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# Verbal Number in Tagom – Rashad Group1

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### Abstract

The current study is an attempt to shed light on verbal number in Tagom as one of the derivational processes in the verbal morphology of the language. Tagom is one of the four varieties of *Tegali* of the Rashad group which itself belongs to the Niger-Congo phylum (Greenberg 1963, Schadeberg 1981, Williamson & Blench 2000, Quint 2009, Blench 2013, Dimmendaal 2018).

The objective of this study is to investigate verbal number and specifically pluractional marking in Tagom. Verbal number is a grammatical device that indicates that the actions transmitted by a verb are repeated or that multiple participants performing certain actions are involved (cf. Creissels et al. 2007, Veselinova 2013). The notion of verbal pluractional marking is restricted to "plurality or multiplicity of the verb's action" which was first introduced by Paul Newman (1990:53-54) in his survey of this phenomenon in Chadic languages. The study focuses on answering the following: When does verbal number, i.e., participant number and/or event number, surface in Tagom? What are the different strategies used in Tagom to indicate pluractionality? What is the correlation between transitivity and verbal number in Tagom? What are the semantic connotations of verbal number in Tagom?

## 1. Introduction

The meaning of reduplicated verbs (as a representative of various forms of pluractional marking) <1> may be summarized as "a derivational category widespread among Nilo-Saharan and Afro-Asiatic languages, though rather marginal in Niger-Congo. This category is variously known as the intensive, habitative, frequentative, repetitive, or plural verb. Morphologically, it is characterized by reduplication, and it has the general meaning of a repeated action, an action simultaneously performed by several agents, an action performed on more than one object, or various combinations of these 'plural' meanings" (Eulenberg 1971:73). As will be discussed in the following sections of this study, reduplication is only one of the devices that are used to mark verbal number in Tagom. Together with other morphological means it will be dealt with in this paper. As Dimmendaal (2014:58) observes: "Prototypically, verbal pluractional marking expresses "[...] plurality or multiplicity of the verb's action", as pointed out by Newman (1990:53-54) in his survey of this phenomenon in Chadic languages. In the case of intransitive verbs, pluractional marking typically affects the subject, whereas with transitive verbs it typically affects the object." Kutsch Lojenga (1994:285) (also cited in Dimmendaal (2014:128-129), distinguishes between collective and distributive plurality in the Central-Sudanic, Nilo-Saharan language Ngiti. Example 0 below shows distributive plural where a plural object accompanies a plural verb in a transitive clause in Ngiti.

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Note that indri is not differentiated for number and thus refers to both 'goat' as well as 'goats'.<sup>2</sup> That's why both readings are possible.

(1) ma mí indri núdha ma m-í indri ní-ùdha 1SG SC-AUX goat RSM-pull:PLUR:NOM1 'I am pulling several goats one by one (distributive plural), or one goat several times.' (Kutsch Lojenga 994:285)

Collective plural, on the other hand, involves a singular verb stem  $-n\dot{a}dha$  – and the corresponding sentence would translate as 'I'm pulling one goat, or a group of goats simultaneously' (see Kutsch Lojenga 1994:285).

With intransitive verbs in Ngiti, the verb is not marked for pluractionality, if the action is performed once, as in examples (2) and (3a), independent from the number of the subject. By contrast, if the action is repeated, the verb is marked for pluractionality, as in example (3b). In both cases, we may deal with a singular subject. That is, here, the number of the subject has no influence on pluractional marking, counter the general tendency.

(2)	ma ma	mákpe m-í-àkpe
		SC-AUX-whistle:NOM1 whistling (singular subject).' (Kutsch Lojenga 1994:286)

(3) a. ma măkpe ma m.i-àkpe
1PL SC-AUX-whistle:NOM1
'We (as a group) are whistling (singular-action verb, plural subject: collective plural).' (Kutsch Lojenga 1994:286)

(3)	b.	та	múkpe	(abhə)	
		та	m- <del>í</del> -ùkpe	(abhə)	
		1sg	SC-AUX-whistle:PLR:NOM1	(much)	
		'I am whistling (a lot) (pluractional verb, singular subject).' (Kutsch Lojenga 1994:286)			

This is different in Karko (a Kordofan Nubian language), as shown by Jakobi (2017) for the intransitive verb 'enter' illustrating "that the singular and plural stems, *tòr* (example 4a) and *twākár* (example 4b), designate a single event associated with a distinct number of participants, i. e. a singular subject in the case of *tòr* and a plural subject in the case of *twākár*" (Jakobi 2017:131).

<sup>2 &</sup>quot;Afroasiatic languages have a general number or transnumeral form, i.e. a form not marked for number, which nevertheless can have a singular or a plural interpretation." (Dimmendaal 2014:61) "Whereas transnumeral forms for nouns were thought to be absent from Nilo-Saharan languages" (Dimmendaal 2014:62), at least for Maba (studied by Weiss 2009), a transnumeral form is also attested, as Dimmendaal (2014) states. Considering Ngiti (Central Sudanic), he continues "[...] pluractional marking on verbs also coerces a "general number" (transnumeral) reading of object nouns (or subject nouns, depending on whether a transitive or intransitive predication is involved). It may be this latter property which lies at the heart of transnumeral readings for object (or subject) nouns in corresponding constructions with pluractional verbs." (Dimmendaal 2014:62)

- (4) a.  $k\bar{\sigma}\bar{\sigma}l=\dot{\sigma}t$   $t\bar{\sigma}r$ house=LOC enter.SGL.IMP 'Enter (SG) the house [once].'
- (4) b. k555l=5t twākár house=LOC enter.PLR.IMP
  'Enter (PL) the house [once].' (Jakobi 2017:132)

Only by using a different plural stem, i.e.,  $t \partial k p \partial r$ , Karko refers to multiple events (see Jakobi 2017:132), independent of the number of subject agents. In Karko, a threefold distinction is also practiced for transitive verbs, as described by Jakobi (2017:131). That is, e.g., the verb  $\partial g$  'call' is used with a singular object, while  $\partial g \partial r$  is used with a plural object but a singular event. The third form,  $\partial / \partial r$ , is used with plural objects and distributive events. The following summarizing points can be made of what verbal number describes:

- Verbal number may describe an action repeated many times and is in this case understood as pluractional (as in example 3b)
- It also describes a single action with multiple subjects, to be differentiated from pluractional marking, depending on the language (as in example 3a).
- It may also describe an action with multiple objects, understood as pluractional only when simultaneously referring to repeated actions (as in 1)

From the literature mentioned above and further publications on the topic of verbal number/ verbal pluractionality (such as Jakobi 2017, Schneider-Blum 2017, and Blench 2010), the essence of pluractionality marking is that the action of the verb is repeated or lasts for long. This may be because several agents perform an action, because an action is performed on several objects, or because it is performed several times or continuously.

The current study is an attempt to shed light on verbal number in Tagom as one of the derivational processes in the verbal morphology of the language. The investigation lets us strongly assume that verbal pluractional marking in Tagom is solely correlated to event number, not to participant number, as hopefully becomes clear with the data presented below.

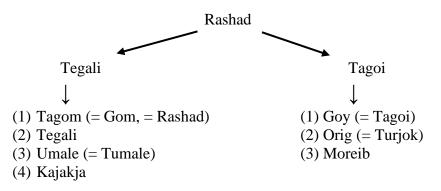
The remainder of this paper is structured as follows. In Section 2, background information is given, mainly on language classification, previous publications on Tagom, and linguistic facts relevant to facilitate understanding of the examples given in the main body of the paper. Section 3 discusses pluractional marking. It is divided into several subsections based on the formal side of pluractional marking. The discussion is summarized in Section 4.

# 2. Background information

<2> Tagom is one of the varieties of *Tegali*, a language of the Rashad group which itself belongs to the Niger-Congo phylum (Greenberg 1963, Schadeberg 1981, Williamson & Blench 2000, Quint 2009, Blench 2013, Dimmendaal 2018). But whereas e.g., Greenberg (1963) assorts the Rashad languages and three other language groups into a cluster he labels Kordofanian, a supposed subbranch of the Niger-Congo phylum, Dimmendaal (2018) and Blench (2013) call for a reconstruction of what is classified as Kordofanian, claiming that the evidence for the four language groups Heiban (Greenberg's Koalib), Katloid, Rashad (Greenberg'sTegali), and Talodi forming a subbranch is rather poor.

