Some notes on the Tsaukambo language of West Papua

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ABSTRACT

This article presents some first observations on the Tsaukambo language of West Papua's Digul Basin. It is entirely based on the language learning and field notes of missionary Baas (1981). The Tsaukambo speech community, on the Lower Dawi river, is culturally very similar to its Awyu-Dumut and Ok neighbors, for example in clan-based organization, feast cycles, Omaha kinship system and an extended body-part system of counting. Linguistically, Tsaukambo has its closest ties to its western neighbor Korowai and its northern neighbor Komyandaret. It is argued that these three languages form a group of closely related languages that we call the Becking-Dawi group. This Becking-Dawi group shares ancestry with the Awyu-Dumut family in the Greater Awyu family.

KEYWORDS

Tsaukambo, Komyandaret, Becking-Dawi, Awyu-Dumut, Greater Awyu family

1. INTRODUCTION

This article presents some first observations on the Tsaukambo language of West Papua's Digul Basin. After introducing the speech community and some of its cultural practices, some elements of Tsaukambo morphology are discussed (pronouns, bound verb morphology, focus marking, negation). These data are then used for an initial assessment of the linguistic affiliation of the Tsaukambo language.

The missionary Peter Baas of the Mission of the Reformed Churches, a Dutch mission also known by its abbreviation ZGK (Zending Gereformeerde Kerken), gave me his field
notes on the Tsaukambo language of the Upper Digul region in West Papua so that I could extract information from his notes and share it with the linguistic community. The notes date from 1981 when Baas lived for a year in Kawagit where he met with Tsaukambo speakers. Kawagit also formed his base for trips, by helicopter, by canoe and on foot, to the Tsaukambo area. The notebook consists of 235 pages with miscellaneous notes on cultural practices, survey and patrol reports, maps, four Tsaukambo texts, transcribed in IPA and with an interlinear Indonesian translation, a wordlist with 110 basic vocabulary items, a few shorter wordlists with terms from specific semantic domains, such as body parts, names of sago species, kinship nouns and numerals. The first 129 pages are concerned with cultural aspects. The pages 129-178 contain texts, wordlists and notes on the Tsaukambo language. The only other source on Tsaukambo is the Upper Digul Survey by the SIL linguist Hughes (2009) that gives basic survey information on Tsaukambo and contains a list of 239 Tsaukambo words.

There are not enough data in the field notes to enable a phonological analysis. The overwhelming majority of words in the notes of Baas consists of strings of CV syllables, e.g. [næ] 'rope' (CV), [me'li] 'fire' (CV.CV) and [nama'ka] (CV.CV.CV). There are also V syllables, e.g. [æ] 'breast' and [æ'nɔ] 'snake' (V.CV). All words end in vowels and no word contains CC or VV clusters.

The data will be given as written by Baas, who uses IPA most of the time but sometimes writes in an improvised spelling. All (tentative) morpheme breaks and morpheme glosses are mine.

2. NAME, VILLAGES AND NUMBER OF SPEAKERS

Baas, like all older missionary sources, calls the language Tsakwambo but notes that native speakers do not agree with that pronunciation. Hughes (2009: 5) writes it as Tsaukambo on the basis of the pronunciation of the name that he encountered during the
survey. The name is almost certainly an exonym and may be connected with the river Tsaw (or Sauw) that forms the eastern border of the Tsaukambo area.

In the time of Baas, the early 1980s, village formation had begun but many speakers still lived on their clan territories in the high tree houses and had not yet moved to the multi clan and multi ethnic settlements or *kampungs*, Indonesian style hamlets with low houses, where the government and the mission wanted them to live (see de Vries 2012 on the process of *kampung* formation in the Upper-Digul area). Baas (1981: 53) gives exact numbers for Tsaukambo speakers that he counted in the Tsaukambo speaking villages and then adds the number of speakers that he estimates to be on the clan territories in the tree houses on the basis of helicopter surveys and foot patrols. The village Bi on the Digul river had 225 Tsaukambo inhabitants in 1981, and 21 Wambon, 6 Muyu, 34 Wanggom, 6 Muyu, 4 Ekari and 1 Makassar inhabitant. The village Waliburu, on the lower Dawi river, had 176 Tsaukambo speakers in 1981 and 1 Awyu speaker (Baas 1981: 33). Baas estimates the total number of Tsaukambo speakers around 500.

Hughes (2009) gives no numbers of speakers since the survey team did not enter the Tsaukambo area but gathered information from Tsaukambo speakers that were present in Gaguop, a Wambon speaking village where there was a big feast at the time of the survey that attracted speakers from the whole area. Hughes (2009: 5) writes that the village secretary of Waliburu, also present at the feast in Gaguop, tells him that the village Waliburu, on the lower Dawi river, has 341 inhabitants, all Tsaukambo speaking. In 2009 Tsaukambo speakers lived in the villages Waliburu, Bi(wage), Kabuwage and Danokit (Hughes 2009: 5).

Waliburu clearly is the central location of Tsaukambo as far as villages go, but it is important to realize that in this area many speakers spend much of their time on clan territories in the jungle, where clans have sago harvesting, fishing and hunting rights. The clan territories are still extremely significant and necessary for survival (see de Vries 2012 for the parallel worlds of settlements and clan territories in the Digul Basin).
means that Tsaukambo is not only spoken in the village Waliburu but in a wide area between the Digul and Upper Becking rivers where Tsaukambo have clan territories.

