Mwaghavul pluractional verbs

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Abstract

The Mwaghavul [=Sura] language in Central Nigeria is a relatively large West Chadic language which has received only limited attention from linguists, despite publications on the neighbouring Mupun language. Mwaghavul has an elaborate system of pluractional verbs, where plurality denotes the iterative, repeated action or action on multiple objects and often concomitant semantic shift. Some verbs have two pluractional forms denoting different types of multiple action. Only a very small subset of the class of verbs has pluractional forms. Many singulars and plurals show morphophonological alternations but these are not predictable. Some plurals are suppletive. Given that such pluractional verbs are characteristic of the Plateau languages with which Mwaghavul is in direct contact, it might be thought these are borrowed, but there is no evidence for direct copying. The proposed explanation is metatypy, where a structural idea is adapted across language boundaries, without borrowing actual lexemes.

1. Introduction

A feature of Chadic languages whose present distribution and significance is somewhat unclear is the 'plural' or 'pluractional' verb. NEWMAN (1990) distinguishes 'pluractional' verbs where the semantic characteristic of the verb is plurality or multiplicity of action and 'plural' verbs, similar to conjugation in Indo-European, where the verb agrees in person and number with the subject. Using these terms, pluractional verbs are very common in Chadic and can probably be reconstructed to the proto-language, whereas plural verbs occur only sporadically. Newman admits that not all the literature makes this distinction, but it seems a useful definition and will be adhered to in this paper. Pluractional verbs have a simplex and at least one derived form which are morphologically distinct. Except in rare cases of suppletion, one can be derived from the other by more or less transparent processes. Within West-Central Africa, they are a common feature both of Chadic languages and neighbouring East Benue-Congo languages. Pluractional verbs occur in much of Africa (BROOKS 1991) but also in Amerindian languages and in some Asian phyla such as Dravidian. NEWMAN (1990) describes the literature for Chadic, while within East Benue-Congo, pluractional verbs occur principally in the Plateau and Cross River families. For Plateau, the first description of pluractional verbs may be

BOUQUIAUX' (1970) account of Berom. Izere has been the subject of at least two partial accounts (WOLFF and MEYER-BAHLBURG 1979; GERHARDT 1984), MCKINNEY (1979) characterised Jju and ARON (1996/7) has described plurality in verbs in Obolo, a Cross River language as well as providing some references to extra-African literature. Plural verbs also exist in Nilo-Saharan (see KEEGAN 1999 for Mbay examples) and in Gur (BLENCH 2003).

The precise semantics of pluractional verbs is more than a little confusing, in part because the morphosyntactic systems are now often fragmentary, especially in Benue-Congo languages, and because the emphases of their use do indeed vary from language to language. In Izere and Fyem they have been described as 'continuous'; in Jju (Kaje) and Berom as 'plural' verbs and in Chadic as pluractional (NEWMAN 1990). ARON (1996/7) contrasts 'distributive' (where the subject or object can be plural) with 'iterative' where an action is performed many times. Their uses can be categorised as follows;

1. Describing an action repeated many times
2. Describing an action with multiple subjects
3. Describing an action with multiple objects
4. Describing an action conducted over a long time
5. Any combination of these

The iterative use of the pluractional forms led some researchers to associate these forms with an imperfective; if an action is undertaken many times it is presumably incomplete and thus contrastive with a completed form. However, in most languages where the verbal system has been described, aspect and plurality are distinct. For a number of Chadic languages it is likely there has been a functional shift from verbal "plurality" from derivational to inflectional morphology in terms of 'imperfective' readings.

An aspect of verbal plurality that is contrastive with nominal plurals is that speakers do not generally connect forms systematically, particularly when plurals are suppletive. Thus speakers of Benue-Congo languages can easily cite noun-class affix pairings but are not usually aware of verb pairings, although they usually recognise them when pointed out. This is even more the case where there are triplets, multiple plurals linked to a singular form. As a consequence, there are sometimes borderline cases when the relationship between a singular and a pluractional form can be in doubt especially where the semantics are no longer transparent. In some Chadic languages, diachronic pluractionals can be re-analysed as synchronic simplex forms allowing the formation of a new pluractional.

