# 22 <br> Proto Awyu-Dumut phonology II 

C.L. VOORHOEVE

## 1 Introduction

The Awyu-Dumut family of languages is a group of closely related languages extending over a large part of the lowlands of south-east Irian Jaya (see map). There are seven known member languages: Syiaxa/Yenimu, ${ }^{1}$ Axu, Pisa, Kaeti, Yonggom-Wambon, Digul-Wambon, and Kombai. The closest relatives of the Awyu-Dumut family seem to be two small neighbouring languages, Sawuy in the west and Korowai in the north. All other languages surrounding them those of the Asmat, Ok, Marind and Kayagar families - are at best only distantly related.

The first to make a study of languages of the Awyu-Dumut family was the Dutch Roman Catholic missionary P. Drabbe who, between 1950 and 1959, published grammatical sketches of various lengths on Syiaxa, Pisa, Axu, Kaeti and Yonggom-Wambon² (Drabbe 1950, 1957, 1959). Because of the numerous lexical and grammatical similarities between them, Drabbe considered them to be dialects of one language, which he labelled the Awyu language.

Drabbe's data formed the input to one of the earliest applications of the method of comparative linguistics to Papuan languages, Alan Healey's (1970) Proto-Awyu-Dumut phonology, published in a festschrift for Arthur Capell. In this article Healey argued that Drabbe's "Awyu dialects" are in fact closely related languages which fall into two groups, labelled by him the Awyu and Dumut groups. His Awyu group comprised at least three languages: Syiaxa, Pisa and Axu. ${ }^{3}$ The Dumut group had at least two members: Kaeti and

[^0]Yonggom-Wambon. ${ }^{4}$ He further reconstructed the phonologies of Proto A wyu, Proto Dumut and their mother language Proto Awyu-Dumut as well as a large number of vocabulary items in the three protolanguages. His main data base was the 430 -item comparative word list which Drabbe (1959) added to his study of Kaeti and Yonggom-Wambon. ${ }^{5}$

After Healey's article nothing new appeared on the Awyu-Dumut languages until almost 20 years later. Fieldwork conducted by L. and R. de Vries in the upper Digul area between 1983 and 1989 resulted in short grammars of Digul-Wambon and Kombai (de Vries 1989) and a morphology of Digul-Wambon (de Vries \& de Vries 1992). De Vries' work shows that DigulWambon belongs to the Dumut group of languages. The position of Kombai within the family is still uncertain. Lexicostatistical evidence suggests it could be included in the Dumut group, as is shown in Table 1:

Table 1: Lexicostatistical evidence for the subgrouping of the Awyu-Dumut language family

| Pi | 52 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ax | 55 | 68 |  |  |  |  |
| Ka | 32 | 33 | 33 |  |  |  |
| Wy | 32 | 35 | 34 | 62 |  |  |
| Wd | 34 | 36 | 34 | 51 | 50 |  |
| Kb | 30 | 32 | 30 | 40 | 38 | 36 |
|  | Sy | Pi | Ax | Ka | Wy | Wd |

Sy = Syiaxa, $\mathrm{Pi}=$ Pisa, $\mathrm{Ax}=\mathrm{Axı}, \mathrm{Ka}=$ Kaeti, $\mathrm{Wy}=$ Yonggom- Wambon, Wd $=$ Digul-Wambon, $\mathrm{Kb}=$ Kombai

However, there is no clear phonological or lexical evidence which supports this. For the time being therefore it will be classified as a separate member of the family. The internal structure of the Awyu-Dumut family is then as follows:

Table 2: The internal structure of the Awyu-Dumut Family

| Awyu group | Dumut group | Isolate |
| :--- | :--- | :--- |
| Syiaxa | Kaeti | Kombai |
| Pisa | Yonggom-Wambon |  |
| Axu | Digul-Wambon |  |

misinterpretation of a short reference to it in Drabbe (1959) who mentions it as the name used by the Kaeti speakers for the languages spoken to the north of them, i.e. Yonggom-Wambon and Dumut-Wambon.
4 Healey included a third language, Wanggom, in this group on the basis of a reference to it in Drabbe (1959:5). Recent research by de Vries has identified Wanggom as a dialect of Kombai (de Vries 1989:4).In addition Healey used two word lists taken in Kwem village, a Kaeti speaking enclave across the border with Papua New Guinea. One of these was collected by the present author.
5 In addition Haley used two word lists taken in Kwem village, a Kaeti-speaking enclave across the border with Papua New Guinea. One of these was collected by the present author.

The present paper takes a second look at Proto Awyu-Dumut phonology, taking into account the new data which have become available. While in this respect its scope is wider than that of Healey's article, it is narrower in that it focuses on the consonants only, and no attempt is made to present a list of all possible vocabulary reconstructions. It further offers a picture of the Proto A wyu-Dumut consonant system which differs in detail from the one drawn up by Healey.


Map: The Awyu-Dumut language family and surrounding languages

In the following, first the consonants of Proto Awyu will be reconstructed (§2); next come the Proto Dumut consonants (§3). The reconstructed consonants of Proto Awyu and Proto Dumut plus the consonants of Kombai form the input for the reconstruction of Proto Awyu-Dumut consonants (§4). It should be noted that the label Proto Awyu-Dumut is used here for the mother language of the whole Awyu-Dumut family, not just of the Awyu and Dumut groups. In §5, a selected corpus of comparative data is given, with footnotes, and is followed by a list of bibliographical references.

## 2 The Awyu Group

### 2.1 Overview

The Awyu Group has at least three member languages: Syiaxa, Axu, ${ }^{6}$ and Pisa. As mentioned above, Airo-Sumaxage is a possible fourth member but data in this language are lacking.

Axu, Pisa and Syiaxa all have the phonemes /p, t, k, b, d, g, f, s, x, m, n, w, y; i, u, e, o, a/. ${ }^{7}$ In addition, Syiaxa and Pisa have a phoneme $/ \mathrm{r} /$, and Axu and Pisa have a high rounded front vowel /ii/. In Pisa and Axu no consonants except /n/ occur in word-final position. This holds for the great majority of Syiaxa vocabulary as well, but in this language a few instances of wordfinal $/ \mathrm{t}, \mathrm{k}, \mathrm{s} /$ and $/ \mathrm{m} /$ do occur. So far no comparative evidence has come up to suggest that Syiaxa has retained consonants in word-final position that were lost in the other two languages. However, as we shall see below, it has retained a few previously word-final consonants as medial consonants by adding a vowel to them (see $\S 5: 8,41,47$ ).

### 2.2 The Proto Awyu consonants

In the following, Proto Awyu (PA) consonants will be reconstructed on the basis of their reflexes in the daughter languages. Syiaxa will usually be represented by the Syiaxa dialect except when the proper reflex is not found in this dialect but in Yenimu (see footnote 1). In the same way, Pisa will be represented by the variant noted down by Drabbe, but occasionally data collected by the present author in the Pisa-speaking village of Keru will be used to complement those of Drabbe.

A protoconsonant is considered established if there are at least three valid sets of correspondences to support it. If supported by only two sets, or one, the reconstruction is tentative. To illustrate the sound correspondences presented below a selected part of the data base is given in the comparative word list in $\S 5$. The bracketed cross-references after each set of correspondences refer to the numbered items in this list. Language names are abbreviated as follows: $\mathrm{Ax}=\mathrm{Axu}, \mathrm{Pi}=$ Pisa, $\mathrm{Sy}=$ Syiaxa, $\mathrm{PA}=$ Proto Awyu. I, M, F stand for word-initial, word-medial and word-final position.