3. CULTURAL PRACTICES, KINSHIP, COUNTING

It is clear from the notes of Baas that Tsaukambo speakers share many cultural practices with their Korowai, Kombai and Wambon neighbors. Elaborate sago grub feasts with guests from the whole region, but also smaller pig feasts, play a central role in their lives and they are mentioned both in the field notes of Baas (1981) and 30 years later in the survey by Hughes (2009) who had to adapt the survey plans when they found that a feast was being held in Gaguop, attracting many speakers from the different groups they wanted to survey.

Tsaukambo society is patriclan based, with many small clans, each with its own clan territory. Baas (1981: 29) gives the following names of Tsaukambo clans represented in Waliburu: Seningchatu, Seychatu, Hubuchatu, Gainggatu, Yaikatu, Gununggatu, Hauchatu, Chenichatu, Anenggatu, Yabangchatu. Notice that all these clan names end in –chatu (written –chatu by Baas) or one of its allomorphs. This element is the cognate of Korowai –xatun 'offspring' that according to Stasch (2001) occurs in around a quarter of Korowai clan names.

The ranges of reference of Tsaukambo kinship terms given by Baas are consistent with an Omaha system because Tsaukambo terminology distinguishes parallel and cross relatives in ego's generation and in the first ascending and first descending generations from ego, with the term for MB extending to the sons of MB (MBs) and his sons (MBss), etcetera. The kinship terminologies of which we have more or less complete descriptions in the area (Mandobo, Boelaars 1970: 95-112; Korowai, Van Enk and de Vries 1997: 139-153; Kombai, de Vries 1987) are all Omaha type terminologies with a cross-parallel distinction and skewing of natural and terminological generations because the avuncular dyad MB-Ss extends to next generations (MB=MB son=MB son's son=MB son's son's son etc.).
Tsaukambo distinguishes parallel male parents (mba, father and father's brothers (and FFBs, etcetera through generational extension), parallel female parents (yeni), mother and her sisters), cross male parents (mo, mother's brothers and their sons (and sons etcetera, Omaha extension: MB=MBs=MBss etc.) and cross female parents (yomu, father's sisters). In ego's generation, ego has older brother (yaw), older sister (yaw), younger brother (nomoka) and younger sister (nomodo) as parallel relatives (therefore extending to mother's sister's children and father's brother's children), in contrast to the cross relatives in ego's generation, nahabü for father's sister's son and nahala for father's sister's daughter. Above we noted the Omaha extension of the parent terms for maternal uncle (MB) to the son of MB, and this implies that ego uses a parent term for that member of his own generation. Ego's son is nabü and ego's daughter is nala. These parallel child terms are extended to male ego's brother's son and daughter and female ego's sister's son and daughter. The cross child terms are nahabü for a male cross child and nahala for a female cross child. Parent's male parent is nday and parent's female parent is yama.

It is not clear from Baas’ notes which part of the kinship terms are possessive prefixes but a comparison with Korowai kinship terms shows that if we assume that n(V) - (V subject to V-harmony) is a first person possessive prefix, and y(V) - a third person possessive prefix, and if we take into account that Tsaukambo does not allow final consonants we see many cognates with Korowai kinship terms (Van Enk and de Vries 1997: 140-151):

<table>
<thead>
<tr>
<th>Table 1 Kinship terms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>kin type</strong></td>
</tr>
<tr>
<td>parallel female parent</td>
</tr>
<tr>
<td>cross female parent</td>
</tr>
<tr>
<td>cross male parent</td>
</tr>
<tr>
<td>parallel male child</td>
</tr>
<tr>
<td>parallel female child</td>
</tr>
</tbody>
</table>
Korowai has a dedicated prefix with kinship terms that means ‘cross’ and that derives marked cross terms from unmarked parallel ones (Van Enk and de Vries 1997: 143, e.g. abül ‘parallel male child’ > s-abül ‘cross male child’; lal > sa-lal ‘cross female child’). Tsaukambo has the same derivation, with the cross prefix ha-, e.g. na-la ‘my (parallel) daughter’ > na-ha-la ‘my cross daughter’. See 5.2.5 for a discussion of the relationship between Korowai and Tsaukambo.

Tsaukambo has an extended body-part system for counting just as all its neighbours.