The source of pluractional verb formation strategies is highly variable. While we have a great deal of historical information about Chadic in general, where Chadic languages have been influenced by their Benue-Congo neighbours, 'mixed' systems occur. In most languages so far studied, the diversity of forms suggests a mixture of strategies inherited from proto-Chadic (such as the 'internal –a-'plural) and borrowings of morphological elements from neighbouring Plateau languages. Both strategies can be applied to a single pluractional form and strategies can be lexicalised and then extended to new lexemes.

This paper[1] describes the system of pluractional verbs in Mwaghavul [=Sura], a West Chadic language of east-central Nigeria. The morphology of pluractional verbs is discussed and as complete a list of verb-pairings as possible is presented, together with suggestions as to their historical origin. The paper then explores some of the syntax and semantics of plurality, and concludes with some historical speculations as to the origin of pluractional verbs.

2. Mwaghavul background

Mwaghavul is a relatively large West Chadic language spoken in Mangu Local Government Area, Plateau State, Nigeria. The main towns of the Mwaghavul are Mangu and Panyam. There are generally estimated to be some 150,000 speakers of Mwaghavul, although such a figure is largely guesswork. Mupun, often considered a distinct language, is very close to Mwaghavul and the division may be more ethnic than linguistic. The closest relatives of Mwaghavul are Cakfem-Mushere and Miship and it falls within the same group as Ngas and Goemai (cf. TAKÁCS 2004). The Mwaghavul are known as 'Sura' in much of the older literature. Mwaghavul is bordered by Plateau (i.e. Benue-Congo) languages to the north and west, notably Berom and Izere.

Mwaghavul (under the name Sura) was first described in modern linguistic terms by JUNGRAITHMAYR (1963/4). FRAJYZNGIER (1991, 1993) has published a dictionary and grammar of the neighbouring Mupun language. Scripture portions were first published in the 1920s and there is an active literacy programme associated with a Bible Translation Project and a collaborative project to produce a dictionary is also under way (DAPIYA et

al. forthcoming). However, no phonological analyses associated with the orthography have ever been published.

3. Mwaghavul phonology

There are six vowels in Mwaghavul, the cardinal vowels and a central vowel /ɨ/. Phonetically, the mid-vowels are /ɛ/ and /ɔ/ but they are not in contrast with /e/ and /o/ and are thus represented by 'e' and 'o' in orthographic practice.

Degree	Front	Central	Back
Close	i	ɨ	u
Half Open	ɛ		ɔ
Open		a	

Vowel length is contrastive, but there are no nasal vowels. Since VV sequences of the same vowel can bear different tones, there is a strong argument for considering these as distinct from the long/short oppositions.

Mwaghavul consonants are as follows:

	Bila-bial	Labio-dental	Alveo-lar	Post-alveo-lar	Pala-tal	Ve-lar	Lab io-ve-lar	Glo ttal
Plosive	p b		t d			k g		ʔ
Implosive	ɓ		ɗ					
Nasal	m			n	ɲ	ŋ		
Fricative		f v		s z	ʃ ʒ	[ɣ]		h
Affricate						tʃ dʒ		
Approx.					y		w	
Trill			r					
Lateral Approx.			l					

Mwaghavul has palatalised and labialised consonants in contrast with their normal forms. In addition it permits homorganic nasals for some consonants. /g/ has a positional allophone /ɣ/ in intervocalic position; this is represented as 'gh' in the orthography, including the ethnonym. Although it is technically unnecessary, it is written here to make the transcriptions more accessible to Mwaghavul speakers. Phonetically, Mwaghavul has two /r/ sounds, in medial and final position, but again, these are not contrastive phonemes.

