]

Finally, on the basis of nouns it forms nouns with the notion of collectivity, e.g.

\[ \text{sayur 'vegetable'} \quad \text{sayuran 'various vegetables'} \]

\[ \text{p\textsubscript{\text{a}r}\textsubscript{ab\textsubscript{\text{o}}} 'tool'} \quad \text{p\textsubscript{\text{a}r}\textsubscript{ab\textsubscript{\text{o}}jan} 'equipment'} \]

N.B. In a few cases -an\(\textsubscript{1}\) occurs in combination with b\(\textsubscript{o\text{r}}\). It does so with VDIs, VSIs, and precategorials, and it yields reciprocal verbs with a stative meaning. b\(\textsubscript{o\text{r}}\)- -an\(\textsubscript{1}\) forms are often in free variation with b\(\textsubscript{o\text{r}}\)-forms and -an\(\textsubscript{1}\) forms, e.g.

\[ \text{ba\textsubscript{jub\textsubscript{a}l} 'crowd (v)'} \quad \text{ba\textsubscript{jub\textsubscript{a}l}\textsubscript{an} 'id.' (Muhadjir 1981:49-50)} \]

\[ \text{bargaul 'associate (v)'} \quad \text{bargaul\textsubscript{an} 'id.' (Muhadjir 1981:49-50)} \]

\[ \text{k\textsubscript{a}nal 'know, be acquainted with'} \quad \text{bokonalan,\ konalan 'get to know each other'} \]

\[ \text{dak\textsubscript{at} 'close'} \quad \text{b\textsubscript{\text{o\text{d\textsubscript{k\textsubscript{a}t\textsubscript{a}}}}} 'be near (to each other)'} \]

\[ \text{la\textsubscript{\text{\text{\text{x}}} 'other'} \quad \text{b\textsubscript{\text{\text{o\text{a\text{\text{\text{x}}}}}} 'be different (from each other)'} \]

(One of Muhadjir’s examples is actually derived from a noun: (b\(\text{\text{o\text{p\text{a\text{c\text{a\text{n}}}}}} , 'be in love with each other' is derived from pacar 'girl- or boy-friend'.)')

-\text{an}\(\textsubscript{2}\) is suffixed to VSIs, VDIs, and VTRs. Suffixed to VSIs it yields nouns referring to objects which somehow have the quality of (VSI). These nouns are few in number and have a rather lexicalised meaning, e.g.

\[ \text{manis 'sweet'} \quad \text{manisan 'sweetened fruit candy'} \]

\[ \text{asin 'sour, salty'} \quad \text{asinan 'k.o. food made of vegetables with peanut sauce'} \]

\[ ^{198}\text{Abdul Chaer gives p\textsubscript{a}no\textsubscript{2} whereas Muhadjir gives p\textsubscript{a}no, without glottal stop (Muhadjir does not distinguish œ and o cf. 2.6.1).} \]
Suffixed to VDIs it yields abstract nouns or nouns referring to the place where the act is performed. When the resulting noun is an abstract noun, it is always followed by a nominal or a nominal phrase in the agentive role (Muhadžir 1981:60), e.g.

\[
\begin{align*}
tarèak & \quad \text{‘yell’} & tarèakan (lu) & \quad \text{‘(your) yelling’} \\
bañöl & \quad \text{‘make jokes’} & bañöl(-ñê) & \quad \text{‘(her/his) joking’} \\
pèñköl & \quad \text{‘turn’} & pèñköl(-ñê) & \quad \text{‘intersection’}
\end{align*}
\]

On the basis of VTRs it forms abstract nouns or nouns referring to the goal, result, place, or instrument of the action. Here too, if the resulting form is an abstract noun, it is followed by a nominal or a nominal phrase, e.g.

\[
\begin{align*}
dòrðñ & \quad \text{‘push (O)’} & dòrðñan (lu) & \quad \text{‘(your) pushing’} \\
jait & \quad \text{‘sew (O)’} & jaitan(-ñê) & \quad \text{‘(his/her) (way of) sewing’} \\
tanøm & \quad \text{‘plant (O)’} & tanøman & \quad \text{‘plant (n)’} \\
mìnùm & \quad \text{‘drink (O)’} & mìnùman & \quad \text{‘drink (n)’} \\
pøgàñ & \quad \text{‘hold (O)’} & pøgànan & \quad \text{‘handle (n)’} \\
gòsòk & \quad \text{‘rub, iron (O)’} & gòsòkan & \quad \text{‘(clothes-)iron’}
\end{align*}
\]

6.5.7 DISCUSSION OF SM -an(1), SM -an(2), AND THEIR CORRESPONDENCES

SM, MIN, BH, and SWY, have a suffix -an(1) denoting plurality of subject, or diffuse action when suffixed to a VDI, reciprocity when suffixed to a VTR, and collectivity and/or similarity when suffixed to a noun. In MIN, -an(1) may also denote plurality of subject or diffuse action when suffixed to a VTR; moreover, in MIN and BH it may convey the combined meaning of location and collectivity when suffixed to a noun. When affixed to verbs, -an(1) often (and in SM and MIN always) co-occurs with bør-, ba-, bør-. This SM, MIN, BH, SWY suffix -an(1) is only to a certain extent comparable to JKT -an(1): the latter can also denote reciprocity on the basis of VSIs and VDIs (‘semi-transitives’, see 6), and it denotes stativity and durativity with (other) VDIs and with VTRs. Finally, it may form a comparative degree when suffixed to VSIs. JKT -an(1) in some ways agrees more with -an in neighbouring non-Malayic languages, as has already been pointed out by Ikranagara for -an(1) forming a comparative degree on the basis of VSIs. But in other ways too JKT -an(1) seems to agree more with non-Malayic languages: JV and SUN have VDIs consisting of a noun + -an with the meaning ‘wear, have (noun)’ (cf. JKT jèngòtan, etc.), and JV has VDIs consisting of a noun + -an meaning ‘suffer from (noun)’ (cf. JKT igusàn, pandöan, kòrèñan, although one would expect an ending -øn instead of -an(1)). Like JKT, JV also has VDIs denoting stativity or durativity (cf. JKT rabaan, tidurán, cùmburuan, and jualan, pøgànan) or reciprocity (cf. JKT dømanan, kanalan) which are formed on the basis of a VDI or VTR + -an. As yet it is uncertain whether JV, SUN and/or Balinese had the most influence on the JKT morphology in this respect, but it seems very likely that the differences between SM, MIN, BH, SWY -an(1) on the one hand, and JKT -an(1) on the other, are due to influence from non-Malayic languages on JKT. In IBN a living suffix -an no longer occurs; as far as IBN has fossilised forms with /-an, these are evidence for an ancestral form of SM -an(2) etc., but do not yield decisive evidence for an ancestral form of SM -an(1) (except maybe for IBN saràn ‘container’ vs saràn/ţan ‘sheath, nest’, and şali gaám vs şali gam/ţan ‘back teeth’).

-an(2) occurs in all isolects; in IBN it only occurs in fossilised forms. Suffixed to VSIs it agrees in all isolects in denoting ‘something that has the quality of (VSI)’. Suffixed to VTRs it agrees in all isolects in denoting goal or result of an action, or place where the action takes
place; in SM it may also denote the instrument, and in JKT it may denote the instrument, or form an abstract noun.

On the basis of what is commonly found in SM, MIN, BH, and SWY, it is possible to reconstruct for -an(1) a PM ancestor which denoted plurality of subject, or diffuse action on the basis of VDIs, reciprocity when suffixed to VTRs, and collectivity and/or similarity when suffixed to nouns. One could argue that this ancestor did not have the meaning of reciprocity, because in the above four isolects -an(1) usually co-occurs with bar- etc. when forming reciprocal forms, and reciprocity is then already indicated by the prefix. (If this line of reasoning holds, then -an(1) probably has the same function whether suffixed to VDIs or VTRs, since plurality of subject is a consequence of reciprocity.) On the basis of -an(2) in all isolects, a PM ancestral form can be reconstructed which was suffixed to VSIIs and VTRs. Suffixed to VSIIs it denoted something with the quality of (VSI); suffixed to VTRs it referred to the goal, result or location of the act. Such an ancestral form, however, would correspond to two PMP suffixes: *an (referring to the place where an act is performed), and *en (referring to the object of an act), which would have yielded JKT +an and +an. But JKT only has one nominalising suffix -an. There are four possible solutions for this apparent inconsistency: (1) JKT does not distinguish PMP *a and *e in final syllables, (2) PM merged PMP *an and *en to *an, (3) JKT has merged PM *an and *en to -an, or (4) JKT -an(2) is innovative. As far as solution (1) is concerned, it was seen in Chapter 3 that the JKT distinction of a and o in final syllables must be inherited. Solutions (2) and (3) are also unlikely, because if the distinction between JKT final-syllable a and o is inherited (and therefore reflects PM *a and *e), there is no a priori reason why PMP *an and *en would have merged in PM, or in JKT. Solution (4) yields more perspectives, because it fits in with the fact that JKT -an(1) also seems to be borrowed. Furthermore, JKT has only two suffixes (-in and -an(1,2)) of which one, -in, is not inherited in any case and has replaced an earlier *-i (cf. 6.1.1). It is quite possible that at an earlier stage JKT lost all PM suffixes, and that JKT -an(1,2) is also innovative. But then again, if JKT -an(2) (forming nouns denoting goal or result on the basis of VTRs) is a loan morpheme, this time its source must be a Malayic isolec on account of its vowel (and not Balinese, as with -in, or JV, SUN, or Balinese, as with other forms of -an).

As it is, it is not possible to make definite statements about the history of JKT -an(1,2) and its reflex (or reflexes) in PM. I will maintain the (artificial) distinction I made between -an(1) and -an(2) for PM, and reconstruct separate proto-forms on the basis of them.

6.5.8 RECONSTRUCTION OF PM *-an(1), *-an(2), AND *-An

On the basis of -an(1) in the isolects I reconstruct a PM ancestral form *an(1), which denoted diffuse action or plurality with VDIs, reciprocity with VTRs, and collectivity, place where a collectivity is found, and/or similarity with nouns. It is possible that the notion of reciprocity on the basis of VTRs was already included in *(mb)Ar-, with which it must have co-occurred. In that case, this suffix probably only added the notion of diffuse action or plurality of subject (as with VDIs). On the basis of -an(2) in the isolects I reconstruct two different PM ancestral forms. As all isolects agree in having nouns on the basis of a VTR + -an referring to the goal or result of a VTR, and as JKT as a rule distinguishes between PMP *a and *e in final syllables, and JKT -an(1,2) may be innovative, I reconstruct for this agreement *-An. This was a noun-forming suffix occurring on the basis of VTRs and denoting the goal or result of an act. (The vowel of this suffix is
*A since it is assumed to be a continuation of synonymous PMP -*en). On the basis of the other functions of -an(2) I reconstruct PM *-an(2), a suffix which formed nouns denoting the quality of (VSI) on the basis of VSIs, and denoting the place where (VTR) was performed on the basis of VTRs.

6.6 SM ka- -an(1), SM ka- -an(2), AND THEIR CORRESPONDENCES

6.6.1 SM ka- -an(1) AND ITS CORRESPONDENCES

6.6.1.1 SM

SM ka- -an(1) is a circumfix denoting an unintentional action or state, or a potential action. As such it is equivalent to tar- + a VDI or VTR, but it occurs less frequently, and it is also circumfixed to nouns and VSIs; in the latter case it has the meaning ‘unintentionally being affected by (noun) or by the quality of (VSI)’. It occurs most frequently on the basis of dongar ‘hear’ and lihat ‘see’ viz. kadongaran ‘be heard, audible; sound (v)’ and kalihatan ‘be seen, visible; seem, appear’. (These forms are largely synonymous with tordongar and tortlihat, although the latter do not share the notions ‘sound (v)’ and ‘seem, appear’ respectively). Other examples:

<table>
<thead>
<tr>
<th>SM</th>
<th>ka- -an(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>datan</td>
<td>1. ‘accessible’</td>
</tr>
<tr>
<td></td>
<td>2. ‘be visited, attacked’</td>
</tr>
<tr>
<td>hilan ‘disappear; lost’</td>
<td>kahilangan ‘lose’</td>
</tr>
<tr>
<td>tahu ‘know’</td>
<td>kahabuhan ‘be found out, discovered’</td>
</tr>
<tr>
<td>habis ‘be finished’</td>
<td>khamabulan ‘run out of’</td>
</tr>
<tr>
<td>masuk ‘go in’</td>
<td>kamasukan 1. ‘penetrable’</td>
</tr>
<tr>
<td></td>
<td>2. ‘be entered, broken into’</td>
</tr>
<tr>
<td>hujan ‘rain’</td>
<td>kahujanangan ‘caught by the rain’</td>
</tr>
<tr>
<td>raja ‘king’</td>
<td>karaajan ‘made, proclaimed a king’</td>
</tr>
<tr>
<td>tulan ‘bone’</td>
<td>katulanangan ‘swallow a bone’</td>
</tr>
<tr>
<td>sakit ‘ill, sick; suffering’</td>
<td>kasakitan ‘in pain; agonising; tormented, worried’</td>
</tr>
<tr>
<td>lupa ‘forget’</td>
<td>kalampan ‘forgotten’</td>
</tr>
</tbody>
</table>

N.B. On the basis of (often doubled) VSI- and noun-bases ka- -an(1) sometimes also forms VSIs denoting ‘behaving like or resembling (VSI/noun)’, e.g.

<table>
<thead>
<tr>
<th>nego</th>
<th>perk</th>
<th>(perak)an</th>
</tr>
</thead>
<tbody>
<tr>
<td>perak ‘silver’</td>
<td>kaperak(perak)an ‘silverish’</td>
<td></td>
</tr>
<tr>
<td>ibu ‘mother’</td>
<td>kabin(ibu)an ‘motherly’</td>
<td></td>
</tr>
<tr>
<td>kunin ‘yellow’</td>
<td>kakuinin ‘yellowish’</td>
<td></td>
</tr>
</tbody>
</table>

6.6.1.2 MIN

MIN ka- -an(1) is equivalent to SM ka- -an(1), but differs from it in one respect: circumfixed to VSIs it also denotes a comparative degree, e.g.

(41) Lai sa-heto kapanjanjan tuŋke? ko pado tuŋke? tu. more a-cubit ka- -an + long stick this than stick that
This stick is a cubit longer than that one.
(42) Kabare’an jawi naŋko sapulu2h kati.
ka- -an + heavy cow this ten kati
This cow is ten katis heavier (1 kati is 617 grams).

6.6.1.3 BH

BH ka- -an(1) occurs with VSIs and nouns. On the basis of VSIs it denotes an excessive degree, e.g.

<table>
<thead>
<tr>
<th>BH</th>
<th>VSls</th>
<th>SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>lamak ‘fat’</td>
<td>kalamakan ‘too fat’</td>
<td></td>
</tr>
<tr>
<td>handap ‘short’</td>
<td>kahandapan ‘too short’</td>
<td></td>
</tr>
<tr>
<td>haban ‘red’</td>
<td>kahaban ‘too red’</td>
<td></td>
</tr>
</tbody>
</table>

Circumfixed to nouns (of which the first syllable is reduplicated) it conveys the meaning ‘to suffer from the effects of (noun)’, e.g.

<table>
<thead>
<tr>
<th>BH</th>
<th>VSls</th>
<th>SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>samut ‘ant’</td>
<td>kasasamutan ‘have pins-and-needles’</td>
<td></td>
</tr>
<tr>
<td>sitan ‘devil’</td>
<td>kasisitanan ‘be pestered by, suffer from, a devil’</td>
<td></td>
</tr>
</tbody>
</table>

6.6.1.4 SWY

SWY kə- -an(1) is equivalent to SM kə- -an(1).

6.6.1.5 IBN

No affix corresponding to SM kə- -an(1) occurs.

6.6.1.6 JKT

Apart from the prefix ta- (treated in 6.2.6), JKT has two other affixes expressing unintentionality or feasibility, viz. kə- and kə- -an(1). The latter is usually in free variation with the former, but is the obligatory variant if the base is a VTR consisting of a VDI + the transitivising suffix -in, e.g.

<table>
<thead>
<tr>
<th>JKT</th>
<th>VSls</th>
<th>SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>campur ‘mix’</td>
<td>kəcampur, kəcampuran ‘be mixed, involved’</td>
<td></td>
</tr>
<tr>
<td>doŋor ‘hear’</td>
<td>kədoŋor ‘be heard, audible’</td>
<td></td>
</tr>
<tr>
<td>dudukin ‘sit upon’</td>
<td>kədudukin ‘sat upon (unintentionally)’</td>
<td></td>
</tr>
<tr>
<td>jatōin ‘fall on’</td>
<td>kəjatōin ‘be struck by s.th. falling’</td>
<td></td>
</tr>
<tr>
<td>alaŋin ‘prevent’</td>
<td>kalaŋin ‘prevented’</td>
<td></td>
</tr>
</tbody>
</table>

(cf. also 6.2.6 for kə- and kə- -an(1) forms in free variation with ta- forms.)

6.6.2 SM kə- -an(2) AND ITS CORRESPONDENCES

6.6.2.1 SM

SM kə- -an(2) is circumfixed to VSIs, VDI s and nouns. With VSIs it forms nouns referring to the quality of (VSI) as such, e.g.
merah 'red'  
rajin 'industrious'  
basar 'big, large'

With VDIs it usually forms abstract nouns, but it may also form nouns referring to the place where the act is performed, e.g.

datang 'come'  
pargi 'go'  
mati 'die; dead'

tidur 'sleep'  
naik 'climb; increase'

On the basis of nouns it forms nouns referring to the place where (noun) is found, to a collectivity of (noun), or to the quality as such of (noun). k- -an(2) derivations referring to the quality as such of (noun) are as a rule neologisms; other k- -an(2) derivations on the basis of nouns must be older, e.g.

hian 'divinity'  
raja 'king'  
pulaw 'island'  
binatan 'animal'  
buaya 1. 'crocodile'  
2. 'lecher, scoundrel'

N.B. In a few cases k- -an(2) seems also to occur with a VTR, e.g. putuskan 'decide (O)' and kaputusan 'decision'; simpulkan 'conclude (O)' and kasimpulan 'conclusion'. Kaputusan, however, is possibly derived from its primary base putus, which is a VSI meaning 'broken off, ended; disposed of, decided'. Kasimpulan and simpulkan must be neologisms, as they do not occur in pre-war dictionaries.

6.6.2.2 MIN

MIN k- -an(2) is equivalent to SM k- -an(2) but it does not occur with nouns.199 (In Van der Toorn's material the impression is given that MIN k- -an(2) is not as frequent as SM k- -an(2). Also, Van der Toorn treats k- -an(1) and k- -an(2) as a single category, which makes their description somewhat confusing.)

6.6.2.3 BH

BH k- -an(2) with VSIs forms nouns referring to the quality of (VSI), and with VDIs forms nouns referring to the place of an action, e.g.

---

199In Moussay's description k- -an(2) does occur with nouns, which may be due to SM influence in the MIN he described (Moussay 1981:118).
6.6.2.4 SWY

SWY ka- -an(2) forms occur on the basis of VSIs, and denote the quality expressed by (VSI). Only two possible ka- -an(2) forms on the basis of non-VSIs are found (in Helfrich) viz. kayaIjan 'dwelling of gods' and koidupan '(means of) living, livelihood' (cf. idup 'live'). But kayaIjan does not have a corresponding base; kayaIjan and koidupan are probably loans from SM.

6.6.2.5 IBN

IBN does not have a corresponding affix.

6.6.2.6 JKT

JKT ka- -an(2) on the basis of VSIs forms nouns referring to the quality of (VSI), e.g.

<table>
<thead>
<tr>
<th>VDI</th>
<th>k};-an(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pand6 'clever'</td>
<td>k};pand6an 'cleverness'</td>
</tr>
<tr>
<td>kuat 'strong'</td>
<td>k};kuatan 'strength'</td>
</tr>
<tr>
<td>untuI 'lucky'</td>
<td>k};untuIan 'profit'</td>
</tr>
</tbody>
</table>

In Muhadjir there is one example of a ka- -an(2) form with a VTR base:

<table>
<thead>
<tr>
<th>VDI</th>
<th>k};-an(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bakar 'burn (O)'</td>
<td>k};bakaran 'fire'</td>
</tr>
</tbody>
</table>

Not all VSIs take this circumfix: some (e.g. gdead 'big', tingi 'high', and colour terms) form equivalent nouns through suffixation of -fie. Most ka- -an(2) forms in Muhadjir (including the ones presented here) also occur in SM, and JKT ka- -an(2) is probably not inherited.