Tagom is spoken in Southern Kordofan in the Tegali and Rashad Hills as well as in the town of Rashad of the Nuba Mountains. Its speakers use the term  $\eta \dot{a}g \dot{o}m$  to refer to their language;  $\eta \dot{a}$  means 'tongue' or 'language' and  $\eta \dot{a} \cdot g \dot{o}m$  is the 'language of Rashad'. The name of the language shares the same lexical root as  $k \dot{o}m$  'Rashad person' and  $T \dot{o}g \dot{o}m$  'Rashad town' (Schadeberg 2013:328). Tagom is an under-described variety which also has no written tradition. Together with Lafofa, the Rashad group is the most understudied group of those groups which are in the Greenbergian tradition referred to as Kordofanian languages (Schadeberg 2013:327).



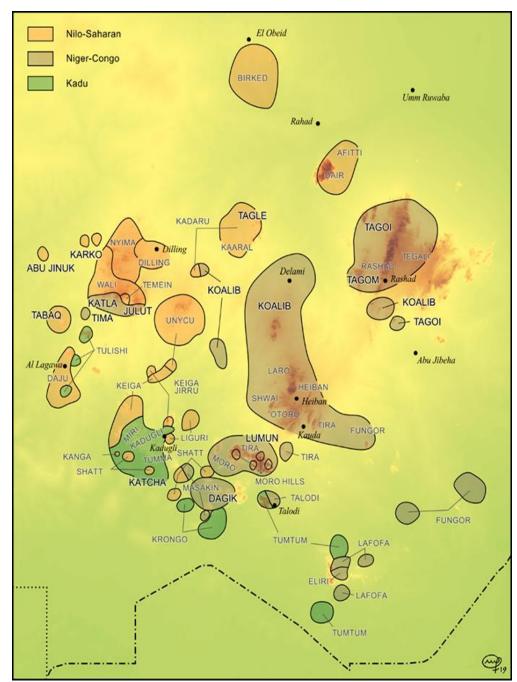


- <3> The fieldwork was carried out with native speakers of Tagom living in Khartoum. The primary data of this work were collected during fieldwork sessions held by the author in Khartoum between January 2018 and February 2019 which include a mix of structured interviews, elicitation, and focus group discussions. Two main informants were involved: Ibrahim Adam Yousif (born in 1973) and Adil Abdalla Ibrahim Mohamed (born in 1963). As for the writing of my data, I use a practical orthography that closely follows the IPA system and that has been developed during a workshop on Tagom segmental phonology held in 2016 in Khartoum.<sup>3</sup>
- <4> This study on verbal number of Tagom is a pioneering work and the data collected are quite limited. Some aspects of the phonology of Tagom are still fuzzy in particular concerning the vowel system, where the phonemic status of some of the units identified remains questionable. For a consonant inventory and categorization of the vowels of Tagom see Aldawi & Nashid (2018:130). Previous publications on Tagom are few and comprise essentially the following references:
  - 1) Stevenson (1956-1957), a pioneer in Kordofanian studies, lists a certain amount of Rashad data in his PhD thesis dealing with the languages of South Kordofan.
  - 2) Aldawi & Nashid (2017) presented a paper under the title "An Initial Sketch of the Tagom noun phrase" at the 3<sup>rd</sup> Nuba Mountain Conference held in Cologne Sept. 27-29 which was later published in *Nuba Mountain Languages Studies New Insights* (Schneider-Blum et al. 2018). It is a descriptive and analytic study discussing the structure of Tagom noun phrases. It basically covers the morphology of the Tagom noun, the nominal number marking system, and the noun-phrase constituents (personal and possessive pronouns, demonstratives, adjectives, quantifiers, numerals) as well as a summary of the morphosyntactic structure of Tagom NPs.
  - 3) Bashir (2018) reclassified the Tagoi nouns which have already been investigated by Alamin (2015), Schadeberg (2013) and Stevenson (1956/57), the latter being the most comprehensive

<sup>&</sup>lt;sup>3</sup> The workshop (August 10-15, 2016) was one of the activities of the Department of Linguistics within the scope of the Tagoi Orthography Development Project.

study of the three. Bashir reclassified nouns in the light of new data using an alternative recent approach as suggested by Corbett (1991:45) based on agreement evidence and follows both semantic and morphological assignment rules. "This method enables us to set out all nouns, including irregular nouns like zero prefix nouns and others, and to assign them to the appropriate classes." (Bashir 2018:153)

4) An 'Initial Phonological Study of *yágóm* (Tagom)' is now being prepared as a master's degree research by Mona Ibrahim, a staff member of the linguistics department of the University of Khartoum.



Map 1: The Nuba Mountain languages (Source: Schneider-Blum et al. 2018)

<5> Tagom is a tonal language with two register tones H/L which play a major role in the marking of the tense system of the language, sometimes together with vowel alternation regarding the prefix vowel. Though vowel alternation is common in various contexts in Tagom, its conditions for the occurrence are at present still unknown. In the present tense, the root is marked with a low tone whereas the past is always marked with a high tone which extends to influence the tone of the attached affixes. Table 1 presents data with the verb *frak* 'get out', where we also find vowel alternation comparing the prefixes, while the verb *lam* 'see', illustrated in Table 2, shows no such vowel alternation with the prefix.

Person	Past Tense	Present Tense
1sg	y <i>ó-fr</i> ák	yà-fràk
2sg	w <i>ź-fr</i> źk	wà-fràk
3sg	ú-frák	Ø-fràk
1PL (EXCL)	nú-frák	nà-fràk
1pl (incl)	tú-frák	tà-fràk
2pl	ŋú-frák	ŋà-fràk
3pl	kú-frák	kà-fràk

## Table 1: The verb *frok* 'get out' in the past/present tense

## Table 2: The verb *lam* 'see' in the past/present tense

Person	Past Tense	Present Tense
1sg	yí-lớm	yì-làm
2sg	wí-l <i>ám</i>	wì-làm
3sg	í-l <i>ám</i>	ì-làm
1pl (EXCL)	ní-l <i>ám</i>	nì-làm
1pl (incl)	tí-lớm	tì-làm
2pl	ŋċ-lźm	ŋờ-làm
3pl	kí-lám	kì-l <i>àm</i>

Since the focus of this study is the verb category, it is important to shed light on the verb root and the morphemes possibly attached to it, before beginning our discussion on verbal number. The verb roots in Tagom are bound roots, i.e., bound morphemes which are either monosyllabic or disyllabic. Additionally, few polysyllabic roots are attested. The canonical structure of the known verb roots falls into one of the syllable types as presented in Table 3.

Tagom is considered to have a "moderately complex syllable structure", which permits a single consonant after the vowel and/or allows two consonants in the onset position of a syllable with the restriction on the type of combinations allowed. An example from Tagom which allows a combination of liquids and plosives as a second consonant in the onset position of the syllable is the verb 'get\_out' *frak* and the noun 'eye' *ngít*. Schadeberg (2013:329) mentions that "[t]here are open and closed syllables [in Rashad] giving rise to consonant sequences." Tagom allows consonant sequences in all positions (Aldawi, In preparation). Possible sequences witnessed in Tagom are those listed in Table 4.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> This data is from my contribution in the 2<sup>nd</sup> PICS workshop: "The languages of the Sudan: a typological and areal crossroad", Paris-Villejuif 11<sup>th</sup> of March 2020.