**Table 2 Tsaukambo numerals**

<table>
<thead>
<tr>
<th>number</th>
<th>body part</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ḥeŋəla (little finger)</td>
</tr>
<tr>
<td>2</td>
<td>ḥeŋəlati (ring finger)</td>
</tr>
<tr>
<td>3</td>
<td>jedi (middle finger)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4</td>
<td><em>nondo</em> (index)</td>
</tr>
<tr>
<td>5</td>
<td><em>wajo</em> (thumb)</td>
</tr>
<tr>
<td>6</td>
<td><em>g'elu</em> (wrist)</td>
</tr>
<tr>
<td>7</td>
<td><em>sabo</em> (lower arm)</td>
</tr>
<tr>
<td>8</td>
<td><em>bongu</em> (elbow)</td>
</tr>
<tr>
<td>9</td>
<td><em>sabu</em> (upper arm)</td>
</tr>
<tr>
<td>10</td>
<td><em>janggi</em> (shoulder)</td>
</tr>
<tr>
<td>11</td>
<td><em>ŋgono</em> (side of neck)</td>
</tr>
<tr>
<td>12</td>
<td><em>hota</em> (ear)</td>
</tr>
<tr>
<td>13</td>
<td><em>habja</em> (head)</td>
</tr>
<tr>
<td>14</td>
<td><em>hota mokulu</em> (ear of the other side)</td>
</tr>
<tr>
<td>15</td>
<td><em>ŋgono mokulu</em> (side of neck of the other side)</td>
</tr>
<tr>
<td>16</td>
<td><em>janggi mokulu</em> (shoulder of the other side)</td>
</tr>
<tr>
<td>17</td>
<td><em>sabu mokulu</em> (upper arm of the other side)</td>
</tr>
<tr>
<td>18</td>
<td>boŋu</td>
</tr>
<tr>
<td>19</td>
<td>sabo mɔ̂kulu</td>
</tr>
<tr>
<td>20</td>
<td>g'elu mɔ̂kulu</td>
</tr>
<tr>
<td>21</td>
<td>wajo mɔ̂kulu</td>
</tr>
<tr>
<td>22</td>
<td>nɔndo mɔ̂kulu</td>
</tr>
<tr>
<td>23</td>
<td>jedi mɔ̂kulu</td>
</tr>
<tr>
<td>24</td>
<td>hɛŋɔləti mɔ̂kulu</td>
</tr>
<tr>
<td>25</td>
<td>hɛŋɔlə mɔ̂kulu</td>
</tr>
</tbody>
</table>
The highest number is 25 and the head, 13, is the turning point in this system. Baas (1981: 209) notes that the body-part numerals for one, two and three cannot be used ‘in context’ (=in noun phrases as numeral modifier) and that ‘in context’ three non-body part based numeral appear: [faʔadi] ‘one-just’, [mɔmɔni] ‘two’ and [diraŋɔ] ‘three’. The word [diraŋɔ] ‘three’ is most likely a compound of [dir] ‘middle finger’ and [anɔ] ‘amount’. The body-part noun for middle finger is [jɛdi], Tsaukambo does not have word final consonants but they resurface when they are no longer final ([di>dɔdi]).

Tsaukambo has a pattern to form compounds with the noun [anɔ] ‘amount’ when the body-part based numerals higher than three are used as numeral modifiers in noun phrases, e.g. the body part numerals for 4 and 5 become [nɔndɔ-anɔ] ‘index finger-amount’ and [waj-anɔ] ‘thumb-amount’ when used as numeral modifiers in NPs.

4. MORPHOLOGY

4.1 PERSONAL PRONOUNS

Baas (1981: 208) includes the following free personal pronouns in his word list:

(1) Tsaukambo personal pronouns
1SG nu
2SG gu
3SG yu/kabu
1PL nau/nahu
2PL gau
3PL  yau/kayano

4.2 NEGATION

Verbs are negated in Tsaukambo by the circumfixing bo-nda to uninflected verb stems:

(2)  bo-melixe-nda

NEG-go.home-NEG
‘I do not go home’

I found this example of verb negation (bo-fadi-nda) in the opening sentence of a Tsaukambo text recorded in Kawagit on 24 April 1981 from a speaker called Dominggus (Baas 1981: 133) where we see both the inflected positive form (fadi-bo) and the uninflected negated form bo-fadi-nda:

(3)  Pendeta  Bas  yaka  fadi-bo  rayawo
Pastor  Baas  here  come-PERF.non1SG  but

yo-ma  yoho-ma  bo-fadi-nda  Tuan-Allah=tɔ
he-himself  he-himself  NEG-come-NEG  Lord God=FOC

tɔxɔ  nɔgɔɾi  Belanda  waɔko  suwa  Bas  yaka  sabiwi
FOC  land  Holland  there  mister Baas  here  bring
‘Pastor Baas has come here but he did not come himself, the Lord God brought Mr. Baas here from Holland over there.’
There is a negative imperative adverb ɔndɔ (glossed by Baas with the Indonesian negative imperative adverb jangan) in the Tsaukambo Bible story told by the evangelist Demianus in the village Bi that Baas (1981: 135) transcribed:

(4) fadikɔ xandindak kalɔxa tree-fruit IMP.NEG eat-IRR-non1PL (buah pohon) (jangan) (makan)

you shall not eat the one fruit of the tree that stands in the middle.'

Example (4) is part of the Tsaukambo retelling of the story told in Genesis 2 where Adam is commanded by God not to eat of the fruits of the tree in the middle of the garden, the tree of the knowledge of good and evil.

