Gertrud Schneider-Blum*

Once or more often? On pluractionality marking in Tima

Abstract: The verbal root in Tima may be marked for one or several derivational functions, such as transitive, ventive, antipassive, middle voice, causative, instrumental, or pluractionality. Contrary to other derivational devices, pluractional marking can be achieved by various formal strategies, which are described in detail in the present contribution. Pluractional marking on Tima verbs indicates only repeated action or duration, depending on the lexical aspect of the verb; the number of the subject or object does not interfere with the marking. However, certain constructions force the speaker to use the pluractional as default form; the focus is on the action itself in such constructions.

Keywords: Nuba Mountain languages, verbal morphology/derivation, lexical aspect, Construction Grammar

1 Introduction

Tima is an endangered language spoken in the Nuba Mountains in Sudan. Approximately 7,000 speakers still speak their mother tongue more or less fluently.[1]

The Tima language, which belongs to the Niger-Congo phylum, features a rudimentary noun class system (as outlined in a number of previous publications by various members of the Tima research team,[2] Abeer Bashir (2010), Suzan Alamin (2012), Gerrrit J. Dimmendaal (2009) and Gertrud Schneider-Blum (2013), among other publications. Besides usually being marked for singular or plural, nouns can receive instrumental or locative marking. Noun class prefixing is

---

1 For detailed information on the social anthropological situation, the interested reader is referred to Mugaddam and Abdelhay (2012) and Meerpohl (2012).
2 At this point, all members of the team and the community members want to express their gratitude towards the Volkswagen Foundation, who sponsored the Tima Project in their Documentary Project on Endangered Languages with a generous grant.

---

*Corresponding author: Gertrud Schneider-Blum, Institute for African Studies and Egyptology, University of Cologne, Albertus-Magnus-Platz, 50923 Köln, Germany,
E-mail: schneider_blum@yahoo.de.

subject to one of the prevailing morpho-phonological rules in the language, i. e. vowel harmony based on the position of the tongue root (ATR) as well as the position of the tongue blade (fronting). This means that the height of the vowel, e. g. for the common singular noun class prefix *kV-*, depends on the height of the first root vowel. In addition, the vowels in question have to share the same ATR quality, i. e., either their tongue root is advanced or it is retracted. Again, the ATR quality of the root vowel determines the position of the tongue root of the prefix vowel (for details see Abeer Bashir 2010). Most vowels in affixes and clitics obey these harmony rules; however, some exceptions are attested.

The vowel system is comparatively complex: Tima has 12 vowels, divided into the two groups according to their tongue root position; each vowel can be short or long (with [ə:] not attested). To facilitate reading, the IPA symbols with their diacritics[3] are abandoned in favor of the graphemes as agreed with the community members.

Chart 1: Tima vowels.

	[+ATR]			[−ATR]	
i	ɨ	u	ɪ	ə	ʊ
e		o	ɛ		ɔ
	ʌ			a	

Tima is a tone language with two register tones plus rising and falling tones, downstep and downdrift. Tone is contrastive on the lexical level (e. g. *kúɽúún* 'belly' vs. *kùɽúún* 'smoke' vs. *kùɽùún* 'kind of lizard') as well as on the grammatical level, e. g. with regard to the tense-aspect system of the language (e. g. *(…) ìhìnʌ́ ncɛ́mə̀làák* '(until you came) they were waiting' vs. *ìhìnʌ́ ncɛ́mə́lààk* '(right now) they are waiting'). Since the tonal system of Tima has not been entirely analyzed yet, the tone marking in this paper is phonetic.

The Tima language has 22 distinct consonantal phonemes that are illustrated in Table 1.

---

3 Tima vowel system with their respective IPA symbols:

[+/−ATR]	[+/−ATR]	[+/−ATR]
[i̘/i̙]	[ɨ̘/ɨ̙]	[u̘/u̙]
[e̘/e̙]		[o̘/o̙]
	[a̘/a̙]	

Table 1: Phonemic system of Tima consonants.

		bil	den	alv	retroflex	pal	vel	glot
Plosives	vl	p	t̪		ʈ	c	k	ʔ
	vd	b		d		ɟ	g	
Implosives	vd	ɓ						
Fricatives	vd		ð[4]					
	vl							h
Nasals	vd	m		n		ɲ	ŋ	
Lateral liquids	vd			l				
Central liquids	vd			r	ɽ			
Glides	vd	w				j		

Most phonemes are adopted as graphemes, with a few exceptions. These concern the phonemes listed in Table 2:

Table 2: Graphemes deviating from IPA.

phoneme		grapheme
/ʈ/	→	<t>
/ɟ/	→	<j>
/j/	→	<y>

Since the focus in this paper is on pluractionality marking, which is one of the verbal derivations, the verb, as the potentially most complex constituent of the Tima utterance, is sketched in greater detail. The simplest form of the verb is the singular imperative, which is often equivalent to the root, e. g. *álə̀m* 'eat' or *hwáyà* 'peel'. The verbal root may be preceded by TAM and person markers. Following the root, we find derivation markers, object/subject markers and the applicative clitic. With a negated verb, the first and the last slot surrounding the rest of the verb are occupied by the discontinuous negation marker (cf. Alamin 2012: 70).

The following schematic illustration of a complex verb (see Table 3) helps to get an overview (for an earlier version see e. g. Dimmendaal 2010: 2005).

The verbal root may receive one or several derivation markers, such as transitive, ventive, antipassive, middle voice,[5] causative, instrumental, or pluractionality marking. Several options can be combined (see Alamin 2012: 118), but

---

4 The dental fricative /ð/ only occurs in the speech of speakers > 60 years. It is generally replaced by /y/ in the speech of the younger generation.

5 The middle voice morpheme has been labelled 'reversive' or 'separative' in earlier publications on Tima, e. g. in Dimmendaal (2010) and in Alamin (2012).