[^1]```
Ax \(\quad \mathrm{Pi} \quad\) Sy
1. \(\begin{array}{lllllll} & p & p & p & \text { PA }\end{array}\)
```

Only two sets with medial $/ \mathrm{p} /$ have been noted.
Ax $\quad \mathrm{Pi} \quad \mathrm{Sy}$
2. $\begin{array}{cccccc}t & t & t & \mathrm{PA}_{t} & \mathrm{I} & {[2,22,51] ; \mathrm{M}[43,66,78]}\end{array}$
$s \quad s \quad t \quad \mathrm{I} \quad[3,31,59,72] ; \mathrm{M}[5,19,62,87,101]$
The first set is found preceding $/ \mathrm{a} / \mathrm{/} / \mathrm{o}$; the second set precedes any of the other vowels.


|  | Ax | Pi | Sy |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $b$ | $b$ | $b$ | PA | $* b$ | I |
| Ax | Pi | Sy |  |  |  |


| 5. | $d$ | $d$ | $d$ | PA | $* d$ | I | $[11,49,50,77] ; \mathrm{M}[1,11,46,63,76,93]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Ax | Pi | Sy |  |  |  |  |
| 6. | $g$ | $g$ | $g$ | PA | $* g$ | I | $[6,61,108] ; \mathrm{M}[2,7,17,28,72,80,98,105]$ |
|  | Ax | Pi | Sy |  |  |  |  |

7. $f f \quad f \quad$ PA *f $\quad$ I $[69,78,85] ; \mathrm{M}[15,24,106]$

Ax $\quad \mathrm{Pi} \quad \mathrm{Sy}$
8. $s \quad s \quad s \quad \mathrm{PA}{ }^{\prime} s \quad \mathrm{I}$ [30,36,67]; $\mathrm{M}[25,71,96]$

Ax $\mathrm{Pi} \quad \mathrm{Sy}$
9. $\begin{array}{rllllll}x & x & x & \text { PA }^{*} x & \text { I } & {[20,48,62,66,82,103] ; ~} & \text { M }[9,12,17,32,40,92,104]\end{array}$

Ax Pi Sy
10. $m \quad m \quad m \quad$ PA ${ }^{*} m \quad$ I $[17,29,34,47,93,102] ; \mathrm{M}[55,79,95,96,99]$

Ax Pi Sy
11. $n \quad n \quad n \quad$ PA ${ }^{*} n \quad$ I $[54,65,94,105] ;$ M $[67,75,83]$
$n \quad n \quad \mathrm{~F}[6,9,10,15,16,24,26,33,39,48,62,107]$
Word-final $/ \mathrm{n} /$ in Ax and Pi occurs as a nasal consonant only in certain phonological environments: when the next word begins with a vowel, [n] occurs; when the next word begins with a voiced stop the nasal is homorganic with the following consonant: ( $n \# d, m \# b, \eta \# g$ ). When followed by a pause it is realised as nasalisation of the preceding vowel. Thus, [gõ] =/gon/ etc.

|  | Ax | Pi | Sy |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 12. | $\boldsymbol{\emptyset}$ | $r$ | $r$ | PA | ${ }^{*} r$ |$\quad$| $\mathrm{I} \quad[9,11,14,24,44,58,84,100,107] ;$ |
| :--- |


|  | Ax | Pi | Sy |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 13. | $w$ | $w$ | $w$ | $\mathrm{PA}^{*} w$ | I | [55,57,65,76,87,90]; M [8]

Ax $\quad \mathrm{Pi} \quad \mathrm{Sy}$
14. $y \quad y \quad y \quad$ PA ${ }^{*} y \quad$ I $[4,8,12,15,39,92,95,101]$

The only case of medial ${ }^{*} y$ is in a probable loan word [21].

### 2.3 Summary

Proto Awyu had 14 consonant phonemes:

| ${ }^{*} p$ | $*_{t}$ | $*_{k}$ |
| :--- | :--- | :--- |
| $*_{b}$ | $*_{d}$ | $*_{g}$ |
| $*_{f}$ | $*_{s}$ | $*_{x}$ |
| ${ }^{2} m$ | $*_{n}$ |  |
|  | $*_{r}$ |  |
| $*_{w}$ | $*_{y}$ |  |

No consonants other than $/ \mathrm{n} /$ occurred in word-final position; the evidence for medial /w/ and $/ \mathrm{y} /$ is scanty.

## 3 The Dumut Group

### 3.1 Overview

There are three Dumut ${ }^{8}$ languages: Digul-Wambon, Yonggom-Wambon, and Kaeti. They all have the phonemes /p, t, k, b, d, g, m, n, r, w, y; a, e, i, o, u/. In addition, Digul-Wambon and Yonggom-Wambon have /s/, Digul-Wambon has /v, $x, h$ and j/ and Kaeti a sixth vowel /ii/. ${ }^{9}$
$/ \mathrm{p} /$ occurs in word-medial and word-final position in Digul-Wambon but is restricted to wordfinal position in Yonggom-Wambon and Kaeti. /t, k, m, $\mathrm{n} /$ occur in all positions; the other consonants do not occur word-finally. Of these, $/ \mathrm{h} /$ and $/ \mathrm{j} /$ are restricted to word-initial position and $/ \mathrm{x}$ / occurs only word-medially.

### 3.2 The Proto Dumut consonants

In the sets of correspondences presented below, Kaeti and Yonggom-Wambon are represented by the varieties described by Drabbe except for a few cases in which gaps in the Kaeti data were filled by Kwem data collected by myself. The Digul-Wambon data are from de Vries (1989) and de Vries and de Vries-Wiersma (1992 and pers. comm.) ${ }^{10}$ The language names have been abbreviated as follows: Wd = Digul-Wambon; $\mathrm{Wy}=$ Yonggom-Wambon; $\mathrm{Ka}=$ Kaeti.

[^2]

The sets for I and M positions correspond to / $\mathrm{f} /$ in the Awyu languages and Kombai. In one unexplained case the Ka reflex of initial ${ }^{*} p$ is $/ \mathrm{w} / .^{11} \mathrm{Ka}$ wado, Wy adoy (Sy fodo) 'bird of paradise'. Medial / $\mathrm{p} /$ in Wd seems to be a new introduction and the result of morphophonemic processes which postdate the PD stage. Possibly loaning played a role as well. ${ }^{12}$


The two series appear to be in complementary distribution: ${ }^{*} t>\mathrm{Wd} / \mathrm{s} /$ before a front vowel (/i, e/).

|  | Wd | Wy | Ka |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3. | $k$ | $k$ | $k$ | PD ${ }^{* k}$ | I $[20,26,36,43,63,82,83,97,103,106]$ |  |
|  |  |  |  |  | F $[46,58,75,104]$ |  |
|  | $x$ | $k$ | $k$ |  | M $[9,45,57,58,64]$ |  |
|  | Wd | Wy | Ka |  |  |  |
| 4. | $b$ | $b$ | $b$ | PD ${ }^{*} b$ | I $[21,68,81] ; \mathrm{M}[90]$ |  |

In the data on hand there are only two sets with $\mathrm{Wd} / \mathrm{b} /$ in medial position.

|  | Wd | Wy | Ka |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5. | $d$ | $d$ | $d$ | PD | $* d$ | I | $[46,49,50,77] ; \mathrm{M}[34,43,63]$ |
|  | Wd | Wy | Ka |  |  |  |  |
| 6. | $g$ | $g$ | $g$ | PD | $* g$ | I | $[6,60,61,108] ; \mathrm{M}[2,28,66,72,98,105]$ |
|  | Wd | Wy | Ka |  |  |  |  |
| 7. | $s$ | $s$ | $t$ | PD | ${ }^{*} s$ | I | $[22,27,30,89,96]$ |

There is some external evidence for $\mathrm{PD} *$ sin word-medial position; see §4.2, set 7.
Wd Wy Ka
8. $m \quad m \quad m \quad$ PD ${ }^{*} m \quad$ I [7,29,50,52,66,74,94]; $\mathrm{M}[52,96,97,99] ; \mathrm{F}[6,10]^{13}$

Wd Wy Ka
9. $n$ n $n$ n $\quad$ PD $*_{n} \quad \mathrm{I}$ [12,54,65,105]; $\mathrm{M}[33,83,94] ; \mathrm{F}[21,39,52,59,95,107]$

11 Ka werik 'ladder' corresponding with Sy furi, Pi afiri and Ax fike < *firike seems to be a loan word.
12 Two instances of intervocalic /p/, one in Wy and one in Ka, occur in suspected loans. Wy sapuk 'tobacco' is an obvious loan; Ka apap 'butterfly' could be a loan from one of the Awyu group languages since Wy and Kb have forms with /w/: Wy awo-buruy, Kb awayo.
13 A correspondence set $/ \mathrm{m}: \mathrm{m}: \mathrm{n} /$ can be found in [24, 26 and 79]. It concerns here a verb stem-final consonant which, at least in Kaeti, is always followed by an affix. The appearance of $n$ in the Kaeti forms is due to Drabbe's decision to give in his word list the 'primary stems' of the Kaeti verbs in which the $/ \mathrm{n} /$ seems to be an artefact of his analysis. The 'secondary stems' have $/ \mathrm{m} /$ instead of $/ \mathrm{n} /$. It should be noted that in Kaeti wordfinal $/ \mathrm{m} /$ and $/ \mathrm{n} /$ sometimes alternate (Drabbe 1959:5).

|  | Wd | Wy | Ka |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10. | $l$ | $r$ | $r$ | PD | ${ }^{*} r$ | $\mathrm{I}[8,24,40,44,47,58,88,91,107] ;$ |
|  |  |  |  |  |  | $\mathrm{M}[19,22,31,36,42,50,59,60,95]$ |

Wd Wy Ka
11. $w \quad w \quad w, 0 \quad \mathrm{PD}{ }^{*} w \quad \mathrm{I}$ [34,57,64,90]; M [106]

There are only two sets supporting PD ${ }^{*} w$ in medial position, 'wind' [106] ${ }^{14}$ and 'white': Wd kowalop, Ka koat (+ Kb xuwaru). Word-initially both $\mathrm{Ka} / \mathrm{w} /$ and Ka 0 were noted.