Mwaghavul has three level tones (JUNGRAITHMAYR 1963/4: 19). Falling and rising tones are heard phonetically on sequences of similar vowels, but it is doubtful whether there are underlying glide tones. Examples in Jungraithmayr, such as *dî*, the relative pronoun, are currently written with a doubled vowel. Tones are not written in the orthography, which is a problematic decision, as significant grammatical distinctions are sometimes made with tone.

4. Mwaghavul pluractional verbs

Mwaghavul has an elaborate system of pluractional verbs, where plurality can denote iterative, repeated action, multiple subjects or action on multiple objects. Some verbs have two forms denoting different types of multiple actions. JUNGRAITHMAYR (1963/4: 31-32) has a short discussion of pluractional verb stems and cites some examples. Most of these occur in the present dataset, but some were unknown, which may simply reflect language change in the past half-century. FRAJZYNGIER (1993: 55-62) gives more examples of pluractional verbs in Mupun, many of which show similarities to Mwaghavul. In some cases the vowels and tones recorded here differ slightly from these earlier transcriptions.

Table 1 shows all the Mwaghavul pluractional verbs presently identified. These constitute only a very small proportion of all Mwaghavul verbs and there appears to be no way of predicting whether a pluractional exists. Superscript numbers indicate that these are considered to be two distinct but homophonous verb stems. Where a plural is otherwise similar to a singular but has no tone-marking this is not an omission; the tone has changed to mid. The notes[2] offer some proposals or hypotheses as to the source of the pluractionals.

Table 1: Mwaghavul pluractional verbs

sg.	pl.	pl.	Gloss	Notes
at	ɨrap		to bite	Possibly suffix –ap with intervocalic weakening of –t-. If so, a unique example.
bák	biyan		to pound condiments in a mortar	suppletive
ɓàl	jwal		unite, fix, join	suppletive
ɓéé	ɓak		to dissect, cut open, split open	< Plateau formative Vk
ɓwot	fwo		to release, drop	suppletive
can	saa		to cut	suppletive

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2 I would like to acknowledge the observations of H. Ekkehard Wolff in the 'Notes' section.

cèt	cìcèt		to cook	Plateau high-vowel reduplication
cùt	cwàt		to hit	Chadic internal –a- *cu-à-t
ɗés	nan		be big in size	suppletive
dùgùn	dwaghan		to annihilate	Chadic internal –a- *du-a-g-a-n
dùgùr	dwaghar		to block, debar, prevent	Chadic internal –a- *du-a-g-a-r
dul	dires		to pull	Plateau formation *-Vs
ɗáksak	ɗáksuk		to prepare oneself	?Chadic internal -a- *ɗáks-a-k & functional flipflop?
ɗál	ɗilaŋ		to swallow	Chadic plural verbs -aN
ɗár	ɗìraŋ		to stand	Chadic plural verbs -aN
ɗiin	ɗwan		to tie s.t. such as a goat	Chadic internal –a- but why *ɗy-a-n > ɗw-a-n??
ɗugun	ɗwagan		to have sexual intercourse	Chadic internal –a- * ɗu-a-g-a-n
dut	dwat		to be diminutive, dwarfed	Chadic internal –a- *du-a-t
kɨn	kan		to defecate, urinate	Chadic internal –a- *k-a-n
kɨɓin	kɨɓan		to mix things up, juggle	Chadic internal –a- *kɨɓ-a-n
kóón	lìyòòn		to dismantle a house, to be taken apart, to be strip-ped out, to be lost (teeth)	suppletive
kuul	kwaghal		to tie a knot	Chadic internal –a- *ku-a-gh-a-l; possible simplex *kugul with intervocalic *g > ø
làà²	la		to give birth, to be delivered of a baby	pl. means to give birth many times. Tone-change
làŋ	laŋ		to hang	pl. means many things hanging. Tone-change
lè	kwáŋ		to keep, to place, to cause, to put s t	pl. means to put many things. suppletive
lop	jwal		to put in	suppletive
lùgùs	lwagas		to thresh *fonio* with the feet [practice discontinued]	Chadic internal –a- *lu-a-g-a-s
lùn	lwan		to mend **kutut** tray	Chadic internal –a- *lu-a-n