Table 3: The verbal complex in Tima.

slot	function	syntactic category
1	negation	proclitic
2	aspect	proclitic
3	person (S, A)	prefix
4	tense	prefix
5	person (S, A)	prefix
6	ROOT	root
7/8/9/10	derivation 1/2/3/4	suffixes
11	completive/locative	enclitic
12	applicative (DAT)	enclitic
13	pronominal S	enclitic
14	pronominal O	enclitic
15	negation	enclitic

a certain sequential order has to be maintained (see Table 4). Contrary to earlier findings we now suggest four slots. If the transitive marker is present, it must come first, second may come antipassive, causative or middle markers (there is no example attested that contains a combination of all three or of two of the three), followed by the ventive marker (combinations of antipassive plus ventive, middle plus ventive as well as causative plus ventive are possible). The last position is taken by the instrumental marker.

Table 4: Sequence of derivation markers without pluractionality.

Slot 1	Slot 2	Slot 3	Slot 4
transitive	antipassive middle causative	ventive	instrumental

As the alert reader may have noticed, the position of the pluractional marker has not been pointed out. This is based on the fact that, in Tima, 'the' pluractional marker does not exist, and we rather find different devices that express the idea of verbal pluractionality. The description of how to convey pluractionallity in Tima (cf. also Alamin 2012: 104 ff.), and where the markers show up in relation to the verbal root, will occupy the main part of this paper (Sections 2 and 3).

Before going into detail, though, the idea of pluractional marking in general deserves some attention. As has been pointed out by Roger Blench with regard

to the use of pluractional[6] verbs (in his contribution on verbal pluractionality in Mwaghavul), pluractional marking can have different functions, i. e.

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

(Roger Blench to appear, 2)

Thus, the aim of this paper is to find out not only what strategies are used in Tima to convey pluractionality, but also to show that Tima verbs marked for pluractionality refer only to two of the above mentioned functions, i. e. repeated action (which includes a habitual reading) or an action conducted over a considerable period of time. The greater part of this paper is devoted to the formal and functional devices of pluractional marking on Tima verbs (Sections 2.1–2.6). In addition, we will examine how pluractional marking fits into the order of derivation markers as outlined before (Section 3). After presenting other possibilities of conveying pluractionality than by marking the verb (Section 4), the paper is concluded with a summary of the findings (Section 5).

　　The data presented in this paper come from our database, which has been compiled over a period of roughly seven years in the Nuba Mountains, as well as in Khartoum. The collection covers all kind of data, from elicited words to photo stimulation,[7] from narration and songs to conversation. Whenever possible, examples from natural spoken language join elicited phrases or sentences.

2 Formal ways of marking verbal pluractionality

In Tima, pluractional marking can be achieved by various formal strategies, including

---

6 For a detailed discussion on verbal number (= verbal pluractional marking) from a general linguistics' point of view see Corbett (2000, chapter 8). In a footnote, Corbett explains: "Newman (1980: 13n23) suggested the term pluractional, but use of this term is largely limited to Africanists" (Corbett 2000: 243, fn. 2).

7 All photos used for prompting utterances in Tima were taken in the Tima area by the author during numerous visits to the Nuba Mountains.

- pluractional formation by root vowel change and tonal change (discussed in Section 2.1)
- pluractional formation through vowel length and tonal change (discussed in 2.2)
- pluractional formation through tonal change (discussed in 2.3)
- pluractional formation by full/partial reduplication and tonal change (discussed in 2.4)
- pluractionality achieved with suppletive or irregular forms (discussed in 2.5)
- pluractionality marking with -*ṭ*- (discussed in 2.6)

The different formal ways are discussed one by one. To facilitate understanding, each device is first presented in a table that includes – out of context – the verb referring to a single action and the verb marked for pluractionality, together with their glosses. Hereafter, examples illustrate the use of some of the lexemes. Of course, the main findings for each device are pointed out and, in addition, language-specific phenomena that may go slightly beyond pluractional marking are commented on.

2.1 Pluractional formation by root vowel change and tonal change

One way of changing a verb that refers to an action exerted once only, involves the change of a root vowel plus a change of tone (for example see Table 5). In addition, the verb referring to a single action is marked by the transitive marker -*i/-ɪ*, a marker that never occurs with the pluractional form. As suggested by Dimmendaal (p.c.), the root vowel change in these transitive forms is probably caused by height assimilation to the transitive suffix -*i/-ɪ*, i. e. the vowel of the pluractional form is the original one, while the front vowel of the causative form is the assimilated, i. e. heightened, one.

The verbs can be divided into groups, one that includes verbs that have an inherently punctual meaning, the other one with verbs that have a (potentially) durative meaning. If the verb has a punctual meaning, its pluractional form exclusively refers to a repeated action, as is the case with *kɔ́mɔ̀r* 'pinch again and again' and *mɔ́nà* 'take again and again a part of a (bigger) piece'. If the action a verb refers to can potentially be extended over a longer period of time, the meaning of the pluractional marking may resume this aspect and express duration; however, it may also express a repeated (short) action, as exemplified with *dɔ́ŋà* 'climb (repeatedly or for a long time)'.

Table 5: Pluractional formation by root vowel change and tone.

Single action verb marked for transitivity	English gloss	Pluractional stem vowel and tonal change	English gloss	Semantics of pluractional marking
kòmőr-ì	'pinch once with two fingers'	kɔ́mɔ̀r	'pinch repeatedly with two fingers'	repeated action
mìnɛ́ (mɪna-ɪ)	'take once a part from a (bigger) piece'	mɕnà	'take repeatedly a part from a (bigger) piece'	repeated action
dìŋɛ́ (dɪŋa-ɪ)	'climb it'	dɕŋà	'climb repeatedly or for long'	duration or repeated action

The use of the last verb from the previous table, 'climb', is illustrated with the following two sentences. The former was elicited by showing a photo (hence: photo stimulation) with three children riding on a donkey.