6.6.2.7 DISCUSSION OF SM ka- -an(1), SM ka- -an(2), AND THEIR CORRESPONDENCES

In SM, MIN, and SWY, ka- -an(1), ka- -an(1) denote unintentionality or feasibility of an action when they are circumfixed to a VDI or a VTR. When circumfixed to a noun or a VSI, they mean 'unintentionally affected by (noun) or by the quality of (VSI)'. In BH, ka- -an(1) circumfixed to nouns means 'to suffer from the effects of (noun)'. In JKT, ka- -an(1) alternates with ka- and to- except when affixed to a VTR consisting of a VDI + -in, in which case only ka- -an(1) applies. In IBN no correspondence of ka- -an(1) etc. occurs. Apart from these meanings BH ka- -an(1) also forms excessives on the basis of VSIs, while MIN ka- -an(1) with VSIs (apart from denoting unintentionality) can also form a comparative

---

200According to Muhadjir (1981:65-66, section 6.10.2-3) this circumfix also forms abstract nouns from VDIs ('intransitive verbs') and 'semi-transitive' verbs (see 6), but the four examples which he gives (viz. jahat, jail, polit, and ribut) are all labelled as adjectives in his wordlist.

201Although there are exceptions, which are all loanwords, mostly from JV, viz. kadamanan 'love (n)', kodoyanan 'liking', kamacatan 'blockage, hold-up', (on the basis of daman 'love (v)', ddayan 'like (v)', macat 'jammed', all from JV), and kaloma'an 'greed' (on the basis of 'greedy', from AR tammid 'greedy, desirous').
degree. The valency of \( k\omega- -an(1) \) etc. differs from one isolect to the other, and the only feature common to all isolects (except IBN) is that they have \( k\omega- -an(1) \) etc. affixed to nouns. But \( k\omega- -an(1) \) etc. also occurs with verbs in SM, MIN, SWY, and JKT, and I will reconstruct a PM ancestor which occurred on the basis of verbs and nouns, and which denoted unimportantness and feasibility. As to its function of forming comparatives with VSIs in MIN and of forming excessives with VSIs in BH, this is an even smaller base for a PM reconstruction than in the case of \( tar- \) etc. with VSls (cf. 6.2.2). Since \( k\omega- -an(1) \) and \( tar- \) etc. are to a great extent similar in function and meaning, a difference in distribution would be expected between them. However, I have not been able to discover any such difference that would hold for all isolects.

All isolects except IBN have a correspondence of SM \( k\omega- -an(2) \) occurring with VSls and forming nouns referring to the quality denoted by (VSI). JKT \( k\omega- -an(2) \), however, may not be inherited. SM \( k\omega- -an(2) \) and MIN \( ka- -an(2) \) also occur with VDIls (forming abstract nouns, and nouns referring to the place where the action is performed). In BH, \( ka- -an(2) \) is found with VDIls, but here the resulting noun exclusively refers to the place where the action is performed. It is therefore possible to reconstruct a PM ancestral form of SM \( k\omega- -an(2) \) which on the basis of VSls formed nouns referring to the quality of (VSI) as such, and which on the basis of VDIls formed nouns at least referring to the place where (VDI) takes place.

In none of the isolects do \( k\omega- -an(1) \) and \( k\omega- -an(2) \) etc. seem to have a connection, in spite of their identical shape. They will therefore yield separate reconstructions in PM. Comparative research involving non-Malayic languages may show a historical relationship between \( k\omega- -an(1) \) and \( k\omega- -an(2) \) etc. With the material at hand, however, it seems likely that such a possible relationship was already historical at the PM level.

6.6.2.8 RECONSTRUCTION OF PM *\( kA- -an(1) \) AND *\( kA- -an(2) \)

On the basis of SM, SWY, JKT \( k\omega- -an(1) \), MIN, BH \( ka- -an(1) \), I reconstruct *\( kA- -an(1) \), which contributed the notion of unintentionality or feasibility to the VTR or VDI to which it was affixed. *\( kA- -an(1) \) was also circumfixed to nouns and VSls, to which it added the notion of ‘unintentionally being affected by (noun) or by the quality of (VSI)’. It is not certain whether *\( kA- -an(1) \) was also a degree marker when affixed to VSls.

On the basis of SM, SWY, (and JKT?) \( k\omega- -an(2) \), MIN and BH \( ka- -an(2) \), I reconstruct PM *\( kA- -an(2) \), a circumfix forming nouns with VSls and VDIls. When circumfixed to VSls, *\( kA- -an(2) \) referred to the quality as such of (VSI); when circumfixed to VDIls, it formed nouns referring to the place where (VDI) is performed.

6.7 THE NOUN-FORMING AFFIXES \( p\omegaN-\), \( p\omegar-\), \( p\omegaN- -an\), \( p\omegar- -an\), AND THEIR CORRESPONDENCES

These four noun-forming affixes are defined by their meaning, and by their formal agreement and valency with certain classes of verbs. Generally speaking, \( p\omegaN-\) and \( p\omegar-\) and their correspondences both refer to the actor of a performance, to the instrument with which the action is performed, or, with VSls, to someone or something having the quality of (VSI) as a characteristic. It is more difficult to describe the meanings which \( p\omegaN- -an\) and \( p\omegar- -an\) usually have in the isolects. Their meanings are broader than those of \( p\omegaN-\) and \( p\omegar-\).
(including the action or event itself (verbal abstract), or the actor, instrument, or place, depending on the particular isolect). As far as the valency and the formal agreement of these affixes are concerned, SM \( \text{p}a\text{N} \)- and \( \text{p}a\text{N} \)-\text{-an} and their correspondences form nouns on the basis of VTRs that do not have the VTR marker \( \text{p}a\text{r} \)- etc. prefixed, and VDIs that have \( \text{ma}N(1) \)- etc. prefixed, whereas \( \text{p}a\text{r} \)- and \( \text{p}a\text{r} \)-\text{-an} form nouns with VDIs that have \( \text{bo}r \)- etc. prefixed, and with VTRs that have the VTR marker \( \text{p}a\text{r} \)- etc. prefixed (cf. 6.1.2).

6.7.1 SM \( \text{p}a\text{N} \)- AND ITS CORRESPONDENCES

6.7.1.1 SM

SM \( \text{p}a\text{N} \)- occurs with verbs, and forms nouns usually referring to the actor of a performance, to the instrument with which the action is performed or, with VSIs, to someone or something having the quality of (VSI) as a characteristic. Some \( \text{p}a\text{N} \)- forms have a complement. If the underlying verb has a derivative affix, this is elided; \( \text{p}a\text{N} \)- forms (especially with VSIs) are often used attributively and can even function as VSIs if the base is also a VSI, e.g.

\[
\begin{align*}
\text{kirim(kan)} & \text{'send (O)'} & \text{panirim} & \text{‘sender’} \\
\text{bantu} & \text{‘help, assist (O)’} & \text{pambantu} & \text{‘assistant’} \\
\text{layani} & \text{‘serve (O)’} & \text{pelayan} & \text{‘waiter’} \\
\text{kumpulkan} & \text{‘collect (O)’} & \text{p\text{\textbullet}umpul} & \text{‘collector’} \\
\text{manari} & \text{‘dance’} & \text{p\text{\textbullet}ari} & \text{‘dancer’} \\
\text{tidur} & \text{‘sleep’} & \text{panidur} & \text{‘sleepyhead’} \\
\text{tidurkan} & \text{‘put (O) to bed, send (O) to sleep’} & \text{obat} & \text{panidur} & \text{‘narcotic, sleeping-pill’} \\
\text{obat} & \text{‘medicine’} & \text{p\text{\textbullet}mijit} & \text{\textbullet}kaki & \text{‘masseur of the feet’} \\
\text{p\text{\textbullet}j	ext{\textbullet}it} & \text{‘massage (O)’} & \text{p\text{\textbullet}n\text{\textbullet}ungu} & \text{\textbullet}p\text{\textbullet}ntu} & \text{‘porter, doorkeeper’} \\
\text{kaki} & \text{‘foot’} & \text{\textbullet}tali} & \text{\textbullet}p\text{\textbullet}nikat} & \text{‘rope for binding’} \\
\text{tunggu} & \text{‘guard (O)’} & \text{\textbullet}tali} & \text{\‘run’} & \text{\‘runaway slave; slave with the tendency to run away’} \\
\text{p\text{\textbullet}ntu} & \text{‘door’} & \text{\textbullet}sahaya} & \text{\‘slave’} & \text{\‘runaway slave; slave with the tendency to run away’} \\
\text{ikat} & \text{‘bind (O)’} & \text{\‘afraid’} & \text{\‘coward; timid, cowardly’} & \text{\‘coward; timid, cowardly’} \\
\text{tali} & \text{‘rope’} & \text{\‘drunk’} & \text{\‘drunkard; (someone) with a tendency to drink, addicted to alcohol’} & \text{\‘drunkard; (someone) with a tendency to drink, addicted to alcohol’} \\
\text{\textbullet}tali} & \text{‘run’} & \text{\‘shy’} & \text{\‘chaste, modest (person)’} & \text{\‘chaste, modest (person)’} \\
\text{\textbullet}sahaya} & \text{\‘slave’} & \text{\‘convey, lead (O)’} & \text{\‘introduction (in books, etc.)’} & \text{\‘introduction (in books, etc.)’} \\
\text{dapat} & \begin{itemize} \\
\item \text{\‘be able to (VDI)’} \\
\item \text{\‘find, acquire (VTR)’} \\
\end{itemize} & \text{\‘opinion’} & \text{\‘gift’ (Classical Malay)} & \text{\‘gift’ (Classical Malay)\
\end{align*}
\]

There are, however, many \( \text{p}a\text{N} \)- forms that do not fit into this description. Sometimes they are nouns that do not (or, at any rate, do not clearly) denote actor, instrument or (with VSIs) a characteristic; in modern usage these nouns are exceptional, but in Classical Malay they occur more often, e.g.
ajār ‘teach’  
poṇajār ‘instruction’ (Classical Malay and Malaysian)  
sakīt ‘ill’  
poṇakīt ‘illness’

(Indonesian SM has poṃbriaṇ for ‘gift’ and (poṇ)ajaraṇ for ‘instruction’.)

In Classical Malay poN- forms also occur in prepositional phrases, e.g.

(43) air akan poṃbasuh kaki suami-nā  
water for poN-+ wash foot husband-her
water for washing her husband’s feet

(44) Uaṇ itu saya banañakan akan poṃbayar hutaṇ saya.  
money that I spend for poN-+ pay debt I
That money I will use to pay my debts.

They denote a measure of time or space, or a point in time, when s- is prefixed (many of
these forms belong to Classical Malay), e.g.

poḷuk ‘embrace’  
sapōmōḷuk ‘fathom, the diameter of an embrace’
ludah ‘saliva’
māḷudah ‘spit’  
sapōludah ‘as far as one can spit (as a primitive measure of distance)’
tīṅgalkan ‘leave (O  
sapanīṅgal ayah ‘at (the time of) father’s departure’

6.7.1.2 MIN

MIN poN- is prefixed to VTRs, VDIs, and VSIs. The resulting forms are nominals
which may occur independently with the meaning ‘the habit of doing (base)’, or ‘something
to perform (base) with’; but they are often used attributively or predicatively with a noun as
referent. They mean ‘having the habit, inclination or disposition to do (base), being able to
do (base) or be used for doing (base)’, and are sometimes followed by a complement, e.g.

kali ‘dig’  
panali ‘spade’
toko? ‘hit, knock’  
panoko? ‘k.o. small hammer’
lambe? ‘slow’  
palambe? ‘the habit of being slow’

(45) Pandudu? di pintu sañjo ari inda? elo?,
poN-+ sit at door dusk day not good
The habit of sitting in the doorway at dusk is bad.

(46) uraṇ  
pamaliṇṇ  
human.being poN-+ steal
s.o. with the tendency to steal

(47) uraṇ  
palari  
human.being poN-+ run (away)
a runaway

(48) kabaw  
palalo?  
buffalo poN-+ sleep
sleepyhead (said of a buffalo) (cf. uraṇ palalo? ‘sleepyhead (of a person)’)
(49) padati pambao baban
cart paN- + carry load
cart used to carry a load (cf. uraŋ pambao baban 's.o. who carries a load')

(50) aiŋ pambasuŋ muko
water paN- + wash face
water to wash one's face

(51) aŋjiŋ pamburu ruso
dog paN- + hunt deer
da dog for hunting deer

(52) Pariŋ ko pananaŋ katan.
pot this paN- + cook glutinous rice
This pot is used for cooking glutinous rice.

(53) Caŋkiŋ tu paminum ube?.
cup that paN- + drink medicine
That cup is for taking medicine.

(54) Awaŋ-no palarikan anaŋ-biŋi uraŋ.
3SG paN- + run.away with child-wife human.being
He likes to run off with other people's wives.

(55) Tambaŋ-kan lah ube? ko di kaŋjiŋ aŋ:
particle medicine this on forehead you
pandiŋini kapalo aŋ sakete?.
paN-+ cool. off head you little. bit
Put this remedy on your forehead: it will cool off your head a bit.

6.7.1.3 BH

BH paN- forms nouns with VSIs, VDIs, and VTRs. With VSIs paN- forms nouns referring to 's.o. having the characteristic or inclination of being (VSI)', e.g.

kulir 'lazy' paqulir 'lazybones'
gamat 'late' pangamat 's.o. always late'
mauk 'drunk' pamauk 'a boozier, s.o. with a disposition to drinking'

With VDIs and VTRs they refer to the actor performing (VDI/VTR) or to the instrument used for performing (VDI/VTR), e.g.

tulis 'write (O)' panulis 'writer, clerk'
sadap 'tap a tree' pañadap 'tapper; tapping knife'
kayuh 'row (v)' papayuh 'oar, paddle'
tambal 'patch (v)' panambal 'glue, s.th. used for patching'

6.7.1.4 SWY

SWY paN- forms nouns with VDIs, VTRs, precategorials, and VSIs. Some of these nouns refer to the actor or to the instrument used to perform the act, but due to the scarcity of examples it is not possible to make an adequate semantic description of them, e.g.
tidu? ‘sleep’
-\textit{goriwit} ‘(eat or steal sweets)’
kikir ‘file (v)’
poti?(h) ‘white’
iriri ‘accompany, escort (O)’
\textit{pandu}? ‘sleepyhead’
\textit{pandu}? ‘a sweet-toothed sneak thief’
\textit{pandikir} ‘file (n)’ (Aliana et al.)
\textit{pomoni}?(h) ‘s.th. used to whiten’ (Aliana et al.)
\textit{pandiriri} ‘escort, company’ (Aliana et al.)

But cf. also:
\textit{a?ja?} ‘give (O)’
sakit ‘ill, sick’
\textit{pandunju}? ‘gift’
\textit{pandakit} ‘illness’

6.7.1.5 IBN

IBN \textit{pa} -forms nouns with VSIs, VDIs, and VTRs. It is the only noun-forming affix in
IBN, and the meanings of the resulting nouns are quite diverse: they can refer to actor,
object, place, or instrument, and they can also be abstract nouns, e.g.

\textit{insap} ‘smoke’
\textit{saup} ‘help (v)’
\textit{indi}? ‘tread on’
\textit{balut} ‘wrap, bandage (O)’
makay ‘eat’
tamu ‘know’
manah ‘beautiful’
arap ‘hope, trust, believe’
pandi? ‘bathe’
\textit{pandinsap} ‘smoker’
\textit{panaup} ‘helper’
\textit{pandindi}? ‘mat used in treading sago’
\textit{pamalut} ‘anything used for wrapping or
‘bandaging’
\textit{pamakay} ‘food’
\textit{panamu} ‘knowledge’
\textit{pamanah} ‘beauty’
\textit{pajarap} ‘faith, religion’
\textit{pamandi}? 1. ‘bathing place’
\textit{2. ‘bather’}
\textit{3. ‘(the act of) bathing’}
\textit{pamakul} ‘enclosure; game net’

6.7.1.6 JKT

JKT \textit{pa}N- is unproductive (the functions of actor of a performance or bearer of a
characteristic are usually circumscribed by \textit{tuka} + verb, e.g. \textit{coget} ‘steal, pickpocket’, and
\textit{tukaj coget} ‘pickpocket (n)’; \textit{jait} ‘sew’, and \textit{tukaj jait} ‘tailor’); it occurs on the basis of
VSIs, VDIs, (precategori als) and VTRs. When occurring with VDIs and VSIs, the
derivational affixes of underlying forms are elided. With VSIs \textit{pa}N- yields nouns referring
to a person having (VSI) as a characteristic, e.g.

diam quiet \quad \textit{pandiam} quiet person
jahat bad, wicked \quad \textit{pa?jahat} crook, wicked person

With VDIs, it yields nouns referring to the actor of the performance, e.g.

\textit{ma?na?}i sing \quad \textit{pa?na?}i singer
\textit{maen} play \quad \textit{pa?na?}en player

With VTRs (and some precategori als), it yields nouns referring to actor or object of the
act, to the instrument used to perform the act, or it yields an abstract noun; the suffix \textit{-in} of
some underlying VTRs is lost, e.g.
At first sight there is much difference between the function and valency of \( p\alpha N \)- and its correspondences in the six isolects. In SM \( p\alpha N \)- occurs with VSIs, VDIs, and VTRs; forms with VSIs denote a characteristic. Forms on the basis of VDIs or VTRs usually denote an actor or instrument, but (particularly in Classical Malay) they also denote a goal or result, or they form an abstract noun. Furthermore \( p\alpha N \)- forms are used attributively, and, on the basis of VSIs, they can function as VSIs. In Classical Malay they may also occur following a preposition. Finally, when they have \( s\alpha \)- prefixed they denote a measure of time or space, or a point in time (these forms are also more usual in Classical Malay).

In MIN, \( p\alpha N \)- occurs with VSIs, VDIs, and VTRs. The resulting nouns are used attributively and predicatively with the meaning 'having the quality or habit of (base)', and they may have a complement; they are also used as a noun denoting a habit, an instrument, or an actor.

In BH \( p\alpha N \)- forms nouns referring to the actor or instrument, or it forms abstract nouns, when prefixed to VDIs and VTRs, and it refers to someone having a characteristic or inclination when prefixed to VSIs.

Only a few examples are available of SWY \( p\alpha N \)- forms: they refer to actor or instrument, but in one case they form an abstract noun on the basis of a VSI (\( p\alpha n\alpha k\alpha t \)), and in another case a noun referring to the object of an act on the basis of a VTR (\( p\alpha n\alpha n\alpha j\alpha \)).

In IBN \( p\alpha N \)- is the only nominaliser, and its meaning is quite general (including actor, object, instrument, place, and abstract noun).

JKT \( p\alpha N \)- refers to the actor if the base is a VDI, it refers to the actor, object, instrument, or it forms an abstract noun, if the base is a VTR, and it refers to a person who has (VSI) as a characteristic if the base is a VSI.

There are a few general remarks that can be made on the above picture. Firstly, \( p\alpha N \)- and its correspondences do not refer to the location where the action or event takes place. An exception to this is IBN \( p\alpha N \)- which, as the only nominalising affix in IBN, has generalised its meaning in a maximal way. Secondly, all isolects agree in forming nouns or VSIs referring to an inclination or characteristic by prefixing \( p\alpha N \)- etc. to a VSI. Thirdly, in all isolects \( p\alpha N \)- etc. in some cases also forms nouns referring to the actor or to the instrument, and abstract nouns; MIN has abstract nouns only with the connotation of the action 'as a habit'; \( p\alpha N \)- forms referring to the object are found in SM, SWY, IBN, and JKT (i.e. the word for 'gift' in SM, SWY, JKT). Fourthly, the syntactical role of SM \( p\alpha N \)- and MIN \( p\alpha N \)- is quite different from the (more restricted) role of their correspondences in other isolects. This fact is very important for the reconstruction of a PM ancestor, because for SM
and MIN we have recurrence to grammars that reflect these isolects in a relatively archaic form (they were written at the end of the nineteenth century, and are partly based on language material found in old manuscripts). The material for them is at any rate more complete than the descriptions available for BH, SWY, and IBN. (JKT is sufficiently well described, but in its grammatical structure it is probably most affected by external influences.) In view of this it is not unwarranted to put extra weight on the SM and MIN evidence.

It is possible to reconstruct for \( p\alpha N \) a PM ancestral form that referred to an inclination or a characteristic when prefixed to a VSI, and that denoted the actor of a performance or the instrument with which an act was performed, when prefixed to a VDI or a VTR; this PM prefix did not refer to the location where the action or event takes place. But from all other regular and sporadic functions which \( p\alpha N \)-etc. has in the isolects, it seems that its PM ancestor had a wider application. The explanation that I propose for the diffuse picture of \( p\alpha N \)-etc. is that its PM ancestor was used attributively and predicatively with a noun as antecedent. (This situation is preserved best in MIN.) Later on the derived forms also occurred without antecedent noun, and were reinterpreted as independent deverbal nouns. Abstract nouns and deverbal nouns referring to object or place were already available in PM (viz. \( p\alpha AN- -an/*pAr- -an, -*An \), and \( -*an(2) \) respectively, cf. 6.7.3-4 and 6.5). This explains why nouns formed with the ancestor of \( p\alpha N \) would more often than not refer to actor or instrument, for which no other formant was available.

