Pronominal Marking in Bumbita Arapesh: Duals, Trials and Quadrals

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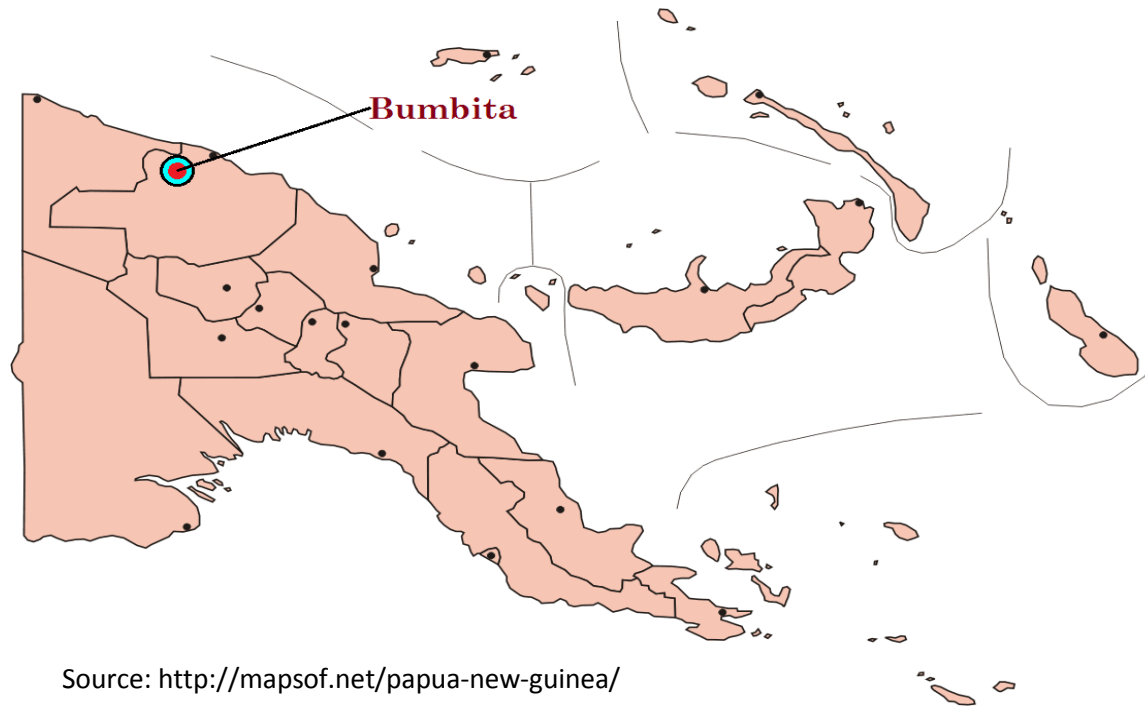
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Introduction

Geographical location

Bumbita is a language variety of Arapesh spoken in the western periphery of Maprik district in East Sepik province. It is located in the southwest of the Arapesh language area.

Source: http://mapsof.net/papua-new-guinea/

Genealogy

Which of the three paradigms (Duals, Trials & Quadrals) are in other dialects?

Mufian the closest neighbour has the following (Lukas & Conrad: 2004):	Abu' has the following (Nekitel: 1985)	Bukiyip has the following (Conrad & Wogiga: 1991):
afa' ina' 'we and you' *ipa' bipa* 'you two' *ipa' wanipa* 'you three' *ae' ina'* 'you and I'	*ouha'* 'we two'	*ohwak* 'we two' *bwiepu̇* 'you two' *omom bwiom* 'they two (males)' *owo bwiou* 'they two (females)' *echech bwiech* 'they two (m + f)'

- (Foley 1986: 71) "Many Papuan languages have additional number distinctions, notably dual."

- (Foley 1986: 72) "And a few Papuan languages add a paucal, or sometimes a trial, in addition to a plural or dual."