## Table 3: Canonical structure of Tagom verb

	Syllable Structure	Root	Gloss
monosyllabic	CV	уэ	drink
	CCV	ngś	3sg (independent pronoun)
	CVC	rıŋ	slaughter
	CVCC	gork	tie
	CCVC	frək	get out
disyllabic	V.CV	<i></i> епа	stab
	CV.CV	SERE	lie down
	V.CVC	asod	cut
	V.CVV	egei	bite
	VC.CV	ande	go
	VC.CVC	onden	sleep
	CV.CVC	təwək	grind
	CVC.CVC	golmək	hide
polysyllabic	V.CV.CV	amada	shave
	VC.CV.CV	imridi	wash
	V.CV.CV.CV	udobidi	cultivate
	VC.CV.CV.CV	onfoyanı	whistle

### Table 4: Possible consonant sequences

Consonant Sequence	Example	Gloss
nj	àràn <del>j</del>	brain
rɲ	tábźrná	name of village in Rashad
ŋn	ÈŋnÈ	hands
mn	ámn	goods
ld	kòldókóldò	calabash
rd	tòrdà	chair
ŋg	ŋg <del>i</del> t	eye
fr	fràk	get out!
fn	ndófnán	kind of ants
ft	kàftè	throw!
ŋk	kìŋkè	towards

The verb root attaches to several compulsory and optional inflectional and derivational affixes that adjust its meaning. As mentioned by Stevenson (1956-57:50), in verb conjugation person elements are prefixed to the verb. Tagom has pronominal indexes which are obligatorily attached to the verb. Two series of person prefixes, subject indexes and object indexes, are distinguished (see Table 5 below). Independent pronouns occur in verbless sentences. They may also co-occur with person indexes in the same verbal sentence, but they are not obligatory; a sentence remains grammatically correct even when the independent pronoun is absent. The conditions for their co-occurrence still need to be investigated.

Person	Subject indexes	Object indexes	Independent Pronouns5
1sg	y-∕ y(V)-	<i>t(V)</i> -	ŋì
2sg	w-/w(V)-	$n^{w}$ -	ŋò
3sg	V-/Ø-	Ø-	ngś
1pl (excl)	n - n(V)-	tıŋg-	pìndé
1pl (incl)	t(V)-	Ø-	pìndé
2pl	$\eta(V)$ -	nong	ŋòndá
3pl	k - k(V)-	Ø-	ŋèndá

 Table 5: Subject and object person indexes and independent personal pronouns

Generally, with verb roots beginning with an initial vowel, the pronominal prefix is consonantic (see example 5). When a vowel indicates 3SG it is possible that this vowel merges with the initial vowel of the root which may show a difference in vowel quality or length. With roots beginning with an initial consonant, the pronominal prefix has a CV-structure (see example 6). Vowels of the root trigger vowel alternation/assimilation of the vowels of the pronominal prefixes (compare example 6 with examples 22a,b and example 11b with example 12, e.g.). Root initial glides have the same assimilating effect (see17b and compare with example 6).

- (5) ηì tà-sókó y-àndè
   s1sG LOC-market S1sG-go
   'I am going to the market.'
- (6)  $\eta i$  pòn yé-yék s1sg porridge s1sg-ate:PLUR 'I ate porridge.'

In intransitive sentences, the subject index is always marked on the verb in Tagom, whereas in transitive sentences, the personal index on the verb follows a person hierarchy (summarized in the following and also in Table 6 where the respective examples are listed).

- (i)  $1^{st}$  and  $2^{nd}$  persons take precedence over the  $3^{rd}$  person (1, 2 > 3) independently of their argument role;
- (ii) when a first and second person are object arguments of the verb, the object prefix takes precedence over the subject prefix (O > S);
- (iii) when the subject and object are both 3<sup>rd</sup> persons (whether singular or plural), it is the subject which is marked on the verb.

The basic word order is S O V in all cases.

able of i erbon merareny for person maches in transitive verbs						
Subject	Object	bject Person index on the verb		erarc	Examples	
1 or 2	3	Subject	1, 2	>	3	6, 7
3	1 or 2	Object	3	<	1, 2	8
1	2	Object	S	<	Ο	9
2	1	Object	S	<	Ο	10
3	3	Subject	S	>	Ο	11a, 11b

# Table 6: Person hierarchy for person indexes in transitive verbs

<sup>&</sup>lt;sup>5</sup> The forms of subject and object independent pronouns are identical in Tagom.

(7)			o3sg	ŋ <i>ú-lám</i> s2pL-saw
(8)		<i>ŋgó</i> s3sg 'He saw	o1sg	<i>tí-lám</i> 01sG-saw
(9)		s1sg	<i>ŋòndá</i> 02PL ou (PL).'	nòŋgò-làm 02PL-saw
(10)		-	O1PL	<i>tíŋg(í)-lám</i> 01PL-saw
(11)	a.	men	woman	<i>kí-lóm</i> s3pL-saw he woman.'
	b.	man		<i>í-lám</i> s3sG-saw he women.'

Also important for the understanding of examples is the internal order of verbal morphemes. Table (7) presents the linear order of the inflectional and derivational affixes of the Tagom verb (see example 12) with a verb marked for middle). Some of the verbal derivation markers will be discussed in a separate study (Aldawi, in preparation). As indicated above, TAM is suprasegmentally marked on the verb by tone.

Table 7: Linear order of verbal morphemes12345NEGPERSONROOTDERIVATIONAL MARKERSQUES

(12)	kíà	tàrbìsà-dà	tờờ	<i>ὑ-gύlm</i> ź-k
	child	table-LOC	under	s3sg-hid:mid
	'The c	hild hid under	the table.	,

Schadeberg (2013:331) observed six suffixes,  $-\varepsilon$ ,  $-\varepsilon n$ ,  $-\varepsilon n\varepsilon$ , -un, -n,  $-nd\varepsilon$ , used to mark the nominal plural in Tagom, of which  $-\varepsilon$ ,  $-\varepsilon n$  and  $-\varepsilon n\varepsilon$  are attached to consonants, and -un, -n,  $-nd\varepsilon$  are attached to vowels. Four of Schadeberg's six suffixes have been supported by our data, i.e.,  $-e/-\varepsilon$ ,  $-ene/-\varepsilon n\varepsilon$ , -n,  $-nde/-nd\varepsilon$  (differentiated for height or possibly ATR). With two adjectives,  $-(y)\sigma$  is attested, the presence of y depending on the last root vowel being a consonant (as against a vowel). In addition, one further suffix is attested in our data:  $-ne/-n\varepsilon$ . The first two suffixes, i.e.  $-e/-\varepsilon$ ,  $-\varepsilon n\varepsilon$ , are attached to consonants, whereas -n,  $-ne/-\varepsilon$  and  $-nd\varepsilon/-nd\varepsilon$  are attached to vowels, generally supporting Schadeberg's (2013) analysis.

## **Table 8: Number marking devices**

	Singular Form	Plural Form	Gloss
Suffixes	àràn <del>j</del>	àràn <del>j</del> -è	brain
	màs	màs-é	stomach
	péér	péér-éné	big calabash
	lép	lép-éné	star
	mbờ	mbờ-n	knee
	kòldókóldò	kòldókóldò-nè	calabash pot
	rś	ró-nè	chest
	ràmá	ràmá-ndé	fence
	ŋànì	ŋànì-ndé	elephant
Prefixes	rá	á-rà	cow
	tàŋ	à-dàŋ	leaf
Circumfix	màrì	á-mààrì-n	road
	fà	à-fá-n	wood
Replacement Pattern	íd-á	íd-ờàn	door
	<i>òy-à</i>	<i>ày-</i> ùàn	shoe
Irregular Plural	èd	ès	man
	yánè	yîn	woman / girl / female

Furthermore, plural prefixes are attested, as already mentioned by Stevenson (1957:47) for *a*-. Besides *a*-, Schadeberg lists  $\varepsilon$ -, *e*- and *o*-, the latter two occurring only rarely. In our data, the prefix *o*- is not attested. A combination of prefix and suffix, as mentioned by Stevenson, can be confirmed (see Aldawi & Nashid 2018:133). A few nouns have been attested displaying a replacement pattern or an irregular plural marking. The nouns listed in Table 8 exemplify each of the above-mentioned nominal plural markers.