6.7.2 SM \( p\alpha r \)- AND ITS CORRESPONDENCES

6.7.2.1 SM

SM \( p\alpha r \)- is prefixed to the base of VDIs with \( b\alpha r \)-, and of VTRs with the VTR marker \( p\alpha r \)-. The resulting forms have the same range of function and meaning as \( p\alpha N \)- forms, and refer to actor or instrument. They may have a complement; if the underlying VTR has a transitivising suffix, this is elided. \( p\alpha r \)-forms are not frequent and sometimes have a more current variant with \( p\alpha N \)- or with \( p\alpha - \) (see below). Moreover, in some morphophonemic environments (as before liquids), \( p\alpha r \)- and \( p\alpha N \)- both have a regular allomorph \( p\alpha - \), so that the distinction is lost, e.g.

- \( borjudi \) ‘play dice’ \quad \( porjudi \) (also \( p\alpha njudi \)) ‘dice-player’
- \( b\alpha rt\alpha n\alpha n \) ‘predict’ \quad \( p\alpha rt\alpha n\alpha n \) (also \( p\alpha n\alpha n\alpha n \)) ‘fortune-teller’
- \( p\alpha rt\alpha n\alpha j\alpha k\alpha k\alpha n \) ‘show’ \quad \( p\alpha rt\alpha n\alpha j\alpha k \) (more often \( p\alpha tu\alpha j\alpha k \)) ‘indication’
- \( b\alpha rt\alpha n\alpha k \) ‘cook rice’ \quad \( s\alpha p\alpha rt\alpha n\alpha k \alpha n\alpha s \) (also \( s\alpha p\alpha n\alpha n\alpha k \alpha n\alpha s \)) ‘(the time needed to cook rice =) somewhat less than half an hour’

As with \( p\alpha rt\alpha n\alpha j\alpha k \) and \( p\alpha tu\alpha n\alpha j\alpha k \), there also occurs a prefix \( p\alpha - \), which, according to some scholars (Gerth van Wijk p.162), would correspond to object-oriented VTRs, e.g. \( p\alpha taruh \) ‘pawn’ vs \( p\alpha nanuh \) ‘s.o. who takes or gives in custody, possessor’ (\( taruh \) ‘keep, have, harbour (O)’). There is not much evidence for a separate meaning of \( p\alpha - \), which is in fact much more common than \( p\alpha r \)- (and has become a productive prefix). It is difficult to determine the difference between \( p\alpha r \)- and \( p\alpha - \), and I consider \( p\alpha - \) as a variant of \( p\alpha r \)-, which presumably originated through interdialectal borrowing. Many Malayic isolects (including the peninsular ones, which had most influence on SM) lost \( +r \) in their cognates of the
prefixes \( \textit{b\text{\-}or, p\text{-}or,} \) and \( \textit{t\text{-}or}. \) Moreover, the fact that both \( \textit{p\text{-}aN-} \) and \( \textit{p\text{-}or} \) have allomorphs \( \textit{p\text{-}} \) (see 2.1.2) may have added to the expansion of \( \textit{p\text{-}} \) at the cost of \( \textit{p\text{-}or} \) (and even \( \textit{p\text{-}aN-} \)), e.g.

- \( \textit{b\text{\-}orjua} \) 'fight, clash (esp. of large animals)'
- \( \textit{p\text{-}orjua} \) 'fighter, struggler'
- \( \textit{bor\text{-}dag\text{\-}n} \) 'trade (v)'
- \( \textit{p\text{-}odag\text{-}n} \) 'trader'
- \( \textit{b\text{-}ortugas} \) 'work, have a task'
- \( \textit{p\text{-}otugas} \) 'functionary'

6.7.2.2 MIN

MIN \( \textit{p\text{-}} \) occurs with the bases of VDIs that have \( \textit{ba-} \) or \( \phi-, \) and with the bases of VTRs that have (the transitivising prefix) \( \textit{p\text{-}} \). It has the same meaning as \( \textit{p\text{-}aN-} + \) VDIs or VTRs. In many cases it is not possible to determine whether a particular form has \( \textit{p\text{-}aN-} \) or \( \textit{p\text{-}} \)-prefixed (e.g. when the base verb has an initial vowel, nasal, or liquid, in which case both prefixes appear as \( \textit{p\text{-}} \)), e.g.

- \( \textit{bacuk\text{\-}\text{\-}w} \) 'shave'
- \( \textit{pak\text{\-}acu\text{\-}w} \) shaving soap
- \( \textit{kasih} \) 'love, like'
- \( \textit{pakasih} \) 'love potion'
- \( \textit{bacaruy?} \) 'use foul talk'
- \( \textit{pacaruy?} \) 'call (O) names, use foul language to (O)'
- \( \textit{pasala\text{\-}n} \) 'give (O) in loan'
- \( \textit{paburu} \) 'go/be hunting'
- \( \textit{pacaruy?} 'a foul-mouthed person'
- \( \textit{pasal\text{\-}n} \) 's.th. which is lent'
- \( \textit{paburu} \) 1. 'hunter'
  2. 's.th. used for, or s.o.devoted to, hunting'

(56) \( \textit{Ura\text{\-}n\text{\-}n\text{\-}tun\text{\-}paburu\text{\-}banay}. \)
human.being which that \( \textit{p\text{-}} + \) hunt true
That man is devoted to hunting. (or That man is a true hunter.)

According to Van der Toom, \( \textit{p\text{-}} \) is not prefixed to underlying object-oriented forms with \( \textit{ba-} \), for example, \( \textit{bajua} \) 'be sold' (as in \( \textit{kudo bajua} \) 'the horse is sold') does not have a corresponding \( \textit{p\text{-}} \)-form (Van der Toom 1899:4). Furthermore he says that \( \textit{p\text{-}} \) also occurs with nouns, but these forms are probably derived from VDIs consisting of \( \textit{ba-} + \) noun rather than directly from the noun, cf. \( \textit{kayu} \) 'wood', \( \textit{bakayu} \) 'look for wood', and \( \textit{pakayu} \) 'wood for construction work'; cf. also:

(57) \( \textit{ur\text{\-}n\text{\-}kudo}. \)
human.being \( \textit{p\text{-}} + \) horse
someone who is often on horseback, someone devoted to horses
(cf. also \( \textit{bakudo} \) 'be on horseback; have a horse')

(58) \( \textit{ula\text{\-}patikuyh}. \)
snake \( \textit{p\text{-}} + \) mouse
a snake looking for mice
(cf. also \( \textit{batikuyh} \) 'with mice, have mice')

Van der Toom points out that there are sometimes variants with \( \textit{p\text{-}aN-} \) and \( \textit{p\text{-}} \), but from his examples it seems that the difference between these variants is that those with \( \textit{p\text{-}aN-} \) have a complement (and hence are probably derived from VTRs, and not from VDIs), e.g.
    pot that paN-+ cook katan (glutinous rice)
    This pot is for cooking glutinous rice.
    (cf. also *pariu? patanak* ‘cooking pot’, Van der Toom 1899:6)

(60)  *anji? pamburu ruso*
    dog pa-+ hunt deer
    a dog for hunting deer
    (cf. *anji? paburu* a ‘hunting dog’, Van der Toom 1899:6)

6.7.2.3 OTHER ISOLECTS

In Asfandi no mention is made of a BH form corresponding to SM *por-* and MIN *pa-*. I was able to find only one example with a prefix corresponding to SM *por-* etc. in the material on SWY isolect versus *parmakau* ‘food supply’ (cf. *makan* ‘eat’); the (apical) *r* in this example points to borrowing. IBN and JKT do not have a corresponding prefix.

6.7.2.4 DISCUSSION OF SM *por-* AND ITS CORRESPONDENCES

SM *por-* occurs with VDIs that have *bor-* prefixed and with VTRs that have (the transitivity marker) *por-* prefixed. It is unproductive, and apparently being replaced by *po-* and *paN-*. Its meaning is equivalent to that of *paN-* with VTRs and VDIs. MIN *pa-* occurs with VDIs that have *ba-* or *ø-* prefixed and with VTRs that have (the transitivity marker) *pa-* prefixed. Its meaning is equivalent to that of *paN-* with VDIs and VTRs.

Other isolects do not have a corresponding prefix: *por-/pa-* is in a paradigmatic relation with *por-/-an/pa-/-an, bor-/ba-*, and (transitive) *por-/pa-* on the one hand, and with *paN-/paN-* on the other, so it is very likely that the other isolects had corresponding forms which were lost. PM must have had an ancestral form which occurred with VDIs which had **(mb)Ar-* prefixed, and with VTRs which had the transitivity marker *pAr-* prefixed; this ancestral form must have had a meaning equivalent to that of the ancestral form of *paN-* etc. occurring with VDIs and VTRs.

6.7.3 SM *pøn-* an AND ITS CORRESPONDENCES

6.7.3.1 SM

SM *pøn-* an occurs on the basis of VDIs that are formed with *maN(2)*- and of VTRs that are not formed with *por-. The resulting forms are usually abstract nouns, but they can also refer to the place where an action is performed, and, with VTRs, to the goal or result of an action. If the underlying VTR has a transitivising suffix (-i or -kan), this is elided, e.g.

*mandarah* ‘bleed heavily’
*pondearah* ‘haemorrhage’
*møngømbara* ‘wander, travel’
*pøngømbaraan* ‘(act or place of) wandering’
*mañabaran* ‘go across’
*pønañbaran* ‘(act or place of) crossing’
*døn’a* ‘hear’
*pøndønara* ‘(sense of) hearing’
*kirim* ‘send’
*pønjiriman* ‘consignment’
*katahu* ‘know’
*pøñøtahuan* ‘knowledge’
*pølañkan* ‘give back, bring or send home’
*pømøløjan* ‘restitution, repatriation’
pandaŋ 'see, look'

bokalkan 'provide, supply (O)'

tawarkan 'bargain'

pomandatjan 'seeing, observation; view, outlook'
pombokalan 'supply, provisioning'
polawaran 'bargaining; offer, bid'

6.7.3.2 MIN

As Van der Toorn does not distinguish in a systematic way between paN -an and pa- -an, it is not always clear what the difference between them is. From his examples it seems that paN -an is circumfixed to VTRs that do not have the transitivising prefix pa-, (and that pa- -an is circumfixed to VTRs formed with pa-, to VDIs, and to nouns, cf. 6.7.4.2).

paN- -an usually forms nouns referring to the place where an action is performed, but it also forms abstract nouns and nouns referring to instrument or goal of an action. In some cases it depends on the context which of the above meanings apply to a particular paN- -an form, e.g.

jamuŋ 'put to dry (in the sun)'
guntiŋ 'cut with scissors'
kikɪŋ 'file (v)'
pandaŋ 'look at'
bari 'give'
jamu 'receive guests'

When prefixed with sa-, paN- -an can denote a measure of distance, for example, badiŋ 'shoot', and sapambadiŋlan (or, by false analogy, sapambadɪran, cf. SM badil) 'the distance of a gunshot'; bae 'throw', and sapambaean 'the distance of a stone's throw'.

6.7.3.3 BH

BH paN- -an occurs with VSIIs, VDIIs, and VTRs. When affixed to a VSI, paN- -an refers to someone with (VSI) as a characteristic (the resulting forms are similar to paN- forms with VSIIs, but they are more intensive), e.g.

kulir 'lazy' (cf. paqulir 'lazybones')
sarik 'angry'

When it is affixed to a VDI or a VTR, it refers to the actor or location of a performance, e.g.

bawa 'carry'
urut 'massage'
sipμ 'branch off'
lipat 'fold (v)'

pambawaan 'carrier, porter'
paŋrutan 'masseur'
paŋimpagan 'bifurcation, branching-off'
palipatan 'fold, folded spot; bend of the knee'

6.7.3.4 SWY

From the very few examples found in Helfrich and Aliana et al., it seems that paŋ -an is equivalent to SM paŋ -an, e.g.

ajax 'teach'
sungut 'arrive'

paŋajaŋan 'instruction'
paŋuŋgutan 'arrival, anchoring'
6.7.3.5 IBN

IBN does not have a corresponding circumfix, \( pəŋ \)- being the only noun-forming affix in this isolec.

6.7.3.6 JKT

JKT \( pəŋ- -an \) is circumfixed to VSIs, VDI s and VTRs. With VSIs it forms nouns meaning 'someone who or something which has (VSI) as a characteristic', e.g.

\textit{malu} 'shy, embarrassed' \hspace{1em} \textit{pəmaluan} 'shy person'
\textit{dəŋki} 'jealous' \hspace{1em} \textit{pədəŋonian} 'jealous person'

It can also form a VSI meaning 'always be (VSI), have a (VSI) character', e.g.

(61) \textit{pəmaboka}n \textit{boñar diə}.
\textit{pəN- -an} + drunken true 3SG
She's a real drunkard.

(62) \textit{dərəŋ} \textit{pəŋikutan}
human being \textit{pəN- -an} + follow
a person who always follows

With VDI s it forms nouns referring to the place where the action is performed, or to the action as a process; it also forms nouns meaning 'someone who or something which often performs (VDI)',\(^{202}\) e.g.

\textit{brənti} 'stop' \hspace{1em} \textit{pəmbrəntiān} (bis) '(bus)stop'
\textit{gəjii} 'recite the Koran' \hspace{1em} \textit{pəŋgəjīan} 'place to recite the Koran'
\textit{maən} 'play, act ' \hspace{1em} \textit{pəmaənən} 'game'
\textit{diri} 'stand' \hspace{1em} \textit{pəndirīan} 'founding; building; place to build'
\textit{bəlajər} 'study' \hspace{1em} \textit{pəlajəran} 'lesson'
\textit{bəðəŋ} 'lie' \hspace{1em} \textit{pəmbəðəŋan} 'liar'

With VTRs \textit{pəN- -an} yields: (1) nouns referring to place or goal of the action, or abstract nouns. If the underlying form has the transitivising suffix \(-in\), this is elided. (Abstract nouns formed with \textit{pəN- -an} forms are not common), e.g.

\textit{bəuŋ} 'throw away' \hspace{1em} \textit{pəmbəuŋan} 'garbage container'
\textit{gərəŋ} 'fry' \hspace{1em} \textit{pəŋgərəŋan} 'frying pan'
\textit{gəbəŋ} [gəbək] 'hit' \hspace{1em} \textit{pəŋgəbəŋan} 'hammer'
\textit{jait} 'see' \hspace{1em} \textit{pəŋjaitan} 's.th. to be sewn; sewing'
\textit{alamīn} 'experience (v)' \hspace{1em} \textit{pəŋalamīn} 'experience (n)'
\textit{bəli} 'buy' \hspace{1em} \textit{pəmbəliən} 'buying'
\textit{liət} 'see' \hspace{1em} \textit{pəŋliətan} 'sight'

(2) VSIs denoting a characteristic or feature; these forms are limited in number, e.g.

\textit{cələŋ} 'steal' \hspace{1em} \textit{pənləŋan} 'thievish, prone to stealing'

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\(^{202}\)On pp. 105 and 108 in Muhadjir \textit{ajī} and \textit{diri} are referred to as procategorials, but on pp.113 and 94 \textit{gəjī} (with a nasal) and \textit{diri} are given as VDI s.
A youth who likes to beg is troublesome.

SM, MIN, and (as far as shown by the only two known examples) SWY, agree in having a circumfix *paN*- -an or *paN*- -an which occurs with VTRs (i.e. primary VTR bases). The resulting form is a noun forming a verbal abstract (particularly in SM) or a noun referring to place (particularly in MIN) or, to a lesser extent, to instrument and object.

BH *paN*- -an forms nouns with VSIs, VDIs, and VTRs. These nouns refer to actor or place when their base is a VDI or VTR, and they refer to someone with (VDI) as a characteristic when their base is a VSI.

IBN does not have a corresponding affix.

JKT *paN*- -an forms nouns or VSIs on the basis of VSIs, VDIs, and VTRs. These nouns refer to actor or place when their base is a VTR, or, sometimes, a VDI; with other VDIs, they form an abstract noun or refer to place or to someone who often performs (VDI), and with VSIs they refer to someone who has (VDI) as a habit.

From the above picture it appears that the PM ancestral form of *paN*- -an and *paN*- -an was a nominalising affix occurring at least with VTRs. The ancestral form may have been a combination of affixes (each with its own functions) but as yet there is no evidence for such an analysis. The resulting nouns were at least abstract nouns and nouns referring to the location where the action takes place. They may also have been nouns referring to the goal or instrument of the action (as such nouns are also found in some of the isoelects). Whether the PM ancestral form had other applications is difficult to tell. BH *paN*- -an forms also refer to actor. They are close in meaning to *paN*- forms, the only difference being that a notion of intensity occurs in the former. Here *paN*- -an is possibly analysable as a combination of *paN*- (cf. 6.7.1.3) and -an(1) (cf. 6.5.3); this may also be assumed for BH *paN*- -an on the basis of VSIs. These BH forms are on the other hand similar to JKT *paN*- -an forms denoting 's.o. who / s.th. which often performs (VDI)'. However, the JKT forms occur with VSIs, whereas the BH forms do not. At this stage it is best to limit ourselves to the reconstruction of a PM ancestral form for *paN*- -an that in the first place formed abstract nouns or referred to the location of an action, and that possibly also formed nouns referring to the object of an action, and to the instrument used to perform an action.

SM *por*- -an occurs with VDIs that have *bor- prefixed, with VTRs that have *por- prefixed, and with nouns. The resulting forms on the basis of verbs are equivalent in meaning with *paN*- -an forms: they are usually abstract nouns, but they can also refer to place, instrument, goal or result. *por- -an forms on the basis of nouns were originally in a paradigmatic relationship with VDIs consisting of *ber- + a noun. The transitivising suffixes of underlying forms are elided. On the basis of nouns, *por- -an denotes a collectivity and/or place, e.g.

*borjañji* 'promise, make an agreement' *porjañjian* 'promise, agreement, testament'
bərhias 'decorate'
bərtana 'ask, enquire'
bərburu 'hunt'

pərkəcil 'make smaller'
pərbaiki 'repair, ameliorate'
pərtuŋjkukan 'show, demonstrate'
gunun 'mountain'
dusun 'village'
induk 'mother, dam'
kubur 'tomb'
sawah 'ricefield'

pərhiasan '(s.th. used for) decoration'
pərtaiiaan 'question'
pərburuan 1. 'hunting';
   2. 'game';
   3. alat pərburuan 'tool for hunting';
      padan pərburuan 'hunting field',
      aŋjij pərburuan 'hunting dog'

pərkəcilan 'minimising, reduction in size'
pərbaikan 'amelioration'
pərtuŋjkukan 'show, demonstration'
pəgununjan (Malaysian SM pərgunuIjan)
   'mountains, mountain range'
pədusunan 'countryside, rural area'
pərindukan 'children of one mother, family'
pəkuburan 'graveyard'
pəsawahan, pərsawahan '(complex of) ricefields'

Just as there exist derivations with pə- (instead of expected pər- or pəN-, see 6.7.2.1), so there are also many derivations with pə- -an without nasalisation or -r- in the first component, as seen in some of the examples above. In the same way, some grammarians (Gerth van Wijk p. 168) consider these forms as derived from object-oriented VTRs: thus the underlying form of pəsuruhan 'messenger, delegate', would thus be disuruh 'be sent, ordered', and not maŋuruh 'send'. I do not find much support for this view. The existence of doublets such as pəgununjan, pərgunuIjan and pəsawahan, pərsawahan suggests that the pə- -an forms were originally dialectal variants of pər- -an forms, and that they are now expanding at the cost of the latter (though to a smaller extent than with pər- and pə- forms, cf. 6.7.2.1). There are a very few verbs without bər- or pər- which have a corresponding deverbal noun on the basis of pər- -an, for example, toloŋ 'help, rescue O (v)', and pərtoloŋan 'help (n)'; minta 'ask for O', and pərmintaan 'request'. Pərtoloŋan is an anomaly: in Classical Malay toloŋ is still a noun, and does not yet occur as a VTR. But no such explanation is available for pərmintaan (Classical Malay has a base pinta 'request' which is now rare, having been largely replaced by minta), nor for, for example, pərtoloŋ 'printing office', pərkawinan 'wedding', or pərtumbuhan 'growth' (cf. cetak 'print O', kawin 'get married', tumuh 'grow').

6.7.4.2 MIN

MIN pə- -an is prefixed to VDIs with ba-, to VTRs with pə-, and to nouns. The resulting forms are similar in meaning to pəN- -an forms: they usually refer to the place where the action is performed, and to a lesser extent to the action itself (forming an abstract noun), to the instrument, or to the goal or result. pə- -an forms on the basis of nouns denote the place
where (noun) is found, or they have a particular lexicalised meaning (as in the case of *pataunan, see below), e.g.

batamu ‘meet, visit each other’

bajalan ‘walk, go’

baara? ‘walk in procession’

bareh ‘(uncooked) rice’

tau ‘year’

Sometimes -r- is found between pa- and a following initial vowel, as above in parara?an: this is due to SM influence, or it may be a sporadic retention from PM (*pAr- > MIN pa-, see 6.7.5).