Duals, Trials, and Quadrals in Bumbita plus Singulars and Plurals

Number	Person	Bumbita Arapesh	English Equivalents
Singular	1st person	*ei'*	'I'
	2nd person	*ine*	'you'
	3rd person MAS	*enene*	'he'
	3rd person FEM	*'o'o'*	'she'
	3rd person NONH	*enene*	'it'
Dual	1ST person	*bohitopwe' ~ bohitohwe'*	'we two'
	2nd person	*bohitipe*	'you two'
	3rd person MAS	*bohitoh*	'they two'
	3rd person FEM	*bohitowe*	'they two'
	3rd person MIX	*bohites*	'they two'
Trial	1ST person	*wenihitopwe' ~ wenihitohwe'*	'we three'
	2nd person	*wenihitipe*	'you three'
	3rd person MAS	*wenihitoh*	'they three'
	3rd person FEM	*wenihitowe*	'they three'
	3rd person MIX	*wenihites*	'they three'
Quadral	1st person	*bombohitopwe' ~ bombohitohwe'*	'we four'
	2nd person	*bombohitipe*	'you four'
	3rd person MAS	*bombohitoh*	'they four'
	3rd person FEM	*bombohitowe*	'they four'
	3rd person MIX	*bombohites*	'they four'
Plural	1st person	*opwe' ~ ohwe'*	'we'
	2nd person	*ipe*	'you'
	3rd person MAS	*ohoh*	'they'
	3rd person FEM	*owowe*	'they'
	3rd person MIX	*eses*	'they'
	3rd person NONH	*omom*	'they'

Duals, Trials, and Quadrals in Bumbita

Number	Person	Bumbita Arapesh	English Equivalents
Dual	1ST person	*bohitopwe' ~ bohitohwe'*	'we two'
	2nd person	*bohitipe*	'you two'
	3rd person MAS	*bohitoh*	'they two'
	3rd person FEM	*bohitowe*	'they two'
	3rd person MIX	*bohites*	'they two'
Trial	1ST person	*wenihitopwe' ~ wenihitohwe'*	'we three'
	2nd person	*wenihitipe*	'you three'
	3rd person MAS	*wenihitoh*	'they three'
	3rd person FEM	*wenihitowe*	'they three'
	3rd person MIX	*wenihites*	'they three'
Quadral	1st person	*bombohitopwe' ~ bombohitohwe'*	'we four'
	2nd person	*bombohitipe*	'you four'
	3rd person MAS	*bombohitoh*	'they four'
	3rd person FEM	*bombohitowe*	'they four'
	3rd person MIX	*bombohites*	'they four'

Clausal Examples; Duals

1. **_Bohitopwe'_** _sa_ _m-u-mbi-ni_ _weri._
   1DU will 1PL.MIX.SUBJ-R-go-DEM NEG
   '**Both of us** will/should/must not go.'

2. _Ipe_ **_bohitipe_** _sa_ _p-i-rei-ni_ _weri._
   2PL **2DU** will 2PL.SUBJ-IRR-come-DEM NEG
   '**You two** will/should/must not come.'

Clausal Examples; Duals Cont.

3. *N-a-tutu*   *n-a-ti*   ***bohitoh,***
   3SG.MAS.SUBJ-R-stand   3SG.MAS.SUBJ-R-see   **3DU.MAS**

   naumbih   *ohoh.*
   enemy   3PL.MAS

   'He saw **two men**; who were enemies.'

4. *Inga-s*   *Josep-i,*   *opondu-we*   ***bohitowe***
   child-PL   Joseph-POSS   female-PL   **3DU.FEM**

   di-u'.
   die.R-3PL.FEM.PAT

   'As for Joseph's children, **two** of his **daughters** died.'

Clausal Examples; Duals Cont.

5. *Buhen   niye   Unguharo'   **bohites***   *d-u-is*
   Buhen   and   Unguharo'   **3DU.MIX**   die-R-3PL.MIX.PAT
   i-mbe   kiya'.
   DEM-be   finish
   '**Both** Buhen and Unguharo' have died.'

Clausal Examples; Trials

1. *Wandoh*   *n-a-so'om-ois*
   fight/war   3SG.NONH.SUBJ-R-lift.up-3PL.MIX.OBJ
   s-a-tembe-ni,   *s-au-s-ipwe'*
   3PL.MIX.SUBJ-R-go-DEM   3PL.MIX.SUBJ-R-leave-1PL.OBJ
   wenihitopwe*'*   *m-u-ta.*
   1TRI   1PL.MIX.SUBJ-R-sit
   'Tribal fight broke out and they ran away leaving **us three** behind.'

2. **Wenihitipe**   *betipe*   *p-i-ta*   *iye?*
   2TRI   yourselves   2PL.SUBJ-R-sit   or
   'Are **you three** the only ones left behind?'

Clausal Examples; Trials Cont.

3. *Ating*   *mas*   **wenihitoh**   *o*   *fopl-eis.*

   maybe   must   **3TRI.MAS**   or   four-3PL.MIX

   'Maybe **three** or four of **them**.'