```
    Wd Wy Ka
12. \(y, 0 \quad y \quad y, 0 \quad\) PD *y I \([4,14,92,101]\)
```

The little evidence there is suggests that PD *y was dropped before a front vowel in Wd and Ka .

### 3.3 Residual problems

So far it has not been possible to establish with certainty the provenance of $\mathrm{Wd} / \mathrm{v} /$ and $/ \mathrm{j} /$.
Digul-Wambon / v /:
There is a possibility that $\mathrm{PD}^{*} p$ had fricative allophones in initial and medial position and that they are reflected by $/ \mathrm{v} / \mathrm{in} \mathrm{Wd}$ and $\emptyset$ in Ka - data in Wy are lacking. Facts supporting this view are (1) the complementary distribution of $\mathrm{Wn} / \mathrm{v} /$ and $\mathrm{PD} * p$; (2) Wd final $/ \mathrm{p} />/ \mathrm{v} /$ if it becomes intervocalic as a result of affixation or compounding. ${ }^{15}$ The comparative evidence however points in another direction: the possibility that/v/ has been introduced in loan words from Kombai:

Wd javet : Kb rafe 'upper arm'; Wd avop : Kb yafo 'who'; Wd valim : Kb fale 'curved, crooked'. Comparative evidence involving other languages of the Awyu-Dumut Family is lacking. If new evidence is found which establishes $\mathrm{Wd} / \mathrm{v} /$ as a reflex of $\mathrm{PD}{ }^{*} p$, then $\mathrm{PD}{ }^{*} f$ will have to be posited on the basis of the correspondence sets for I and M in §3.2, No.1.

## Digul-Wambon $/ \mathrm{j}$ :

There are only two cognate sets featuring Wd /j/: Wd jat : Wy rat : Ka orat (: Sy ara) 'light, not dark'; Wn junop : Ws yun : Ka orün (: PA *ruN, Kb lü) 'ulcer'[100]. In the latter set Ws yun could be a loan from its eastern neighbour Kati (a Lowland-Ok language) which has yin. They suggest a PD ${ }^{*} j$ and a PAD ${ }_{j}$ which merged with ${ }^{*} r$ in all daughter languages except Wd .

[^3]
### 3.4 Summary

Proto Dumut seems to have had at least 12 consonant phonemes:

| ${ }^{*} p$ | ${ }^{*}{ }_{t}$ |  |
| :---: | :---: | :---: |
| *b | ${ }^{*} d$ | * $(j ?)$ |
| ${ }^{*}$ m | ${ }^{*} n$ |  |
|  | ${ }^{*}$ |  |
|  | ${ }^{*} r$ |  |
| *w | * ${ }^{\prime}$ |  |

${ }^{*} p,{ }^{*} t,{ }^{*} k,{ }^{*} m$ and ${ }^{*} n$ occurred in all positions, the voiceless stops being unreleased in final position. Initially and medially ${ }^{*} p$ probably was a bilabial fricative. The voiced stops, /s/ and ${ }^{*} r$ did not occur word-finally; ${ }^{*} b,{ }^{*} d$ and ${ }^{*} g$ were prenasalised. ${ }^{*} w$ and ${ }^{*} y$ seem to have been restricted to word-initial position. Whether or not ${ }^{*} j$ was part of the PD consonant inventory is still unclear.

## 4 Proto Awyu-Dumut

### 4.1 Introduction

As mentioned in $\S 1$ it is assumed that PAD had three daughter languages, PA, PD and the precursor of present-day Kombai. Before the consonant correspondences between these languages can be presented, an overview must be given of the phoneme inventory of Kombai.

Kombai has at least 12 consonant phonemes: ${ }^{16} / \mathrm{b}, \mathrm{d}, \mathrm{g}, \mathrm{j}, \mathrm{m}, \mathrm{n}, \mathrm{f}, \mathrm{x}, \mathrm{l}, \mathrm{r} /{ }^{17}$ and $/ \mathrm{y} /$, and seven vowels: /a, e, i, ü, $u, u /$ and $/ \mathrm{o} /{ }^{18}$ In an earlier stage Kombai allowed at least $/ \mathrm{f}, \mathrm{x}, \mathrm{l}, \mathrm{m} /$ and $/ \mathrm{n} / \mathrm{in}$ word-final position. In present-day Kombai this is no longer the case, but the former final consonants reappear when words receive an affix. ${ }^{19}$ In unaffixed words a trace of final $/ \mathrm{m} /$ and $/ \mathrm{n} /$ is left in nasalisation of the final vowel. ${ }^{20}$

### 4.2 The Proto Awyu-Dumut consonants



[^4]PA *p appears to have been an innovation, as words in the Awyu languages containing its reflex do not have cognates outside the Awyu group.


In PA, the reflex of $\mathrm{PAD}^{*} k$ is $* k$ if it preceded $/ \mathrm{i}, \mathrm{e}, \mathrm{u}, \ddot{\mathrm{u}} /$ and ${ }^{*} x$ if it was followed by $/ \mathrm{a}, \mathrm{o} /$. The consonants $/ \mathrm{x} /$ and $/ \mathrm{k} /$ must have been in complementary distribution in PA before they became separate phonemes by the introduction of $/ \mathrm{k} /$ and $/ \mathrm{x} /$ in environments in which they contrast. ${ }^{21}$

| 4. | Kb $b$ | $\begin{aligned} & \text { PD } \\ & * b \end{aligned}$ | $\begin{aligned} & \mathrm{PA} \\ & * b \end{aligned}$ | PAD *b | I | [18,21,42,53,80,81], M [35,48,90] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kb | PD | PA |  |  |  |
| 5. | $d$ | ${ }^{*} d$ | ${ }^{*} d$ | PAD *d | I | [49,50,77], M [23,33,46,63] |
|  | Kb | PD | PA |  |  |  |
| 6. | $g$ | *g | *g | PAD *g | I | [6,56,61,108], M [2,28,70,72,80,98,105] |
|  | Kb | PD | PA |  |  |  |
| 7. | $r$ | *S | ${ }^{\text {s }}$ | PAD *s | I | [30,89,96]; (M) |

Only one case of possible evidence for medial *s was found: Wy asak, PA *aseka 'thin'. Additional evidence for initial *s is Kb rino, $\mathrm{Ka}(\mathrm{Kwem})$ tino, PA *sina 'ashes'.

| 8. | Kb | PD | PA | PAD ${ }^{*} m$ | $\begin{aligned} & \text { I [17,29,102], M }[26,50,96,9 \\ & \text { F }[6,10,24,62,83] \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $m$ | *m | ${ }^{*} m$ |  |  |  |
|  | $\sim / m$ | *m | ${ }^{*} n$ |  |  |  |
| 9. | Kb | PD | PA | PAD *n |  |  |
|  | $n$ | *n | ${ }^{*} n$ |  | I | [54,65,105], M [33,83,94] |
|  | $\sim / n$ | *n | ${ }^{*} n$ |  |  | [2,15,39,47,48,107] |

In PA, word-final ${ }^{*} m$ and ${ }^{*} n$ of PAD merged into one, PA ${ }^{*} n$.
$\mathrm{Kb} \quad \mathrm{PD} \quad \mathrm{PA}$
10. $\begin{array}{llllll}l & { }^{*} r & { }^{*} r & \mathrm{PAD}^{*} & { }^{*} r & \mathrm{I} \\ r & { }^{*} r & { }^{{ }^{2}} & {[9,24,44,47,58,84,91,107]}\end{array}$
$r \quad{ }^{*} r \quad{ }_{r} \quad \mathrm{M}[22,31,36,42,86]$
But: Kb mali, $\mathrm{Pi}(\mathrm{Keru})$ mari ‘descend’. The three cases of $\mathrm{Kb} / \mathrm{r} /(31,36,86)$ all have $/ \mathrm{r} /$ followed by a back vowel ( $/ \mathrm{o}, \mathrm{u} /$ ). This suggests that the following vowel is the conditioning factor here.

[^5]11. | Kb | PD | PA |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $w$ | $*_{w}$ | $*_{w}$ | $\mathrm{PAD}_{w}$ | I | $[57,90]$ |
| $f$ | $*_{w}$ | $?$ |  | I | $[1,34]$ |

In $[1,34] \mathrm{Kb} 0$ is followed by $/ \mathrm{i}$; there are no cognates in the Awyu group.