6.7.4.3 BH

Asfandi does not mention a circumfix pa- -an, but from the derivations in Abdul Jebar it appears that it exists, and that it agrees in meaning with SM par- -an. It occurs on the basis of VDIs and nouns. With nouns it refers to the place where (noun) is found. With a VDI it forms nouns referring to the place where an act is performed, and, in one case, pabukaan, to the act itself, but the examples in Abdul Jebar are too few in number to consider these meanings as the only possible ones, e.g.

buka ‘open(ed)’

batapa ‘live as an ascetic’

kajaJ ‘bamboo plaitwork’

kucur ‘saliva of a betel chewer’

galan ‘bracelet’

In one case -r- occurs between pa- and the following initial vowel, cf. paraduan ‘competition’, from baadu ‘compete (in sports etc.)’. This must be a SM loan (or a retention from PM *r?).

6.7.4.4 SWY

Only two forms corresponding to SM par- -an etc. are found:

bay ‘dam, mother animal’

kayu ‘(piece of) wood’

6.7.4.5 IBN

No corresponding affix occurs.

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203 According to Moussay (1981:120) pa-[noun]-an forms denote a collectivity.

204 Babuka ‘break the fast’ would be expected along with pabukaan, cf. also SM barbuka (puasa) ‘break the fast’.
6.7.4.6 JKT

JKT has a circumfix par- -an forming nouns with VDIs (including 'semi-transitives', see 6) and VTRs. According to Muhadjir, these nouns refer to place, instrument, or they form an abstract noun. It does not occur frequently. Most of the par- -an forms found in Muhadjir also occur in SM, and is is likely that this class of derivations as a whole is borrowed from SM, e.g.

ḅoranak 'give birth'  
paranakan, pranakan 'womb, offspring'
banjul 'gamble'  
parjudian 'place for gambling'
ḅolari 'run'  
polarian 1. 'escape (n)'  
2. 'fugitive'
jalan 'go, walk'  
parjalanan 'journey'

6.7.4.7 DISCUSSION OF SM par- -an AND ITS CORRESPONDENCES

SM par- -an and MIN pa- -an agree in occurring on the basis of VDIs which have ḅor-/ba- prefixed, on the basis of VTRs which have (the VTR marker) par-/pa- prefixed, and on the basis of nouns. They also agree in meaning, forming abstract nouns (particularly in SM) or nouns referring to place (particularly in MIN), goal, result, or instrument.

BH pa- -an occurs with VDIs forming nouns referring to place (and, in one case, forming an abstract noun), and it occurs with nouns forming nouns referring to the place where (noun) is found.

SWY has only two examples of p̣ox- -an: both are based on nouns, and one refers to a place where (noun) is found, and the other to a collectivity of (noun).

IBN has no corresponding affix.

JKT has a restricted number of par- -an forms: these are nouns referring to actor, place or instrument, or they are abstract nouns. The JKT par- -an forms may all be loanwords.

On account of the above material, and the paradigmatic relationship of par- -an etc. with ḅor- etc., (nominal) par- etc., and (transitive verbal) par- etc. on the one hand, and with p̣oN- -an on the other, a PM ancestral form should be reconstructed for par- -an etc. which occurred on the basis of VDIs that had *(mb)Ar- prefixed, VTRs that had *pAr- prefixed (cf. 6.1.2), and nouns. It is quite probable that *pAr-[noun]-an forms were not derived from nouns properly, but rather from *(mb)Ar- forms on the basis of nouns (thus: *pAr-[(mb)Ar-noun]-an + deletion of *(mb)Ar-). On the basis of VDIs and VTRs, this ancestor at least formed abstract nouns and nouns referring to the place where an action or event takes place.

6.7.5 RECONSTRUCTION OF PM *pAN-, *pAr-, *pAN- -an, AND *pAr- -an

PM *pAN- is reconstructed on the basis of SM, SWY, IBN, JKT p̣oN-, MIN, BH paN-. It occurred with VSIs, with VDIs that did not have *(mb)Ar- prefixed, and with VTRs that

2051 question the validity of Muhadjir's single example of a par- -an form referring to the instrument of an action: p̣arinatan 'remembrance'. Compare the following sentence:

Ni gué kasi tändémät buạl pari 'n.  
this I give souvenir for/in order to par- -an + remember  
i give you this for remembrance.
did not have *pAr- prefixed. PM *pAr- is reconstructed on the basis of SM pər-, MIN pa-.
It occurred with VDI s that had *(mb)Ar- prefixed, and with VTRs that had the transitive verbal prefix *pAr- prefixed. *pAN- and *pAr- formed deverbal nouns that were used attributively, predicatively, and in prepositional phrases, and that had a nominal as head or subject. They denoted a purpose or instrument when prefixed to VDI s and VTRs. Moreover, *pAN- denoted an inclination or characteristic when prefixed to VSI s.

PM *pAN- -an is reconstructed on the basis of SM, JKT, pəN- -an, (sporadically) SWY pəN- -an, and MIN, BH pəN- -an. It occurred with underived VTR bases, and with VDI s that had *mAN(2)- prefixed. PM *pAr--an is reconstructed on the basis of SM (and JKT?) pər- -an, MIN, BH pə- -an, and, sporadically, SWY pəx- -an. *pAr- -an occurred with VDI s that had *(mb)Ar- prefixed, and with VTRs that had the VTR marker *pAr- prefixed. *pAN- -an and *pAr- -an formed abstract nouns and nouns referring to the location where an action or event takes place. They may also have formed nouns referring to the goal, result, or instrument, but these roles are not well attested in the isol ects.

6.8 EVIDENCE FROM FOSSILISED AFFIXES

A number of PMP affixes have become fossilised in the Malayic isol ects. The evidence for these affixes is fragmentary and scattered over the individual isol ects, and it is insufficient for the reconstruction of PM living affixes. If a set of cognate affixes occurs in fossilised form in each of the members of a linguistic group, their comparison would only lead up to the reconstruction of a proto-affix if their presence in a substantial list of lexemes in one isolate could be set off against their absence in a corresponding list in another isolate. This is evidently not the case in the Malayic isol ects.

Possible PM reflexes of PMP *ma- (a VSI marker) and PMP *-in- (a marker of object-orientedness) are restricted to a very few cognate sets of which each member moreover agrees in showing the reflex in question, cf. SM ma/buk, ma/kan (3.6.1.1; 4.5), m/erah (3.1.2.5), b/in/ataq (which is unlikely to be inherited), m/an/antu (3.1.3.1) and their correspondences. Under such circumstances it is quite unlikely that the affixes in question were not already fossilised in the proto-language. (A prefixed allomorph of PMP *-in- was probably inherited as PM (*ni-), cf. 6.3.7 last N.B.). PM reflexes of the PMP VDI marker *-um- / *(u)m- are more substantial in number. Nevertheless, the evidence is still too fragmentary to give grounds for the reconstruction of an affix which was still alive at the PM level. It is possible that PM still had a living affix reflecting PMP *-um- / *(u)m-, but it remains uncertain, and it is equally possible that PM had a corresponding affix which was already fossilised, or at least highly unproductive.

The following cognate sets have members some or all of which reflect PMP *-um- / *(u)m-; their members are VDI s except for tali-t/əm/ali etc., tipis etc. and (possibly) turun-t/əm/urun etc. :

All isol ects reflect PMP *-um- / *(u)m-:

*m/asaK ‘cooked, done, ripe’ (5.7 lemma 39) (< PMP *m/asaK ‘done, ripe, cooked’, and *tasaK ‘done, ripe, accomplished’, cf. Toba tasak ‘accomplished’, Old Javanese tasak ‘ripe; accomplished’);

*m/atı ‘die, be dead’ (5.7 lemma 75) (< PMP *matey ‘id.’, which derived from *-um- + *patey, with regular loss of initial labial);

*m/andı? ‘bathe’ (3.5.2) (< PMP *anDuy ‘id.’);
*m/ąntah / *m/atah 'raw, unripe' (3.6.2) (< PMP *m-a(n)taq / *m-e(n)taq); *m/u(at)ah 'vomit (v)' (< PMP *u(n)taq 'id.').

The isolects invariably reflect PMP *-um- / *(u)m-, but some also have a doublet without this affix:

*tu/m/buh 'grow' (< PMP *t-um-ubuq 'id.' ) and *tubuh 'body' (4.6; 5.6.4) (< PMP *tubuq);

*m/i/mi / *impi 'dream (v)' > a.i. mimpi 'dream (v, n)' and SM, JKT impi 'dream, or hope for (v)' (4.3.1; 5.7 lemma 50);

*turun 'go down, descend' > SWY tuxun, o.i. turun (3.4.1.2), and SM turun-t/əm/urun 'continuous descent, whether of rain or of an ancient family', MIN turun-t/um/urun, BH turun-t/əm/urun (with unexplained a), SWY tuxun-t/əm/uxun ' (succeed, go down) through the generations';

*tali 'rope, string' (3.4.2.6) and SM, SWY tali-t/əm/ali, MIN tali-t/um/ali 'cordage of all sorts';

*m/uda? 'young, unripe' > IBN muda? 'id.', SM muda, MIN, SWY mudo 'young, unripe; light (of colour)' and SM uda (as in ma? uda 'mother's younger sister'), MIN udo 'older brother';

*m/a/mpus / *ampus 'wiped out, gone' > SM, BH, JKT m/ampus, MIN m/ampuyh 'dead, wiped out (coarse)' and SM (h)ampus 'id.', MIN ampuyh 'wiped out' (4.3.1); cf. also KD and SD ampus 'go (away)';

*nipis / *mipis 'thin' > SM, SWY tipis, nipis, MIN, IBN nipih, BH nipis, JKT tipis, and MIN mipih, IBN mipis, mipaw, mipih (5.7 lemma 156);

*udi/k 'upstream, upriver area' (5.2) and *m/udi/k 'go upstream, go back against the current' (3.5.2); both etyma are derived from PM *udi ' (part) behind', which is still reflected in SM k/əm/udi/an 'then, subsequently', SM kom/udi 'rudder (of a boat); croup (of a horse)', IBN udi 'after, later, follow after'; cf. also SD d-udi-e 'afterwards'.

The isolects disagree in reflecting the affix:

*m/inum / *inum 'drink' > SM, SWY, JKT m/inum, MIN m/inun, BH k/inum (5.7 lemma 40).

Of the above sets, *m/asak, *m/ati, *m/andi?, *m/ąntah (*matah) and *m/u(at)ah provide no evidence for a living PM VDI marker *um- / *(u)m- : as none of the isolects has a doublet without a reflex of the affix, they may as well already have been lexicalised forms in PM. The same applies to *tu/m/buh: there are related forms without the affix, but these forms reflect PM *tubuh which occurred along with *tu/m/buh. It is quite possible that *tu/m/buh and *tubuh were not felt any more as belonging to the same regular morphological paradigm, a circumstance which may have been stimulated by syncope of *u in *tu/m/buh (cf. 4.6). In SM m/inum, BH k/inum etc., the isolects disagree in showing m/-. Provided that BH k/inum is not due to borrowing or backformation (cf. 5.7 lemma 40), this set represents the strongest evidence for a living PM affix *um- / *(u)m-. The other sets show that there was an affix, but, as already stated above, they do not provide unambiguous evidence for a living affix at the PM stage. PM may already have had the doublets represented in these sets.
CHAPTER 7

THE CHANGES FROM PMP TO PM

In this chapter the various changes are described that occurred in the evolution from PMP into PM. Austronesianists have gained a fair amount of insight into the course of sound changes between PMP and the contemporaneous AN languages. On the lexical level there is enough reconstructed material available to trace the developments from PMP to PM as regards terms for times of the day, directions, numerals, kinship terms, pronouns, and body parts, and to compile a Swadesh 200-item basic wordlist for PMP (as is done by Blust, see Blust forthcoming) which can be contrasted with the equivalent list for PM. The reconstruction of PAN/PMP morphology, however, has been attempted only recently, and has not met the same agreement among scholars as the reconstruction of PAN/PMP phonology and lexicon. Moreover, attempts to reconstruct PAN/PMP morphology have so far been mainly concerned with the verbal system and, more particularly, with the verbal focus system. This focus system, although reasonably well reflected in the languages of Formosa, the Philippines, northern Sulawesi, north-east Borneo and Madagascar, had undergone some radical changes in the western Indonesian languages. I restrict myself here to a comparison between PMP and PM phonology (including word structure) and lexicon.

7.1 PHONEMIC DEVELOPMENTS

The sound changes from PMP to PM are as follows:

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Examples:
PMP *waRi ‘day; sun’ > *hari (3.1.1.1); PMP *baRah ‘live coal’ > *bara? (3.1.1.1); PMP *tinu?un ‘weave’ > *tonun (3.1.1.2); PMP *seger ‘sting’ > *sagat (3.1.1.2); PMP *liqeR ‘neck’ > *lihør (3.1.2.1); PMP *DaReq ‘blood’ > *darah (3.7.3); PMP *quluh ‘head’ > *hulu(?) (3.4.2.5).

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Examples:

PMP *sungay ‘river’ > *sungay (3.2.1); PMP *bąnkay ‘corpse’ > *bąnkay (3.2.1); PMP *gatey ‘liver’ > *hati (3.2.3); PMP *pajey ‘rice plant’ > *padi > SM, MIN, SWY, IBN, JKT padi ‘id.’; PMP *bąby ‘pig’ > *babi > a.i. bąbi (but cf. also IBN bąby, which is probably a loan); PMP *hąpuy ‘fire’ > *api (5.7 (143)); PMP *łařiw ‘run, flee’ > *lari > SM, BH lari, MIN, IBN lari, rari, SWY laxi, lari, JKT lari?, rari ‘id.’; PMP *bąřiw ‘spoiled’ > *bari? > SM, BH bąři/bari ‘fruit-fly’, SWY pądi/bądi/an ‘rice that has been stored away for more than two years’ (bą/baxi ‘owl-moth’: also a cognate?), IBN bąri ‘musty’, bą/bari ‘fruit-flies’; PMP *bařew ‘chase, run (away), hunt’ > *buru (5.7 (69)); PMP *pulaw ‘island’ > *pulaw > JKT pulo, o.i. pulaw ‘id.’; PMP *panaw ‘white spots on the skin’ > *panaw (3.2.2).

N.B. In two cases PM shows an unexpected *-? after *i reflecting a PMP final diphthong: PMP *beRey ‘give’ > *bəri?, and PMP *anDuy ‘bathe’ > *m/andi? (3.5.2).

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Examples:

PMP *qayam ‘domesticated; play’ > *hayam ‘domesticated animal, pet-animal, plaything’ (3.3.1); PMP *bayaD ‘pay (v)’ > *bayar (3.3.1); PMP *sawah ‘python’ > *sawa? (3.3.2); PMP *ńawa ‘soul,’ life’ > *ńawa (3.3.2); PMP *wakaD ‘root, creeper’ > *akar (3.1.1.3); PMP *waDa? ‘(not) exist, there is (not)’ > *ada(?) (3.4.2.5).

N.B. In one case PM reflects *h for PMP initial *w: PMP *waRi ‘sun; day’ > *hari (3.1.1.1). The correspondence PMP *waRi > SM hari induced Dempwolff to posit a sound law PMP *w- > SM h, notwithstanding the fact that in other cases SM has ø for PMP w-. Nothofer reconstructed two PMJ phonemes to account for the SM reflexes for PAN *w-: PMJ *w1- > SM h, and PMJ *w2- > SM ø. PMJ *w1aRi (SM hari) is the only proto-phoneme containing *w1- (except for PMJ *w1aiR ‘water’ > *air, which is probably a misprint for *w2aiR, see Nothofer p.165). Rather than taking SM h- as a regular reflex of PMP *w- (and PMJ *w1(1)-), I assume that PMP *w- became ø in PM (and SM), and that in some isolecets an epenthetic -h- originated between like vowels in the compound *mata *hari. From Blust’s fieldnotes on SAR, it appears that this isolecet has ari ‘day’, but matahari ‘sun’. A comparable development is seen in Dairi, where PMP *w- was lost in ari ‘day’, but was maintained (between like vowels) in matawari ‘sun’ (Adelaar 1981:13).

<table>
<thead>
<tr>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(d)</em></td>
<td>p</td>
</tr>
<tr>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>c</td>
<td>c</td>
</tr>
<tr>
<td>k</td>
<td>k</td>
</tr>
</tbody>
</table>

Examples:

PMP *puluq ‘ten’ > *puluh (3.4.1.1); PMP *gatep ‘roof, roofing thatch’ > *hatap (3.4.1.2); PMP *taliqa ‘ear’ > *Aliga(?) (5.7 lemma 43); PMP *m/atey ‘dead’ > *m/ati (5.7 lemma 75); PMP *hepat ‘four’ > *empat (3.4.1.1); PMP *kutu ‘head louse’ > *kutu (3.4.1.4); PMP *pucuk ‘top, summit’ > *pucuk (3.4.1.3); PMP *cukup ‘enough’ > *cu(t)jkup (3.4.1.3); PMP *aku ‘I’ > *aku (3.4.2.6).
Examples:

PMP *beRey > 'give' > *bərən? (3.5.1; *? unexplained, see (b) above); PMP *tebuh 'sugarcane' > *təbu (3.4.2.6); PMP *kaban 'companion' > PM *kaban 'companion, follower; herd, group' (3.5.1); PMP *DuRi 'thorn' > *duri? (3.5.2); PMP *(iu)juhug 'nose' > *hidug (3.5.2; *h- unexplained); PMP *anDuy > *m/andi? (3.5.2, 7.1b N.B.); PMP *tazem 'sharp' > *təjam (3.5.3); PMP *Zual 'sell' > *jual (3.5.3); PMP *Zaqet 'evil-hearted' > *jaʔəat (3.1.1.5 IC); PMP *pajey 'rice plant' > *padi (see (b) above); PMP *deqeR 'hear' > *daʔar (5.7 lemma 44); PMP *kunij 'curcuma' > *kunit 'curcuma; yellow' (3.6.1.2IC; see 3.4.2.2 for PMP *-j > JKT r in lalar, pusar, and ular, and JKT d/t in anud/anut); PMP *bayad 'pay (v)' > *bayar (3.3.1); PMP *wakaD 'root, creeper' > *akar (3.1.1.3); PMP *tuheD 'knee' > *tuʔəat (3.10); PMP *lebleb 'immerse, inundate' > *luəp 'submerge, disappear, be sound asleep', MIN lalo? 'be asleep', JKT luəp 'sunken, submerged'; PMP *zegzeg 'have firm ground under one's feet' > *jək 'step on; footprint' > SM jək, MIN jaja?, BH jajak, SWY jəj, (JKT jajak 'footprint' must be a loan; *jajak is possibly related to *sajak, cf. 4.3.2).

Examples:

PMP *(i)kami '(1st pers. pl. excl.)' > *kami (3.6.1.1); PMP *mata 'eye' > *mata (3.4.1.2); PMP *tazem 'sharp' > *təjam (3.5.3); PMP *naneq 'pus' > *nanah (3.6.1.2); PMP *ʔənəmuk 'mosquito' > *ʔənamuk (3.6.1.3); PMP *ʔənəm 'weave, plait' > *ʔənəm (3.6.1.3); PMP *ʔaŋa 'open (mouth)' > *ʔaŋa(ʔ) 'agape' (3.6.1.4); PMP *ʔanət 'sky' > *ʔanət (3.6.1.4); PMP *tənem 'plant (v)' > *tənan (3.6.3.1); PMP *bulan 'moon, month' > *bulan (3.6.3.2); PMP *DiŋDiŋ 'wall' > *dindig (3.6.3.3).

Examples:

PMP *limah 'five; hand' > *limaʔ 'five' (3.7.1); PMP *tugela(n1)) 'bone' > *tulən (3.7.1); PMP *Rumaq 'house' > *rumah (3.1.1.3); PMP *beReqat 'important, heavy' > *bərət (3.7.3); PMP *rantaw 'inlet, bay; travel along the coast' > *rantaw 'coastland, inlet, foreign country' (3.2.2); PMP *ukur 'measure (v)' > *ukur 'measure, test, divine' > SM, BH, JKT
ukur SWY ukur ‘measure (v)’, MIN ukoru ‘measure (n)’, IBN ukur ‘luck, chance’, and ụg-ukur ‘test (one’s luck), read (someone’s fortune)’.

PMP : PM
(h) s : s

Examples:
PMP *salaq ‘error’ > *salah ‘at fault, amiss’ (3.1.1.1); PMP *tasik ‘sea’ > *tasik ‘sea’ (3.4.2.3); PMP *a ta?as ‘on top of, above’ > *atas (3.8.2).