(1)   ìbʌ̀rímbʌ́↓ri-nʌ́   í-dìŋè   kʊ̀hʊ̀mbílí-↓ná
      children-DEM.PROX PST-climb:TR donkey-DEM.PROX
      'the children mounted the donkey'   [photo stimulation]

In the heat of Sudan, food gets spoiled easily. This was exactly what happened to a formerly delicious sauce, to the disappointment of our main informant who, when seeing that the fermented soup had risen considerably, with bubbles coming up everywhere, uttered:

(2)   í↓ʈán án-dʒ̀ŋà-àʈáŋ
      sauce 3P:PRF-climb:PLUR-COMPL
      'the sauce has become bad' (lit. 'the sauce has completely climbed')

In fact, as far as the pluractional form of dɪŋ- 'climb' is concerned, we are dealing here with a middle verb in Tima. Mention of the object is optional with this form, thus it can be either transitive or intransitive. However, the situation is different with regard to the transitive verb form (a non-derived form is not attested). If there is no further derivation marker suffixed, the verb is always transitive and specifying the object/goal (the latter being encoded in a prepositional phrase) is obligatory. If we further derive the transitive form for the ventive, mentioning an object becomes optional. This has some effect on the semantics of the verb: if followed by a (prepositional) object, the ventive verb has the notion of 'climbing/growing as high as speaker (not higher)', whereas if

it occurs without an object, the meaning shifts completely to 'rising/growing' (ex. 3 and 4).[8]

(3) *kɔ̀báánʊ̀-lɨ̀ dɨ̀ŋέ-έŋ-ʈáŋ   ɨ̀-kɨ̀lŋʎ*
     fungus-FOC climb:TR-VENT-3P:LOC PREP-rotten.wood
     'there is a fungus growing on the rotten wood'   [photo stimulation]

(4) *cíídìŋ   àn-dĭŋέ-έŋ*
     moon   3P:PRF-climb:TR-VENT
     'the moon is rising (has climbed, has grown)'

Another pair in this group is *ʈɨ̀hí* 'pull (once)' vs. *ʈúh* 'pluck, take out (feathers, weeds, etc.), cast, undress (several clothes)'. The first sentence with the transitive verb is a striking example of how the Tima people view the world from the perspective of having vs. lacking control, as has been summarized in Schneider-Blum and Dimmendaal (2013: 235): "The bottom line is that if we do not master a situation any longer, we are no longer agents; the linguistic reflex of this state of affairs grammatically is the expression of the experiencer in non-subject position." It is rather the source of pain that occurs in the position of the subject, i. e. sentence initially, as in the following example:

(5) *kààn   án-ʈɨ̀h-íí-dʎ*
     flat.stone 3P:PRF-pull-TR:APP-1SG
     'the flat stone made me slip' (lit. 'the flat stone pulled for me')

The verb is marked as transitive and ventive in the following sentence, whereby the vowel of the transitive marker and that of the ventive marker coalesce (as did the vowel of the transitive marker and the applicative marker in ex. (5) above):

(6) *ʈɨ̀h-íŋ-àʈáŋ   kílíh*
     pull-TR:VENT-COMPL fat
     'take out the fat'

The pluractional verb is exemplified with two sentences that are differentiated by the fact that the object in the former (*ŋ̀kwáh* 'INS:SG:bark') is marked with the instrumental prefix, thereby demoting it from a direct object to an oblique object, whereas in the latter example, we are dealing with a direct object (*íídì*

---

8 Of course, this 'shift' of meaning may be a problem for translation. The root *-dɨŋa-* may have a more abstract meaning (conceivably 'go higher') that cannot be covered by a simple English term.

'water'). Also, in ex. (8), the verb is marked for the ventive (*túhûŋ*), thus expressing how the actor pulls the water towards himself (for a detailed discussion on the egocentric perspective in Tima see Alamin et al. 2012).

(7) *kʌcúk,*   *í-ʈúh-nɛ̀y*   *ǹ-kwáh*
     baobab 1PL-pull:PLUR-1PL:INCL INS-SG:bark
     'baobab, we pull (at) the bark'   [31.01.08_33, use of plants (Adlaan) (26)]

(8) *kìbɛ̀ɛ́y-↓ná*   *dʊ́wá* *ì-yèŋɛ́*   *kɘ̀ɓá-ná*
     person-DEM.PROX stand PREP-LOC:mouth hole-DEM.PROX
     íídì-yè   *túh-ûŋ*   *ɘ̀-ràmbɛ́ɛ̀*   *ú-húúɽ*   *yánʈɘ̀*
     water-FOC pull:PLUR-VENT PREP-bucket PST-pour:PLUR inside
     tàbɘ̀rɛ́ɛ̀
     water.basin
     'this person is standing at the (mouth of the) hole, pulling water in a bucket and pouring it into the water basin'
        [photo stimulation, see corresponding photo at the end of this article]

2.2 Pluractional formation through vowel length and tonal change

The second means of forming pluractional verbs is by lengthening the root vowel (see Table 6). This also involves a tonal change. Again, the verb denoting the singular action is marked for transitivity, while the pluractional verb is not. With both the pluractional form and the non-pluractional form, mention of an object is required.

Table 6: Pluractional formation through vowel length and tonal change.