```
    Kb PD PA
12. yf *y *y PAD *y I [4,15,92,101]
```

The only case of PAD *y $>\mathrm{Kb} \emptyset$ is preceding a front vowel, just like $\mathrm{PD} * y>0$ in Wd and Ka , see §3.2, set 12.

### 4.3 Summary

Twelve consonants can be reconstructed for PAD:

| ${ }^{* p}$ | $*_{t}$ | $*_{k}$ |
| :--- | :--- | :--- |
| ${ }^{*} b$ | $*_{d}$ | $*_{g}$ |
|  | $*_{s}$ |  |
| ${ }^{*} m$ | $*_{n}$ |  |
|  | $*_{r}$ |  |
| ${ }^{*} w$ | ${ }^{*} y$ |  |

PAD ${ }^{*} p$ was un unreleased stop in word-final position; intervocalically it was a voiced bilabial fricative and word-initially it may have been a voiceless bilabial fricative or affricate. In Kombai and in the languages of the Awyu group it shifted to a fricative or was dropped; in the Dumut languages it shifted to $w$ or $h$, or was dropped, in initial and medial positions.
$\mathrm{PAD}^{*} t$ has been attested in all positions. Probably it was in morphophonemic alternation with * $r$, as it still is in the languages of the Dumut Group. In Kb it shifted to a flap or lateral, or was dropped. In the Awyu Group final *t has been dropped. When preceding a high or front vowel PAD * $t$ probably had a fricative or affricate allophone which was passed on to PA and PD and finally merged with /s/ in Wd, Ax and Pi.

PAD ${ }^{*} k$ has been attested in all positions. It must have had a fricative allophone [x] at least when followed by /a/ or /o/. In PA this [x] attained phonemic status by spreading to other vocalic environments and the introduction of a new $/ \mathrm{k} /$ before $/ \mathrm{a} /$ and $/ \mathrm{o} /$. The same phonemic split occurred in Wn ; there $/ \mathrm{x} /$ seems to have spread to all vocalic environments in medial position, attaining phonemic status before it spread to initial position.

PAD ${ }^{*} b, * d$ and $* g$, attested in initial and medial position, were prenasalised voiced stops, as they still are in Kombai and in the Dumut languages. In PA and its daughter languages the prenasalisation disappeared except in certain phonological environments (e.g. initial /b, d, g/ > $/ \mathrm{mb}, \mathrm{nd}, \mathrm{gg}$ / when preceded by a word-final vowel).

PAD *s is well attested in initial position only. The change of *s to /t/ in Kaeti suggests that PAD, PD initial *s was an affricate [ $\mathrm{t}^{\mathrm{s}}{ }^{2}{ }^{22}$

[^6]PAD ${ }^{*} m$ is attested in all positions. In PA it merged with ${ }^{*} n$ in word-final position although a few traces of it remain in the daughter languages in those cases in which a final consonant received an epenthetic vowel or was reinterpreted as medial, e.g. Ax kinumi- 'to sleep' < kinum $i$ - [83]. The PD daughter languages retained $/ \mathrm{m} /$ in final position but in Ka there are some cases of alternation of final $/ \mathrm{m} /$ and $/ \mathrm{n} /$ (Healey1970:1005). In Kombai, word-final $/ \mathrm{m} /$ was replaced by nasalisation of the preceding vowel.

PAD ${ }^{*} n$ is attested in all positions. In PA it was dropped in certain phonological environments (see $\S 2.2$, set 11 ), leaving a trace in the nasalisation of the vowel that preceded it. In Kombai, word-final $/ \mathrm{n} /$ was dropped altogether and the preceding vowel was nasalised.

PAD ${ }^{*} r$, attested in initial and medial position, may have had both flapped and lateral allophones as in its daughter language Wd. In Kombai, its reflex is a lateral; in the other Awyu-Dumut languages it is a flapped/r/.

PAD *w and *y are attested in initial position only.

## 5 Comparative word list

In this list only cognate forms are given which underlie the sets of correspondences presented in $\S \S 2-4$. A dash signals a non-cognate form; a question mark stands for a gap in the data; a blank indicates that no protoform can be reconstructed on the evidence.

Reconstructed forms are given for PA, PD and PAD. They are the forms reconstructed by Healey, with some minor changes in the consonants and, additionally, in the vowels if the new data seem to warrant such a change. Forms between brackets are not Healey's reconstructions but tentative reconstructions added on the basis of new data.

|  | 1. arm $^{23}$ | $2 .$ <br> armpit | 3. banana | 4. bird | 5. bite | 6. blood |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | bedo | togon | sü | $i i^{24}$ | asi- | gon |
| Pi | bida | toxon ${ }^{25}$ | su | $y i$ | asi- | gon |
| Sy | bedo | togo | $t u$ | $y i$ | ati- | gon ${ }^{26}$ |
| Ka | it | tagon-top | tyut ${ }^{27}$ | et | - | gom |
| Wy | wit | tago-top | tit | yet | atigo- | gom |
| Wd | - | - | sit | et | - | gom |
| Kb | it | - | rül | el | - | - |
| PA | *bedo | *togon | ${ }^{*}$ u | *yi | *ati- | *gon |
| PD | *wit | *taagon | *(tyut) | *yet | *ati(go)- | *gom |
| PAD | (*wit) | *togon | *(tyut) | *yet | *ati- | *gom |

24 ii: Drabbe's notation. Possibly a long vowel.
25 The expected form is togon; in Keru the form togo-di was noted. In Wy and Wd the form is compounded with top 'hole'.
26 One of the few words in Sy with a final nasal vowel.

|  | 7. <br> bone | 8. <br> breadfruit | 9. <br> break $^{28}$ | 10. <br> breast $^{29}$ | 11. <br> bring | 12. <br> brother $^{30}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ax | bigi | - | axa fün- | on | ade da- | yoxo |
| Pi | bagi | yawo | axa fun- | on | radi de- | - |
| Sy | boge | yuato |  |  |  |  |
| Ka | mirap 32 | raot | raxa fu- | ome | rakamo- | am |


|  | 13. butterfly | $\begin{aligned} & \hline 14 \\ & \text { call } \end{aligned}$ | 15. canoe | 16. carry ${ }^{33}$ | 17. cheek | 18. chest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | apo | - | yofün | kekun- | moxo pe | be-same |