4.3 TAM AND SUBJECT PERSON-NUMBER SUFFIXES

Baas (1981: 199) gives a paradigm for the verb meliɔ- ‘to go home’. Baas glosses them in Indonesian with saya/engkau (etc.) sudah pulang ‘I/you/etc. have gone home’ and we tentatively analyse them as Perfect forms. In example (3) we find the second/third person singular form in a transcribed text (fadi-bɔ). Just like all Auyu-Dumut languages, Tsaukambo has verb paradigms that consist of four forms (1SG, non-1SG, 1PL, non-1PL) based on the oppositions speaker versus non-speaker and singular versus non-singular. The only difference between the 1SG and 1PL form in the Tsaukambo paradigm is the stem.

Baas (1981: 135) transcribed:

(4) fadikɔ xandindak kalɔxa tree-fruit IMP.NEG eat-IRR-non1PL (buah pohon) (jangan) (makan)

you shall not eat the one fruit of the tree that stands in the middle.'
alternation *melixɛ/-melixɔ*. Below (5.2.1) it is argued that this vowel alternation is probably phonologically conditioned.

(5) Tsaukambo Perfect paradigm

\[
\begin{align*}
{\textit{melixɛ-ba-li}} & \quad \text{‘I have gone home’/saya sudah pulang} \\
{\text{go.home-PERF-1SG}} \\
{\textit{melixɔ-bɔ}} & \quad \text{‘you/he/she/it have gone home’} \\
{\text{go.home-PERF.non1SG}} \\
{\textit{melixɛ-ba-li}} & \quad \text{‘we have gone home’} \\
{\text{go.home-PERF-1PL}} \\
{\textit{melixɔ-ba-i}} & \quad \text{‘you(PL)/they have gone home’} \\
{\text{go.home-PERF-non1PL}}
\end{align*}
\]

Baas (1981: 199) also gives forms of *melixɔ/-melixɛ* ‘to go home’ with a different set of subject person-number suffixes. Notice that in this paradigm yet another stem alternation occurs (*melixa*). The TAM value of the forms in (6) is also different from (5), tentatively analysed as intentional/adhortative in 5.2.1.

(6) \[
\begin{align*}
{\textit{melixa-w-ɛ}} & \quad \text{‘we go home’/kami pulang} \\
{\text{go.home-1-PL}} \\
{\textit{melixa-m-ɛ}} & \quad \text{‘you (pl) go home’/kamu pulang}
\end{align*}
\]
Finally, we found a verb form $li^y-a-te$ in the transcribed texts that shows yet another subject person-number ending in the non1PL, viz. $-te$ and a TAM suffix $-a$ (see example (4)) that we tentatively gloss as Irrealis.

4.4 FOCUS MARKER

The Tsaukambo texts show what seems to be a focus clitic $tɔ(ɔɔ)$, as in example (3) above where there is a clear focus on $Tuhan Allah$ (Baas did not come to their area on his own accord but it was God brought him there) and in this example from a sermon by the evangelist Demianus in Bi, recorded and transcribed by Baas (1981: 135):

(7)

$Tuhan-Allah=tɔ yaka fu-ma wala-ma fi-be^y a$

Lord-God=FOC this heaven-and earth-and made-PERF.non1SG-and 'The Lord God made heaven and earth and…'

5. LINGUISTIC AFFILIATION OF TSAUKAMBO

Tsaukambo has Komyandaret as its northern neighbor. East of Tsaukambo we find the Wambon language (Drabbe 1959; de Vries and Wiersma 1992; Jang 2008), an Awyu-Dumut language of the Dumut subgroup. West of Tsaukambo the Korowai language is spoken (Van Enk and de Vries 1997). South of Tsaukambo Wanggom is spoken, an Awyu-Dumut language closely related to Kombai (see de Vries, Wester and van den Heuvel, this volume). North of Komyandaret, Ok languages are spoken, Burumakok, Tangko and Nakai (Jang 2003: 12). How does Tsaukambo relate to these languages and (sub)groups of languages? In this section we present initial evidence for the hypothesis:
(i) that Tsaukambo is most closely related to Komyandaret
(ii) that Tsaukambo, Komyandaret and Korowai form a group of closely related languages in the Becking-Dawi area

de Vries, Wester and van den Heuvel 2012 (this volume) argue that this Becking-Dawi group is not part of the Awyu-Dumut family but shares common ancestry with the Awyu-Dumut family in the Greater Awyu family.

5.1 RELATIONSHIP WITH KOMYANDARET LANGUAGE

Baas (1981: 90) points to a small speech community, estimated to be no more than 300-500 people, that lives along the higher parts of the Dawi river and that is known under various names such as Taret, Komyandaret or Komyedalin. According to Tsaukambo speakers in Waliburu, a kampung settlement on the Lower Dawi river, these Komyandaret speak a language that is almost the same as theirs (Baas 1981: 90). Baas (1981) talks about it as a variety of Tsaukambo. The survey of Hughes (2009) included speakers from the Komyandaret speaking village Danokit and has a 239 item Komyandaret wordlist. Hughes (2009: 7) concludes that Tsaukambo and Komyandaret have 60% lexically similarity and that it is "likely that the inhabitants of Danokit would know the language variety spoken in Waliburu downstream from them". Hughes (2009: 7) was told by the village headman of Danokit that there are around 300 speakers of Komyandaret. Baas estimated the number of Komyandaret speakers as maximally 500. The high lexical similarity percentage and the intelligibility judgments of native speakers suggest a very close relationship between Tsaukambo and Komyandaret.