Single action verb marked for transitivity	English gloss	Pluractional vowel lengthening and tonal change	English gloss	Semantics of pluractional marking
ŋʌ̀l-í	'smell it'	*ŋʌ́ʌ́l*	'smell (several times), keep smelling'	duration or repeated action
lɛ̀m-í	'taste it'	*lɛ́ɛ̀m*	'taste (repeatedly)'	repeated action
rìh-í	'turn (it) (e. g. a book top down, or sth. by 180°)'	*ríìh*	'turn (sth. repeatedly), plait'	repeated action

To demonstrate the use of both forms, the verb 'tasting' is chosen. In the first example, two versions are possible, depending on word order. If the affected object comes before the instrument, the verb is only marked for transitivity, the affected object is not marked and the instrument is marked for the instrumental case. However, if the instrument precedes the affected object, both nouns are unmarked, while the verb is additionally derived for the (verbal) instrumental. The semantic consequence for the latter version is the foregrounding of the instrument (e. g. 'she did not lick, she tasted the porridge with a SPOON). Since *ìṭúk* 'porridge' is grammatically plural, we find the first proof here that, in Tima, pluractionality marking does not depend on the number of the object.

(9) a. *á-lèm-ì*   *ìṭúk*   *ŋ̀-kááyìm*
        3P:PRF-taste-TR porridge INS-spoon
        'he/she tasted the porridge with a spoon (once)'
     b. *á-lèm-ì-y-àà*   *kááyìm*   *ìṭúk*
        3P:PRF-taste-TR-EP-INS spoon   porridge
        'he/she tasted the porridge with a spoon (once)'

When a mother was teaching her daughter about how to cook porridge, she also advised her to always taste it before serving it to see whether the texture was good:

(10) *léɛ̀m*   *ìṭúk*
        taste:PLUR porridge
        'taste the porridge (usually, always)'

Examples (11a) and (11b) show that the correlation between formal pluractionality marking (in this case vowel length) and semantic pluractionality is overruled in certain constructions. That is to say, if the affected participant, in this case *ìṭúk* 'porridge', is not mentioned at all, the only correct choice is the verb that is formally marked for pluractionality, although neither multiple objects nor a repeated action is the hidden information. A necessary condition is that the verb must additionally be marked for the antipassive, in order to make clear that there is an affected object that is just not mentioned. Word order is flexible.

(11) a. *à-léɛ́m-àk-àà*   *kááyìm*
        3P:PRF-taste:PLUR-AP-INS spoon
        'he/she tasted it with a spoon (once or more often)'

    b. *kááyìm à-lɛ́ɛ́m-àk-àá*
       spoon   3P:PRF-taste:PLUR-AP-INS
       'he/she tasted it with a spoon (once or more often)'

(In the above constructions, marking the instrument with the nominal instrument marker would be ungrammatical: * *àlɛ́ɛ́màkàà ŋkááyìm / ŋkááyìm àlɛ́ɛ́màkàà*.)

    Similar findings are attested for *kìŋʌ́ʌl* 'smelling'. The distribution of pluractionality marking in examples (12a and b) and (12c) is as expected. Examples (12a) and (12b) show again that pluractionality marking in Tima is not dependent on the number of the object, since the verb is marked for transitivity (and not for pluractionality), independent from word order. The object is marked as plural. In (12c), the verb is further marked for the instrumental to indicate that there is an instrument or tool involved that is otherwise not explicitly mentioned.

(12) a. *cé-ŋʌl-ì*   *yábʊ̀h*   *ǹ-cɨ̀tɨ̀*
       3P:IPFV-smell-TR PL:meat INS-cloth
       'he/she sniffs at the meat through the cloth (once)'
    b. *yábʊ̀h*   *cé-ŋʌl-ì*   *ǹ-cɨ̀tɨ̀*
       PL:meat 3P:IPFV-smell-TR INS-cloth
       'he/she sniffs at the meat through the cloth (once)'
    c. *cè-ŋʌ́ʌl-áá*   *yábʊ̀h*
       3P:IPFV-smell:PLUR-INS PL:meat
       'he/she smells/they smell (at) the meat through it (several times or for a long time)'

Again, if the affected participant, here *yábʊ̀h* 'meat' or *kábʊ̀h* 'piece of meat', is not mentioned, the verb is marked for pluractionality, independently of the number of the affected object, or the number of actions, or the duration of the action.

(13) *cé-ŋʌ́ʌl-ʌk-áá*   *cɨ̀tɨ̀*   (* *ǹ-cɨ̀tɨ̀*)
     3P:IPFV-smell:PLUR-AP-INS cloth (*INS-cloth)
     'he/she smells it / they smell it through the cloth (once or often)'

Hence, it looks as if – when the affected object is not mentioned – the pluractional form is the default form. We hypothesize that not mentioning the object creates an imperfective type of situation, and the pluractional form is the natural choice for that, whereas the verb form marked for transitive demands an object and the verb becomes telic.

2.3 Pluractional formation through tonal change

Tonal change had a part to play in the previously discussed ways of forming pluractionals, but there it was not the only factor for turning a verb that referred to a single action into a verb referring to a repeated action. However, there is a small group of verbs where tone alone is the decisive element responsible for pluractional formation (see Table 7). The single action verb has a (L)LH tone marking pattern, whereas the pluractional verb has (L)HL.[9] The division into two groups with inherently punctual verbs on the one side and potentially durative verbs on the other side can also be observed here. Pluractionality marking may only refer to duration (in addition to repeated action) with verbs from the latter group.

Table 7: Pluractional formation through tonal change.

Single action	English gloss	Pluractional	English gloss	Semantics of pluractional marking
pàŋá	'open the mouth' (once or for a short time)	páŋà	'open the mouth' (for longer or repeatedly)	duration or repeated action
dɔ̀yá	'steal it'	dɔ́yà	'steal repeatedly', 'keep stealing'	repeated action
kùwìyí	'turn it over', 'flip it over'	kùwíyì	'turn over', 'flip over' (several items, one item repeatedly)	repeated action

The following example was elicited again by prompting an utterance when showing a photo. The sentence contains the pluractional form *ʈúyù* 'drag (several times or for long)' and the reading here can only be interpreted as an action that is exerted over a longer period of time (since the speaker does not know whether the donkey habitually drags the cart).