# 3. Verbal number in Tagom

<6> Having given the necessary background information on verbal number in general and on some specific features of the Tagom language, we go now into the depth of considering verbal number in Tagom. Pluractional marking in Tagom is not productive, only a limited number of verbs are attested. Other verbs are either inherently plural verbs (i.e., have plurality in their semantics) or have the *-k* extension (see 3.3) in the singular form which is replaced by another pluractional marker. The semantics of plural verb stems in Tagom basically indicate event number and they cover the following meanings: Iterative/frequentative, habitual, and durative, as will be shown with the examples of this study. Tagom uses the following strategies to encode the notion of verbal number:<sup>6</sup>

The extension -(V)ni (Section 3.1)

- i. the extension -(V)nI with transitive verbs (Section 3.1.1)
- ii. the extension -(V)n1 reduplicated (Section 3.1.2)

<sup>&</sup>lt;sup>6</sup> As Dimmendaal (2014:60), after having investigated a number of African languages, mentions: "What is striking, when looking at pluractional marking from a cross-linguistic point of view, is the fact that in several languages there tend to be a number of co-occurring formal strategies, often with different degrees of productivity." This is, e.g., the case in Tima, a Niger Congo language spoken in the Nuba Mountains (see Schneider-Blum 2017), and also Tagom joins the ranks in that respect.

The extension -dən (Section 3.2)

- i. the extension *-dən* marking intransitive verbs (Section 3.2.1)
- ii. the extension *-dən* marking transitive (Section 3.2.2)

The extension -k (Section 3.3)

- i. the extension -k with transitive verbs (Section 3.3.1)
- ii. the extension -k as petrified element (Section 3.3.2)

Each of these strategies will be discussed separately in the mentioned sub-sections. With some verbs (see Table 9), morphological processes which are at present only partly explainable lead to a number of changes in the plural form as compared to the singular form.

## **Table 9: Irregular formation of plural forms**

Singular	Plural	Phonological Process	Gloss
-ímrídí -údóbídí -étáwí -èfr <b>è</b> k -gúlm <b>é</b> k	-ímríd <b>á</b> -ní -údóbíd <b>á</b> -ní -étáw <b>á</b> -dán -éfr <b>ì</b> -yà <sup>7</sup> -dàn -gólm <b>í</b> -yá-dán	root vowel alternation	washed cultivated jumped is building hid
-gonnak -ígní -ámádá -ér	-goimi-ya-aən -ðgnð-k -èmèdè-k -ír-íní	general vowel alternation	bought shaved cooked
-ás <b>ód</b> -t <b>ág</b> á -óbtál	-ás <b>t</b> -ání -t <b>k</b> á-k <sup>8</sup> -ábáldá-k	internal vowel drop plus consonant alternation	cut broke 1 broke 2

That is, internal or final vowel alternation, beside the drop of the mid or final vowel. The alternation of the vowels of the root triggers the alternation of the vowels of the attached affixes. Consonant alternations are also featured in Tagom; these concern basically  $t \sim d$  and  $k \sim g$  when they fall intervocalically. These changes could be combined in the same verb. It may well be that with these exceptionally formed pluractional verbs, a morpho-phonological opaque process took place leading to these special forms. However, by analogy with the majority of verbs, where root and suffix are readily analyzable, the suffixes as suggested above are identified as pluractional markers even in these irregular forms.

# 3.1. The extension -(V)nI

<7> The suffix -(V)nI (with *I* representing either *i* or *i*) is the most common extension used to mark pluractionality in Tagom. When the verb stem ends with a vowel, the -nI suffix is attached, and in cases where the verb root ends with a consonant, the suffix extension -VnI occurs. The quality of the final vowel in the extension -VnI is observed to be *a* in a number of the examples, occasionally

<sup>&</sup>lt;sup>7</sup> -ya is a causative marker attached to some plural verbs in the language especially verbs referring to a habitual event or an event happening for a long time. The causative marker will be discussed in Aldawi (in preparation).

<sup>&</sup>lt;sup>8</sup> When looking into the paragraph on syllable structure, it becomes obvious, that tk is not among the attested clusters, since here a phonotactic change took place due to a morpho-phonological process, i.e. tk is only attested when a preceding vowel allows for the omission of a; the two consonants are then spread on two syllables.

even other vowels were observed. The change from *I* to *a* cannot be explained. One may suspect, though, that the original morpheme was *-anI* since it is the vowel that occurs most often.

The extension -(V)nI marks both transitive and intransitive verb stems. The only difference is that when it marks intransitive verbs the suffix -(V)nI is reduplicated because it already exists as part of the lexical structure of the verb. Both verb groups are discussed below in Sections 3.1.1 and 3.1.2.

# **3.1.1.** The extension -(*V*)*nI* with transitive verbs

<8> Pluractional marking with the extension -(V)nI on transitive verbs are exemplified with example0 (13b - 24b). See Table 10 for a list of basic verbs vs. pluractional verbs used in the examples. Vowel alternation occurs, e.g., in examples (14a) and (20a), where the final vowel of the verb root in the underived form is *i*. In example (16b), vowel alternation of the pluractional marker from *i* to *s* seems to be triggered by the second person plural prefix index  $\eta \dot{o}$ - prefixing the verb stem. Example (18) exhibits a drop of the second vowel of the verb stem in the plural form and in the following the voiced consonant becomes voiceless:  $-\dot{a}s\dot{o}d \rightarrow -\dot{a}st-\dot{a}n\dot{i}$ .

In the examples (13b), 17b), (18b), (20b), (21b) and (22b), the suffix -(V)nI is attached to verb root, whereas in examples (14b), (15b), (16b), (19b), (23b) and (24b) the -nI counterpart is attached, with the choice of the allomorph depending on the last sound of the root, as explained above. Note that for 'plait' (examples 23a,b) the verb is further derived for the causative; more details are given below. Each verb is exemplified with the non-marked verb and its pluractional counterpart.

Unmarked singular event	Marked plural event	Gloss	Example
-èr	-ìr-ànì	cooking/cooks	(13)
-ímrídí	-ímrídá-ní	washed	(14), (24)
-ófódá	-ófódá-ní	woke up	(15)
-fódá	-fódwá-n <i>ý</i>	opened	(16)
-wán	-wán-ání <sup>9</sup>	cooked	(17)
-ásód	-ást-ání <sup>10</sup>	cut	(18)
-éŋá	-éŋá-ní	stabbed	(19)
-àdòbìdí	-àdòbìd-ànì	cultivate	(20)
-írín	-írín-ání	hurt (with a knife)	(21)
-ríŋ	-ríŋ-ání	slaughtered	(22)
-èr	-èr-yà-nì	plait	(23)

# Table 10. Plural objects marked with the extension -(V)nI

(13) a. *ngó ràŋàk Ø-èr* s3sG food s3sG-cook 'She is cooking food.'

<sup>&</sup>lt;sup>9</sup> Tagom has several verbs for 'cooking' the usage of which depends basically on what is being cooked and the way of cooking it. In the above example,  $\varepsilon r$ - is the verb which refers to the general meaning of 'cooking', but its essential meaning is 'doing something' which in the context of preparing food can be translated as 'cooking'.

<sup>&</sup>lt;sup>10</sup> Again, different verbs are used by Tagom speakers for cutting trees or grass. The verb in the above example classifies the object as being hard.