| Pi | apero | $r i-$ | yefun | kekun- | moxo bagi | bie |
| Sy | apa | ri- | - | akeku- | moxo boge | - |
| Ka | apap | yo- | yoün | - | amoka | be-man |
| Wy | - | yo- | - | - | - | be-mit |
| Wd | ? | yo- | - | - | - | ? |
| Kb | - | ya- | yafu | - | ? | bema |
| PA | *aparo | ${ }^{*}$ ri- | *yofün | *kekun- | *moxo | (*bie) |
| PD |  | *yo- | (*yopün) |  |  | (*be) |
| PAD |  | (*yo-) | (*yopün) |  | (*moka) | (*be) |

'to break wood'. The expected Pisa form is raxa.
'woman's breast'. For Sy ome see note 31.
'elder brother'.
In yuato, like in ome [10], kete [41] and moxo [47] Syiaxa seems to have retained an original final consonant by adding an epenthetic vowel.
Ka mirap: $/ \mathrm{t} / \mathrm{>} / \mathrm{r} /$ is a common morphophonemic change in the Dumut languages.
'carry on the shoulder'.

|  | $\begin{aligned} & 19 . \\ & \text { climb } \end{aligned}$ | 20. cloud, sky | $\begin{aligned} & 21 . \\ & \text { coconut }^{34} \end{aligned}$ | $\begin{aligned} & 22 . \\ & \text { cold } \end{aligned}$ | 23. <br> cook | 24. <br> cry |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | osu- | xuito | peyo | tü | - | ifi on- |
| Pi | su- | xou | peyo | taru | $d u$ - | ife ru- |
| Sy | oto- | xotu | payo | toru | nu- | efe ro- |
| Ka | törö- | kut | bian | toru ${ }^{35}$ | odü- | run- |
| Wy | turu- | kumut ${ }^{36}$ | bian | saruy | udo- | rom- |
| Wd | matulo- | kut | - | salon | папи- | lomo- |
| Kb | - | ramoxoü | biyo | - | adü- | - |
| PA | *otu- | *xuito | *рæуо | *toru |  | *efz ron- |
| PD | *törö | (*kut) | *bian | (*toruy) | *udü- | *rom- |
| PAD |  | (*koüt) | (*biyon) | *torüy | (*audu) | *rom- |


|  | $\begin{aligned} & \hline 25 . \\ & \text { dark }^{37} \end{aligned}$ | $\begin{aligned} & 26 . \\ & \text { die } \end{aligned}$ | $\begin{aligned} & \hline 27 . \\ & \mathrm{dig} \end{aligned}$ | $\begin{aligned} & \hline 28 . \\ & \mathrm{dog} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 29 . \\ & \text { drink } \end{aligned}$ | $\begin{aligned} & \hline 30 . \\ & \text { dry } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | asü | kün- | küo- | yagi | $m i-$ | so |
| Pi | asu | kun- | ko- | agi | $m i-$ | se |
| Sy | asu | ku- | ku-38 | - | $m i-$ | so |
| Ka | - | kün- | to- | aga | $m i-$ | (tomap) |
| Wy | - | kim- | so- | agai | mi- | - |
| Wd | - | kim- | aso- | agai | ami- | sok |
| Kb | - | xumo- | xüone- | - | $m i-$ | roxe |
| PA | *asü | *kün- | *küo- | *yagi | *mi- | *so |
| PD |  | *küm- | *so- | *agai | ${ }^{*} m i-$ | (*sok) |
| PAD |  | *küm- | (*küo-) | *agai | *mi- | (*soke) |

[^7]|  | $31 .$ ear | $\begin{aligned} & \hline 32 . \\ & \text { earth } \end{aligned}$ | $\begin{aligned} & 33 . \\ & \text { eat } \end{aligned}$ | $\begin{aligned} & 34 . \\ & \mathrm{egg}^{39} \end{aligned}$ | 35. <br> elbow | $\begin{aligned} & \hline 36 . \\ & \text { eye } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | suketo ${ }^{40}$ | soxo ${ }^{41}$ | en- | mügo | - | kio ${ }^{42}$ |
| Pi | surun ${ }^{43}$ | soxo | nin'ade ${ }^{44}$ | mugo | - | kiri |
| Sy | turu | soxo | $e$ - | - | - | kero |
| Ka | keretop | itop | ?/ade- | wedin | i-gabun | kerop |
| Wy | turutop | itiwa ${ }^{45}$ | en- | - | wi-gabin | kerop |
| Wd | silutop | ip | en ${ }^{\text {ade- }}$ | wadin | - | kelop |
| Kb | ruro | $i$ | en ${ }^{\text {ade- }}$ | idi | $i$-gabii | xoro |
| PA | *turun | *soxo | *en ${ }^{\text {ade- }}$ | *mugo |  | *kero |
| PD | *turutop | *itip | *en/ade- | (*wadin) | (*wi-gabün) | *kerop |
| PAD | *turun | (*ip) | *en'ade- | (*waidin) | (*wi-gabiin) | *kerop |


|  | $37 .$ <br> faeces | $38 .$ <br> father | $\begin{aligned} & 39 . \\ & \text { fire } \end{aligned}$ | $\begin{aligned} & 40 . \\ & \text { fish } \end{aligned}$ | 41 flower | $\begin{aligned} & \hline 42 . \\ & \text { fly } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | $o$ | eto | yan | axe | ki | bun xo- |
| Pi | $o$ | bo | yin | axae | ki | burun- |
| Sy | $o r^{46}$ | - | yido | axae | kete ${ }^{47}$ | boro- |
| Ka | $a$ | eti | in | roka | ket | berena- |
| Wy | oy | $a t i$ | enop | rakae | ket | - |
| Wd | ? | bap | enop | laxai | - | bulup- |
| Kb | $a$ | are | $e$ | - | $x e$ |  |
| PA | *or |  | *yin | *axae | *ket | *burun- |
| PD | *oy | (*ati) | (*yen) | *rokae | *ket |  |
| PAD | *or | (*ati) | *yin | *rokai | *ket | (*burun-) |

39 The forms in Ax and Pi have probable cognates in the Marind languages: Marind magaf, Yaqay moqa; those in the Dumut languages and Kombai link up with forms found in the Ok languages: un, win, windi.
40 suketo: a compound of su < *turu 'ear', ke <kere ('ear'? see the Ka form), and to < *top 'hole', also found in the Ka, Wy and Wd forms.
41 Axu and Syiaxa also have the forms mokan and moka which almost certainly are loans from Marind languages, cf. Marind makan, Yaqay moqon 'earth, soil'.
42 The full forms in Axu and Pisa are kio-mogo, kiri-mogo, i.e. they are compounds containing a second constituent mogo 'egg'.
43 In the Kerv variant of Pisa I noted the forms surun and surum, both with a final nasal consonant.
44 Awyu verbs often have two to four suppletive stems which are tense/mood-linked. ade- ([ande]), noted in Keru, Kwem, Digul- Wambon and Kombai, is a future tense stem. Other stem forms noted are Kwem ana, $\mathrm{Wd} n a$-, $\mathrm{Kb} n a$ - (imperative stem) and $\mathrm{Kb} n e$-.
45 The Kwem variant of Kaeti has etiwa 'earth', but iwa $(<i p+a)$ in the utterance mene iwa 'this is earth'. The forms etiwa, itiwa therefore appear to be (old) compounds containing an unidentified constituent et, it also found in itop.