5.2 RELATIONSHIP BETWEEN TSAUKAMBO AND KOROWAI

If we compare the morphology of Tsaukambo that we extracted from the notes of Baas with that of neighboring languages and language groups (e.g. Kombai, de Vries 1993; Wambon, de Vries and Wiersma 1992, Jang 2008, Drabbe 1959; Nagiï, Williamson 2010; proto Awyu, proto Dumut and proto Awyu-Dumut, de Vries, Wester and van den
Heuvel, this volume), we see initial evidence from morphology, both in pattern and matter, that links Tsaukambo to Korowai, its western neighbor.

5.2.1 BOUND VERB MORPHOLOGY

The strongest evidence comes from bound verb morphology in three separate verb paradigms, Perfect, Intentional and Irrealis paradigms. Let us start with a comparison of Tsaukambo and Korowai Perfect paradigms.

(8) Tsaukambo and Korowai Perfect paradigms

<table>
<thead>
<tr>
<th>Korowai</th>
<th>Tsaukambo</th>
</tr>
</thead>
<tbody>
<tr>
<td>alo- ‘to stand’</td>
<td>melixɔ ‘to go home’</td>
</tr>
<tr>
<td>alo-ba-lé ‘I have stood’</td>
<td>melixe-ba-li ‘I have gone home’</td>
</tr>
<tr>
<td>stand-PERF-1SG</td>
<td>go.home-PERF-1SG</td>
</tr>
<tr>
<td>alo-bo</td>
<td>melixɔ-bɔ</td>
</tr>
<tr>
<td>stand-PERF.non1SG</td>
<td>go.home-PERF.non1SG</td>
</tr>
<tr>
<td>alo-ba-lè</td>
<td>melixɔ-ba-li</td>
</tr>
<tr>
<td>stand-PERF-1PL</td>
<td>go.home-PERF-1PL</td>
</tr>
<tr>
<td>alo-ba-té</td>
<td>melixɔ-ba-i</td>
</tr>
<tr>
<td>stand-PERF-non1PL</td>
<td>go.home-PERF-non1PL</td>
</tr>
</tbody>
</table>

The Perfect suffix –ba appears as –bo in non1SG forms of both Korowai and Tsaukambo. Van Enk and de Vries (1997: 92) explain the second singular form as the result of the elision of the non1SG suffix –o after the vowel of the Perfect suffix (–ba-o>–bo). The 1PL and 1SG suffixes of Korowai differ only in vowel quality (–lè 1SG, half close vowel,
-lè 1PL, half open vowel). Baas writes –li for Tsaukambo 1PL and 1SG endings. There may have been a similar subtle vowel quality difference in Tsaukambo missed by Baas or the distinction may have been neutralized.

Some of the stem alternations found in Tsaukambo verb paradigms (e.g. melixɔ-/melixa- in (5) and (6)) are strongly reminiscent of the phonologically determined vowel changes in Korowai verb stems (see Van Enk and de Vries 1997: 90, 94, 99), viz. laxation and reduction of the stem final vowels in unstressed conditions, with non close vowels reducing and laxing to the open, central and lax vowel [a] (e.g. melixɔ- > melixa-) and close vowels to schwa. We need much more data, on stress patterns and vowel variation, to confirm that the Tsaukambo stem alternations are indeed phonologically conditioned along the lines of Korowai. For now we assume that the vowel alternations, including melixa-, are not morphemic.

Baas sometimes calls the forms of (8) Past tense forms, elsewhere he glosses them in Indonesian with saya/engkau (etc.) sudah pulang 'I/you/etc. have gone home'. These forms occur also in the texts he transcribed, in contexts that allow us to see these forms as Perfects, comparable to their Korowai counterparts. Take for example this opening sentence of a text recorded in Kawagit on 24 April 1981 from a speaker called Dominggus:

(9) Pendeta Bas yaka fadi-bo rayawo
Pastor Baas here come-PERF.non1SG but

yɔ-ma yoho-ma bɔ-fadi-nda Tuan-Allah=ι
he-himself he-himself NEG-come-NEG Lord God=FOC

tɔɔ nɔgɔri Belanda waɔko suwa Bas yaka sabiwi
FOC land Holland there mister Baas here bring
‘Pastor Baas has come here but he did not come himself, the Lord God brought Mr. Baas here from Holland over there.’

Both the Perfect suffix –ba and the subject person-number marking closely correspond between Korowai and Tsaukambo. The non1PL marking of Tsaukambo is different from the Korowai one but below we will see that the Korowai non1PL ending –té does have a counterpart in another Tsaukambo paradigm. The person-number suffixes of Tsaukambo and Korowai of example (8) are very close to each other and find no parallel in person-number suffixes of Awyu-Dumut or Ok languages.