- b.  $\eta g \circ r \partial \eta \partial k \cdot \hat{e} \phi i r \cdot \partial n \hat{i}$ s:3sg food-PL s3sg-cook-PLUR 'She is cooking the dishes.'
- (14) a. *ŋì kià y-imridi* s1sG child s1sG-washed 'I washed the child.'
  - b. *ŋì á-gìà y-imrídá-ní* S1SG PL-child S1SG-washed 'I washed the children'
- (15) a. *ŋèndá kíà k-ófódá* s3PL child s3PL-woke\_up 'They woke up the child.'
  - b. *ŋɛ̀ndá á-gìà k-ófódá-ní* s3PL PL-child s3PL-woke\_up-PLUR 'They woke up the children.'
- (16) a. *ŋòndá idí ŋó-fódá* s2PL door s2PL-opened 'You (PL) opened the door.'
  - b. ŋɔ̀ndá íd-wàn ŋú-fúdwá-nɔ́
    s2PL door-PL s2PL-opened-PLUR
    'You (PL) opened the doors.'
- (17) a. *ŋì pònn yó-wán* s1sG porridge s1sG-cooked 'I cooked porridge.'
  - b. *ŋì pònn-ànè yó-wán-ání* s1sG porridge-PL s1sG-cooked-PLUR 'I cooked several porridges.'
- (18) a.  $\eta i$  làs y-ásód s1sG tree s1sG-cut 'I cut the tree.'
  - b.  $\eta i$  làs- $\epsilon$  y-ást-ání s1sG tree-PL s1sG-cut-PLUR 'I cut the trees.'
- (19) a.  $\eta g \dot{\beta} \quad \dot{e} d \quad \emptyset \dot{\epsilon} \eta \dot{a}$ s3sG man s3sG-stabbed 'He stabbed the man.'

- b. ηgό ès Ø-έηά-ní
  s3sG men s3sG-stabbed-PLUR
  'He stabbed the men.'
- c. ŋèndá èd k-éŋá-ní
  s3PL man s3PL-stabbed-PLUR
  'They stabbed the man (each aggressor having his own weapon).'
- (20) a. *ŋì tàbòn yèrkèr y-àdòbìdí* s1sG field work s1sG-cultivate 'I am cultivating the field.'
  - b. *ŋɛ̀ndá tàbòn yɛrkɛr k-àdòbìd-ànì*s3PL field work s3PL-cultivate-PLUR
    'They are cultivating the field (each of them has a part in the cultivation).'
- (21) a.  $y \acute{anc}$  kíà Ø-iripwoman child s3sG-hurt 'The woman hurt the child (with a knife).'
  - b.  $y\acute{an}\grave{\epsilon} \acute{a-g}\grave{a} \acute{t}\grave{a}lt\grave{a}l$   $Ø-irin-\acute{an}i$ woman PL-child one by one S3SG-hurt-PLUR 'The woman hurt the children (with a knife one by one).'
- (22) a.  $\eta \hat{i} r \hat{a} y \hat{i} r \hat{i} \eta$ s1sg cow s1sg-slaughtered 'I slaughtered the cow.'
  - b.  $\eta i$  á-rà yí-ríŋ-ání s1sg PL-cow s1sg-slaughtered-PLUR 'I slaughtered the cows (one by one).'
- Habitual and progressive meanings in Tagom are not differentiated. For example, the same verbform is used whether you want to say that the woman was doing continuous washing/plaiting or whether the washing /plaiting is her habit/work. Plaiting without a pluractional marker is  $\epsilon r$ -, which is the same root used for cooking (cf. example 13a) It generally means 'to do something'. A difference occurs with forming a pluractional, in that with the meaning of 'plaiting' the causative extension -ya precedes the pluractional -ni (see example 23a). When overtly expressed that somebody else's hair is plaited, the verb is derived for applicative with the extension -ndi instead of pluractionality (see example 23b). Further research will show in detail the usage of the applicative. Compare also example (13b) with regard to the pluractional form of the verb when referring to 'cooking'.
  - (23) a. ngó ànèkòl àm Ø-èr-yà-nì
    s3sG always hair s3sG-plait-CAUS-PLUR
    'She plaits hair (plaiting hair is her habit/work).'

- b.  $\eta g \circ w' \circ \partial m \circ \partial \eta = \partial f \circ \partial r \circ \partial$
- (24) a. yánê ógàd Ø-àmìrìdì
   woman cloth s3sG-wash
   'The woman is washing the cloth (now).'
  - b. yánè kèllà ógàd-è Ø-àmìrìdà-nì
    woman now cloth-PL s3sG-wash-PLUR
    'The woman is washing the clothes (now).'
  - c. yánè ógàd-è Ø-àmìrìdà-nì
    woman cloth-PL S3SG-wash-PLUR
    'The woman washes the clothes (habitually/as her job).'

# 3.1.2. The extension -(V)nI with intransitive verbs

<10> The verbs discussed in this section seem to consist of a root with -(V)nI being incorporated. Additionally, they may be suffixed by -(V)nI (again) with *I* of the preceding syllable mostly dropped. These verbs convey an iterative event or are associated with the duration of an action. A possible explanation is that a pluractional form expressing the plurality of an action was reinterpreted as a simple verb form, while the former root  $*\ell ld$  'cough once' sank into oblivion. Therefore, in today's Tagom, the etymological pluractional  $\ell ldán$  'cough' may be felt as the basic form which can be pluralized by -(V)nI. All lexicalized verbs containing -(V)nI have intransitive verb stems. Consider the verbs in Table 11:

# Table 11: Lexicalized plural verbs

Singular Event	Plural Event	Gloss
-éldání	-éldán-ání	coughed
-úndéní	-úndén-éní	slept
-úŋfúyání	- <i>óŋf</i> óyán-ání	whistled
-údwánı	-údwán-ánı	shake hands
-ŋúmdéní	-ŋớmdén-íní	washed (oneself) <sup>11</sup>

- <11> In the examples (25b), (26c), 28b), (29b,c) the extension -(V)nI is suffixed to these petrified forms, cf. the non-pluractional sentences (with the frozen morpheme) with the pluractional-marked forms (plus the frozen morpheme):
  - (25) a. *ŋì y-éldání* s1sG s1sG-coughed 'I coughed (once).'
    - b. ηì y-έldán-ání
      s1sG s1sG-coughed-PLUR
      'I coughed (repeatedly).'

<sup>&</sup>lt;sup>11</sup> The verb used for washing oneself is different from washing someone else or other items like clothes.

- (26) a. ngó Ø-óndéní s3sG s3sG-slept 'He slept.'
  - b. *ŋgó ítè* Ø-*óndéní* s3sG small/little s3sG-slept 'He slept (for a moment).'
  - c. *ŋg5 Ø-ċndén-éní*s3sG s3sG-slept-PLUR
    'He slept (for a long time) / he is a sleepy head.'
- (27) a. *kíà Ø-óŋfóyání* child s3sG-whistled 'The child whistled (once).'
  - b. kià Ø-óŋfóyán-ání
    child s3sG-whistled-PLUR
    'The child whistled (repeatedly).'
- (28) a. *màhà-áú ìbràhìm-áú sàlàm kú-dwání* maha-CONJ ibrahim-CONJ hello s3PL-shook\_hands 'Maha and Ibrahim shook hands (once).'
  - b. màhà-áú ìbràhìm-áú sàlàm kú-dwán-ání maha-CONJ ibrahim-CONJ hello S3PL-shook\_hands-PLUR 'Maha and Ibrahim shook hands (repeatedly).'
- (29) a. *kèryà ú-ŋómdéní* kerya s3sG-washed 'Kerya washed himself (once.).'
  - b. kèryà ό-ŋómdéní-ní kerya S3SG-washed-PLUR
    'Kerya washed herself (for a long time.).'
  - c. kèryà ànètòm ò-ŋòmdònò-nì<sup>12</sup>
     kerya the\_whole\_day S3SG-wash-PLUR
     'Kerya is washing herself for the whole day.'

The discussion on the extension -(V)nI started with transitive verbs, since they are the morphologically simpler ones. In the next section, the extension  $-d\partial n$  is under scrutiny. Here, the simpler form is with intransitive verbs, so the discussion will start with them before looking at  $-d\partial n$  with transitive verbs.

<sup>&</sup>lt;sup>12</sup> The difference of the form of the root between example (29b) and (29c). is due to different TAM.

# 3.2. The extension -dən

<12> The plural extension *-dən* attaches to intransitive and transitive verb stems indicating habitual action. Plural verbs formed with the extension *-dən* are accompanied with vowel alternation. In these verbs, vowel alternation is either root internal, as in (32b) or the final vowel is altered, as in example (30b). The vowel alternations found are:  $1 \sim a/\partial$ ,  $a \sim \partial$ ,  $\varepsilon \sim a$ .