(14)   *kʊ̀hʊ̀mbɪ̀lĭ-lǐ   ʈúyù [ʈú↓yú]   káárɔ̀   wáʈ̰ŋ-yáŋ   à-tʊ̀ʔàŋ*
      donkey-FOC   drag:PLUR   cart   owner-3P:LOC SOURCE-up
      'the donkey is dragging a cart with its owner on top' [photo stimulation]

---

9 Even for other formatives the imperative tonal pattern for pluractional marking may be HL, but here Tima verbs also exhibit other tone patterns, as the above examples show.
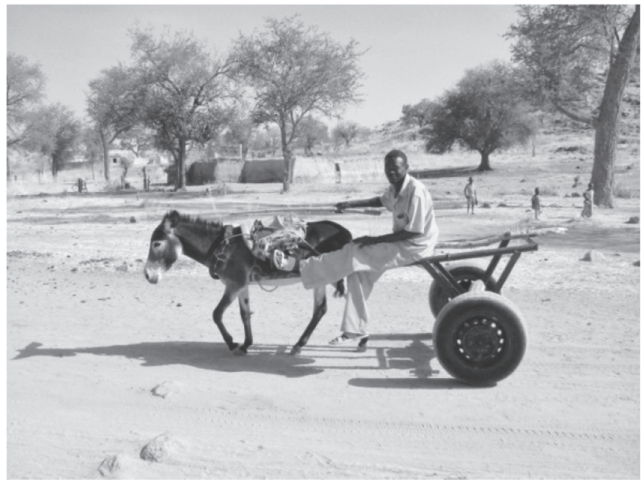
Photo 1: Photo corresponding to example (14).

A variation of this kind of pluractionality marking involves the previously mentioned transitive marker (see Table 8). It occurs with the verb denoting a single action, while the pluractional verb goes without it. Apart from this fact, the tonal change is equivalent to what has been just described: It is HL with the pluractional verb, while the root of the verb marked for transitivity is LH.

Table 8: Pluractional formation through tonal change and absence of transitive marker.

Single action	English gloss	Pluractional	English gloss	Semantics of pluractional marking
cìléŋì	'rinse it'	cílèŋ	'rinse repeatedly'	repeated action
tìláŋì	'melt it'	tílàŋ	'melt' (several things)	repeated action
kùrúhì	'push' (once and short)	kúrùh	'push' (several times or for long)	duration or repeated action

Comparing examples (15) and (16), the coherence of transitive marking and an action bounded in time, i. e. a telic action, is especially prominent. The affected object of the verb in (15) is understood from the context (the action referred to hanging up a frying-pan), while the action itself is short and bounded. The affected participant in (16) has been promoted into subject position, the pluractional verb conveying an indefinite, unbounded period of time. This is also reflected in the lack of T/A-marking that usually precedes the verbal root (cf. examples 11–13): the action is lost in time, so to speak.

(15) *tùh-í   tʊ̀ʔàŋ*
hang-TR up
'hang it up'

(16) *kùdùléh-lí   túh-ùk   ù-kùdùwʌ̀*
calabash-FOC hang:PLUR-CAUS[10] PREP-pole
'the neck-shaped calabash is hanging at the pole'   [photo stimulation]

2.4 Pluractional formation by full/partial reduplication and tonal change

The next pluractional formation device is the reduplication of the root, either full or partial (see Table 9). In addition, we find a change in tonal marking. Again, in the verb referring to a single action, the root is marked for transitivity, while the reduplicated verb is not.

Table 9: Pluractional formation by full/partial reduplication and tonal change.

Single action verb marked for transitivity	English gloss	Pluractional stem vowel and tonal change	English gloss	Semantics of pluractional marking
tʊ̀n-í	'break it'	*tɔ́ntʊ̀n*	'break several times/ into pieces, bend'	repeated action
t̪ìbír-ì	'take apart', 'unpick', 'undo'	*t̪ìbírbìr*	'take apart', 'unpick', 'undo' (e. g. undo the roof, pick off the grass of a roof)	repeated action
kʊ̀-tɔ̀n-ʊ́l (verbal noun[a])	'reply','repeating', 'returning'	*tɔ́ntɔ̀n*	'repeat (an action) again and again', 'return sth.'	repeated action

Note: [a]Verbal nouns are composed of the number marker *kV-* or *c-*, the stem and the middle marker. An assimilation process between stem and suffix may blur the boundary which is then not marked (for further details see Dimmendaal and Schneider-Blum (in preparation)).

---

10 The causative as a source for passives has been described in detail by Haspelmath (1990: 46 ff.). Haspelmath also points out that the passive may have a resultative reading, i. e. it may refer to a "state resulting from a preceding action; with transitive verbs, the patient is the subject of the resultative, just as in the passive, [...]" Haspelmath (1990: 33). For more data on Tima in that context, the interested reader is referred to Dimmendaal and Schneider-Blum (in preparation).

If verbs are marked by reduplication (partly or entirely), the meaning carries the notion of doing something by bits (i. e. many distributive events), as becomes obvious from the examples below. Example (17) shows the verb 'break' denoting a single action. This example provides proof that pluractional marking in Tima is not required with plural subjects (since the command is given to two people; see also example (1)):

(17) *nà-tɔ́n-áátáŋ*   *cʊ̀ràŋ*
      PL:IMP-break-TR:COMPL stick
      'break (PL) the stick (into two)'

When choosing the pluractional form with a single object, the meaning changes into 'break into pieces':

(18) *tɔ́n-tɔ̀n*   *cʊ̀ràŋ*
      break-break stick
      'break (SG) the stick into pieces'

If the pluractional form is used with a plural object, the meaning is vaguer in that it may refer to breaking each item once or breaking all of them into pieces. However, multiple action units are required.