46 An isolated case of final $/ \mathrm{r} /$ in Syiaxa.
47 See note 31.

|  | 43. <br> foot | fruit | 45. | garden | 46. | give |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


|  | 49. <br> hear | 50. heart ${ }^{49}$ | 51. hole | $\begin{aligned} & 52 . \\ & \text { hot } \end{aligned}$ | 53. house ${ }^{50}$ | $54 .$ I |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | $d a$ - | dübo | to | apufo | busü | nu |
| Pi | $d a-$ | duburo | to | apasio | afaxain ${ }^{51}$ | nu |
| Sy | $d a-$ | dibo | to | apato | afoxei | no |
| Ka | dot- | diumarop | top | - | bütüp | nöp |
| Wy | dat- | dimdop | top | mamin | bitip | nир |
| Wd | dat- | dimlop | top | mamin | $a p$ | nuk |
| Kb | - | dümo | rof | татӥ | af | nuf |
| PA | *da- | *düburo | *to | *apat | (*afoxain) | *nu |
| PD | *dat- | *dümarop | *top | *mamin | *ap | *nup |
| PAD | *dat- | *dümorop | *top | (*mamün) | *ap | *nup |

48 The forms of the *ron and *muk sets can mean 'hair' as well as 'leaves'. In Kb , lo is compounded with a morpheme meaning 'skin'. In Wd, lon is combined with 'head' to signify 'hair of the head'; muk means 'body hair'. In the Sawuy language the cognate form mox means 'leaf'.
49 In several languages the word for 'heart' is a compound with 'egg' as its second constituent. Dumut ${ }^{*} m$ : Awyu ${ }^{*} b$ is irregular.
50 There seem to have been two words for 'house', *ap and *xaim, the latter referring more specifically to houses built in trees (as in Korowai which has both forms: op, xaim). In Ax and Pi the two words have formed one compound with the general meaning 'house'. In Sawuy, the cognate form aboxaim now means 'village'. The forms bitip, bütüp and busü seem to be a local innovation which spread from Axu to Ka , Wy or vice versa.
51 Form noted in Keru; the Pisa form noted by Drabbe is xain.

|  | 55. inside | $\begin{aligned} & 56 . \\ & \text { jaw } \\ & \hline \end{aligned}$ | 57. <br> knife ${ }^{52}$ | 58. language | $59 .$ <br> leech | $\begin{aligned} & \hline 60 . \\ & \text { long } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | womu | - | woki | $u$ | sisi | $p i$ |
| Pi | womu | - | waki | ru | - | - |
| Sy | wити | gado | - | roxo ${ }^{53}$ | tese | pere |
| Ka | karup | gadöm | weki | arek | teren | guruop ${ }^{54}$ |
| Wy | kop | - | waki | ruk | teren | gurup |
| Wd | - | - | waxi | luk, loxo | selen | - |
| Kb | xalu | gadu | waxi | $l u$ | - | - |
| PA | * womu |  | *waki | *ru, roxo | *tese | *pere |
| PD | (*karup) |  | *waki | *ruk, roko | *teren | *guruap |
| PAD | (*karup) | (*gadom) | *waki | *ruk, roko |  |  |


|  | $61 .$ <br> louse | 62. man, male | $63 .$ <br> meat | $64 .$ <br> moon | 65. mother | 66. mouth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | agu | xo basin ${ }^{55}$ | kudu | - | - | xato |
| Pi | ago, agu | xo bisin | kadu | - | ni,wani | xate |
| Sy | go, gu | xo butu | kodo | - | wini | xateto |
| Ka | gut | küap | kadö | oko | nou | magot |
| Wy | gut | ko batim | - | wokoi | noi | magot |
| Wd | gut | kap | kadu | waxot | $n i$ | - |
| Kb | gu | $x$ of | xudo | - | $n i$ | mogoro |
| PA | *agu | *xo batin | *kodu |  | *ni | *xate |
| PD | *gut | *koap batim | (*kadö) | *wakot | *noi | *magot |
| PAD | *gut | *koap batim | *kodö | (*wakot) | *noi | *magot |

52 'Bamboo knife' as well as 'kind of bamboo of which knives are made'.
53 Two stems are involved, derived from PAD *ruk and *roko. In present-day Wd they are suppletive stems of the verb 'to speak'. In other languages this link does not exist and either one or the other means 'word, voice, language'.
54 Kwem: goro-ap.
$55 X o$ and its cognates mean 'person, people', while basin etc. means 'male'.

|  | 67. mucus | 68. <br> nail | 69. <br> name | $70 .$ <br> nose | $\begin{aligned} & 71 . \\ & \text { old }^{56} \end{aligned}$ | 72. penis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | sinifo | - | fi | - | posii | segi |
| Pi | sinifo | - | $f i$ | - | pasi ${ }^{57}$ | sigi |
| Sy | sinifu | - | fi | - | pusu ${ }^{58}$ | tege |
| Ka | - | betit | üp | togut | - | teget |
| Wy | - | - | ip | togot | - | teget |
| Wd | ? | bisit | hit | - | - | ? |
| Kb | ? | - | $f i$ | ragu | - | rege |
| PA | *Sinifo |  | *fi |  | *patü | *tege |
| PD |  | *betit | $*_{\text {fip }}$ | $*_{\text {togut }}$ |  | *teget |
| PAD |  |  | *pip | (*togut) |  | *teget |


|  | 73. put down | 74. rain | 75. <br> rattan | 76. river ${ }^{59}$ | $\begin{aligned} & \hline 77 . \\ & \text { sago } \end{aligned}$ | 78. see, look |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | - | $a$ | - | widi | $d \ddot{u}$ | eteox- |
| Pi | ? | $a$ | - | wadi | $d u$ | feto- |
| Sy | fe-/foro- ${ }^{60}$ | $a$ | - | - | $d w d o$ | fete- |
| Ka | ? | murüp | tik | - | $d u$ | itigo- |
| Wy | ? | mirip | tik | - | dun | eto- |
| Wd | halo | - | sik | - | $d u$ | hetak- |
| Kb | $f a$ - | mulü | $r i$ | wodei | doii | fera- |
| PA |  | *a |  | *wadi | (*doii) | *feteox- |
| PD |  | *mürüp | ${ }^{*}$ tik |  | *du(n) | (*petaok-) |
| PAD | *pa'*paro- | (*murüp) | (*tik) | (*wadei) | (*doü) | (*peta-) |

[^8]57 Keru variant.
58 Yenimu dialect: patu.
$59 \mathrm{Sy}, \mathrm{Ka}, \mathrm{Wy}$ and Wd have one word for 'river' and 'water', see 104.
60 foro- is the future tense stem.

|  | 79. <br> shoot | 80. <br> short | $\begin{aligned} & 81 . \\ & \text { sit } \end{aligned}$ | $\begin{aligned} & \hline 82 . \\ & \text { skin } \\ & \hline \end{aligned}$ | 83. <br> sleep ${ }^{61}$ | 84. <br> lie down |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | - | bago | $b a$ - | $x a$ | kunumi- | $i$ - |