# 3.2.1. The extension -dən with intransitive Verbs

<13> First, we look at intransitive verbs for which pluractionality is marked by *-dən* (see Table 12). Consider the examples below, either accompanied with vowel alternation, as in (30b) or without as in (31b). In the case of the verb 'jump', which is a punctual verb, the plural marking indicates repetition, whereas in 'laugh', which is inherently rather durational, the marking indicates duration. Admittedly, thorough investigation of language-internal evidence for lexical aspect is still in need, though.

# Table 12. Intransitive verbs marked by -dən

Singular Event	Plural Event	Gloss
-étáwí	-étáwá-d <i>án</i>	jumped
-èlyà	-èlyà-dàn	laugh
-tká	-tkáwá-dźn	broke

- (30) a.  $\eta i$  y- $\epsilon t \dot{a} w i$ s1sG s1sG-jumped 'I jumped (once)'
  - b. ŋì y-étáwá-dán
    s1sG s1sG-jumped-PLUR
    'I jumped repeatedly/continuously.'
- (31) a. kèryà<sup>13</sup> Ø-élyá kerya s3sG-laughed 'Kerya laughed (once).'
  - b. kèryà Ø-élyá-dán
    kerya s3sG-laughed-PLUR
    'Kerya laughed repeatedly/continuously.'

When the verb 'break  $-tk\dot{a}$ ', is used intransitively, the plural is marked by the extension  $-d\partial n$ , see example (32b), (compare also examples 37b, c, d), and d where it is used transitively).

- (32) a. *ìlìg Ø-tágán* pot s3sG-broke 'The pot broke.'
  - b. *ìlìg-ènè ké-tkáwá-dán* pot-PL s3PL-broke-PLUR 'The pots broke.'

<sup>&</sup>lt;sup>13</sup> Kerya is a birthname in Tagom used to refer to the first-born male.

## 3.2.2 The extension -dən with transitive Verbs

The extension *-dən* is also attested with transitive verbs, but the pluractional marker must then be preceded by the causative extension *-ya* (see Table 13). Examples (33b, c) and (34b) illustrate the situation. The causative and pluractional marked verbs refer to habitually repeated actions. The question which arises here is why the causative suffix *-ya* appears with the pluractional form of these verbs. This remains for now unsolved and needs further investigation.

# Table 13. Transitive verbs marked by -dən

Simple form	Plural	Gloss
údə́f	-òdfì-yà-dàn	clean
éfrá	-èfrì-yà-dàn	build

(33) a.  $yán \hat{\epsilon} f a \hat{\epsilon} r \phi - \dot{\omega} d \hat{\epsilon} f$ woman house s3sG-cleaned 'The woman cleaned the house (once).'

b.	yánè	à-fààr-nè	Ø-òdfì-yà-dàn
	woman	PL-house-PL	s3sg-cleans-CAUS-PLUR
	'The wo	man cleans hou	ses (habitually as her job).

c.  $y\hat{i}n$   $\hat{a}$ - $f\hat{a}\hat{a}r$ - $n\hat{\epsilon}$  k- $\hat{v}df\hat{i}$ - $y\hat{a}$ - $d\hat{a}n$ women PL-house-PL S3PL-clean-CAUS-PLUR 'The women clean houses (habitually as their job).'

For the verb  $\acute{e}fr\acute{a}$ - 'build' in example (34), no simple form is attested, but one can reconstruct the root by comparing the applicative (as in example 34a), the causative-pluractional (as in example 34b), and the middle voice verb forms (as in example 52).

- (34) a. *èd yánè-òŋ fààr Ø-éfrá-ndí* man woman-POSS3SG house S3SG-built-APPL 'The man built a house for his wife.'
  - b.  $\dot{e}d$   $\dot{a}$ - $f\dot{a}\dot{a}r$ - $n\dot{e}$   $\emptyset$ - $fr\dot{i}$ - $y\dot{a}$ - $d\dot{\partial}n$ man PL-house-PL s3sG-build-CAUS-PLUR 'The man builds houses (habitually as a job).'

# 3.3. The extension *-k*

# 3.3.1. The extension -k with transitive verbs

<14> Another suffix indicating pluractionality is the extension -k. It only marks transitive verbs expressing event number. The plural marking is accompanied with or without internal vowel alternations.

# Table 14: Transitive verbs with the pluractional extension -k

Singular	Plural	Gloss
-égéí	-égéí-k	bite
-ígní	-ágná-k	buy
-tká	-tká-k	break
-émél	-émélá-k	pull

Examples (35-39) illustrate the suffix -k in transitive sentences. As is shown with the additional information added in brackets, pluractional marking in Tagom refers to the number of the events/actions, not to the number of participants. For instance, in example (35b), agent as well as patient are singular, while the verb is marked for pluractional. By contrast, in examples (38) and (39) we have several agents, but the verb is not marked for pluractionality, since it is a joint action. Finally, consider example (39a) with several objects/patients, yet the verb is not marked for pluractionality, since the patients are affected by a single action.

- (35) a. sờ yán ề Ø-égéí
  dog woman s3sG-bit
  'The dog bit the woman (once).'
  - b.  $s \dot{v} y \dot{a} n \dot{\epsilon} \qquad \emptyset \dot{\epsilon} g \dot{\epsilon} i k$ dog woman s3sG-bit-PLUR 'The dog bit the woman (repeatedly).'
  - c. *ò-sò-wàn yánè k-égéí-k*PL-dog-PL woman S3PL-bit-PLUR
    'The dogs bit the woman (repeatedly/or each).'
  - d.  $s \dot{v} y \hat{i} n$   $\emptyset \dot{\epsilon} g \dot{\epsilon} \dot{i} k$ dog women S3SG-bit-PLUR 'The dog bit the women (one by one).'
  - e. *ờ-sờ-wàn* yîn k-égéí-k
    PL-dog-PL women s3PL-bit-PLUR
    'The dogs bit the women (repeatedly/or each one by one).'
- (36) a.  $\eta i$  fààr y-ígní s1sG house s1sG-bought 'I bought the house.'
  - b. ŋì à-fààr-nê y-ágná-k
    s1sG PL-house-PL S1SG-bought-PLUR
    'I bought several houses.'
- (37) a.  $\eta i$  *ilig*  $y \not{\epsilon}$ -tká S:1SG pot S1SG-broke 'I broke the pot.'
  - b.  $\eta i$  *ilig*  $y \not\in -tk \nota -k$ s:1sg pot s1sg-broke-PLUR 'I broke the pot (into pieces).'
  - c. ŋì ìlìg-ènè yé-tká-k
    s:1SG pot-PL S1SG-broke-PLUR
    'I broke the pots (one by one)'

- d. *ŋì ìlìg-ènè lòt yé-tká-k*s:1SG pot-PL a lot S1SG-broke-PLUR
  'I broke a lot of pots (on different occasions).'
- (38) a. *ŋèndá wòn k-émél* s3PL rope s3PL-pulled
   'They pulled the rope (one joint pulling action).'
  - b. *ŋèndá wàn-é k-émél-ák*s3PL rope-PL s3PL-pulled-PLUR
    'They pulled the ropes (each one).'
  - c. *ŋgɔ́ wàn Ø-émél* s3sG rope s3sG-pulled 'He pulled the rope.'
  - d. *ŋg5 w∂n-€ Ø-émél-ák*s3sG rope-PL s3sG-pulled-PLUR
    'He pulled the ropes (one by one.)'
  - e. *ŋg5 wàn-έ ìndá ìndá Ø-émél-ák*s3sG rope-PL one by one s3sG-pulled-PLUR 'He pulled the ropes one by one.'
- (39) a.  $\eta i$   $mb \epsilon r \cdot \epsilon$   $y \cdot \delta b t \delta l^{14}$ s1sG stick-PL s1sG-broke 'I broke the sticks (into two) all together at once.'
  - b. *ŋì mbèr y-ábtál* s1sG stick s1sG-broke 'I broke the stick (into two).'
  - c. ŋì mbèr y-ábáld-ák
    s1sG stick s1sG-broke-PLUR
    'I broke the stick (into pieces).'
  - d. *ès mbèr k-ábtál*men stick S3PL-broke
    'The men broke the stick (into two).'