PMP : PM
(i) q : h
? : 0, -?

h : { h/-0-, -0-, -?/-0

Examples:
PMP *qihu ‘shark’ > *hiu? (3.9.1); PMP *taqun ‘year’ > *tahun (3.4.1.2); PMP *suqsaq ‘trouble, worries’ (3.9.3) > *susah ‘difficult, troublesome’ (3.9.3); PMP *daqan ‘branch’ > *dahan (5.7 lemma 113); PMP *haliq ‘go, move’ > *alih ‘move, change’ > SM, BH alih, MIN alih, SWY alih(h) ‘id.’, IBN alih ‘turn over’; PMP *hepat ‘four’ > *ampat (3.4.1.1); PMP *tuheD ‘knee’ > *tusat (3.10); PMP *Duha ‘two’ > *dua(?) (3.1.1.4); PMP *lahud ‘towards the sea’ > *laut ‘id.’ (5.7 lemma 124); PMP *tebu ‘sugarcane’ > *tobu (3.4.2.6); PMP *qumah ‘farm(land)’ > *huma(?) (3.2.3, 3.4.2.5); PMP *kitah ‘(1s t pers. pl. incl.)’ (cf. Zorc, 3.4.2) > *kita? (3.2.3, 3.4.2.4); PMP *paRih ‘rayfish’ > *pari? (3.4.2.4); PMP *ha(n)teD ‘deliver, escort’ > *hantah ‘mlt’ > SM hantar, SWY antat, antar, JKT antar; PMP *hiRup ‘sip, slurp’ > *hirup (3.9.1); PMP *enem ‘six’ > *enam (3.1.1.5); PMP *a ta?as ‘on top of, above’ > *atas (3.8.2); PMP *be(n)ti?is ‘calf (leg)’ > *batis ‘part of leg between knee and ankle’ (5.6.5); PMP *Datu? ‘chief’ > *datu? ‘head of a clan’ (3.4.2.4); (cf. also PMP *mata ‘eye’ > *mata (3.4.1.2); PMP *kutu ‘head louse’ > *kutu (3.4.1.4)).

7.2 PHONOTACTIC DEVELOPMENTS

7.2.1 DEVOICING OF PMP FINAL VOICED STOPS IN PM

In PM no final voiced stops or palatals occurred: PMP *-b, *-d, and *-g became devoiced, PMP *-D became *r, and PMP *-j became *t (7.1e).

7.2.2 REDUCTION OF PMP CONSONANT CLUSTERS

(a) Consonant clusters were reduced to the second component, unless the first component was a nasal:

Examples:
PMP *zegzeg > *jajak (7.1e);
PMP *bejbej ‘wind (v)’ > *babat ‘bandage’ > SM babat, BH babat ‘bandage’, MIN babat ‘waist belt’, SWY babat ‘bandage; waist belt’;
PMP *buRbuR ‘gruel’ > *bubur (3.1.2.4);
PMP *sugsaq ‘trouble, worries’ > *susah ‘difficult, troublesome’ (3.9.3);
PMP *tektek ‘cut off’ > *tawak ‘cut up’ (3.4.2.3).

(b) Heterorganic nasals became homorganic to following stops:

Examples:

PMP *DemDem ‘think, be quiet’ > *dandam ‘foster (secret) feelings of revenge; pine, long for’ > SM dandam, SWY dandam, dandam (medial m unexplained), MIN, BH dandam, JKT dandam ‘id.’, IBN dandam ‘feud’;
PMP *DiŋDiŋ ‘wall’ > *dindiŋ (3.6.3.3);
PMP *gemgem ‘hold (in the fist)’ > *gɔŋgɔm ‘hold (in the fist); closed hand, fist’ (cf. 7.3.7, (89));
PMP *paŋuDan ‘pandanus’ > *pandan (4.6);
PMP *(n(iu)pi ‘dream (n)’ > *impi ‘dream (v)’ (3.4.1.1).

7.2.3 SYLLABLE REDUCTION

Syllable reduction occurred in lexemes of more than two syllables (this has been an ongoing process from PMP to the contemporaneous isolects). There are three ways in which syllable reduction took place:

(a) contraction of vowels in lexemes of more than two syllables: see 4.5;
(b) syncope of penultimate vowels in trisyllables: see 4.6;
(c) loss of PMP initial *(h/q/ŋ)ːa: see 3.1.3.3.

7.2.4 MERGERS OF PMP *a AND *e IN PM *a BEFORE *-h

Examples:

PMP *salaq ‘error’ > *salah ‘at fault, amiss’ (3.1.1.1);
PMP *sugsaq > *susah (see 7.2.2a);
PMP *Dareq ‘blood’ > *darah (3.7.3);
PMP *naneq ‘pus’ > *nanah (3.6.1.2);
PMP *taneq ‘land, soil, earth’ > *tanah > JKT tanë, SWY tana(h), o.i. tanah.

7.2.5 CHANGES OF PMP SEQUENCES OF *(h, q, ɵ)ː- +STOP TO PM SEQUENCES OF *(h)ːN- + STOP

PM did not have initial *(h)ː- sequences of + stop (4.2 and fn. 128). Corresponding to PMP initial sequences consisting of (laryngeal +) *e(N)- + stop, PM always has *(h)ːN- + stop.

Examples:

PMP *hepat ‘four’ > *əmpat (3.4.1.1);
PMP *e(N)bun ‘dew’ > *əmbun (3.1.2.4);
PMP *e(N)taq ‘raw’ > *məntah (3.6.2UIC);
PMP *qe(N)tut ‘fart (n)’ > *kəntut > SM, SWY, JKT kəntut, MIN kantuy?, BH kantut ‘id.’, IBN kəntut ‘break wind’.
7.2.6 LOSS OF PMP SEMIVOWELS IN INITIAL POSITION

PMP initial semivowels were lost; intervocally, PMP *y was maintained in the position *(a,u) → (*a,u), and PMP *w was maintained in the position *a → *a. Lexeme finally, PMP semivowels occurred as part of a diphthong (see 7.1b).

7.3 LEXICAL REPLACEMENT

The developments in lexical changes that took place between PMP and PM will be investigated according to the semantic fields to which the respective lexemes belong.

7.3.1 TIMES OF THE DAY

Two PMP terms referring to times of the day have been reconstructed on the basis of sets of widespread cognates: PMP *Rabii ‘evening’ and PMP *beRni ‘night’. PMP *Rabii and *beRni were replaced by PM *ka-la(hø)am hari and *ma-la(hø)am respectively. No sound PMP reconstructions have yet been proposed for ‘morning’ or ‘afternoon’.

7.3.2 DIRECTIONAL TERMS

Blust (1980c:220) proposes four PMP directional terms, two of which are actually names of winds:

PMP *lahud ‘towards the sea’ > *laut ‘id.’ (5.2.2; 5.7 lemma 124);
PMP *habaRat ‘north-west monsoon’ > *barat ‘id.’ (> SM barat ‘west’);
PMP *hatimuR ‘south-east monsoon’ > *timur ‘id.’ (> SM timur ‘east’);
PMP *Daya ‘towards the interior’ > *daya? ‘id.’ (5.2.2).

PM *barat and *timur were still names of monsoon winds: SM barat and timur do not have trustworthy cognates in the other isolects, which makes it impossible to assign the meanings ‘west’ and ‘east’ to their PM proto-form (see 5.2.2).

7.3.3 NUMERALS

In the numeral system PM replaced the original PMP terms for ‘seven’, ‘eight’, and ‘nine’, cf.

PMP *pitu ‘seven’ vs *tujuh ‘id.’;
PMP *walu ‘eight’ vs *dua(?) alap-an ‘id.’;
PMP *siwa ‘nine’ vs *(e)sa? ambil-an, *(e)sa? alap-an ‘id.’.

Otherwise, the PM numerals and numeral system derived regularly from PMP (5.3.1-2).

7.3.4 KINSHIP TERMS

The following kinship terms are characteristic for PM, and are not derived from PMP forms with widespread reflexes:

PMP --- vs *(am)pu - *hian ‘ancestor’;
PMP *e(n)pu ‘reciprocal term for grandparent and grandchild’ vs *nini? ‘grandparent;
7.3.5 PRONOUNS

No lexical replacements took place in the personal pronoun system, although the PMP personal markers (*i and *si) were partly lost, cf.

<table>
<thead>
<tr>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(i)aku</td>
<td>*(i)aku</td>
</tr>
<tr>
<td>*(i)kita</td>
<td>*(i)kita</td>
</tr>
<tr>
<td>*(i)kami</td>
<td>*(i)kami</td>
</tr>
<tr>
<td>*(i)kahu</td>
<td>*(i)kahu</td>
</tr>
<tr>
<td>*(i)kamu</td>
<td>*(i)kamu</td>
</tr>
<tr>
<td>*(si)ia</td>
<td>*(si)ia</td>
</tr>
<tr>
<td>*(si)iDa</td>
<td>*(si)iDa</td>
</tr>
</tbody>
</table>

PM retained the PMP demonstratives:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>*qi-ini</td>
<td>*(i)ni</td>
</tr>
<tr>
<td>*qi-tu</td>
<td>*(i)tu</td>
</tr>
<tr>
<td>*qi-a</td>
<td>*(i)na</td>
</tr>
</tbody>
</table>

The loss of PMP *q in the PM reflexes is unexplained.

The locative pronouns are also basically reflexes of PMP locatives, although they do not agree semantically for the second person, and they do not match in the third person. In some ways the IBN locatives agree better with the PMP locatives than the ones reconstructed for PM (cf. IBN ditu? 'here', dia? 'there', and diin 'yonder'). Compare:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(i)ni</td>
<td>*(i)ni</td>
</tr>
<tr>
<td>*(i)tu</td>
<td>*(i)tu</td>
</tr>
<tr>
<td>*(i)na</td>
<td>*(i)na</td>
</tr>
</tbody>
</table>

Of the five interrogative pronouns reconstructed, two are innovations, and one has no corresponding PMP reconstruction:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>*mana</td>
<td>*mana</td>
</tr>
<tr>
<td>*i-nu</td>
<td>*-mana</td>
</tr>
<tr>
<td>*apa</td>
<td>*apa</td>
</tr>
<tr>
<td>*(i)sai</td>
<td>*(si)-apa</td>
</tr>
</tbody>
</table>

7.3.6 PARTS OF THE BODY

In the field of body parts the following PM reconstructions are not reflexes of PMP terms with the same meaning:

<table>
<thead>
<tr>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>*tian</td>
<td>*pørut</td>
</tr>
<tr>
<td>*t-in-aqi</td>
<td>*pørut</td>
</tr>
<tr>
<td>*pusuq</td>
<td>*jantuj</td>
</tr>
</tbody>
</table>
PMP *bahaq-bahaq ‘mouth’ vs *mulut ‘lips; mouth’
PMP *(l,n,q,q)ipen, *(q)isi ‘tooth’ vs *gigi ‘id.’;
PMP *buh(ue)k ‘head hair’ vs *rambut/*buø(ue)k ‘id.’.

PMP *likud ‘back’ vs *bAlakaŋ ‘id.’;
PMP *lambUI) ‘side, flank’ vs *rusuk ‘id.’.

PMP *qaqay/*waqay ‘foot, leg’ vs *kaki ‘id.’;
PMP *(qa-)lima/*kamay ‘hand’ vs *taøan ‘id.’.

PMP *panij ‘wing’ vs *sayap ‘id.’;
PMP *sugut ‘snout’ vs *jugur ‘id.’.

N.B. (1) A semantic shift occurred in PMP *tian ‘belly’ > *tian ‘uterus’ (2) Dempwolff reconstructed PMP *peliR on the basis of only two correspondences, SM palir and JV pali, both of which he labelled ‘penis’. In fact only pali has this meaning: SM palir means ‘testicle’ and reflects *pølir ‘id.’ (3.1.2.3). (3) For two concepts PM reconstructions have been made, but no well established PMP correspondences are available: *puø(ua)t ‘vagina’, and *dagu? ‘chin’.

7.3.7 200-ITEM BASIC WORDLIST

In the Swadesh 200-item basic wordlist for PM (5.7) the following lexical replacements took place:

<table>
<thead>
<tr>
<th>English</th>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. hand</td>
<td>*(qa-)lima/*kamay</td>
<td>*taøan</td>
</tr>
<tr>
<td>4. leg, foot</td>
<td>*qaqay/*waqay</td>
<td>*kaki</td>
</tr>
<tr>
<td>5. walk, go</td>
<td>*(lakadt)/lakaw/</td>
<td>*(mb)Ar-jalan</td>
</tr>
<tr>
<td></td>
<td>*(panaw/lampa(ŋ?)</td>
<td>*biluk</td>
</tr>
<tr>
<td>8. turn (v)</td>
<td>*biliq/*ileq/*li(u)liu</td>
<td>*(mb)A-rañaq (but cf. 5.7.1 lemma 9)</td>
</tr>
<tr>
<td>9. swim</td>
<td>*laŋuy/*naŋuy</td>
<td></td>
</tr>
<tr>
<td>10. dirty</td>
<td>*cemeD/*daki/*ma-ilag</td>
<td>*kamah/*kumuh</td>
</tr>
<tr>
<td>13. belly</td>
<td>*tian</td>
<td>*porut</td>
</tr>
<tr>
<td>16. guts</td>
<td>*t-in-aqi</td>
<td>*porut</td>
</tr>
<tr>
<td>30. mouth</td>
<td>*bahaq-bahaq</td>
<td>*mulut</td>
</tr>
<tr>
<td>31. tooth</td>
<td>*(l,n,q,q)ipen, *(ŋ)isi</td>
<td>*gigi</td>
</tr>
<tr>
<td>41. bite (v)</td>
<td>*kaRat/*katkat/*ketket/</td>
<td>*gigit</td>
</tr>
<tr>
<td></td>
<td>*kitkit/*kukut/*kete(b,p)</td>
<td>*lihat</td>
</tr>
<tr>
<td>46. see</td>
<td>* kita</td>
<td>*duduk</td>
</tr>
<tr>
<td>51. sit</td>
<td>*untud/*tubaq</td>
<td>*uraŋ (but cf. 5.7.1 lemma 53)</td>
</tr>
<tr>
<td>53. person, human being</td>
<td>*tau/*tau-mataq</td>
<td></td>
</tr>
<tr>
<td>57. husband</td>
<td>*qasawa/*bana</td>
<td>*laki</td>
</tr>
<tr>
<td>58. wife</td>
<td>*qasawa</td>
<td>*bini</td>
</tr>
<tr>
<td>59. mother</td>
<td>*(t-)ina</td>
<td>*(ə)ma(?)/*indu?/*ina</td>
</tr>
</tbody>
</table>
60. father *(t-)ama *apa(?) 69. hunt *ganup *buru
70. shoot (an arrow) *panaq *timbak/*panah 73. steal *takaw *malig
77. scratch (an itch) *kaRaw, *garut *garu/*garut/*garuk 82. dull, blunt *pu(n)dul/*dumpel *tumpul
87. swell (as an abscess) *baReq *bøyakak
89. hold (in the fist) *gemgem *pøgañ 94. throw (as a stone) *tudaq *limpar
97. bird *manuk *buruñ
100. wing *panij *sayap
101. fly (v) *Rebek *Ar(ə)bañ
102. rat *labaw *tikus
104. fat, grease *meñak/*miñak *lømøk
107. (earth)worm *kalati/*(qali-)wati *hul;/caciñ
118. grass *balijj *rumput
121. sand *genay/*benaqi *pasir
130. star *bi(n)tuqen *bintaj
131. cloud (not a rain-) *Rabun *a(bw)an
134. thunder *kuDug/*ru(ŋ)guñ *guntur/*guruñ
140. dry *(ma-)Rañaw *køriñ
145. smoke (of a fire) *anus/*qasu/*ebel *asap
151. green *(ma-)jiselem *hijaw
152. small *Dikiq/*keDi/*keDik *køcil/*køcik
155. long (of objects) *anaduq/*adaduq *panjaj
159. wide *(ma-)lawa *libar
161. shy, ashamed *(ma-)hiaq *malu
164. good *(ma-)pia/*dia *baik
167. night *beRpi *ma-la(h)øam
179. near *azani *døkør/*hampiñ
181. where (interrogative) *i-nu *-mana(l)
190. other *duma *bukan
191. all *amin *habis
195. no, not *diaq/*qazi *-da?

In twelve cases, two reconstructions occur in the PM list, one of which does not reflect the corresponding PMP reconstruction(s) in the Swadesh wordlist:

<table>
<thead>
<tr>
<th>English</th>
<th>PMP</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. hair of the head *buh(ue)k</td>
<td>*rambut/*buø(ua)k</td>
<td></td>
</tr>
<tr>
<td>38. chew (v) *mamaq</td>
<td>*mamah/*kuñah</td>
<td></td>
</tr>
<tr>
<td>39. cook (v) *nasuk/*tanek/*Zakan</td>
<td>*m/asak/*tanøk</td>
<td></td>
</tr>
<tr>
<td>71. stab, pierce *suksuq</td>
<td>*tusuk/*tkim</td>
<td></td>
</tr>
<tr>
<td>72. hit (with a stick) *palu</td>
<td>*pukul/*palu</td>
<td></td>
</tr>
<tr>
<td>78. cut, hack *tektek/*taRaq</td>
<td>*tøøk/*putuñ</td>
<td></td>
</tr>
<tr>
<td>93. pound, beat *tututk/*bayu</td>
<td>*tumbuk/*tutuk</td>
<td></td>
</tr>
<tr>
<td>95. fall (as fruit) *ka-nabuq/*ma-nabuq</td>
<td>*jatuñ/*labuh</td>
<td></td>
</tr>
<tr>
<td>103. meat, flesh *hesi/*isi</td>
<td>*isi/*dagiq</td>
<td></td>
</tr>
<tr>
<td>144. burn (s.th.) *tunu</td>
<td>*bakar/*tunu</td>
<td></td>
</tr>
</tbody>
</table>
204

153. big *(ma-)Raya *(basar/*raya
189. who (interrogative) *(i)sai *(si-apa/*sai

N.B.
(1) The *t- in PM *tusuk is unexplained (due to regressive dissimilation?)
(2) Some PMP basic proto-lexemes have PM reflexes, but these were probably not part of the PM basic vocabulary:

7. PMP *maRi ‘come’ > *mari(?) ‘come; hither’ > SM mari ‘come here!’; SM, JKT ka/mari,
MIN, BH ka/mari ‘hither’ (possibly connected with SM d/ari (d- < *di-?) , SWY g/axi (g-)
unexplained), IBN ari ‘from’;
10. PMP *cemeD ‘dirty’ > *cumar > SM cumar, MIN cama; PMP *daki ‘body dirt’ > *daki?
(3.4.2.4);
11. PMP *abuk ‘dust’ > *abuk > SM, IBN abuk, SWY abu²;
44. PMP *diI)a ‘hear’ > *diI)a > IBN diI)a;
88. PMP *peReqes ‘squeeze’ > *pəras > JKT pəras;
89. PMP *gemgem ‘hold (in the fist)’ > *găngam ‘hold (in the fist); closed hand, fist’ > SM
găngam, MIN gangam, JKT gangam, ‘(grasp, grip, hold in) the closed hand or fist’, MIN
găngam, SWY gangam, ‘the fist, closed hand’, IBN gangam 1. ‘the width of the fist’ 2. ‘a
handful’;
112. PMP *buRuk ‘rotten’ > *buruk ‘stinking, rotten’ (5.7 lemma 112);
148. PMP *burak ‘white’ (Blust 1970:119) > *burak > IBN burak;
168. PMP *qalejaw ‘day’ > *andaw ‘day, daylight’ (5.1.2);
(3) Some PMP basic proto-lexemes have reflexes that underwent a semantic shift:
14. PMP *tian ‘belly’ > *tian ‘uterus’ (7.3.6);
21. PMP *DemDem ‘think, be quiet’ > *dandam ‘foster secret feelings(of revenge, etc.)’
(7.2.2b);
54. PMP *(ma-)Ruanay ‘man, male’ > *MA(r)(w)anay ‘brother (woman speaking)’ (5.4.5);
55. PMP *b-in-ahi ‘woman’ > *bini ‘wife’ (5.7 lemma 55);
70. PMP *panaq ‘shoot’ > *panah ‘bow’ (5.7 lemma 70); JKT panè, o.i. panah;
87. PMP *baReq ‘swell (an abscess)’ > *barah ‘abscess’ > SM, MIN barah, SWY baxa(h);
97. PMP *manuk ‘bird’ > *manuk ‘domestic fowl’ > BH, IBN manuk;
104. PMP *miñak ‘fat, grease’ > *miñak 1. ‘oil’ 2. ‘fat’;
123. PMP *aluR ‘flow’ > *alur ‘hollow or current (?) in a river’ > SM alur, MIN alu², SWY
alur/an ‘groove, channel, hollow’, BH alur ‘long line’, IBN alur ‘current in a river’;
194. PMP *mana ‘how’ > *manana(?) ‘which’ (5.5.4, 5.5.6).
(4) Loss of morpheme boundary and other formal changes occurred in the following PM
lexemes:
2. PMP *kiwa ‘left’ > *kiba? (with unexplained -*b-);
35. PMP *(m-)utaq ‘vomit’ > *mu(n)tah (5.7 lemma 35);
36. PMP *luZaq ‘spit’ > *ludah (with *d for expected *j, 5.7 lemma 36);
37. PMP *ka?en ‘eat’ > *ma/kan ((3.6.1.1);
50. PMP *(mi-)hepi, *nipi, *nupi ‘dream (v)’ > *impi (3.4.1.1);
76. PMP *quDip ‘live’ > *hidup (4.4 and 5.7 lemma 76);
137. PMP *hiup ‘blow’ > *t/iup (5.7 lemma 137).
CHAPTER 8

CONCLUSIONS

8.1 RESULTS

In the previous chapters I have attempted a reconstruction of PM. I was able to point out
that some of the isolects still show retentions that were lost in SM. Among other things,
JKT final-syllable schwa was shown to be a retention from PMP, and a corresponding
schwa was reconstructed for PM. A further consequence of the fact that JKT schwa is a
retention (rather than a loan phoneme) is that if lexemes in Malayic isolects have a
corresponding form with a final syllable schwa in Javanese, this form may have been
borrowed from JKT into Javanese. There are at any rate no grounds for automatically
assuming that the Javanese correspondence must be inherited on account of its final-syllable
schwa. It may turn out to be an original Malayic lexeme that came into Javanese through
JKT, or through another Malayic isolect which retained schwa in an earlier stage. This may
eventually throw new light on the mutual influence that Malayic isolects and Javanese
exercised on one another. It was also demonstrated that, although there is a r/x distinction in
SWY, this does not reflect the alleged PMP *r/*R distinction, and that SWY r is an
innovation.