| Pi | pemo- | bogo | $b a-$ | $x a$ | kunun | ri- |
| Sy | piemo- | bogedi | bo- | $x a$ | kono | re- |
| Ka | teen- | - | $b a$ - | kota ${ }^{62}$ | kinum | ran- |
| Wy | taem- | - | $b a$ - | kotae | kinum | yan-63 |
| Wd | tamja- | - | $b a$ - | kat ${ }^{64}$ | kinum | la/le- |
| Kb | - | bogo | $b a$ - | $x a$ | хипи | lei- |
| PA | *piemo- |  | * ba- | * $x a$ | *kunun | *re- |
| PD | *taem- |  | * ba- | *katay | *kinum | ${ }^{*} r a(n) / r e-$ |
| PAD |  | (*bogo) | *ba | *kat | *kunum | (*rei-) |


|  | 85. smell | 86. smoke | 87. snake | 88. stand | $89 .$ | $\begin{aligned} & 90 . \\ & \text { tail } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | fumi- | üku | wisi | $e$ - | - | wobugo |
| Pi | fimi- | aku | wasi | - | - | wobu |
| Sy | fugu | oru | wuti | $e$ - | sera | wobii65 |
| Ka | ито- | oruk | gweti | $r i-$ | teat | wobit |
| Wy | ipmo- | uruk | - | re- | sat | wabit |
| Wd | hip- | iruk | - | la/lo- | sat | wabit |
| Kb | ? | emaru | gwari | le/la- | $r e i$ | - |
| PA | *fümi- | (*aruku) | *wati | ${ }^{\text {e }}$ - |  | *wobu |
| PD | *рӥрто- | *uruk | (*gwati) | (*re/ra-) | *sat | *wabit |
| PAD | (*рӥpmo-) | (*aruk) | (*gwati) | (*re/ra-) | (*seyat) | *wabiut |

[^9]|  | 91. <br> take | 92. they | 93. thigh | 94. this | $95 .$ <br> thorn | $96 .$ <br> throw ${ }^{66}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | $a$ - | yoxo | midi | nego | yomo | kusumu- |
| Pi | ra- | yoxo | midin | nego | yamo | kosomo- |
| Sy | re- | yoxo | midi | nere | yomo | rasomo- |
| Ka | - | yegip | - | mene | orün | - |
| Wy | rap- | yagup | - | mene | arin | somo- |
| Wd | lap- | jaxop | - | - | alin | samo- |
| Kb | - | ya | ? | mene | ? | - |
| PA | ${ }^{*} r a-$ | *yoxo | *midi(n) | *ne(go) | *yomo | *sumu- |
| PD | *rap- |  |  | *mene | *arün | (*samo-) |
| PAD | *rap- | (*ya-kop) |  | (*mene) |  | *somo- |


|  | 97. <br> thunder | 98. tongue | 99. two | $\begin{aligned} & 100 . \\ & \text { ulcer } \end{aligned}$ | 101. urine | $\begin{aligned} & 102 . \\ & \text { vein } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | $x u$ | fage | okиoти | ione | isi | me |
| Pi | xou ${ }^{67}$ | fage | kuruman | rü | $y i$ | $m i$ |
| Sy | xoru | fage | okomo | run | yiti | me |
| Ka | komöt | ogat | rumo | orün | erok ${ }^{68}$ | temet |
| Wy | kumut | - | irumo ${ }^{69}$ | yiin ${ }^{70}$ | yetok | met |
| Wd | kumut, kut | hat-gat | ilumo | ? | ? | ? |
| Kb | хити | faga | - | liu | ? | ? |
| PA | *xoru | *fage | *okorumon | *rün | * yit | ${ }^{*}$ me |
| PD | *kumöt | (*pagat) | *irumon | *rün | *yet-ok | ${ }^{\text {met }}$ |
| PAD | (*kumöt) | *pogat | *-rumon | *rün | *yet | ${ }^{\text {met }}$ |

'throw away'. The forms in the Awyu group languages are bi- morphemic: ku-sumu, ko-somo, ra-somo. Compare the partly cognate form in Asmat: wi-asom 'throw-away'.
67 Expected: xoru; see §2.2, set 12.
68 Erok, and Wy yetok, are compounds in which the second constituent is 'water', see 104.
69 But in the Kwem variant: ruma.
70 Expected: run. The form yun could be a loan from the eastern neighbour (Kati, of the Ok Family) which has yin, and ying.

|  | $\begin{aligned} & 103 . \\ & \text { walk } \end{aligned}$ | 104. water | $\begin{aligned} & 105 . \\ & \text { we } \end{aligned}$ | 106. wind | 107. woman | $\begin{aligned} & 108 . \\ & \text { you (sg.) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ax | xo- | oxo | nügu | kifi | an | gu |
| Pi | xo- | - | nugu | $k i f i^{71}$ | ran | gu |
| Sy | xo- | oxo | nogo | kifi | $r a^{72}$ | go |
| Ka | ko- | ok | nogüp | kiow | ran | gӧp |
| Wy | ko- | ok | nagup | kiwuy | ran | gир |
| Wd | ko/ka- | ok | noxop | kiwin | lan | gup |
| Kb | $x a-$ | ox | nagu | xifei | lan | gu |
| PA | *xo- | *oxo | *nugu | *kifi | *ran | *gu |
| PD | *ko/ka- | *ok | *nagüp | *kiwuy | *ran | *gup |
| PAD | *ko/ka- | *ok | *nogüp | *kipuy | *ran | *gup |

## References

Abbreviations:
AJPA American Journal of Physical Anthropology N.S.
BKI Bijdragen tot de Taal-, Land- en Volkenkunde
KITLV Koninklijk Instituut voor taal-, land- en volkenkunde, Leiden
VKI Verhandelingen van het Koninklijk Instituut voor taal-, land- en Volkenkunde
Drabbe, P., 1950, Twee dialecten van de Awyu-taal. BKI 106:92-147.
1957, Spraakkunst van het Aghu-dialect van de Awju-taal. 's Gravenhage: Martinus Nijhoff.
1959, Kaeti en Wambon, twee Awju dialecten. 's Gravenhage: Martinus Nijhoff.
Enk, G.J. Van and L. De Vries, 1997, The Korowai of Irian Jaya. Oxford Studies in Anthropological Linguistics 9. Oxford: Oxford University Press.
Healey, A., 1970, Proto-Awyu-Dumut phonology. In Wurm and Laycock, eds, 1970:9971061.

Simmons, R.T., D.C. Gajdusek and M.K. Nicholson, 1967, Blood group genetic varieties in inhabitants of West New Guinea, with a map of the villages and linguistic groups of SouthWest New Guinea. AJPA 27:277-302.
Voorhoeve, C.L.,1971, Miscellaneous notes on languages in West Irian, New Guinea. 47-114. Canberra: Pacific Linguistics.
Vries, L. De, 1989, Studies in Wambon and Kombai. Aspects of two Papuan languages of Irian Jaya. PhD thesis, Amsterdam.
Vries, L. De and R. De Vries-Wiersma, 1992, The morphology of Wambon. VKI 151. Leiden: KITLV Press.
Wurm, S.A. and D.C. Laycock, eds, 1970, Pacific linguistic studies in honour of Arthur Capell. Canberra: Pacific Linguistics.

[^10]
[^0]:    1 The name refers to the two almost identical dialects which make up this language. In the remainder of this article I shall simply refer to it as Syiaxa. The letter $x$ stands for a velar fricative which is voiced intervocalically and unvoiced in other positions.