With the following verb, translated as 'hit', -k is present with the plural form of the verb, but the root is suppletive. It is the only such verb attested so far.

<sup>&</sup>lt;sup>14</sup> The Tagom verb used for breaking a pot is different from that of breaking a stick.

- (40) a. èd kià Ø-ύηύ man child s3sG-hit
   'The man hit the child (once).'
  - b. *èd kíà Ø-úbr-ák*man boy s3sG-beat-PLUR
    'The man hit the boy (several times).'
  - c. èd á-gìà Ø-úbr-ák
    man PL-boy S3SG-beat-PLUR
    'The man hit the boys (each one several times).'
  - d. *ès kíà k-úbr-ák* men boy S3PL-beat-PLUR
    'The men hit the boy (each man several times).'
  - e. ès á-gìà k-úbr-ák
    men PL-child S3PL-beat-PLUR
    'The men hit the boys (several times).'

# 3.3.2. Inherently plural verbs marked by the extension -k

<15> Tagom has a group of verbs which do not differentiate between a distinct singular and plural verb stem and always have -k regardless of the number of subjects or objects. They are presented in Table 15. Quite a number of Tagom verbs belong to this category. As mentioned by Jakobi (2017: 126), with regard to certain intransitive verbs in Karko which also do not show signs of verbal number, "this may be due to the semantics of the verb [...] denoting inherently multiple or repetitive movements and events", which might also be true for certain verbs in Tagom. However, here, the verbs may be either transitive or intransitive and refer in addition to continuous/ long-lasting actions.

## Table 15. Verbs with petrified -k

Verb	Gloss
-tàwàk	grind
-éfyék	run
-ógók	cry
-érŋək	eat

Examples (41 - 44) illustrate the verbs. As expected, continuous and habitual readings are not differentiated grammatically.

- (41) a. yánè ndàgàn tà-ònà Ø-tàwàk
   woman millet LOC-grinder S3SG-grind:PLUR
   'The woman is grinding millet on the grinder (now/continuously).'
  - b. yánè ànè kòl ndàgàn Ø-tàwàk
    woman everyday millet s3sG-grind:PLUR
    'The woman grinds millet (every day).'

- (42) a.  $\dot{e}d \qquad \emptyset-\dot{e}fy\dot{e}k$ man s3sG-ran:PLUR 'The man ran.'
  - b. *èd* Ø-*èfyèk*man s3sG-run:PLUR
    'The man is running (continuously).'
  - c. ès *k-éfyék* men S3PL-ran:PLUR 'The men ran.'
  - d. ès k-èfyèk
    men s3PL-ran:PLUR
    'The men are running (continuously).'
- (43) a. ngó kíà Ø-èbàsnì Ø-ògòk
  s3sG child s3sG-make s3sG-cry:PLUR
  'She is making the baby cry.'
  - b. kíà Ø-ògòk
    child s3sG-cry:PLUR
    'The child is crying (continuously).'
- (44) a. *ŋì y-érŋák* s1sG s1sG-ate:PLUR 'I ate porridge.'
  - b. *ŋèndá k-érŋák* s3PL s3PL-ate:PLUR 'They ate porridge.'
  - c.  $\eta i$  y- $\epsilon r \eta \partial k$ s1sg s1sg-eat:PLUR 'I am eating porridge (now).'

It seems that all these verbs are inherently durative verbs, but, as said above, lexical aspect in Tagom has to be studied yet.

# **3.3.3.** More on the extension *-k*

<16> So far, the examples presented above all display a difference in event number. Consider now the two verbs presented in a variety of examples below. Although we are dealing with long-lasting or repeated actions, the verbs 'breast-feed' (examples 45a-d) and 'kill' are unmarked for plural (examples 46a-d).

- (45) a. yánè kíà Ø-óbíyá
  woman baby s3sG-breast\_fed
  'The woman breast-fed the baby (for a long time).'
  - b. yánè á-gìà Ø-óbíyá woman PL-child s3sG-breast\_fed 'The woman breast-fed the babies.'
  - c. yánè ànèkól kíà Ø-òbìyà
    woman everyday baby s3sG-breast\_feeds
    'The woman breast-feeds the baby every day.'
  - d. yánê kíà táb lót Ø-óbíyá
    woman baby very long s3sG-breast\_fed
    'The woman breast-fed the baby for a very long time (years).'
- (46) a. yánè ónì Ø-íní woman snake s3sG-killed 'The woman killed the snake.'
  - b. yánè ón-wàn ìndá ìndá Ø-íní woman snake-PL one\_by\_one s3sG-killed 'The woman killed the snakes one after the other.'
  - c. yîn ónì k-íní women snake s3PL-killed 'The women killed the snake.'
  - d. *yîn ón-wàn k-ini* women snake-PL s3PL-killed 'The women killed the snakes.'
- <17> The fact that those verbs are not morphologically marked when they refer to repeated/long-lasting actions is by itself not remarkable, since there are many verbs in Tagom which are not sensitive to verbal number, as indicated at in Section 3. However, the two verbs 'breast-feed' and 'kill' may be derived by *-k*, but in that case *-k* does not signal pluractionality, but mid-voice, i.e. it rather serves as a valence decreasing operator as presented in examples (47, 48, 49b, 50a).
  - (47) kià Ø-òbìyà-k
    baby s3sG-breast\_feeds-MID
    'The baby breast feeds.'
  - (48) èd Ø-ónź-k man s3sG-died-MID 'The man died.'

Compare in this context also the underived verb and middle-marked verb in example (49).

- (49) a. ng5  $\eta$   $\hat{}$   $\partial m-\hat{i}\eta$   $t-\hat{a}m\hat{a}d\hat{a}$ s3sG 01sG hair-Poss1sG 01sG-shaved 'He cut my hair.'
  - b.  $\eta i$   $\partial m \cdot i \eta$   $y \cdot i m e d e \cdot k$  s1sG hair-POSS:1SG s1sG-shave-MID 'I am cutting my hair.'
- <18> By contrast to the verb -*ámádV* 'shave, cut hair' in (49), the root for -*gulmV* 'hide', does not exist without being suffixed by one of the derivational extensions, causative (50b) or middle voice (50a), as shown in the examples below.
  - (50) a. *kíà tàrbìsà-dà tògròm ó-gólmá-k* child table-LOC under S3SG-hid-MID 'The child hid itself under the table.'
    - b. *kià kítàb tàrbìsà-dà tògròm ó-gólmí-yá* child book table-LOC under S3SG-hide-CAUS 'The child hid the book under the table.'

Even more proof that the -k extension marks middle voice are the examples (51a, b) and (52a, b) which should be compared to examples (33a, b) and (34a, b), respectively, in Section 3.2.2. above.

(51)	a.	yánè	fààr	Ø-údfá-k
		woman	house	s3sG-cleaned-MID
		'The wo	man clea	ned the house (thoroughly) for herself.'
	_			

b. yîn fààr k-ódfá-k
women house S3PL-clean-MID
'The women cleaned the house (thoroughly) for themselves.'

(52)  $\dot{e}d$   $f\dot{a}\dot{a}r\cdot\dot{v}\eta$   $\emptyset\cdot\dot{e}fr\dot{a}\cdot k$ man house-POSS:3SG S3SG-build-MID 'The man is building a house for himself.'

Of course, the question arises whether the morpheme -k with its two functions – that of pluractionality and that of middle voice – originate in two different morphemes that converged (in which case we are dealing with syncretism) or whether there was historically a morpheme -k which diverged into two different directions. Since there are neither historic data available nor comparative data from related languages at our disposal, this question can at present not be answered. Nevertheless, since the functions of the marker can in all known cases be differentiated, the marker is either glossed as pluractional (PLUR) or as middle (MID) marker, depending on its function.