The study of PM word structure has yielded some insights which I hope will prove to be
useful as a test for inheritedness of lexical items. For instance, there is a strong tendency for
articulation-type harmony of homorganic consonants at the beginning of syllables in
(disyllabic) lexemes. Furthermore, it is very likely that PM lexemes with final *-im or *-ip
sequences did not occur. This would explain the metathesis in *hidup (< PMP *quDip)
which was suggested as a criterion for subgrouping Malayic isolects with some other
languages (Blust 1981:463).

On the morphological level it appears that (besides the single transitive suffix *-i) PM
probably had a subjunctive marker *-a. A patient-oriented prefix ancestral to di- in each of
the isolects did not occur.

The lexical reconstructions which I have made are meant to show sound correspondences
between the isolects, and to present a sufficient corpus of PM basic vocabulary. In a number
of cases I have made corrections to higher order (PMP) lexical reconstructions.

8.2 SUBCLASSIFICATION

It is difficult to make a detailed subclassification of the Malayic isolects on the basis of this
study. The major differences between the isolects are either retentions, or innovations that
are not exclusive to a particular group of isolects. Such differences cannot provide evidence
for a subgrouping argument. This is particularly clear from the phonological comparison of
the isolects. Some features (e.g. JKT a ə ə C#, IBN b la _ a, MIN and BH antepenultimate
i/u) are retentions from PM and PMP. Other features are idiosyncratic innovations (e.g. SWY r vs x, IBN diphthongisation of final syllables) or seemingly shared innovations that are quite recent and, after close examination, turn out to be independent (e.g. diphthongisation of final-syllable vowels, which works in a different way for MIN and SWY, and which does not occur in all MIN subdialects, or not in the same form). Comparison on the lexical and morphological level yields a somewhat different picture: IBN is singled out as an isolec that underwent a rather different development from other isolecs. Being originally an interior Bornean isolec, however, IBN was least affected of all the six isolecs by the long-standing and variegated influences (Sanskrit, Javanese, Arabic, Portuguese) that had such a converging effect on the Malayic isolecs in general. In IBN, interference from SM has begun to play an important role only in the last century and a half. It is therefore not surprising that IBN shows some morphological differences, and that it scores low in cognate percentage with other Malayic isolecs. And it is inversely not surprising that SWY and JKT seem to be much closer than BH or IBN to SM. For the speakers of SWY and JKT, SM has been a normative dialect to a much higher extent than for the speakers of IBN, MIN and BH.

It is quite possible that the Malayic-Dayak isolecs form a separate branch within the Malayic linguistic group, and that SWY and JKT are more closely related than the other isolecs to SM. However, in view of the distortional effects of the influences to which the other isolecs have been jointly exposed, and summarising the above considerations, it seems too early to make an internal classification of Malayic isolecs.

8.3 THE PM HOMELAND

Nothing definite is known about the original homeland of the Proto Malayic speakers. Kern (1917:119-120) proposed the Malay Peninsula as the most probable homeland of the Proto Malayic people (the ‘Malays’ in his publication), ruling out Sumatra on account of the SM word salatan (meaning both ‘straight’ and ‘south’, cf. 5.2.1). He considered an earlier migration from Borneo to the Malay Peninsula as improbable, mainly because it leaves open the question why a people living in a part of Borneo would bother to migrate overseas before it had colonised the remainder of the sparsely populated and fertile island. One would rather expect an external pressure for such a spread overseas, and Kern assumed that this pressure existed in mainland Southeast Asia.

The peoples living there must have pushed out an earlier Austronesian stock. That such a stock did live there is still witnessed by a large number of Austronesian loanwords in Kampuchean, Annamite, and Thai, “much more than can be explained from the current state of mainland Malayo-Polynesian [read: Austronesian] languages” (p.120). In other words, Kern believed that the Austronesian peoples originally lived in mainland Southeast Asia, and were pushed out from there by the peoples that are living there now. Some of them, the ancestors of the present speakers of Malayic isolecs, went to the Malay Peninsula, from where some of them migrated to other areas such as Sumatra and Borneo.

There are several reasons for not accepting Kern’s migration theory. As regards his assumption that the Austronesian homeland was on the Southeast Asian mainland, I refer to

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206 However, to some extent even the Malayic-Dayak isolecs show these influences. It is very likely that most western (including SKT and AR) influence reached SM first, and affected the other isolecs via the latter. This may also have happened with JV influence, although it is quite evident that BH, SWY, and JKT, were also directly influenced by JV.
more recent studies on this subject (Dyen 1965a; Dahl 1976:123-129). Suffice it to say that Austronesianists now generally believe that the early Austronesians spread from Taiwan to the rest of the Austronesian world, and not from the Southeast Asian mainland to insular Southeast Asia and Oceania. The arguments against Kern's assumption that the Malay Peninsula was the original Malayic homeland before migrations took place to Sumatra and Borneo are as follows. The term *salat'an replaced an older directional term *daya*, which actually had a quite opposite meaning and, if anything, suggests a Malayic homeland which had the interior to the south, and the sea to the north (cf. 5.2.2). Furthermore, the way most Malayo-Polynesian peoples migrated or expanded their territories was by sea and not by land. Speakers of Malayic isolects were probably no exception to this, to judge from the seafaring tradition of many of them. There is no reason why a Proto Malayic people living in part of Borneo would have preferred territorial expansion in Borneo's almost inaccessible interior to maritime expansion. The Malay Peninsula shows the typical demographical pattern of a technically advanced coastal people (the Malas) in the process of pushing further into the interior a technologically less developed older stock (the Orang Asli, some of whom are still speakers of Austro-Asiatic languages).

In Borneo, a similar demographical movement can be observed, although here the Malays and Chinese have not penetrated as deeply into the interior. The important difference between the Malay Peninsula and Borneo, however, is that some of the autochthonous Dayaks of the interior are also speakers of Malayic isolects, viz. the Malayic-Dayak speakers. (The Ibans with their recent expansion to the coast are rather exceptional in this respect.) So, whereas in both cases Malays (and Chinese) have populated the coast and are slowly expanding towards the interior, some of the oppressed interior people in West Borneo are themselves speakers of Malayic isolects. Their Malayic isolects are autochthonous, and not the result of language shift, as for instance is the case with several Malayic isolects spoken in eastern Indonesia. Their authenticity is testified by their typically interior Borneo culture and by their languages. These show much variation among themselves, and have undergone hardly any Sanskrit or Arabic influence, which is in contradistinction to other Malayic isolects. The above facts show that Borneo deserves serious consideration as a possible Proto Malayic homeland. Prentice (1978:19) believes that the core of the Malay language lay in the area around both sides of the Strait of Malacca, and he considers the coastal Malay isolects of Borneo a later offshoot. This does not contradict the possibility of Borneo as the Proto Malayic homeland, since Prentice's use of the term 'Malay' does not include the Malayic-Dayak isolects. It is likely that some of the coastal Malay isolects of Borneo are the result of back-migration, and that they were introduced from the Malay Peninsula.

8.4 SUGGESTIONS FOR FURTHER RESEARCH

More material is needed in order to make a more accurate comparative-historical study of Malayic isolects. There is hardly any Malayic isolect that is not in need of a full grammatical and lexical description, and an immense task awaits those who are interested in the description, classification or comparison of Malayic isolects of the Malay Peninsula, the Sumatran, Borneo, or Javanese coasts, or eastern Indonesia. But even so it is clear that

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207 The idea that Borneo was the original PM homeland was first suggested to me by Robert Blust.
208 cf. also Bellwood (in press). Clear evidence for a late introduction from the Malay Peninsula is the Malay spoken in and around Pontianak (West Kalimantan) (Fokker 1895). Jack Prentice informs me that Brunel-Malay speakers were originally speakers of the Bisayan language (still spoken in Brunei and neighbouring areas).
isolects like the Malayic-Dayak ones or Bacan show more retentions than others. These isolects stayed out of the cultural mainstream which determined the shape of most Malayic isolects, and therefore were able to retain PM characteristics that were lost elsewhere. The Malayic-Dayak ones are the more interesting because, apart from their independent development from other Malayic isolects, they also differ considerably from each other.

Another way to amplify the historical picture of Malayic isolects is to draw data from older texts, grammars and dictionaries into the comparison. There are many pitfalls in this sort of material, but with a critical approach to the drawbacks of text corruption or early linguistic and lexicographical deficiency one can benefit greatly from it.

An understanding of the history of Malayic isolects is also largely dependent on a comparative-historical study of Javanese. Javanese and Malayic isolects have been influencing one another for as much as a millennium, and by studying the history of Malayic isolects without simultaneously studying the history of Javanese isolects (or, for that matter, studying the history of Javanese isolects without at the same time taking the history of Malayic isolects into account), one is left with too many loose ends. Furthermore, a better understanding of this mutual influence would be of great interest to higher order reconstructions. Given the great influence which Javanese and Malayic isolects must have had on one another, and given the intensive influence from Malayic isolects on other Indonesian and Philippine languages, it is likely that the study of this Javanese and Malayic mutual influence will prove to yield some corrective viewpoints vis-à-vis PMP vocabulary (especially the part reconstructed by Dempwolff).

Finally, the affinity of PM with other languages should be tested in order to make a further classification of PM within the branch of Western-Malayo-Polynesian languages. Malayic shows a particularly great number of similarities in sound changes and in lexicon with Achehnese and Chamic. Another apparently close relationship which deserves serious attention is that between Malayic and Balinese.

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209 cf. their reflexes of PMP consonants, their numeral system and their vocabulary for body parts. Many of these similarities are not shared by JV, SUN, and Madurese, which, together with SM, constitute the Malayo-Javanic subgroup on the basis of which PMJ was reconstructed (Nothofer 1975).
APPENDIX I

This appendix contains a list of disyllabic lexemes that do not conform to the tendency to consonant-harmony. The lexemes are grouped per isolec, and are subdivided according to their pattern (cf. 4.3.1). Where possible (and with an emphasis on the SM ones), the lexemes are provided with historical information. The following list is exhaustive, except for examples exhibiting combinations of \(d, t\) and \(n\): these examples are all inherited from PMP and are designed to show that such combinations were permitted in the history of the Malayic isolects.

**SM**

N.B. A degree sign \((^{\circ})\) at the upper left corner of a lexeme indicates that this lexeme is not found in Iskandar, and that it is of doubtful status in SM. The following lexemes occur in Iskandar and are not found in Wilkinson (1959): bawel ‘talkative, quarrelsome’ (< JV), bempar ‘car bumper’ (< DU), kagok I ‘disturbed’ (< JKT), kagok II ‘differing from the general speech’ (< JV), mampan ‘vulnerable; efficacious (medicine)’, mepet ‘squeezed’ (< JKT), mopit ‘Chinese writing brush’ (< CHI).

**Pattern I**

\(bVpV(C)\):
- \(bapa\), \(bapa/\eta\), \(bapa/k\) ‘father’.
- \(bepa\), \(bipa\), \(bepa\), in \(kueh bepa\), ‘(k.o.) sweetmeat’ (possibly < CHI, according to Wilkinson);
- \(bope\) ‘pockmarked’ < CHI (Leo 1975:8);

\(pVbV(C)\):
- \(\ddot{p}abu\), in \(main pabu\) ‘somersaults and other tricks by Chinese tumblers’ < CHI;
- \(\ddot{p}\ddot{\alpha}bin\) ‘k.o. teetotum’ < CHI;
- \(\ddot{p}obien\) (disyllabic?) ‘wharf’ < CHI;

\(jVcV(C)\):
- \(jicuy\) ‘opium dross doctored a second time for consumption’ (\(jicin\) in Iskandar) < CHI;

\(cVjV(C)\): ---------

\(gVkV(C)\):
- \(ge\ddot{\alpha}kok\), \(go\ddot{\alpha}kek\) ‘gecko, house lizard’, an onomatopoeia from JV;

\(kVgV(C)\):
- \(kaga\) ‘no’ (which is JKT and must be \(kaga\?, \) cf. Abdul Chaer);
- \(kaget\) ‘startled’ (a JKT lexeme borrowed from JV);
- \(kagum\) ‘astonished’ (a JKT lexeme borrowed from JV);
- \(kugah\) ‘k.o. shrub’.

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Pattern II

\( b\text{VmpV}(C) \):
\( b\text{impaw}, b\text{impo} \) ‘handkerchief, towel’ < CHI;

\( p\text{VmbV}(C) \):
\( ^{*}p\text{ombak} \) ‘dove, pigeon’ < POR;

\( j\text{VnV}(C) \):
\( ^{*}j\text{nace} \) ‘grateful’ < CHI;

\( c\text{VnV}(C) \):
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\( g\text{Vn}k\text{V}(C) \):
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\( k\text{Vn}g\text{V}(C) \):
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Pattern III

\( b\text{VmiV}(C) \):
\( b\text{ami} \) (ba?mi) ‘(k.o.) noodle dish’ < CHI;
\( ^{*}b\text{eman}, \text{in kabur} \) \( ^{*}b\text{eman} \) ‘tax for the support of royal bandsmen in Old Perak’, probably < ENG ‘bandsman’;
\( b\text{ima} \) ‘(a proper name)’, < SKT;
\( b\text{omo, bomo, bomor} \) ‘mage, sorcerer’;
\( b\text{umi} \) ‘earth’ < SKT;

\( p\text{VmiV}(C) \):
\( ^{*}p\text{ama} \) ‘police informer’, probably < ENG ‘informer’;
\( p\text{a?ma} \) (with a medial cluster) ‘the plant \text{Rafflesia hasseltii}’ < JV;
\( p\text{amah} \) ‘low-lying (land)’;
\( p\text{aman} \) ‘uncle’ < JV;
\( p\text{amer} \) ‘talking big, boasting’ < JV;
\( p\text{amit} \) ‘beg leave or depart’ < JV;
\( p\text{amor, pamur} \) ‘alloyed iron’ < JV;
\( ^{*}p\text{oman} \) ‘timber tree’, probably a Jakun loan (cf. Adelaar 1983);

\( j\text{VnV}(C) \):
\( j\text{a}na \) ‘say, think’ < MIN (most likely < +(u)jar + -ña);

\( c\text{VnV}(C) \):
\( ^{*}c\text{una} \) ‘k.o. boat’ (= JKT, < CHI);

\( g\text{Vn}V\text{V}(C) \):
\( ^{*}g\text{in}i\text{n} \) ‘k.o. herb’;

\( k\text{Vn}V\text{V}(C) \):
\( ^{*}k\text{a}na, \text{in damar} \) \( k\text{a}ga \) ‘k.o. tree’;
\( k\text{a}nar, \text{in lan} \) \( k\text{agar} \) ‘bird of prey’;
\( k\text{a}n\text{an} \) ‘long or pine for’ (JKT, borrowed from JV);
\( k\text{onek} \) ‘(belonging to the) public’ (JKT, borrowed from CHI).
Pattern IV

mVbV(C):
°mabaw 'evil spirit of disease';
°mabay 'k.o. tree';
mabir, in tabir mabir, 'all kinds of wall-draperies' (a derivation from tabir);
* mabuk 'intoxicated';
* mabub '(a proper name) < AR;
* mabur 'fly (v) < DU;
* mubal 'shoot up' < JV;
° mubeI) 'circle, revolve' < JV;
° mubyar (with a consonant cluster; written 'mubiar' in Wilkinson) 'strike the eye, scream (of colour)' < JV;

mVmbV(C):
mambaI) I 'spirit of the Indonesian pantheon'; II ikan mambaI) 'a snapper', derived from bambaI);
° mambu 'Malacca cane'; III 'smell (v) < N;
mambul 'k.o. climber';
mimbar 'pulpit in a mosque' < AR;
mumbar 'coconut in its earliest stage of growth';
mumbul 'k.o. climber, Milletia sericea';

mVpV(C):
mapag, mapak 'go out and meet and then escort to one's house' (JKT, borrowed from JV or SUN);
° mapar, in gaI) mapar 'flat-ended brazier's chisel or punch', derived from papar;
° mapat 'k.o. tree';
° mapuk 'k.o. herb';
° mapas, mampas 'fish with the fly';
meper, mipir 'edge away under a blow', derived from peper;
mipis 'thin, tenuous', a variant of nipis and tipis;
° mopeI) see bopeI);
° mapar, ular t; xuI) mupar 'black cobra', derived from upar;
mupuh, mupus 'k.o. tree';

mVmpV(C):
mampatI 'tightly packed'; II 'k.o. tree';
mampir 'stop; touch at', < JV (the usual SM term is singah);
mampu(h) 'having the means for', a JKT lexeme (< SUN);
mampu(h) 'light and spongy in texture' (from (h)ampu(h)?);
mampus 'die (vulgar); be wiped' (from (h)ampus);
° mampus I see mapas, II mampus jantan 'k.o. tree';
mampat 'k.o. tree';
mempar 'bear some resemblance to' < JV;
° mampog 'k.o. tree';
mimpi 'dream' (derived from impi);
° mampog 'used up (nipah, pandan, etc.) of which the fronds have been taken';
° mumpun 'blunt, stumpy' < MIN;
Pattern V

\(bVwV(C)\):

- \(bawa, bawa', bawak\) ‘convey’ < PMP *baba;
- \(bawab\) ‘gatekeeper, porter’ < AR;
- \(bawah\) ‘position under or below’ < PMP *babaq (PM *bah);
- \(bawal\), in \(ikan bawal\) ‘k.o. fish, pomfret’ (< TAM? Wilkinson);
- \(\text{°} bawan\) ‘comrade, playfellow’ (probably < +<bawi +<an, cf. sə-baw`alike’);
- \(bawaj\) ‘bulb (more specifically onion)’;
- \(\text{°} bawar\) I ‘customs barrier’ (~ gawar); II ‘sword of office’ (~ baur);
- \(bawat\) I \(pau̇j bawat\) ‘state umbrella’; II ‘drooping, inclining downwards’; III \(tali bawat\) ‘braces’;
- \(\text{°} bewah\) ‘feast for the dead (v)’ (Kedah) (< +<bar-arwa according to Wilkinson);
- \(\text{°} bewak\) (Kedah and Pattani) ‘monitor lizard’ (~ biawak);

\(pVwV(C)\):

- \(pa?wa\) ‘eldest uncle’ (with a consonant cluster, < +<bapak +<tua);
- \(pawah\) I \(pawahkan\) ‘hire or lend on the metayer system, debtor and creditor sharing the proceeds’; II \(rampah pawah\) ‘all kinds of curry stuff’;
- \(\text{°} pawan\) I ‘title or appellation for Malay-speaking Indians’; II ‘k.o. plant’;
- \(pawaj\) ‘expert in any art believed to need the use of magic; guide; navigation officer, shipmaster; conductor’ (< *(am)pu + *a(bw)aj);
- \(\text{°} pawas\) ‘k.o. freshwater fish’ < MIN;
- \(\text{°} pawat, in payu̇j \text{°} pawat\) ‘k.o. umbrella’ (~ bawat);
- \(paway\) ‘insignia borne after a prince; insignia-bearers’;
- \(\text{°} pawon\) ‘kitchen’ < JV;

\(mVwV(C)\):

- \(\text{°} mawa\) ‘gibbon’ (~ wa?wa?);
- \(mawar\) I ‘rosewater’ < AR; II \(tawar mawar\) ‘harmless, nullified’ (derived from tawar);
- \(mawas\) ‘orang hutan’ (~ mayas (in Kalimantan));
- \(maway\) ‘k.o. shrub’;
- \(mawin, in kawin mawin\) ‘marriage festivities of all sorts’, (derived from kawin);
- \(mewah\) ‘plenteous’
mewek ‘pursing up the mouth, pouting’; a JKT lexeme according to Iskandar, and ultimately from JV according to Kähler;
°mewer ‘sob’ < JV;

jVyV(C):
jaya ‘triumphant’ < SKT;
jayen ‘victorious over’ < JV (< jaya + ig);

cVyV(C):
caya ‘lustre, glow, brightness’ < SKT;
°cayah ‘careless, neglectful’ (~ cuay) < MIN;
cayar ‘diluted, watery (of viscous things)’ (~ cair, < PMJ *caIR13, Nothofer 1975:165);
°cayu ‘sitting-mat’ (~ siu);

nVyV(C):
°ñaya ‘injustice’ (~ aniaya, < SKT);
°ñeyag ‘snap (as a dog)’, (JKT, ultimately < SUN).