    2 Called Wambon by Drabbe. Yonggom-Wambon is the name used by L. de Vries (1989) to distinguish it from its northern neighbour Digul-Wambon.
    3 Healey included two more languages in this group: Airo-Sumaxage and Kotogüt. Airo-Sumaxage, spoken to the south-west of Pisa in the Peru River area, is reported to be an Awyu language by Gajdusek (in: Simmons et al. 1967). Actual language data however were and still are not available so we do not know whether we have to do with a dialect of Pisa or a separate member of the Awyu group. The inclusion of Kotogit seems to rest on a

[^1]:    6 In older literature the name Jair is sometimes used.
    7 In Syiaxa and Axu word-initial voiced stops have a prenasalised allophone when the preceding word ends in a vowel. /s/ has an alveopalatal allophone [s] preceding high front vowels and an affricate allophone [ts] in wordinitial position. Both allophones are rare. /x/ is voiced intervocalically in Axu and Syiaxa. Axu, Pisa /n/ in word-final position is realised as nasalisation of the preceding vowel ( $[\tilde{a}]=/ a n /$ ); $/ \mathrm{r} /$ is a flap except in the Yenimu dialect of Syiaxa, where it has flapped and lateral allophones.

[^2]:    8 The name Dumut was chosen by Healey because the speakers of Kaeti and Yonggom-Wambon live on the Dumut River, also known as the Mandobo. I have taken the group name Dumut to include Digul-Wambon as well.
    9 The voiceless stops $/ \mathrm{p}, \mathrm{t}, \mathrm{k} /$ are unreleased in word-final position preceding a pause. Between vowels, $/ \mathrm{k} / \mathrm{is}$ voiced. The voiced stops are always prenasalised. / $/$ / is a flap; in Digul-Wambon it alternates freely with an alveolar lateral [1]. /s/ in word-initial position is a voiceless alveolar affricate [ t ] in Digul-Wambon (and occasionally in Yonggom-Wambon and Kaeti as well), otherwise it is a voiceless alveolar fricative. /v/ is a voiced bilabial fricative, / $\mathrm{j} /$ a voiced palato-alveolar affricate, $/ \mathrm{x} /$ a voiced velar fricative [ g ] and $/ \mathrm{h} /$ a voiceless glottal fricative. /ü/ finally is a rounded high front vowel.
    10 I am much indebted to Lourens de Vries for providing me with a lot of lexical data which have not been included in his published work.

[^3]:    14 Note that Ka kiow could have come from kiwoy by metathesis of /w/ and $/ \mathrm{y} /$.
    15 In Wy and Ka however the morphophonemic alternation is between /p/ and /w/ and this, together with the near- complementary distribution of $/ \mathrm{w} /$ and $/ \mathrm{p} /$ in those languages, was for Healey sufficient reason to seriously consider the possibility of PD *p having reflexes /w/ and /p/ in Wy and Ka (Healey 1970:999, 1009).

[^4]:    16 De Vries includes three more consonants in his description of Kombai phonology: two labialised velars, /gw/ and $/ \mathrm{xw} /$, and $/ \mathrm{h} /$ which he classifies as a semivowel, but the phonetic equivalent of which is unclear. There are no comparative data on /xw/ and $/ \mathrm{h}$, but there is one instance of $\mathrm{Kb} / \mathrm{gw} /: \mathrm{Ka} / \mathrm{gw} /: \mathrm{Ax}, \mathrm{Pi}, \mathrm{Sy} / \mathrm{w} /$ that could point to the presence of labialised velar consonants in PAD (see §5, 87).
    17 /b, d/ and/g/ are prenasalised; /f/ is a bilabial fricative with voiced and unvoiced allophones, and / $\mathrm{x} / \mathrm{a}$ velar fricative with voiced and unvoiced allophones.
    $18 / \ddot{\mathbf{u}} /$ is a rounded high-front vowel, / $\cup /$ an unrounded high-back vowel.
    19 Perhaps under other circumstances as well, but de Vries' treatment of this aspect of Kombai grammar is very sketchy and no more can be said about it here.
    20 For instance, $e$ 'bird', momo 'uncle', la 'wife' when in certain syntactic constructions they receive a "connective" vowel (de Vries 1989:134, 135) > el-o, momof-o, lan-o. Nasalisation of final vowels as a result of the loss of a final nasal is also found in the languages of the Awyu group; see §2.2, set 11.

[^5]:    21 Healey $(1970: 1000,1001)$ noted that final PAD ${ }^{*} k>$ PA * 0 except in verb stems where it was retained. All PA daughter languages except Axu would have lost this stem-final $k$; PD would have lost final PAD *k in verb stems. I have serious doubts about his analysis of Axu "stem-final $k$ " as part of the verb stem. To go into detail falls outside the scope of this paper.

[^6]:    22 There is one case of what looks like a medial /s/:/t/ correspondence: Ws kosep, Ka kotep 'ashes' from an earlier *kosep. However there is comparative evidence in the Ok languages that Wy and Ka (or their immediate ancestor) borrowed the word from one of them, cf. Ngalum kutep 'fireplace', Telefol kutap, Faiwol kutup 'ashes'.

[^7]:    34 Peyo, payo in the Awyu languages could reflect a PA loan from a Marind language, cf. Yaqay payo, and the eastern neighbours of Marind: Moraori poyo, Yey po.
    35 Form noted in Kwem village. One would expect the $W y$ and $W d$ forms to have initial $/ \mathrm{t}$ instead of $/ \mathrm{s} /$.
    36 See 'thunder' [97].
    37 Also: 'night'.
    38 Yenimu dialect: kuo-.

[^8]:    56 Old, of objects.

[^9]:    61 These forms in fact mean 'asleep, sleeping' and are always followed by a verb meaning 'lie down'; see 84.
    62 'skin, bark'.
    63 The expected form is ran; see also $95,100$.
    64 But kotai 'bark'.
    65 Yenimu dialect.

[^10]:    71 In the Keru variant: kefey.
    72 Glossed 'wife' in Drabbe.