# 4. Conclusion

<19> Tagom, like most – if not all – Nuba Mountain languages (and many other Niger-Congo languages), has a rich array of verb extensions, whose exact value and semantics should be clarified to allow fruitful reconstructions of such extensions for the Rashad grouping and of the related families. As pointed out by Dimmendaal (2014:57): "Pluractional constructions prototypically express repetition of some action or event. In the case of intransitive predications, the subject tends to be affected by this, whereas in transitive constructions, pluractionality tends to affect the object". In Tagom, as shown with the examples in Session 3 and unlike the examples Jakobi (2017) presents for Karko, verbal number is strongly correlated with these events. Of course, we may find plural subjects and/or objects being involved, but this does not have to be the case. We are thus dealing with pluractional marking in its original sense, as coined by Newman (1990).

As initially stated, pluractional marking in Tagom is rather rare, attested only with a limited number of verbs. Of the three extensions which are used to mark pluractionality in Tagom, the most common marker is the -(V)nI suffix. It is attested as an extension of some transitive verbs to reflect the plurality of the subject or object and of intransitive verbs to reflect a repeated or continuous, long-lasting action. With intransitive verbs, the extension is suffixed to a lexicalized stem containing already -(V)n, thus, the derivation morpheme seems to be reduplicated.

<20> The second attested extension is  $-d\partial n$ . It marks intransitive and transitive subjects indicating a frequentative, repeated and habitual actions. When suffixed to transitive verbs,  $-d\partial n$  is preceded by the causative marker -ya. The third attested pluractional-marking extension is -k which marks transitive verbs for durative or frequentative action. It is not attested with intransitive verbs. Obviously, as shown in Section 3.1.3, the morpheme -k has two different functions, that of a pluractional marker and that of a middle marker.

In this paper, pluractional marking in Tagom was subjected to critical scrutiny. It became clear that other derivation marking options interfere into the domain of pluractionality, such as causative marking (combined with pluractional marking) or middle marking. Further research on these other derivation markers and their interplay will hopefully shed more light on the whole system.

## Abbreviations

1	first person	MID	middle voice
2	second person	NOM	nominaliser
3	third person	0	object
Ø	zero morpheme	PL	plural
APPL	applicative	PLR	verbal plural stem
AUX	auxiliary	PLUR	verbal plural marker
С	consonant	POSS	possessive
CAUS	causative	RSM	resumptive marker
CONJ	conjunction	S	subject
EXCL	exclusive	SC	subject concord
IMP	imperative	SG	singular
INCL	inclusive	SGL	verbal singular marker
LOC	locative	V	vowel

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### References

Alamin, Suzan (2015)

The Tagoi pronominal system. In Occasional Papers in the Study of Sudanese Languages 11:17-30.

#### Aldawi, Maha A. & Sawsan A. M. Nashid (2018)

An Initial Sketch of the Tagom Noun Phrase. In: Gertrud Schneider-Blum, Birgit Hellwig & Gerrit J. Dimmendaal (eds.), *Nuba Mountain Language Studies – New Insights*, pp. 129-151. Cologne: Köppe

### Aldawi, Maha (in preparation)

On the Verbal Morphology of Tagom

#### Bashir, Abeer (2018)

Noun class genders in Tagoi. In: Gertrud Schneider-Blum, Birgit Hellwig and Gerrit J. Dimmendaal (eds.), *Nuba Mountain Language Studies – New Insights*, pp. 153-173. Cologne: Köppe

#### Blench, Roger (2010)

Mwaghavul Pluractional Verbs. <u>file:///D:/Temp/MicrosoftEdgeDownloads/2e0cbd0a-a6d9-4536-a6f3-4d9906ba151b/Mwaghavul\_pluractional\_verbs%20(1).pdf</u> (accessed 12.02.2022)

### Blench, Roger (2013)

Does Kordofanian constitute a group and if not, where do its languages fit into Niger-Congo? In: Thilo Schadeberg & Roger Blench (eds.), *Nuba Mountains languages studies*, pp. 485-500. Cologne: Rüdiger Köppe

### Corbett, Greville (1991)

Gender. Cambridge: Cambridge University Press.

Creissels, Denis, Gerrit J. Dimmendaal, Zygmunt Frajzyngier, and Christa König (2007)

Africa as a Morphosyntactic Area. In Bernd Heine and Derek Nurse (eds.), *A Linguistic Geography* of Africa, pp. 86-150. Cambridge: Cambridge University Press

### Dimmendaal, Gerrit J. (2014)

Pluractionality and the distribution of number marking across categories. In Anne Storch & Gerrit J. Dimmendaal (eds.), *Number Constructions and Semantics. Case Studies from Africa, Amazonia, India and Oceania*, pp. 57-58. Amsterdam/ Philadelphia: John Benjamins

#### Dimmendaal, Gerrit J. (2018)

Reconstructing Katloid. In Gertrud Schneider-Blum, Birgit Hellwig and Gerrit J. Dimmendaal (eds.), *Nuba Mountain Language Studies – New Insights*, pp. 1-34. Cologne: Rüdiger Köppe

### Eulenberg, John B. (1971)

Conjunction Reduction and Reduplication in African languages. In: Chin-Wu, Kim and Herbert Stahlke (eds.), *Papers in African Linguistics* (Current Inquiry into Language and Linguistics 1), pp. 71–80. Edmonton: Linguistic Research

Greenberg, Joseph H. 1963

The Languages of Africa. Berlin: Mouton

## Ibrahim, Mona (In preparation)

Initial Phonological Study of nágóm (Tagom)

#### Jakobi, Angelika 2017

Verbal number and transitivity in Karko (Kordofan Nubian). In Jules J. Coly and Anne Storch (eds.), *Verbal Plurals and Pluractionals. Language Typology and Universals (STUF)* 70,1:117-126

## Kutsch Lojenga, Constance 1994

Ngiti, a Central-Sudanic language of Zaire. Cologne: Rüdiger Köppe

## Newman, Paul 1990

Nominal and verbal plurality in Chadic, pp. 53-54. Dordrecht: Foris Publications

#### Quint, Nicolas 2009

The Phonology of Koalib, a Kordofanian Language from the Nuba Mountains (Sudan). Cologne: Rüdiger Köppe

#### Schadeberg, Thilo C. 1981

The Classification of the Kadugli Language Group. In Thilo C. Schadeberg and M. Lionel Bender (eds), Nilo-Saharan: Proceedings of the First Nilo-Saharan Linguistics Colloquium, Leiden, September 8-10, 1980, pp. 291-306. Dordrecht: Foris Publications

## Schadeberg, Thilo. C. (2013).

Rashad survey data. In Roger M. Blench and Thilo C. Schadeberg (eds.), *Nuba Mountain Language Studies*, pp. 325-345. Cologne: Köppe

#### Schneider-Blum, Gertrud (2017)

Once or more often? – On pluractionality marking in Tima. In Jules J. Coly and Anne Storch (eds.), *Verbal Plurals and Pluractionals, STUF* 70(1), 163-194. Berlin: Mouton de Gruyter

Schneider-Blum, Gertrud, Birgit Hellwig and Gerrit J. Dimmendaal (eds.) (2018) Nuba Mountain Language Studies – New Insights. Cologne: Köppe

## Stevenson, Roland C. (1956/57)

A Survey of the Phonetics and Grammatical Structure of the Nuba Mountain Languages. *Afrika und Übersee* 40:73-115; 41:27-65, 41:117-96

#### Veselinova, Ljuba N. (2013)

Verbal Number and Suppletion. In Dryer, Mathews S. and Haspelmath, Martin (eds.) *The World Altas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology, <u>https://wals.info/chapter/80</u> (accessed on 12.02.2022)

## Weiss, Doris (2009)

Phonologie et morphosyntaxe du maba. Thèse de doctorat. Linguistique. Université Lumière Lyon 2, <u>https://tel.archives-ouvertes.fr/tel-01540280/document</u> (accessed 12.02.2022)

#### Williamson, Kay & Roger M. Blench (2000)

Niger-Congo. In Bernd Heine and Derek Nurse (eds.), *African Languages: An Introduction*, pp. 11-42. Cambridge: Cambridge University Press