Baas also gives forms of melixa- 'to go home' with different subject person-number suffixes. Compare the 1PL and 2PL endings in (10). Unfortunately, these are the only forms of the paradigm in the notes of Baas.

\[
\begin{align*}
\text{(10)} & \quad \text{melixa-} \quad \text{‘we go home’} \\
& \quad \text{go.home-1-PL} \\
& \quad \text{melixa-} \quad \text{‘you (PL) go home’} \\
& \quad \text{go.home-2-PL}
\end{align*}
\]

Korowai has a second set of subject person-number suffixes. Korowai uses that secondary set in its Intentional/Adhortative paradigm. Compare Korowai (11) from Van Enk and de Vries (1997: 94) with Tsaukambo (10):

\[
\begin{align*}
\text{(11)} & \quad \text{lo-f-un} \quad \text{‘let us enter/we want to enter’} \\
& \quad \text{enter-1-PL} \\
& \quad \text{lo-m-un} \quad \text{‘you(PL) must enter’} \\
& \quad \text{enter-2-PL}
\end{align*}
\]
Tsaukambo does not allow word final consonants and this explains the absence of the final nasal in the Tsaukambo plural suffix -e. Korowai plural suffix –\(Vn\) is realized with different vowels because of vowel harmony. The second person suffix –\(m\) is the same in Tsaukambo and Korowai; the first person suffixes –\(f\) (Korowai) and –\(w\) (Tsaukambo) also correspond.

Baas glosses the examples in (10) with Indonesian glosses such as saya pulang that may mean different things, so it is not certain whether the Tsaukambo forms have the same meanings as their Korowai Intentional and Adhortative parallels. But when speakers are offered decontextualised Indonesian stimuli such as saya pulang they could easily take the meaning to be intentional ('I want to go home now').

We did find other verb forms in the Tsaukambo texts that show another link to Korowai bound verb morphology (we added Baas’ Indonesian glosses), e.g. (12) (=example (4))

(12) \(fa’di\ xandindak\ ɔ\ kalɔx\a\)
    one middle stand
    \((satu)\ \(ditengah\)\ \(berdiri)\)

    \(dɔlùy-\ɔ\ \ ndɔmɔ\ \ li^e-a-\text{te}\)
    tree-fruit IMP.NEG eat-IRR-non1PL
    \((\text{buah pohon})\ \(jangan\)\ \(jangan makan)\)

    'you shall not eat the one fruit of the tree that stands in the middle'

Korowai has an Irrealis formation verb stem+ -\(xa\) + person-number (van Enk and de Vries 1997: 91). The Korowai Irrealis morpheme has two allomorphs –\(xa\) (with verb stems ending in /e/ or /i/) and –\(xe\) (with verb stems ending in /ai/). Consider this Korowai example:
(13)  nu  gol-e-khal   tanukh=to  lé-axa-lé 
I  pig-TR-meat   only=FOC  eat-IRR-1SG
'I shall eat only pork.'

The endings in the Korowai Irrealis formation are:

(14)  SG  1  -lé
       non1  -é
       PL  1  -lè/-tè
       non1  -té

Compare this example Irrealis paradigm in Korowai, with mi- 'to drink':

(15)  SG  1  mi-axa-lé  'I (shall) drink'
       non1  mi-axa-é
       PL  1  mi-axa-lè
       non1  mi-axa-tè

The Tsaukambo ̗li³-a-ɪɛ  in (12) can be related to the Korowai Irrealis paradigm (15). The Irrealis suffix -xa from Korowai became –a in Tsaukambo because Tsaukambo has either /h/ or complete elision where Korowai has /x/, e.g., Korowai xomi- 'to die' and Tsaukambo homi- 'to die'; Korowai xal 'skin', Tsaukambo ha 'skin', Korowai xolol 'bone', Tsaukambo holo 'bone'. Intervocally, the /h/ disappears sometimes (e.g. nahu/nau 'we'). Baas notes some words in his IPA transcription sometimes with /x/ and sometimes with /h/, e.g. xoto 'ear' and hoto 'ear'. In the Tsaukambo wordlist of the survey of Hughes (2009), elicited from a speaker of the village Waliburu, [h] systematically corresponds to Korowai [x] of Korowai speakers in the south-west, the variety described in Van Enk and de Vries (1997). The non1 ending in the Tsaukambo form -ɪɛ, also correspond to the Korowai Irrealis ending.
Verbs are negated in Tsaukambo by prefixing \textit{bɔ-} and suffixing \textit{–nda} (see 4.2):

(16) \textit{bɔ-}\textit{melixe-nda}

\begin{align*}
\text{NEG-go.home-NEG} \\
\text{‘I do not go home’}
\end{align*}

Korowai independent verb forms are negated as follows:

(17) \textit{be-} (NEG)+ independent verb form + \textit{-da} (NEG)

Some Korowai examples:

(18) Realis Positive Realis Negative

\begin{tabular}{l l l l l l l l l}
SG 1 & dépale & 'I smoke(d)' & \textit{be-dépale-da} & 'I do(did) not smoke' \\
Non1 & dépote & \textit{be-dépo-da} & \\
PL 1 & dépale & \textit{be-dépalè-da} & \\
Non1 & dépate & \textit{be-dépate-da} & \\
\end{tabular}

5.2.2 PRONOUNS

There is good evidence from pronouns to link Tsaukambo to Korowai.