4. *ø-a-ne*   *wohite*   *ø-i-ta*   *ø-a-ti*

   1SG.SUBJ-R-make   secret   1SG.SUBJ-R-sit   1SG.SUBJ-R-see

   opondu-we   **wenihitowe**   *w-a-rei'.*

   female-PL   **3TRI.FEM**   3PL.FEM.SUBJ-R-come

   'I watched secretly and I saw **three girls** coming.'

Clausal Examples; Trials Cont.

5. *Inga-s   Unguharo'   k-utu-sira-m-i;   eses*

    child-PL   Unguharo'   3SG.FEM.SUBJ-R-bear-PL-DEM   3PL.MIX

    *i-mbe   **wenihites**.*

    DEM-be   **3TRI.MIX**

    'The children that Unguharo' bore were those **three**.'

Clausal Examples; Quadrals

1. *Bur   i-mbe-ne   s-a-s-opwe'*
   pig   DEM-be-3SG.NONH   3PL.MIX.SUBJ-R-give-1PL.RECIP
   ***bombohitopwe'**.*
   1QUA
   'This/that pig was given to **us four**.'

2. *Ipe   **bombohitipe**   sa   p-i-kri'i'-i   weri,   ipe*
   2PL   **2QUA**   will   2PL.SUBJ-IRR-talk-DEM   NEG   2PL
   p-a-ne   wah   o'weri-ne-ni.
   2PL.SUBJ-R-make   conduct/action   bad-3SG.NONH-DEM
   'Do not talk, **you four**; you have done wrong.'

Clausal Examples; Quadrals Cont.

3. *Omoh,* **bombohitoh** *s-i-tiha* *maure-n* *i-mbe.*

   male.PL **3QUA.MAS** 3PL.MIX.SUBJ-R-get work-SG DEM-be

   'As for my sons, **they four** have gotten employment.'

4. *Bombohitowe* *w-a-mombru'* *eses-ei'emi*

   3QUA.FEM 3PL.FEM.SUBJ-R-fill 3PL.MIX-PL.POSS

   m-a-sire' *baurereh.*

   3PL.NONH.OBJ-R-go.down bamboo.PL

   '**They four** (**females**) put theirs into bamboos.'

5. *Eses*   *e*   *s-a-mbi*   *Maprik-i,*   ***bombohites**-i.*

   3PL.MIX   ART   3PL.MIX.SUBJ-R-go   Maprik-DEM

   3QUA.MIX-DEM

   '**They** were **four**; those that went to Maprik.'

Uses of plural forms-more with adverbs and less with adjectives.

Adverbs & Adjective Forms	BA Examples	English Free Translation
tihitopwe'/tihitohwe'	*mapwi'* **tihitopwe'/tihitohwe'**	'We stay/live/united **together**.'
tihitipe	*papwi'* **tihitipe** *duwah*	'You (PL) just stay **together**.'
tihitoh	*hwapwi'* **tihitoh** *namwe'*	'They used to be **together** like that.'
tihitowe	*wapwi'* **tihitowe** *wane mauren*	'They combined **together** and do the work.'
tihites	*sapwi'/satutu* **tihites** *suhwais*	'They stood **togethe**r and fought them.'
tihitom	*mapwi'* **tihitom** *weri*	'They are not **together/united**.'

Pronominal or Numeral and Pronominal?

- Given the regularity of the patterns; duals (*bohit-*), trials (*wenihit-*), quadrals (*bombohit-*), it is easy for them to be recognised as numbers plus pronouns. The numerals are bound lexical roots but the pronominals are not. However, when they are merged together not even pronominals maintain their free lexical root that can guarantee us that they are made up of numbers and pronouns.

    E.g. *bohit-oh*

     two-3PL.MAS

Pronominal or Numeral and Pronominal? Cont.

- Phonetically they depend entirely on each other. For the numerals two, three and four, the rhyme (peak & coda) /ɔm/ in the final syllable is lost. For pronouns, nothing is lost in 1st and 2nd persons. For all three third person pronouns, 3.MAS (*ohoh*) and 3.FEM (*owowe*), and 3.MIX (*eses*), they lose their first and second sounds, /ɒh/, /ɒw/ and /es/ respectively. Generally neither the numeral nor the pronoun have new sounds added, and the remaining sounds after deletions are merged together in a way similar to blending.

    (Blust 2009: 307) "In most languages the dual is derived by adding the numeral 'two', and the trial/paucal by adding the numeral 'three' to the pronominal stem...In many languages this numeral is irregularly shortened, either by loss of a phoneme (Hawaiian and Fijian), or by loss of a syllable (Manam)."

Pronominal or Numeral and Pronominal? Cont.

(Pavey 2010: 35) "…blending elements from two words to create a new word."