(19) *tɔ́n-tɔ̀n*   *ìʊ̀ràŋ*[11]
      break-break PL:sticks
      'break (SG) the sticks (each once or all into pieces)'

The final proof that verbal marking for pluractionality in Tima does not depend on the number of the object, but only on the number of actions can be deduced from example (20):

(20) *tɔ̀n-í*   *ìʊ̀ràŋ*
      break-TR PL:sticks
      'break (SG) the sticks (all together once)'

Many verbal lexemes in Tima have a reduplicated root without having a counterpart with a simple root (see Table 10). The meaning is nevertheless confined to repeated actions. Moreover, the radius of the action is small.

---

11 If the type of object (like a pot or a glass) cannot be broken in a controlled way, the verb changes to *tántân* 'break, crush'.

Table 10: Pluractional through reduplication without underived form.

Pluractional reduplicated root (verbal noun)	English gloss	Semantics of pluractional marking
kì-mìlìmìlèél	'rubbing', 'wiping off'	repeated action
kì-tèrtèr-íl	'rekindling', 'fanning (flames)'	repeated action
kʊ̀-tɔ̀htɔ̀h-ő̋l	'repeating (words or actions)'	repeated action

One such word is *kìtètéél* 'chopping, cutting into pieces' (with its reduplicated root *-tɛtɛ-*), which occurred in an inflected form in a description about slaughtering a sheep. However, for Katla, the language that is most closely related to Tima, the non-reduplicated cognate /ʈɛ́/ 'cut' (Birgit Hellwig, p.c.) is attested, suggesting that this simple form has fallen into oblivion in Tima.

(21) *à-tɛ́tɛ́k-á↓ʈáŋ*
      2SG-cut:REDUPL:AP-COMPL
      'you cut (it) into pieces'   [29.01.08_0029, slaughter (Hamid), AR (46)]

2.5 Pluractionality achieved with suppletive or irregular forms

As is probably the case in many languages, single action and multiple actions with the same core meaning can be expressed with suppletive verbs (see Table 11). Bearing in mind that the meaning may vary, with more nuances than expressing the same action repeatedly,[12] we do not want to withhold data concerning this matter. Since it is difficult if not impossible to draw the line between suppletive and irregular forms, they are treated here together.

Three verb pairs from this list are chosen to demonstrate the use of the pluractional verb as opposed to the use of the verb denoting a single action. These are translated as 'put', 'pour liquid', and 'hit, beat'. As can also

---

12 As the workshop participants agreed, the term 'suppletive' may be misplaced in many cases, as the meaning of singular and pluractional forms may diverge; see also Storch and Dimmendaal (2014: 13), following Mithun (1988: 214). In Table 11, it is mainly the last pair *hɔ̀ɔ̀* 'hit once' vs. *táàn* 'beat (repeatedly), slap (repeatedly)' that probably falls into this group of suspicious suppletive forms, as pointed out by Dimmendaal (p.c.).

Table 11: Pluractional marking through suppletive or irregular forms.

Single action	English gloss	Pluractional	English gloss	Semantics of pluractional marking
ɓɔ́ɔ́	'put it'	hûm	'put (several things one by one, or the same thing repeatedly)'	repeated action
tɔ̀ɔ̯́	'pour (small but solid things; once)'	túk	'pour (small but solid things; repeatedly)'	repeated action
ʌ́hùk	'pour (liquid, once or briefly)'	húûɾ	'pour (liquids, repeatedly)'	repeated action
hɔ́ɔ̀	'hit (once)'	táàn	'beat (repeatedly)','slap (repeatedly)'	repeated action

be seen with suppletive/irregular forms, the verb remains unmarked for pluractionality, even if the syntactic object refers to multiple items (compare (22) with (23)).

(22)   *kúy*   *kàmhàhʊ̀ŋ-lí*   *ʊ́-ɓɔ́ɔ̀*   *yʌ̀dʌ̀wúŋ*
     locust kamhahung-FOC PST-put LOC:hand
     'the locust called Kamhahung is lying (sb. put it) in the hand'
                                                [photo stimulation]

(23)   *yúy*   *yàmhàhʊ̀ŋ-ɛ́*   *ʊ́-ɓɔ́ɔ̀*   *yʌ̀dʌ̀wúŋ*
     PL:locust yamhahung-FOC PST-put LOC:hand
     'the locusts called Yamhahung are lying (sb. put them) in the hand'
                                                [photo stimulation]

By way of contrast, if the same movement (here: of putting) is repeated again and again, the pluractional lexeme has to be used. The decisive factor for choosing the verb is the amount of movements (actions).

(24)   *dámák*   *mák*   *à-húm-yáŋ*
     and.then then 2SG-put:PLUR-3P:LOC
     'then you put them evenly (stones for the base of a granary)'
                                         [04.03.10_04_granary (16)]

A telic action with total affectedness of the object is expressed with a verb referring to a single action (even if the verb is not marked for transitivity[13]), as is the case in examples (25) and (26). With regard to these sentences, several informants assured us that – when hearing these sentences – it is clear to them that only one action of pouring is involved.

(25) *ʌ́hʊ̀k ɨ̀-kɨ̀dʌ́↓kʌ́dí*
      pour PREP-cup
      'pour it into a cup'

(26) *à-kʌ̀hʊ̀k-ʈàŋ [àkʌ̀hʊ̀ʈàŋ] íí↓dí*
      2SG-pour-3P:LOC   water
      'you pour the water'   [04.03.10_04_granary (33)]

The pluractional verb *huuɽ-*, in comparison, is correlated with an unbounded action and a low degree of affectedness, as in example (27), which is repeated here for convenience.