Table 3 Tsaukambo and Korowai pronouns

<table>
<thead>
<tr>
<th></th>
<th>1sg</th>
<th>2sg</th>
<th>3sg</th>
<th>1pl</th>
<th>2pl</th>
<th>3pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korowai</td>
<td>nup</td>
<td>gup</td>
<td>yup</td>
<td>noxup</td>
<td>gexenép</td>
<td>yexenép</td>
</tr>
<tr>
<td>Tsaukambo</td>
<td>nu</td>
<td>gu</td>
<td>\textit{yu, kabu}</td>
<td>nau, nahu</td>
<td>gau</td>
<td>yau, kayano</td>
</tr>
</tbody>
</table>

Tsaukambo does not allow word final consonants and this explains the difference with the Korowai pronouns that have a final consonant. Where Korowai has a velar fricative
/x/, Tsaukambo (and Komyandaret) often have either a [h] with friction or an [h] without friction, and sometimes complete deletion. This explains the relation between pairs such as Korowai 1PL noxup and Tsaukambo nau (noxup>noxu (final C deletion))>nohu (x>h)>nou (h>zero).

### 5.2.3 FOCUS

Finally, Tsaukambo shares with Korowai the focus clitic =tɔ, as in example (9), repeated here as (19), and example (13).

(19) **Pendeta** Bas yaka fadi-bɔ rayawo
Pastor Baas here come-PERF.non1SG but

yɔ-ma yoho-ma bɔ-fadi-nda Tuan-Allah=tɔ
he-himself he-himself NEG-come-NEG Lord God=FOC

方圆 negɔri Belanda waɔkɔ suwa Bas yaka sabiwi
FOC land Holland there mister Baas here bring
'Pastor Baas has come here but he did not come himself, the Lord God brought Mr. Baas here from Holland over there.'

Consider the following Korowai examples with the Focus marker =to:

(20) *nuf-ɛ* lalɛo-da yanop=tu
I-CONN spirit-NEG human=FOC
I am not a spirit but a human being.'

(21) yakhop=to nu ne-gol ülmo?
Who=FOC I my-pig kill.3SG.REAL
'Who killed my pig?'
(22)  \textit{nu gol-e-khal tanukh=to lé-akha-lé} \\
I pig-TR-meat only=FOC eat-IRR-1SG \\
'I shall eat only pork.'

\subsection*{5.2.4 INTEGRATION OF BODY PART NUMERALS IN NOUN PHRASES}

Korowai, Tsaukambo and Komyandaret share a pattern of integration of body-part nouns as numeral modifiers with the noun \textit{anop} 'amount'. Greater Awyu languages, except the Awyu subgroup, have extended body-part systems of the same type, a type that requires languages to develop strategies to integrate these body-part nouns in nominal syntax (de Vries 1995). Now the Dumut and Ndeiram subgroups of the Awyu-Dumut branch employ a strategy that involves the comitative suffix, proto-Awyu-Dumut *-\textit{kup}. But Korowai, Tsaukambo and Komyandaret use a compounding strategy with the noun \textit{anop} 'amount':

Korowai
(23)  \textit{gol wayafül-anop} \\
pig index.finger-amount \\
'four pigs'

For Komyanderet we have the wordlists of the survey of Hughes (2009) that only contains the numerals up to the ten. But that is enough to establish that it is an extended body-part system, very similar to Tsaukambo. Interestingly, some of the Komyandaret numerals contain the element [\textit{ɑnɔ}]. This is the cognate of the Korowai noun \textit{anop} 'amount'. Tsaukambo shares with Komyandaret and Korowai the pattern to form compounds with the noun \textit{anop} (Korowai) or [\textit{ɑnɔ}] (Tsaukambo, Komyanderet) 'amount' when the body-part based numeral are used as numeral modifiers in noun phrases (see section 3).

\subsection*{5.2.5 DISCUSSION}
There are two types of correspondences between Korowai and Tsaukambo. The first type are correspondences that could follow from either common ancestry and borrowing. The fact that Korowai, Tsaukambo and Komyandaret share a strategy to integrate body part numerals in noun phrases, in the form of compounds with the noun *ano* ‘amount’ could be explained as the result of contact. The focus clitic =tɔ might also have been borrowed. The correspondences in kin terminology could also be attributed to the contacts between Tsaukambo and their western neighbors, Korowai clans.

The second type of correspondences, paradigmatic and systematic correspondences in free and bound morphology in different parts of the grammar, including detailed correspondences in bound verb morphology in different paradigms, are difficult to attribute to borrowing and most probably point to a genetic relation, especially when taken together. We do not assume that morphology is immune to borrowing but we do assume that systematic correspondences in bound morphology across the grammar and across paradigms are far more likely to be caused by common ancestry than by borrowing.

Within the second type there is a distinction between correspondences between Korowai and Tsaukambo that both these languages share with Awyu-Dumut languages and correspondences that are only found in Korowai and Tsaukambo, not in Awyu-Dumut languages or any other language family.

The correspondences in negativization, pronouns and the first person marker in Intentional forms link both Korowai and Tsaukambo to the Awyu-Dumut languages. Take the negativisation strategy. De Vries, Wester and van den Heuvel (this volume) reconstruct the proto Awyu-Dumut negator *pa/*pe-.....-nda. Korowai (*be-....-nda) and Tsaukambo (negations *bɔ-....-nda) clearly match proto Awyu-Dumut negation.
The same is true for the Tsaukambo pronouns that show good correspondence to the proto Awyu-Dumut pronouns, apart from the 3SG one. Tsaukambo does not allow final consonants, this explains the absence of the final /p/. Proto Awyu-Dumut /k/ corresponds to Korowai /x/ and Tsaukambo /h/. This /h/ sometimes disappears completely in intervocalic conditions (see 5.2.1).