Inherited combinations of d, t and n:

Pattern I

datan ‘come’ < *dators;
datar ‘level, flat’ < PMP *DataR;
datu, datu?, datuk, datug ‘chief, head of the family; grandfather, ancestor’ < *datu;
datik ‘ticking sound’ < PMP *detik (Blust 1970);
taduh ‘abated, calm (wind)’ < PMP *te(n)duq;
tidur ‘sleep’ < PMP *tiDuR;
tudih ‘aslan, at an angle’ < PMP *tudih ‘indicate’;
tuduh ‘accuse’ < PMP *tuduh ‘indicate’.

Pattern II
	
tanda ‘sign’ < PMP *ta(n)da;
tandas ‘state explicitly’ < PMP *(Ct)a(n)(dDj)es (Blust 1970);
tandih ‘division into equal parts, compare’ < PMP *(Ct)anDiDj ‘equal, compare’ (Blust 1970);
tandu ‘hammock-litter’ < PMP *tandu;
tindas ‘crush’ < PMP *tiDes (Blust 1970);
tindih ‘lie in heaps’ < PMP *(t)inDiq;
tunda ‘drag (v)’ < PMP *tunDa;
tunduk ‘bend down, bow’ < PMP *(t)u(n)Duk;
tondoŋ ‘chase away, oust’ < PMJ *tundup.

Pattern III

danaw ‘lake, pool’ < PMP *Danaw;
tanah ‘land, earth’ < PMP *taneq;
tanak ‘cook rice’ < PMP *tanek;
tanam 'plant (v)’ < PMP *tanem;
\(\text{t}\)anar 'be publicly known’ < PMP *teneR ‘voice’ (Blust 1970);
\(\text{t}\)anun 'weave' < PMP *\(\text{t}\)inun;
\(\text{t}\)anun 'gaze fixedly, diagnose illness, divine’ < PMP *(\(C\)t)e(\(n\))un ‘find by divination’
(Blust 1970);
\(\text{t}\)una 'eel' < PMP *\(\text{t}\)una;
\(\text{t}\)unas 'shoot, bud' < PMP *\(\text{t}\)unas;
\(\text{t}\)unay 'cash, ready money’ < PMP *\(\text{t}\)(\(n\))ay;
\(\text{t}\)unu (n) 'burn up’ < PMP *\(\text{t}\)unu ‘burn, fry’.

Pattern IV ---------

MIN

Pattern I
\(\text{b}\)\(\text{V}\)\(\text{p}\)\(\text{V}\)\(\text{(C)}\):
\(\text{bapo, bapa}\) ‘father’.

Pattern II ------

Pattern III

\(\text{b}\)\(\text{V}\)\(\text{m}\)\(\text{V}\)\(\text{(C)}\):
\(\text{bumi} ‘earth, land’ < \text{SKT};
\(\text{J}\)\(\text{V}\)\(\text{n}\)\(\text{V}\)\(\text{(C)}\):
\(\text{ja/\(n\)o} (\sim \text{ja/no}) ‘he/she says, said’ (= ja + -\(n\)o).

Pattern IV

\(\text{m}\)\(\text{V}\)\(\text{b}\)\(\text{V}\)\(\text{(C)}\):
\(\text{mabaw, si-} \text{k.o. evil spirit’;
\(\text{mabt}\text{\(\text{p}\)} ‘drunk, intoxicated’;
\(\text{m}\)\(\text{V}\)\(\text{m}\)\(\text{b}\)\(\text{V}\)\(\text{(C)}\):
\(\text{mamban} ‘ghost, spirit’;
\(\text{mambu, in simambu} ‘\text{k.o. rattan’;
\(\text{mimba} ‘pulpit in a mosque’ < \text{AR};
\(\text{mamban} ‘young coconut’;
\(\text{m}\)\(\text{V}\)\(\text{p}\)\(\text{V}\)\(\text{(V)}\): -------

\(\text{m}\)\(\text{V}\)\(\text{m}\)\(\text{p}\)\(\text{V}\)\(\text{(C)}\):
\(\text{mampe?} ‘in order, fine, excellent’;
\(\text{mampuyh} ‘dead’;
\(\text{mimpi} ‘dream’;
\(\text{mumpun} ‘blunt’.

Pattern V

bVwV(C):
bawa I 'k.o. fish (Stromateus)'; II 'wrapping around the hilt of a chisel, a hoe or a stick to protect it from cracking or breaking';
bawah 'under, below';
bawag 'bulb';
pVwV(C):
pawa 'ruminate';
pawag 'expert in magic; guide, shipmaster, shaman, trapper';
paweh 'k.o. sweetwater fish';
mVwV(C):
ma weh 'orangutan';
cVwV(C):
cayah 'forgetful, indifferent';
cayo 'shine, lustre, glitter' < SKT.

Combinations of d, t and n:

Pattern I

data 'flat, level';
data? 'a cracking sound';
dataq 'come';
dateh 'become weak and slow (e.g. of breathing)';
dat?q 'ticking sound of watch or clock';
dato? 'clear';
datu I 'knowledgeable about medicinal herbs'; II 'palm-fibre thread';
datu? I 'traditional chief'; II 'grandfather (in Simabur)'; 'Sir (in Payakumbuh)';
datuy?, in datuy?kanjari 'flick or stretch one's fingers to make a sound';
datuyh I 'popping or snapping sound'; II ati badatuyh 'have doubts';
deta 'head-cloth' < Persian;
doto 'doctor, physician' < DU;
tadahi 'saucer'; II 'be visible, clear';
tadi 'recently, just a while ago';
tadi' 'wall of plaited lath';
tadin (in Bonjol) see tadi;
tado 'thrash, beat';
taduh 'calm, quiet';
tadup 'k.o. snake';
tida? 'not';
tido '(there is) no, not';
tidup 'sleep (v)';
toda? 'a swordfish';
toda? 'disappeared, gone, lost';
tudi, in basitudi 'behave in a disturbing way, touch everything';
tuduh 'accusation';
tudun 'anything used to cover or protect'.
Pattern II

dántam 'roar, boom (like the sound of a cannon)';
dántañ 'the sound of a gun';
dántañ 'a sound (lighter than dántañ)';
dántin 'a sound (lighter than dántañ)';
dánto 'ivory';
dántin 'sound of a heartbeat';
tandah 'deck (of a ship, etc.)';
tanday I 'lavatory, latrine'; II 'sign, token, indication';
tandán 'cluster of fruit';
tanday 'visit (v)';
tandeh 'all gone, clean, all spent';
tandiə, in tandiə majaə 'courtiers carrying the king's mirror';
tandiə 'equal, match; counterpart, partner, opponent';
tando 'sign, token, indication';
tandu 'palanquin';
tandiə 'horn';
tenda 'tent' < POR;
tenda, in batenda 'hold a competition';
tende 'addition, supplement';
tendoh see tundi;
tinday, in batindang 'disappear';
tindeh 'pinch, squash (with the nails), suppress';
tindiə 'press heavily on, oppress';
tindiə 'pierce (an earlobe)';
tindin I manindin jo tavan 'use one's fists often'; II 'low tones heard between high ones (e.g. as in the gamelan)';
tindo (Koto Tuo) 'last fruits (often small); youngest children';
tondi, tundi?I 'of a married couple) going somewhere together, go out together';
tundi?I see tondi, tundi?II 'bore, pierce in upward direction with s.th. pointed';
tundo 'push forth';
tundin 'bow, stoop; submit to';
tundun 'neck'.

Pattern III

dana?I, dena? 'dwarfish, stunted';
dana?II 'nearest point to the target in certain throwing games';
danañ 'lake, pool';
dano 'result';
danu?, in badanu?an darah idariə-ño 'have nosebleed';
denay (den, deyen) 'I';
dena? see dana?I;
dunia 'world, earth' < AR;
tanah 'land, ground';
tanay 'carry on the palm of the hand';
tana? 'cook rice';
tanam 'plant';
tanaj 'calm, quiet, silent';
tanaw 'k.o. parakeet';
tane? I, tan?i? 'spin around like a top';
tane? II, tane?e? 'impede, obstruct, stop s.o. from doing s.th.';
tane?u? 'tapir';
tane?u?g 'divine (v)';
tanu? 'weave';
tan?o? 'deadly quiet, desolate';
teno? 'aim, point at';
teno?g 'k.o. basket';
tino (an abbreviation of ati-no);
tono? 'try to please, avoid vexing or annoying people';
tun?o?g 'desperate, flurried'.

Pattern IV

nata 'point, dot' < AR;
nanta? (in Suliki) 'visible';
nanti, nanti? 'soon, later';
nantun 'that' (from naN + tu(n)).

BH
Pattern I

bVpV(C):
bapa 'father';
pVbV(C): ------
pabrik 'factory' < DU;
(jVcV(C): ------
(cVjV(C): ------
(gVkV(C): ------
(kVgV(C):

Pattern II ------

Pattern III

bVmV(C):
bima '(name of a character from the wayang)' < SKT;
bumi 'world, earth' < SKT;
pVmV(C):
paman 'uncle' < JV; (BK pamor 'luck, fortune; magical power');
pamun 'caretaker, supporter, mentor, teacher' < JV;

jVnV(C):
jaña '(s)he says, said' (from ja + ña);

cVnV(C): --------
gVgV(C):
ganjan 'k.o. curry';

(kVgV(C)):
kupris 'congress' < DU.

Pattern IV
mVbV(C):
mabuk 'crazy about s.th.';

mVmbV(C):
mambu 'I 'put on airs'; II 'properly speaking, after all';

mVmpV(C):
mampan 'have effect, hit, strike';
mampu 'rich, well-to-do';
mampus 'dead';
mimpi 'dream (n)';

nVjV(C): --------
nVñjV(C): --------

nVcV(C): --------
nVñcV(C): --------

ngV(C): --------
nggV(C): --------

kvV(C): --------
ngkV(C): --------

Pattern V
bVwV(C):
bawa 'carry';
bawah 'under, below';
bawaj 'bulb';

pVwV(C):
pawa 'room, gap, open space';
$mVwV(C)$:
mawah 'worried, afraid';
mawar 'rosewater'.

Combinations of $d$, $t$ and $n$:

Pattern I

dataj 'come';
datar 1. 'level, flat' 2. 'same, equal';
datik 'a ticking sound';
datu 'head, chief, elder; grandfather, ancestor';
tada 'poisonous, strong, vigorous';
tadah 'cistern, tank, reservoir';
tadas 'have hold on, have effect on, hit, strike';
tadi 'recently, a while ago';
tadih see tadi;
taduh 'calm down; stop (rain)';
tadunj 'k.o. snake';
tuduh, in manuduh 'advise, lead, give indications';
tudunj 'cover, lid'.

Pattern II

dintu 'in such a way';
duntu 'tea';
tanda 'sign, token, indication';
tandak 'deposit, sediment';
tandar 'move, shift, rub, grate';
tandik, in batandik 'jump up and down';
tandiy 'equal, peer, match; opponent, counterpart';
tandu 'palanquin';
tinda 'tent' < POR;
tindas 'suppress, oppress';
tindih 'lie on a heap, on top of each other';
tindik 'pierce earlobes';
tunda 'drag, postpone';
tunduk 'bend, bow, submit to';
tundun 'a bunch of bananas'.

Pattern III

dana 'gift, alms' < SKT;
danak 'short and fat';
danaw 'lake, pool';
dinar 'dinar' < AR;
dinas 'service' < DU;
dini 'this';

dini/hari ‘dawn’;
tanah ‘ground, land’;
tanay ‘catch, intercept, receive’;
tanak ‘cook rice’;
tanam ‘plant (v)’;
tanap ‘calm, quiet, silent’;
-tani ‘(farming)’ < SKT;
tanis, in batanis, ‘humid, wet, watery’;
tanun ‘weave’.

Pattern IV

nadar ‘vow to Allah’ < AR;
natal ‘Christmas’ < POR;
natu (~ na/itu ‘that one, the one over there’);
nitral (with a consonant cluster) ‘neutral’ < DU;
nitu (~ na/itu) ‘that one, the one over there’.

SWY

Pattern I

bVpV(C):
bapa?, bapaŋ, bapo ‘father’;

pVbV(C): ------

cVjV(C): ------

jVcV(C): ------

gVkV(C): ------

kVgV(C):
(BSM kagul ‘confused’).

Pattern II

bVmpV(C): ------

pVmbV(C): ------

jVñcV(C): ------

cVñjV(C): ------

gVñkV(C): ------
Pattern III

bVmV(C):
bumi 'earth' < SKT;

pVmV(C):
pama(h) 'swamp';
pamur 'alloyed iron' < fV;

fVnV(C): ------
cVnV(C): ------
gVŋkV(C): ------
kVŋgV(C): ------

Pattern IV

mVbV(C):
mabru< 'drunk, intoxicated';
mibar 'whirl, flutter about (e.g. bats)';

mVmbV(C):
mumbay 'very young, of fruits'; the coconut in its first stage of development';
mumbo 'k.o. edible plant';

mVpV(C):
mupur 'ruffle the feathers in defensive position (of hens etc.)';

mVmpV(C):
mampus 'wasteful, dissipating';
mimpi 'dream (n)';

nVŋV(C): ------
nVŋŋV(C): ------
ncV(C): ------
nVŋcV(C): ------

ŋVgV(C):
ŋigut< 'walk like a duck or a goose'.

Pattern V

bVwV(C):
bawa(h) 'under, below';
bawan 'onion';
bawu 'skin';
bawo 'carry, bring (along)'.

Combinations of \( d, t \) and \( n \):

**Pattern I**

- \( d\text{ata}\) ‘come’;
- \( d\text{atax} \) ‘level, flat’;
- \( d\text{ata}, b\text{odata} \) ‘knock with a hammer’;
- \( d\text{atas} \) ‘the sound of paper or leaves being cut’;
- \( \text{tada}(h) \) I ‘catch from below, intercept’; II ‘pervade with force (e.g. the wind)’;
- \( \text{tadi} \) ‘recently, now’;
- \( \text{tado} \) ‘ask for (literary style)’;
- \( \text{tadu}\rho(h) \) ‘calm, quiet (wind, waves)’;
- \( \text{tidu}\rho \) ‘sleep (v); set (of oil)’;
- \( \text{tudu}\rho(h), \text{in}\ \text{botudu}\rho(h) \), ‘be on first names’;
- \( \text{tudug} \) ‘s.th. used to cover or protect’.

**Pattern II**

- \( \text{donta}m \) ‘heavy crashing sound as of a tree falling’;
- \( \text{donta}g \) ‘onomatopoeia for the sound of the town crier’s gong’;
- \( \text{dontum} \) ‘a thud, as of a heavy body falling’;
- \( \text{tandan} \) I ‘a cluster of fruit’; II ‘rope to tie up horned stock’;
- \( \text{tandap} \) ‘visit, meet without particular purpose or aim’;
- \( \text{tandi} \) ‘s.th. put next to s.th. else in order to compare’;
- \( \text{tando} \) ‘sign, token, indication’;
- \( \text{tandu} \) ‘palanquin’;
- \( \text{tandu}\rho \) ‘horn’;
- \( \text{tind}\rho(h) \) ‘lie in heaps’;
- \( \text{tinda} \) [sic] ‘k.o. cotton curtain’ (< POR);
- \( \text{tindan}an \) ‘parrot’s perch’;
- \( \text{tindi}\rho \) ‘pierce through’;
- \( \text{tunday} \) ‘follow’;
- \( \text{tundo} \) ‘show! demonstrate s.t h.’;
- \( \text{tundug} \) ‘cede, withdraw, go away’;
- \( \text{tundu}\rho \) ‘bent down; bow (head, body)’.

**Pattern III**

- \( \text{danaw} \) ‘lake, pool’;
- \( \text{donaj} \) ‘swim’ < \( *\text{(mb)}A\text{-ronaj} \);
- \( \text{tana}(h) \) ‘ground, land’;
- \( \text{tana}\rho \) ‘cook rice’;
- \( \text{tonaj} \) ‘calm, quiet (water)’;
- \( \text{tanun} \) ‘weave’;
- \( \text{tanaug} \) ‘divine, prophesy’;
- \( \text{tuna}\rho \) ‘be/stay together’;
- \( \text{tunaj} \), in \( \text{nunang gadis} \) ‘(of a boy to the girl he wants to be engaged to) give five dollars as a guarantee and a token’;
- \( \text{tunas} \) ‘bud of a plant’;
tunay 'cash';
tunu, in nunu 'be afire; set fire to';
tunun see tunu.

Pattern IV

nadás 'make a crackling sound';
nantu 'child-in-law' < PMP *b/in/antu.

IBN

Pattern I

(bVpV(C)):

bapā 'term of address for father-in-law';
pVbV(C): -------

jVcV(C): -------

cVjV(C): -------

gVkV(C): -------

kVgV(C):
kigal 'bounce (v)'.

Pattern II

bVmpV(C): -------

pVmbV(C):
pambam 'the game of hide-and-seek';
pambar I 'shattered'; II 'dispersed, shattered';
pambu? 'fruit bad inside; (in songs) dead';
pambur 'burst';
pambus 'punctured';

jVñcV(C): -------

cVñjV(C): -------

gVpV(kV(C): -------

kVñgV(C):
kāngan 'black cotton cloth';
(kāngay 'complain, be unwilling to' < kāngay, cf. 3.1.1).

Pattern III

b-umay 'farm (v)', derived from umay;
bumi 'earth' < SKT;
pama 'good, fine';
pama? 'k.o. frog';
pamur ‘cloudy (of water)’;
\(\text{pamai}^?\) I ‘inheritance’; II ‘disability’; III ‘choice, decision’;
\(\text{p-umay, in } \text{di-p-umay} \) (an object-oriented form of \(\text{b-umay}\));
\(\text{kañaw, } \eta\eta\eta\text{aw} \) ‘call, shout’.

Pattern IV
\(m\text{VbV(C)}\):
\(\text{mabuk} \) ‘drunk’;
\(\text{mabug, in } \text{takuyu} m\text{abug} \) ‘the snail has left its shell (died)’;
\(\text{mabu?} \) ‘shallow’;
\(m\text{VmbV(C)}\):
\(\text{mambam} \) ‘dull (weather)’;
\(\text{mambug} \) ‘k.o. plant, burnt to drive off insects’;
\(\text{mumban} \) ‘k.o. water plant’;
\(m\text{VpV(C)}\):
\(\text{mapap} \) ‘foolish, inconsequent’;
\(m\text{VmpV(C)}\):
\(\text{mimpi} \) ‘dream (v,n)’;
\(n\text{VjV(C)}: \) -----
\(n\text{VnV(C)}: \) ----- 
\(n\text{VcV(C)}: \) ----- 
\(n\text{Vn\text{cV(C)}}: \) ----- 
\(\eta\text{VgV(C)}:\)
\(\eta\text{agay} \) ‘to(wards)’, derived from \(\text{gagay} \);
\(\eta\text{igal} \) ‘bounce’, derived from \(\text{kigal} \);
\(\eta\text{igaw} \) ‘walk, grope about (in sleep)’;
\(\eta\text{VgV(C)}: \) ----- 
\(\eta\text{VkV(C)}:\)
\(\eta\text{okal} \) ‘gasp in paroxysm of crying’;
\(\eta\text{oku} \) ‘make the noise of a \(\text{kok-lir} \)’;
\(\eta\text{ikil} \) ‘giggle, titter (v)’;
\(\eta\text{VgkV(C)}:\)
\(\eta\text{u\text{kat} \) ‘have a relapse’.

Pattern V
\(b\text{VwV(C)}:\)
\(\text{bawa?} \) ‘k.o. ant’;
\(\text{baway I igi baway} \) ‘swollen glands’ II ‘tired, stiff’;
\(\text{baway} \) ‘onion’;
**Combination of *d, t and n***:

**Pattern I**

- data I 'come, arrive'; II natay 'report';
- datas 'above', from di atas;
- datu? (in songs) nobleman, chief';
- d/itu? 'here';
- tada 'a cock's spur';
- tadi? 'indicating recent occurrence or previous mention';
- tada 'remains, s.th. left over';
- tadjuh 'calm (of the sea), ceased (of rain)';
- tadj 'a cobra';
- tudah 'preceding a name' poor', e.g. tudah Lanjat 'poor Lanjat';
- tuduh I 'instructions (for doing s.th.)'; II 'leaky, leaking (of houses)';
- tuduj 'a cover, lid'.