			with cow-dung	
lùs	lwas		to mend, patch	Chadic internal –a- *lu-a-s
mét	mɨrep		to jump	Possibly suffix –ap with intervocalic weakening of t
mìs	myas		to drink too much water	Chadic internal –a-
mìs	myas		to slap s.o.	Chadic internal –a-
mùk	mwak		to sip	Chadic internal –a-
múl	mulam		to rub in s.t.	Chadic plural verbs -aN
mùùt	murap		to die	? suffix –ap with intervocalic weakening of t
náá	lyap		to see, behold, examine	suppletive
nugul[1]	nwagal		to bend	Chadic internal –a-
nuŋ	nwaŋ		to strike any sounding iron	Chadic internal –a-
nùŋ[1]	nwaŋ		to set fire to something, burn	Chadic internal –a-
nùŋ[2]	nɨram, nas	sɨram, nas	to beat e.g. child	? Plateau formations –Vŋ, -Vs, -Vm ?
pet[1]	pɨrep		to burst, explode spontaneously	v.i. ? suffix –ap with intervocalic weakening of t
pèt[2]	pɨrep		to call	? suffix –ap with intervocalic weakening of t
piin[1]	pɨrep		to burst, explode	v.t. ? suffix –ap with intervocalic weakening of t
piin[2]	pyan		to break, split s.t.	pl. means 'to break into pieces' as opposed to 'split in two'. Chadic internal –a-
pun[1]	pwan		to eject, evict	Chadic internal –a-
pun[2]	pwan		to thresh maize	sg. is to remove a single grain, the pl. is to remove many, Chadic internal –a-
pùs	pwas		to nail an object, to kick, shoot, arrow, gun etc.	Chadic internal –a-
put	pwat		to go out, get out	Chadic internal –a-
rù	rwa		to go into soft ground (e.g. a worm, to set (of sun)	Chadic internal –a-
shaŋ sár[1]	shwat sár		to slap a person (more lightly than	? Plateau sg. and pl. formations –Vŋ and -Vt)

			mis)	
shaŋ sár²	shwat sár		to withdraw from an action	as above
shwaa	mis	myas	to drink plenty of water	Chadic internal –a-
sù	swa		to run	Chadic internal –a-
sùl	sulwaŋ		to pierce, penetrate	Chadic plural verbs -aN, with unexplained emergence of glide [w]
teer¹	yem		to spend the night	suppletive
tèn¹	tɨreŋ		to press, to iron clothes etc	Chadic plural verbs -aN with intervocalic weakening of n
tèn²	tɨreŋ		to lock door	Semantic shift. lock had to be pressed. Possibly suffix –ap with intervocalic weakening of -n
tèn³	vwáp		to press s.t. down with the foot	suppletive
tep	tɨrep	roghop	to break, snap	Possibly suffix –ap (analogy formation); suppletion
tù	twa		to kill	Chadic internal –a-
tùgùm	twagham		to disappear, to go from view, hold upside down	Chadic internal –a-
tugun	twagan		to pinch, to slice a bit or take a bit and give out	pl. means repeated action, or giving out a series of small portions
túŋ	twaas		to touch	Plateau sg formation –Vŋ? Combination BC –Vs & Chadic internal –a- *tu-a + -as?
tùs	twas		to spit	Chadic internal –a-
vùùn	vwán		to persist	Chadic internal –a-
vwèt	fwo	car	to throw away indiscriminately	*fwo* is throwing away many things. Both suppletive
yàà	yak		to catch, hold	Plateau formation -Vk
yal	yilaŋ		to dissect, tear-open	Chadic plural verbs -aN

The formation strategies revealed by the analysis are as follows; Chadic internal –a- is the most common strategy, with limited cases of final –aN, also attested in Chadic. Formatives such as final -Vp and other processes attested in Plateau languages, such as high vowel-reduplication also occur,

although with much less predictable results. Only a very small subset of the class of verbs have pluractional forms.