Table 4 Tsaukambo and proto Awyu-Dumut pronouns

<table>
<thead>
<tr>
<th></th>
<th>1sg</th>
<th>2sg</th>
<th>3sg</th>
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<td>gau</td>
<td>yau, kayano</td>
</tr>
<tr>
<td>proto Awyu-Dumut</td>
<td>*nup</td>
<td>*gup</td>
<td>*eke</td>
<td>*naküp</td>
<td>*gakup</td>
<td>*ya</td>
</tr>
</tbody>
</table>

The first person suffixes of Tsaukambo (-w) and Korowai (-f) Intentional paradigms (see 5.2.1) correspond to proto Awyu-Dumut first person suffix *-ep that has bilabial fricative (-ef,-f), bilabial stop (-ep, -p) and bilabial semivowel reflexes (-ew, -w) in all Awyu-Dumut languages (see de Vries, Wester and van den Heuvel, this volume).

But the detailed correspondences between Korowai and Tsaukambo in subject person-number and TAM morphology, in Perfect and Irrealis paradigms, have not been found in any other (sub)group of Awyu-Dumut or in any other language family in the area.

One way to explain these facts would be if we assume that the genetic relationship of Tsaukambo to the Awyu-Dumut family is the same as that of Korowai to the Awyu-Dumut family: not a direct descendant from proto Awyu-Dumut but co-descending from a common Greater Awyu ancestor (de Vries, Wester and van den Heuvel (this volume)), as part of the Becking-Dawi sister branch that comprises Korowai, Tsaukambo and Komyandaret, a branch characterized by its distinctive bound verb morphology (TAM, subject person-number). An alternative explanation would be that Tsaukambo-
Komyandaret, Korowai and Awyu-Dumut are coordinate branches of proto Greater Awyu, with the distinctive bound verb morphology of Korowai and Tsaukambo-Komyandaret retentions from Greater Awyu. Turning to the available lexical evidence does not really help us much in deciding this issue. Korowai has somewhat stronger lexical links with Tsaukambo-Komyandaret than with Awyu-Dumut. Voorhoeve (p.c.) gave me his lexical similarity percentages for Korowai with languages from the Awyu and Dumut subgroups; Korowai-Kombai: 29%, Korowai-North Wambon: 21%, Korowai-South Wambon: 19%, Korowai-Mandobo: 19%, Korowai-Aghu: 17%, Korowai-Sjiakha: 17%, Korowai-Pisa: 18%. The closest lexical link of Korowai is with its neighbor Kombai, not surprising given the long shared border and the many contacts, intermarriage and co-residence in several places. These percentages place Korowai at considerable distance from both Awyu and Dumut subgroups. Hughes (2009: 5) gives 28% as lexical similarity percentage between Korowai and Tsaukambo.

6. CONCLUSION

We presented data on the Tsaukambo language as found in the field notes of the missionary Baas from 1981. Culturally, the Tsaukambo fit in with the neighboring Awyu-Dumut and Lowland Ok groups, patriclan-based communities, with an emphasis on sago and pig feasts, an Omaha kinship terminology. Tsaukambo has an extended body part counting system that is also found in Awyu-Dumut and Ok languages and indeed in much of central New Guinea (Lean 1992).

Linguistically, Tsaukambo has its closest relation to Komyandaret, most probably two dialects of the same language. Tsaukambo-Komyandaret shares bound verb morphology with Korowai, in various paradigms, that point to a close genetic link, either as two coordinate branches from the Greater Awyu family that retained these features or as a Becking-Dawi subgroup that innovated its verb morphology.
REFERENCES


VRIES, LOURENS DE, RUTH WESTER and WILCO VAN DEN HEUVEL. 2012 (this volume). The Greater Awyu language family of West Papua.


ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CONN</td>
<td>connective</td>
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<tr>
<td>FOC</td>
<td>focus</td>
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<tr>
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<td>negation</td>
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<td>realis</td>
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<tr>
<td>TR</td>
<td>transitional nasal</td>
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</tbody>
</table>

\(^1\) Sawuy, Voorhoeve 1971; Pisa, Drabbe 1950; Sjiagha, Drabbe 1950; Jenimu, Drabbe 1950; Aghu, Drabbe 1957; Mandobo (= Kaeti), Drabbe 1959; Wambon (= Yonggom Wambon), Drabbe 1959; Digul-Wambon, De Vries and Wiersma 1992; Kombai, De Vries 1993.
ii Williamson (2010) classifies Nagi as a Mountain Ok language.

iii Final consonant deletion occurs both as a synchronic process (e.g. Kombai, De Vries 1993) and as a diachronic process in Greater Awyu languages (see De Vries, Wester and van den Heuvel 2012, this volume). The longer forms of Korowai, with the final consonants, e.g. its pronouns, correspond to the consonant-final forms that have been reconstructed for proto Awyu-Dumut.