**Pattern II**

- tanda I 'a sign, mark'; II tanda sirat 'the embroidered end of a loin-cloth';
- tanda? 'dances (of various kinds)';
- tandan 'a bunch, cluster, the whole bunch of bananas';
- tandap, in nandap 'take on a visit, tour (cock fighting etc.)';
- tandas I 'chopsticks'; II 'close (of cut[ting])';
- tandin, in nandin 'hold the foot and kick with the knee (game)';
- tanduh 1. 'spout' 2. 'penis' 3. 'term of endearment for boys';
- tanduk I 'horn'; II nanduk 'cup (v)';
- tandu? 'do s.th., use s.th. again';
- tanday 'the warp beam (weaving)';
- tandap, in nandap 'kick';
- tandu?, tandur 'slack (rope, etc.)';
- tinda 'in songs' tinda nuan 'you (respectful)';
- tinduh 'edible maggots';
- tinduk 'sleep';
tunda? ‘imitate, mimic, follow (advice)’;
tundan, in tanga tundan ‘a platform erected for felling a tree’;
tundi?I ‘play, joking, fooling’; II nundi?I ‘try to wheedle, cajole’;
tunduk I ‘yield, submit; bend (the neck)’; II ‘wheedle’.

Pattern III

dana ‘(male proper name)’;
danan ‘k.o. rattan’;
danaw ‘pool, puddle’;
dani ‘awake’;
dini ‘where?’;
dini/hari ‘the time before dawn, 3-5 a.m.’;
tanah ‘earth, land’;
tanak ‘fry in oil’;
tanam ‘plant (v)’;
tanun ‘weave’;
tanug, in nanug ‘divine’;
tunay ‘ready money, cash down’;
tunan ‘a betrothal gift’;
tunu ‘burn, roast’.

Pattern IV

naday ‘(have, there is) not, no’;
nandan ‘(in songs, of time) exactly’.

Pattern V

N.B. The following entries are from Bruggeman (see appendix in Scott 1956):

toda see toda;
gagu ‘tremble, shiver with cold’;
mawan ‘a species of mango’.

JKT

Pattern I

bVpV(C):
bapa? ‘father’;
bapao (with consonant cluster) ‘k.o. food preparation’;
bapet ‘without money’;
baplan ‘thick and large (of a moustache)’
bipak ‘barracks’, < DU;
bopen ‘pockmarked’ < CHI (Leo 1975);
bɔ̀dɔŋ I ‘back’ (~ bɔ̀kɔŋ); II ‘hold (a baby etc.) in one’s arms’;
bупռetat ‘k.o. cupboard’, < DU;
pVbV(C): -------

jVcV(C):
jicap ‘twenty (rupiah)’ < CHI;
jicapgɔ ‘twenty-five (rupiah)’ < CHI;
cVjV(C): -------
gVkV(C): -------
kVgV(C):
kaga?, kagɛ ‘no, not’;
kagɛt ‘startled’ < JV (< +ka-giat);
kagɔk ‘difficult, impeded’.

Pattern II

bVmmpV(C):
bɛmpɔr ‘car bumper’ < DU < ENG;
pVmmbV(C): -------

jVnıcV(C): -------
cVnįjV(C): -------
gVŋkV(C): -------
(kVmŋgV(C)): -------

Pattern III

bVmV(C):
bɛmɔ ‘motorised pedicab’, from bècak mɔtɔr;
pVmV(C):
pamɛr, in pamɛrɛn ‘exhibit’, pamɛran ‘exhibition’;
pamɔr ‘lustre, splendour, shine’;
jVmŋV(C): -------
cVmŋV(C): -------
gVmŋV(C): -------

Pattern IV

mVbV(C):
mabɔk ‘drunk, intoxicated’;
mabruk (with a consonant cluster) ‘ugly, of inferior quality’;
mèbòl 'furniture' < DU;
mòbòlì (with a consonant cluster) 'open (clothes)';

mVmmbV(C):
mambu 'stink';
màmbal 'springy, elastic';
màmbèl 'bent down, weighed down, lowered because pressed down';
mimbar I 'pulpit in a mosque'; II 'podium, platform, forum';
mumbul 'rise, get up, boom';

mVmmpV(C):
mèpèl 'knead dough for cake, make patterns in dough';
mèpèr 'rub, clean one's dirty hands with a cloth, towel etc.';
mòpèt 'k.o. Chinese writing brush';

mVmmpV(C):
mampot 'stopped up, stagnated', < pampat;
mampu 1. 'able, capable' 2. 'rich, well-to-do';
mompan I ngé?mompan 'invulnerable'; II 'efficacious (medicine)';
mompot 'feel annoyed' (from ampot);
mamplok (with a consonant cluster) 'keep or heap up in a random way';
mimpi I 'dream (n)'; II 'dream, thought';
mumpuy 'as long as';

nVjV(C): -------

nVnV(C): -------

nVcV(C):
nìcip 'taste, try a bit (food)' (from cicip);
nVncV(C): -------

qVgV(C):
pègan 'walk in a staggering way and with legs apart';
pègot 'walk like a duck' < ègot.

Pattern V

bVwV(C):
bawè 'carry';
bawa?an '1. s.th. usual 2. usually';
bawè 'below, under';
bawèl 'quarrelsome, talkative';
('bowès' I and II have a non-phonemic glide and should phonemically be analysed as boès);

pVwV(C): -------

mVwV(C):
mawar, aèrmawar 'rosewater';
mèwa [sic] 'wealthy, luxurious';
mèwèk 'cry, weep';

jVyV(C): -------
cVyCV(C):
caya ventilation < SKT;

nVyV(C): -------

Combinations of d, t and n:

Pattern I

datar ‘level, flat’;
dataŋ ‘arrive; from’;
datuŋ ‘grandfather’;
dotik I ‘ticking sound of a watch’; II ‘second (n)’;
dustè (with a consonant cluster) ‘lie, cheat (v)’;
tada, tade I ‘cistern, reservoir, tank’; tukan tade ‘receiver of stolen goods’; II tade ujan ‘topmost hand of bananas in bunch’;
tadé, tadi ‘lately, just now’;
tèdèŋ ‘cover-up, shield (for a secret or s.th. bad)’;
tadu ‘become quiet, calm’;
tidaŋ ‘no, not’;
tidur ‘sleep (v)’;
todòŋ ‘threaten with a weapon’;
tudahan, tudahan [sic] ‘used goods’;
tudìè ‘that’s her/him, there he/she is’ (< itu diè);
tudiŋ ‘point one’s finger at s.th.’;
tudu ‘accuse’;
tuduj 1. ‘hat’ 2. ‘s.th. used to wear, protect or cover’.

Pattern II

dontum ‘sound of cannon fire’;
tandak, in nandak ‘dance (v)’;
tandan I tandanan ‘long central stalk in bunch of fruit (e.g. bananas, coconuts, areca nuts)’;
   II ‘family, relatives’;
tandè ‘sign, indication, symbol’;
tandos I ‘all gone, clean’; II tandosin ‘say s.th. explicitly’; III kòtandosan ‘exaggerated, overdone, beyond the limit’;
tandíŋ I ‘arrange according to size, make s.th. match in size, place in lots (one’s merchandise)’; II batandíŋ ‘measure one’s strength in games’;
tandøn ‘guarantee, surety’;
tanduk ‘horn’;
tandur, in nandur ‘grow rice (move it from a nursery bed to a ricefield)’;
tandap ‘kick (v)’;
tèndè ‘tent’ < POR;
tindak I ‘step, pace’; II tindaktanduk ‘behaviour, acting’;
tindos I 1. ‘lying one on the other, superincumbent’; 2. ‘crush, oppress’; II indosan ‘copy (of s.th. written)’;
tindi ‘lying on one another’;
tindik, in ndik ‘bore an earlobe’;
tundanan ‘railway track’? (cf. Abdul Chaer: ‘jalan kereta api rem [sic] dsb.’);
tundaŋan ‘fiancé(e)’;
tundè ‘postpone’.

Pattern III

dinas ‘service, duty’ < DU;
dèndök ‘short and fat, corpulent’;
tanè ‘earth’;
tanəm ‘plant (v)’;
tani, in pa?tani ‘farmer’;
tanaj ‘be quiet’;
tendøŋ ‘k.o. basket’ (of JV make, see Wilkinson);
tanun ‘weave’;
tanuŋ ‘divine (v)’.

Pattern IV

nantí ‘soon, later’;
natar I natar(an) ‘front-yard of a house’; II ‘ground colour (of a design)’;
nɔŋtɔ̀ ‘emerge, protrude (from a pocket or hole)’;
nɔtɔk ‘knock hard’, from tɔtɔk;
nɔtès ‘notebook’ < ENG (?);
nɔtun ‘two rupiah’ < CHI;
nutug, nutuk I ‘full’; II ‘true, perfect’.
APPENDIX II

The following list contains all disyllabic lexemes with a combination of \( s \) and a palatal in initial and intervocalic position occurring in the isolects.

SM

N.B. a degree sign (°) at the upper left corner of a lexeme indicates that this lexeme is not found in Iskandar, and that it is of doubtful status in SM. The following lexemes were taken from Iskandar, and are not found in Wilkinson (1959): siça ‘set of table and chairs’, siñał ‘signal’ (both < DU), secaŋ (~ sacaŋ, see below), and señjoŋ (~ soñjoŋ, see below).

\[(sVsV(C)):\]
\begin{itemize}
  \item jasa I ‘loyal service, doing duty zealously’ < SKT; II (~ jaksa) ‘prosecutor’ < SKT;
  \item jasad, jasat ‘body’ < AR;
  \item jisim ‘physical body, body (in the mathematical sense)’ < AR;
  \item Jose, in kainjose ‘Chinese silk crape’ < CHI;
  \item jusuh ‘(colloquial form of the proper name Yusuf)’ < AR;
\end{itemize}

\[(sVjV(V)):\]
\begin{itemize}
  \item剩下 (~ sahaja) ‘intentionally; only’ < SKT;
  \item sjañ (also spelled saja) ‘assonance, cadence, melodious harmony, rhythm’ < AR; II see saja;
  \item sajañ ‘spirituous liquor’ < JV;
  \item sajaI ‘served up, dished up, dressed (of food courses arranged on dishes)’; II main saja ‘a form of entertainment’;
  \item °sañuk see sañuk;
  \item saja ‘since’;
  \item sajañ see suñjam;
  \item saja ‘be squeezed or otherwise disposed of (liquid)’;
  \item sajañ ‘coolness, pleasant lowering of the temperature’;
  \item sajañ < AR;
  \item sijil ‘scroll, certificate, written record’ < AR;
  \item soja, sojah ‘bowing the body in salutation (as is done by the Chinese)’ < CHI;
  \item sujen ‘small pike, spit, splinter’ < JV;
  \item sujiI ‘k.o. granular meal’ < Urdu; II ‘embroidery’ < Old Javanese;
  \item suj ud ‘kneeling and bowing the head to the ground’ < AR;
  \item sujut, see suj ud;
\end{itemize}

\[(sVeV(C)):\]
\begin{itemize}
  \item °sacaŋ, in kayu °sacaŋ ‘sappanwood’ < JV;
  \item suci ‘pure, holy’ < SKT;
\end{itemize}
(sVnV(C)):
°sańja I 'look in on a person' < JV; II see sońja;
sańjay 'well-made, well-proportioned (men)' < MIN;
sańjun 'flattery, praise, making much of' < MIN;
sańja 'evenfall, about 5.30 p.m.' < SKT;
°sańjah 'grab, snatch angrily';
sańjak (sajak, samanjak) 'since';
sańjaș 'differing, unlike' < MIN;
sańjīə I 'bar of a balance'; II see sańjīș,
°sińjə 'a Javanese sarong';
°sińjuh 'nudge (v)';
suńjam, in tarsuńjam 'fallen or held head downwards';

sVńC(C):
°sańcoon 'bury, inter' (JKT, and borrowed from CHI (Wilkinson));

(sVńC(C):
sańa, bahwasana 'verily, of a truth' (short for bahwa sońșąguńhąña);
°sańok 'still, lonely' < MIN;
sańak see sońap I;
sańap I suńisənəp 'quite deserted, lonely in the extreme'; II sońaptidur 'sound asleep' III 'shut up! be silent!' (to a child);
sańar 'tingling; the sensation when the funny bone is knocked';
sańuh 'snatch hastily';
seńor, seńur 'Mr, Sir' < POR;
sańum 'smile, smiling';
siń see seńor,
sińuh I see seńor; II see sińjuh;
suńi 'lonely, desolate';

yVsV(C):
yasin 'one of the chapters of the Koran' < AR;

sVyV(C):
saya I (~ sahaya) 'I, me; servant' < SKT II 'sarong waxed to a billowy form < JKT (~ POR saia 'skirt');
sayak I 'a hemispherical bowl of coconut shell' < MIN; II 'stiff pleated sarong' (~ saya II);
sayan I 'pinning, longing, pitying; longing, affection'; II tian sayan 'derrick'; III 'k.o. tree'
sayap 'wing';
sayat 'slicing off';
sayip (in Pahang) 'of royal blood on both sides' < AR;
sayu I 'melancholy, plaintive'; II 'title for Vaisya ladies in Bali, short for gusti ayu');
sayuș I 'doing a thing unevenly or crookedly'; II 'K.o. oar'; III sayuș tikus 'K.o. grass'; IV 'originally: name of a place in Aceh';
sayup 'barely perceptible; just fading away in the distance';
sayur 'green food, edible vegetables';
soyak, soyat ' rending from end to end, tearing in two';
soyak (written 'soyo') see suyuk;
suyak see soyak;
suyar (~ lansuyar) ‘vampire’;
suyuk ‘projecting part of a roof at the narrow ends of a Malay house’ < MIN.

MIN

jVsV(C):
jsa ‘prosecutor’ < SKT;
jsa ‘service’ < SKT;

(sVsV(C):
sajak I ‘since, from’; II ‘rhyme, verse’;
saji (in speeches) ‘course, dish, food’;
sajo ‘only, but’;
sajup ‘cold, chilly’;
suji ‘embroidery’ < Old Javanese;
suyuy ‘prostration’;

sVcV(C):
suci ‘pure, clean, sacred’;

sVny(C):
sanjay ‘tall but not slim, well-built’;
sanjo ‘dusk’;
sanju ‘praise, flatter’;
señja ‘aslant, not parallel’;

sVny(C):
sañun ‘smile’;
sino ‘Indo-European boy’ < POR;
suni ‘silent, lonely, deserted’;

sVyV(C):
saya? ‘(piece of a) coconut shell’;
sayan 1. ‘(it is a) pity’; 2. ‘love’;
sayo (in Lintau and Buo) ‘I, me’ < SKT;
sayuy ‘indistinct, vague; scarcely, hardly’;
sayo ‘wing’;
suya? (~ soe?, ~ kuya?) ‘torn’;
suyuy, soyo? ‘projecting gable’.

BH

jVsV(C):
jsa ‘service’ < SKT;
jasat ‘body’ < AR;

sVJV(C):
saji I (~ sadi) ‘ready, willing’; II sasaji ‘sacrifice’ < SKT;
sujut ‘prostration’ < AR;
\[s\text{Ve}V(C):
\]
\[
suci 'pure, clean, sacred' < SKT;
suc\text{\textgreek{\textae}} 'honest, fair (in fighting, games etc.)';
\]
\[s\text{V\textae}V(C):
\]
\[
(BK se\text{\textae}ap 'lonely, desolate, quiet');
su\text{\textae}i 'silent, lonely, deserted';
\]
\[s\text{Vy}V(C):
\]
\[
say\text{\textae}q '1. (it is a) pity; 2. love';
say\text{\textae}t 'cut fine, notch';
say\text{\textae}uq 'quiet, listless';
say\text{\textup}p '(too) late';
say\text{\textur}'vegetables';
suy\text{\textuk}k 'be submissive, humble oneself, lack inspiration or vigour'.
\]

**SWY**

\[s\text{Vy}V(C):
\]
\[
sajo I 'only, merely' < SKT; II 'purpose (intention)'; III sajoka(n) 'meet a request';
saj\text{\textax} I 'do in parts, do little by little, work on s.th. slowly'; II 'seedlings transplanted from nursery bed';
\]
\[s\text{Vi}\text{\textjs}V(C):
\]
\[
sa\text{\textjo} 'dusk, sunset glow' < SKT;
(BSM sa\text{\textja} 'lie in an ambush at a village of the enemy');
\]
\[s\text{Vi}V(C):
\]
\[
sa\text{\textja}p 'dizzy, stupefied, numb';
\]
\[s\text{V\textup}V(C):
\]
\[
say\text{\textaj} 'feel sorry or pity for, regret';
say\text{\textap} 'wing';
say\text{\textoj} 'servant; I, me'; II sayo... sayo... 'the more..., the more...';
say\text{\textap}(\text{\textth}) 'look after, take care of';
say\text{\textap}(\text{\textwr}) (written 'saj\text{\textja}q' in Helfrich) 'half a coconut, shell of a coconut';
say\text{\textup} 'not reaching one's aim; fail (e.g. a harvest)';
suy\text{\textun} 'group, cattle, shoal'.
\]

**IBN**

\[s\text{V\textja}V(C):
\]
\[
saja? 'only, simply' (seeaja?) < SKT;
\]
\[s\text{Ve}V(C):
\]
\[
tuci (\sim suc\text{\texti}) 'clean, pure' < SKT;
\]
\[s\text{V\textae}V(C):
\]
\[
su\text{\textae}i 'lonely, deserted' < SKT;
\]
\[s\text{Vy}V(C):
\]
\[
sayap 'wing';
\]
sayat 'cut, saw';
sayaw 'having a strong desire that...not';
sayuk 'flowerbuds of palms, maize';
sayur 'vegetables';
suyam 'brushy, thick (of beard)';
suyuṣuyuṇ 'swollen (of the stomach)'.

JKT

jVsV(C):
jasad 'body' < AR;
java 'service, duty' < SKT;

sVjV(C):
sojog, sojok 'since, from ... on';
sōja 'bow in salutation' < CHI;
sujen I 'hollow in cheek when laughing or smiling'; II 'bamboo skewer for meat';
sujii I (~ sugi) 'k.o. tree'; II 'make embroidery';
sujud 'prostrate' < AR;

sVcV(C):
sacap 'thirty (rupiah)';
sacap 'k.o. tree, Caesalpina Sappan';
sēcən 'syphilis';
sēcēp 'a thousand (rupiah)';
sico 'set of comfortable table and chairs' < DU;
suci 'pure, clean, sacred' < SKT;

sVajV(C):
sañjun 'praise';

sVncV(C):
sañca, sañcè 'python' < SUN;

sVnV(C):
sañap 'quiet, desolate';
sañum 'smile (v)';
siñal, siñar 'signal (for trains)' < DU;
sino 'Dutch boy' < POR.
REFERENCES

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<tr>
<td>BKI</td>
<td>Bijdragen tot de Taal-, Land- en Volkenkunde, The Hague</td>
</tr>
<tr>
<td>DBP</td>
<td>Dewan Bahasa dan Pustaka, Kementerian Pendidikan Malaysia</td>
</tr>
<tr>
<td>JMBRAS</td>
<td>Journal of the Malayan Branch of the Royal Asiatic Society, Singapore</td>
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<td>OL</td>
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<td>Pacific Linguistics, Canberra: Australian National University</td>
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<td>Sarawak Museum Journal, Kuching</td>
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<td>VBG</td>
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<td>ZES</td>
<td>Zeitschrift für Eingeborenen-Sprachen, Berlin</td>
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N.B. In view of the various onomastic devices used in Indonesia, in this list of references I order most Indonesian names according to the first full name given in the original source. Thus, if the original sources give Abdul Jebar Hapip and Hoessein Djajadiningrat, the bibliographical reference to these authors will be found under A and H respectively. If the original sources give M. Asfandi Adul, the bibliographical reference will be found under A (from Asfandi). I deviate from this principle when original sources include titles (e.g. Teuku Iskandar is referred to under I), or when the author has a marga [clan] name (e.g., Anggur P. Tambunan is referred to under T).

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N.B. The etyma are arranged (1) according to the proto-language for which they were reconstructed; the proto-languages are ordered from their highest to their lowest order, beginning with PAN and (2) according to the following order of symbols: a, A, b, c, C, d, D, e, a, g, h, ?, i, j, k, l, L, M, n, p, f, N, p, q, r, R, s, t, u, v, V, w, x, y, z, Z. Where brackets, slashes, question marks, zero signs, commas, hyphens or spaces (in compound etyma) occur, they are ignored for ordering purposes, and ordering is done according to the following symbol.

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