5. Morphology

The most common output for pluractional verbs is palatalisation and labialisation of the initial consonant, which results from the application of internal –a- plurals, a very widespread strategy in Chadic and indeed Afroasiatic languages (NEWMAN 1990: 72; WOLFF 2009). In Benue-Congo language descriptions palatalisation and labialisation are treated as derivational processes, but in Chadic linguistics these are treated as glide formations resulting from a replacive or insertive infixed -a-, which is inherited from proto-Afroasiatic (GREENBERG 1955). All Cu- sequences (cu-ɗu-, ku-, lu, mu-, nu, pu-, ru-, su-, tu- and vu-) have corresponding –Cwa plurals. Thus:

sg.	pl.	Source
cùt	cwat	[< *cu-a-t]
dut	ɗwat	[< *ɗu-a-t]
lùn	lwan	[< *lu-a-n]
muk	mwak	[< *mu-a-k]
nùŋ	nwaŋ	[< *nu-a- ŋ]

and so on. This rule is not invariable, as the alternation *dul/dires* indicates.

Pluractional forms are highly lexicalised and no longer reflect the existence of synchronic rules. Verbs with initial labialised consonants such as *shwaa* and *vwet* only ever have suppletive plurals. Some pairings, such as *tù/twa* 'kill' and *sù/swa* 'run' are identical in Ngas, showing that some alternations must be reconstructed back to the proto-language (see TAKÁCS 2004 for more examples). However, comparing Mwaghavul/Ngas with other languages in the group, such as Ron (JUNGRAITHMAYR 1970) or Goemai (HELLWIG in press) verb plurals are often quite different although some of the formation processes are related. Palatalisation is a much rarer output from internal –a- plurals, as the alternations *mis/myas* and *piin/pyan* suggest. In contrast to verbs where –u- is the main vowel of the root, verbs with front and central vowels form highly diverse plurals.

Table 2 shows a low-frequency rule in Mwaghavul which combines a high-vowel prefix (which looks like a Plateau formative) and the addition of a final –aN.

Table 2: -i (ɨ)/r(l) infixing in Mwaghavul verbs

sg.	pl.	Gloss
ɗăl	ɗilaŋ	[< *ɗal-aŋ] to swallow
ɗăr	ɗiraŋ	[< *ɗar-aŋ] to stand
ten	tɨreŋ	[< *tɨr-aŋ] to press, to iron clothes etc
yal	yilaŋ	[< *yal-aŋ] to dissect, tear-open

The derivation of *ten* can only be explained if there has also been high-vowel reduplication of the Plateau type and then n→r. Intriguingly, NEWMAN (1990: 108) records an *–aN* suffix for West Chadic verbal conjugations, but only in the Bole-Karekare subgroup. Ngamo, for example has an *–àn* verbal plural agreement marker. These languages are not in direct contact with Mwaghavul and it is also possible this is also a borrowed Plateau formative. Izere, which borders Mwaghavul, has;

sg.	pl.	Gloss
kpɛ	kpɛŋ	to rub
tá	táŋ	to overflow (of a river)

With such a limited number of cases, no rule can be established. An analogous process, shown in Table 3 gives some support to this hypothesis.

Table 3: Final –Vp in Mwaghavul verbs

sg.	pl.	Gloss
at	ɨrap	to bite
met	mɨrep	to jump
mùùt	murap	to die
piin	pɨrep	to burst, explode
pet	pɨrep	to burst, explode spontaneously
tep	tirep	to break

NEWMAN (1990: 81) proposes that these arise from the final –p is a reflex of *t 'via a morphologically restricted dissimilation rule'. Thus according to this hypothesis *mùùt/ murap* (<*mutat*). However, -p is a common formative in Izere as these examples show;

Table 4: Final –bVk/sVp alternation in Izere

sg.	pl.	Gloss
fábák	fásàp	to fold or draw close to the body
fúbúk	fúsùp	to sip
kábák	kasàp	to share out

If the final –p formative were borrowed from Izere then the final alveolars of the simplex, i.e. -t, -n would be required to weaken intervocalically to –r-. One reason for considering this a borrowing is that –ø can also add final –p as in;

<div align="center">

náá lyap to see, behold, examine
</div>

The verb 'to break' would then be a formation by analogy.