(Crystal 1991: 40) "**blend**(**ing**) A process found in the analysis of grammatical and lexical constructions, in which two elements which normally do not co-occur, according to the rules of the language, come together within a single linguistic unit. In lexis, blending is a common source of new words…"

E.g. */mbɔhɪtəm/* 'two', */ɵwowɛ/* 'they (females)' => */mbɔhɪtɔwɛ/* 'they (two females)'

English words formed out of blending: smoke + fog => smog, breakfast + lunch => brunch

- This same process does not work for numbers exceeding 4. They would sound rather weird and ungrammatical. They are strictly for humans, not other living things or non-living things.

Hierarchy and Factors Influencing the Hierarchy

- There is a marked hierarchy based on the frequency of usage:

    SG > PL > DU > TRI > QUA

- Before outside influences, the use of the three paradigms were influenced by the need to specify referent nouns within a larger group.

    (Corbett 2000: 24) "…whether the group being referred to is contrasted with some larger group within which it is subsumed."

    (Schulz 2018: 46) "The dual can also be used to highlight two main characters in an event."

Hierarchy and Factors Influencing the Hierarchy Cont.

- However if speakers fail to use dual, trial, and quadral forms within the midst of felt need, it is possible they are not conscious about their grammar and or take communication for granted. It can also be that addressees are aware of the noun referents.

- When there is no need to be specific, all 3rd person pronouns can be replaced by *eses* (3PL.MIX), all 2nd person pronouns can be replaced by *ipe* (2PL) and all 1st person pronouns can be replaced by *opwe'* (1PL).

    (Schulz 2018: 43) "While careful speech has a separate form for dual and trial, it is common for people to use plural marking for plural, dual, and trial in everyday speech."

Hierarchy and Factors Influencing the Hierarchy Cont.

- Possibly before the influence of LWCs, the uses of these three pronoun paradigms were obligatory (mandatory).

- Possibly, after decades of exposure to LWCs when the generation of TP > and Eng. < speakers outnumbered L1 speakers, their perspectives (dynamics) on the category of pronouns and its uses had changed their status to being optional.

Hierarchy and Factors Influencing the Hierarchy Cont.

- Possibly, the contracted forms, also followed the original marked hierarchy, as well as the influence of TP in particular.

  Duals are common but not as much as singulars and plurals which possibly can be attributed to the influence of TP. TP trials, for instance *mitripela*, is not common so as BA's trials.

BA Duals	TP Equivalents	BA Trials	TP Equivalents	BA Quadrals	TP Equivalents
bohitopwe'	mitup'la	*wenihitopwe'*	mip'la trip'la	*bombohitopwe'*	mip'la fop'la
bohitipe	yutup'la	*wenihitipe*	yup'la trip'la	*bombohitipe*	yup'la fop'la
bohitoh	(ol) tup'la	*wenihitoh*	ol trip'la	*bombohitoh*	ol fop'la
bohitowe	(ol) tup'la	*wenihitowe*	ol trip'la	*bombohitowe*	ol fop'la
bohites	(ol) tup'la	*wenihites*	ol trip'la	*bombohites*	ol fop'la

Hierarchy and Factors Influencing the Hierarchy Cont.

Examples:

1. Na tri'pla man ya? Ol go long taun. *Ol trip'la go long taun.*

2. Mi gat fo'pla brada na ol stap long ples.

3. Na tup'la brata b'long yu? Tup'la go long taun. *Ol tup'la go long taun.*

The idea of plurality (ol) in TP trials and quadrals has had an influence on BA's trials

and quadrals and so most of the time they would be treated as plurals, thus limiting

the frequencies of the special pronouns - dual, trial and quadral.

- Possibly, the pronominal system in BA has undergone reduction or is undergoing reduction.

  The quadrals are rarely used in daily conversations.

Conclusion

Summary

*   The pronominal system in Bumbita Arapesh is richer than the other Arapesh dialects and (many?) other Papuan languages with the inclusion of dual, trial, and quadral pronouns.

*   It does this by deleting parts of the two separate morphemes (numerals & pronominals) and then blending the remaining parts together.

*   The hierarchy based on the frequency of daily usage is as follows:

    SG > PL > DU > TRI > QUA

Conclusion Cont.

Summary

- The reduction in the use of duals, trials and quadrals possibly follows the original hierarchy where they are used only when there is a need to make clear the number of the noun referents. It may also be that they're not conscious or aware of their grammatical mistake. It can also be that the speaker assumes the addressee is aware of the noun referents implied, so s/he switches to their plural forms.

- One of the greatest possible contributions to the contraction is the influence of their Tok Pisin equivalents.

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