(27) *kɨ̀bɛ̀ɛ́y-↓ná   dʊ́wá ɨ̀-yèŋɛ́   kɜ̀bá-ná*
      person-DEM.PROX stand PREP-LOC:mouth hole-DEM.PROX
      íídì-yè   túh-ûŋ   ɜ̀-ràmbɛ́ɛ̀   ú-húúɽ   yánʈɜ̀
      water-FOC pull:PLUR-VENT PREP-bucket PST-pour:PLUR inside
      tàbɜ̀réè
      water.basin
      'this person is standing at the (mouth of the) hole, pulling water in a bucket and pouring it into the water basin'
          [photo stimulation, see corresponding photo at the end of this article]

The examples for the third pair come from two stories told by an elderly man. All verbs, those that refer to punctual events and the one referring to an action exerted multiple times, occur here in idiomatic expressions: *hɔ́ɔ̀ ʌ́ɽùùɽùk* 'alert (lit.: hit idiom)' and *hɔ́ɔ̀ ʈɔ̀ndɔ̀* 'get off, hit the road (lit.)' on the one side, and *kɜ̀tàànɔ́l kɜ̀bàʈá* 'playing, beating (lit.) the guitar'.

---

13 The productiveness of verbal derivation markers is an issue that needs further investigation which goes beyond the scope of this paper. The interested reader is referred to Dimmendaal and Schneider-Blum (in preparation).

(28) *hɔ̌ɔ ʌ̀ɽʊ̀ʊ̀ɽʊ̀k*
      hit   IDIOM
      'they alert'   [01.10.07-14 Adlaan Misiria, horsequarrel, AR (07)]

(29) *àkáh   hɔ̌ɔ-ŋàŋ ṱ̀ɔ̀ndɔ̀ láánì̀   àkàn   mà   hɔ̌ɔ*
      2SG:RESP hit-2SG   road   POSS2SG 3SG:RESP and hit
      ṱ̀ɔ̀ndɔ̀nɔ̀   pínʌ̀-y-ì
      road:DEM.PROX   3SG-EP-PRES
      'you (resp.) go your way and he (resp.) goes his way (i.e., you better hit the
      road, and he hits the road)'   [01.10.07-11, Adlaan Misiria, myth, AR (56)]

(30) *ǹcéyè, ìhwáà-nà   ìbè̀ṱ̀ér   wɔ̀dɔ̀ŋ-í cèn-táán   kɔ̀bàṱá*
      i.e.   people-DEM.PROX PL:devil past-FOC 3P:PRF-beat:PLUR guitar
      'this means, these people (who talk) stories about the devil from former
      times played the guitar'   [01.10.07-11, Adlaan Misiria, myth, AR (15)]

2.6 Pluractionality marking with -*ṱ*-

The most problematic way of marking pluractionality in Tima concerns those
verbs that contain the morpheme -*ṱ*-. This morpheme occurs in a number of
verbal nouns (out of 435 verbal nouns in the data base, 27 are marked by -*ṱ*-),
some of which are listed in Table 12.[14]

Table 12: Pluractional marking with -*ṱ*-.

Verbal noun	English gloss	Imperative singular	English gloss
kì-dìṱéél	'tying'	*díí*	'tie it!'
kì-lèlṱ́śl	'separating', 'sorting'	*lélè̀*	'separate it!'
kɔ̀-pɔ̀nṱól	'becoming quiet'	*pɔ́nɔ̀*	'be(come) quiet!'
k-àwɔ̀ṱól	'modeling', 'shaping', 'making pottery'	*áwà*	'model!', 'shape (e. g. pot)!', 'make (pot)!'

For the verb *kìdìṱéél* 'tying' we have the following elicited derived verbs in the
singular imperative (Table 13):

---

14 It is also possible that the /ṱ/ occurring in the verbal noun is rather part of the root than a
derivational suffix. Since Tima has a general tendency to eliminate a final plosive, this /ṱ/ might

Table 13: Possible derivations for *kìdìṭéél* 'tying'.

dí-ì	*dí-y-ʌ̀k*	*dí-ṭ-ʌ̀k*	*di-y-aṭaŋ*	*dì-ṭ-áṭáŋ*
tie-TR	tie-EP-AP	tie-ṭ-AP	tie-EP-COMPL	tie-ṭ-INS.COMPL
'tie it'	'tie for yourself'	'tie repeatedly for yourself (e. g. turban)'	'tie (well)'	'tie (well) with sth. (e. g. a rope)'

The following short sentences illustrate the use of the unmarked verb in (31) and (32) vs. that of the -ṭ-marked verb in (33)–(35).

(31) *dí-↓y-áṭáŋ   kwànà*
tie-EP-COMPL cow
'tie/fasten the cow'

(32) *wêὲn-l̀ı   dí-ṭáŋ   kʌ̀tı̀rı̀ŋı̀ŋʌ́h ì-cíbʌ̀   yʌ̀dʌ̀wún*
mother-FOC tie-3P:LOC amulet   PREP-child LOC:arm
'the mother tied the protection to the hand of the child' [photo stimulation]

By adding the causative marker (33), the speaker makes clear that the 'rope', although in subject position, was not the actor.

(33) *kwʌ̀ʌ̀ àn-dí-ṭ-ík-àṭáŋ*
rope   3PRF-tie-ṭ-CAUS-COMPL
'the rope is entangled / has been entangled'

The antipassive marker in the following sentence indicates that the addressee should tie the hair for herself.

(34) *dí-ṭ-ʌ̀k káàm*
tie-ṭ-AP hair
'tie your hair (repeatedly), plait your hair'

The actor in the following sentence comes post-verbal and is hence marked for ergativity.