Suppletive verb plurals are quite rare; Table 5 shows all the examples so far recorded. Where there are two plurals, one may be formed by prosodic alternation and the other be suppletive.

Table 5: Mwaghavul suppletive verb plurals

sg.	pl.	pl.	Gloss
ɓwot	fwo		to release, drop
ɗés	nan		be big in size
lè	kwáŋ		to keep, to place, to cause, to put s.t.
lop	jwal		to put in
teer	yem		to spend the night
tèn	vwáp		to press s.t. down with the foot
shwaa	mis	myas	to drink plenty of water [*mis/myas* is a regular Chadic internal -a- formation now joined to a pseudo-simplex *shwaa* which is probably from the old Chadic simplex **su* 'to drink']
vwèt	car	fwo	to throw away indiscriminately

Only four cases of triplets have been recorded, and the relationship between singular and pluractional is always suppletive, although the two plurals can be related, as in *mis*/*myas* above.

Comparison with FRAJYZNGIER (1993) shows many striking differences with Mupun, notably many fewer forms resulting from internal –a- plurals. The suppletive plurals in Mupun are also quite different (op. cit. p. 58) and Frajyzngier transcribes pairings such as *tep/tɨrep* as *tēp/trèp*. Such plurals in Mwaghavul clearly have two tone-bearing syllables, so Mupun may be in the process of deleting V_1. In many other ways, Mwaghavul and Mupun are very similar, both lexically and grammatically, but differences such as this may make intercomprehension problematic.

6. Syntactic context

Mwaghavul shows fairly consistent SVO word order, and pluractional verbs do not show any particular unusual behaviour within this context. The sentence examples below explore the main contrastive usages of

singular/plural pairings. Most common is the iterative use, to do something many times. For example;

Shàarlek fina wuri at   an
Enemy   my   he   bit me

nfùtmo   teer   ɨrap   an
mosquitoes   during the night   bit many times   me

In contrast to most other Chadic languages, including closely related ones, Mwaghavul has no morphological plurals. With one or two exceptions, all nouns form a plural by adding –*mo* to the stem. A similar affix occurs in the closely related Ngas, where nominal plurals use a suffixed –*ma*. However, many nouns either have no plural or else they often express plurality through verbs. Where the verb is transitive, the object is assumed to be plural, whereas for intransitive verbs it is the subject, which is not uncommon in Chadic in general. Thus:

wán   nduŋ ɗál   yen fina ni
I   will   swallow pill my   the

but;
wán   ndùŋ ɗilaŋ   yen fina ni   mo
I   will   swallow pill my   the pl.
I'll swallow my pills

and;
làà   disi wuri gyar   dùt
boy   this he   excessively be short
this boy is excessively short

jép   disi mo   dwat   zam
boys these pl. be short excessively
these boys are excessively short

In the following example, it seems that additional nominal number marking is required to disambiguate the referent of the pluractional verb. The singular of *piin* 'to break' is used as follows;

wán   kin   piin   tughul àm   ni
I   have broken pot   water it

However, in this example, because many people and acting on multiple objects, the pluractional verb does not provide sufficient information about the number of objects. As a consequence, the pot must be pluralised as well.

doghon   jépmo   teer   pyan   tughul   fɨna   ni   mo
Yesterday children during the night broke   pot   my   them pl.
Children broke my pots last night

In one triplet, the first pluractional implies a single person doing something excessively, whereas the second pluractional marks multiple subjects doing something to excess. Thus;

wurí   shwaa   àm   fɨna   ni   kyes
He   drank   water   my   it   completely

and;

wán   doghon   mis   àm   ni   zam
I   yesterday   drank too much   water   it   excessively

but;

màt   kook   mo   doghon   myas   wáár   dì   ɗéé   ni
female   dan-   pl.   yester- drank   kunnu   be   remain-   it
          cers   day   too   there   ing
                                    much

A more subtle semantic distinction is marked with the verb 'to break'. The sense of the singular verb is 'to snap' or 'to break in two', as in;

jépmo   kɨ   tep   kam-dàghàr   fɨna   mi
children have   broken in two   walking-stick my   it

The plurality of the subject or object is not relevant. Where the action of breaking involves multiple blows, the first pluractional is used;

wátmo   doghon   tɨrep   pò   lù   fɨna   mi
thieves yesterday   broke   door   house   my   it
yesterday, thieves broke down the door of my house

Where there are multiple actions of breaking but also many objects being broken, the second pluractional is used;

mo   teer   roghop   shwáá   an   nwát
they during the night   broke   maize   my   stealing
they broke off and stole many of my maize-cobs last night

Exactly the same distinction is made with the pairing *piin/pyan*, although in this case there is no third member of the set.

Another triplet, *vwèt/fwo/car* 'to discard, throw away or at indiscriminately', also illustrates different types of plurality. A single object takes *vwèt*;

wurí	táá	vwèt	kwàghàzàk	fìri
he	on the way	discarded	shoe	his

whereas throwing away multiple objects is *fwo*;

wùrá	táá	fwo	léé	fìra	a	ár	mwaan
she	on the way	discarded	clothes	her	on	road	go

The second pluractional, *car*, is used to create a reflexive (normally a pronominal construction in Mwaghavul), as in;

mo	nkaa	car	shak
they	at	throw	one another

they are throwing things at one another

The number of pluractional verbs is relatively small and the permitted contexts of use are highly idiosyncratic. It does not seem that it would be possible to predict whether number marking indicates semantic differences, or the plurality of the subject of object, although there is a general rule of transitivity. It is likely that speakers must simply learn individual rules for each verb.

7. Plateau languages and contact hypotheses

Mwaghavul has a substantial set of pluractional forms derived by processes inherited from earlier stages of Chadic. Many others, however, are non-transparent or seem to have borrowed formatives from the neighbouring Plateau languages, which also have characteristic pluractional verbs. Given that Mwaghavul is in direct contact with these languages, it might be that these are direct lexical borrowings, but there is no evidence for this. Substantial draft dictionaries of both Berom and Izere exist (BLENCH et al. forthcoming, BLENCH and KAZE forthcoming) and it is possible to search for potential lookalikes and thus candidates for borrowing. However, the relevant Mwaghavul verbs have no obvious resemblances to Berom and Izere. However, at the level of process of pluractional formation, a number of similarities do occur.

Table 6 shows a process of t → r dissimilation in Berom which should be compared to similar processes in Mwaghavul (Table 2 and Table 3).

Table 6: Berom –Vr- infixing in verb plurals

bɔ̀t	bɔ̀rɔs	put on the lap
jùt	jùrus	carry, hand over
mɔt	mɔrɔs	cheat
rot	roros	bite, sting, throb with pain
tɛt	tɛrɛs	reduce
tút	túrus	climb
wét	weres	prick up the ears, listen
wɔ̀t	wɔ̀rɔs	taste, take a sip

Also attested in Plateau are final formatives –Vp and -N, for example in Izere (Table 4).

8. Conclusion

Mwaghavul and close relatives such as Ngas have a rich system of verbal plurals, with some formation strategies reflecting widespread Chadic morphological processes. However, others correspond in general appearance and semantics to neighboring Plateau languages and there is evidence for analogous processes and cognate morphemes. This is better characterised as metatypy, where a structural idea is adapted across language or phylum boundaries, without borrowing complete words. Pluractionals are relatively rare in most languages, which makes finding conclusive evidence for any hypothesis problematic. Moreover, the documentation of many languages in this area is patchy at best. But it is safe to say that the Chadic/Plateau interface, with pervasive bilingualism between languages with deep structural differences will produce a wide variety of outcomes, depending on the specific circumstances of particular interactions.

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