---

not show where it occurs word-finally. With regard to Katla, *ɖàṭɛ́* 'tie', with /ṭ/ being part of the root in Katla would suggest this possibility. However, other Katla cognates do not show this plosive, e. g. *àwà* 'make pot'; *ɖúlô* 'twine, twist rope', *lɔ̀lɔ́* 'follow' (the Katla data are kindly provided by Birgit Hellwig, p.c.).

(35) y-àn̪t̪ʊ́↓ŋ-ɛ́   dí-t̪-ʌ̀k   ǹ-kʌ̀húnén-↓nʌ́   yàd̪íí
      PL-rattle-FOC tie-t̪-AP ERG-woman-DEM.PROX LOC:leg
      'the rattle is tied to the woman's leg'   [photo stimulation]

Photo 2: Photo corresponding to example (35).

However, apart from the examples above, our data base has no convincing examples showing the correlation between (formal) -t̪- and (semantic) pluractionality. Consider, for instance, the following group of related sentences. In the first two, the t̪-marking occurs as we would expect.

(36) *kwʌ̀ʌ̀ à-dɪ̀lʌ́-t̪-ɪ̀l*
      rope   STAT-twine-t̪-RESULT
      'the rope is twisted (several times)'

(37) *kwʌ̀ʌ̀ án-dɪ̀lʌ̀-t̪-ɪ́k*
      rope   3P:PRF-twine-t̪-CAUS
      'the rope has been twisted (several times)'

The question arises, why we do not find -t̪- in the following short sentence. Mere speculation is that the act of 'twisting a rope' is seen in a more holistic sense as a bounded telic action. (An analogous distribution of -t̪- is attested for the verbs -*hwaya*- 'peel', -*ɔha*- 'clean (field)', and -*pay*- 'spread'.)

(38)   *kʌ̀húnén án-dʌ̀lʌ̀*   *kwʌ̀lʌ̀*
      woman   3P:PRF-twine   rope
      'the woman twisted the rope'

Going through comparable sentence constructions with the verb *-tɔl-* 'finish', our picture of the use of *-ṭ-* gets more and more blurred. Concerning word order, in an unmarked transitive sentence in the perfective, the verb is marked for *-ṭ-*, independently of the number of the object.

(39)   *pìnʌ àn-tɔ́l-ṭ-ɔ̀k-àṭáŋ*   *ŋʊ̀ɲáŋ/ìŋʊ̀ɲáŋ*
      3SG   3P:PRF-finish-*ṭ*-CAUS-COMPL   work/works
      'he/she finished the work/tasks'

If the agent is not mentioned, the verb remains unmarked by *-ṭ-*:

(40)   *ŋʊ̀ɲáŋ é-dɔ́-n-tɔ́l-ɔ̀k-àṭáŋ*
      work   3P-FUT-P-finish-CAUS-COMPL
      'the work will be finished'

Similarly, in the following sentences with a different verbal derivation, i. e. resultative rather than causative, the *-ṭ-* is absent:

(41)   a. *ŋʊ̀ɲáŋ àn-tɔ́l-ɔ̀l*
         work   3P:PRF-finish-RESULT
         'the work has been finished'
      b. *ìŋʊ̀ɲáŋ àn-tɔ́l-ɔ̀l*
         works   3P:PRF-finish-RESULT
         'the tasks have been finished'

It is certainly possible that a translational problem (combined with the expected valency of the verbs in question) is the cause of the problem of understanding the distribution of *-ṭ-*. One may wonder whether verbs that employ *-ṭ-* in intransitive constructions (as in examples (36) and (37)) are a priori transitive, whereas those verbs that employ *-ṭ-* in transitive constructions (as in example (39)) are intransitive in the first place. Unfortunately, this possible explanation is challenged again when considering the following sentences. Example (42) is a transitive clause comparable to example (39), but does not employ *-ṭ-*.

(42)   *pìnʌ é-dɔ́-n-tɔ́l-ɔ̀k-àṭáŋ*   *ŋʊ́ɲáŋ*
      3SG   3P-FUT-P-finish-CAUS-COMPL   work
      'he/she will finish the work'

In example (43) -*ṭ*- is also missing. Here, the actor is not mentioned, the patient occupies the position of the subject. Hence, the whole construction has a passive reading in spite of the fact that no passive morphology is involved.

(43) *ìŋʊ̀ɲáŋ   àn-tɕ́l-ɘ̀k (*àntɕ́lṭɘ̀k)*
      works   3P:PRF-finish-CAUS
      'the tasks have been finished'

Finally, in example (44) the patient, again in subject position, occurs in the singular, and the verb is marked for -*ṭ*- again.

(44) *ŋʊ̀ɲáŋ   àn-tɕ́l-ṭ-ɘ̀k (*àntɕ́lɘ̀k)*
      work   3P:PRF-finish-*ṭ*-CAUS
      'the work has been finished'

A last attempt to shed light on the occurrences of -*ṭ*- is made by comparing verbs unmarked by -*ṭ*- and cognates marked by -*ṭ*- in Table 14. The comparison faintly indicates that -*ṭ*- not only corresponds to a repeated action, but instead may occur (when we least expect it) with other functions.

Table 14: Verbal marking with -*ṭ*-.

Unmarked verb	English gloss	Marked verb	English gloss	Semantics of complex marking
dí-ì tie-TR	'tie it'	*dí-ṭ-ʌ̀k* tie-*ṭ*-AP	'tie repeatedly'	repeated action
dîik walk:AP (AP-marker is petrified)	'walk', 'go', 'leave'	*dí-ṭ-ìk* walk-*ṭ*-CAUS	'make walk', 'let walk (by assisting, like a child or a sick person)'	causative notion
híl-ì-ìk yàpɛ́ send-TR-CAUS letters	'send the letters (separately)'	*hɪl-ṭ-ɪk yapɛ* send-*ṭ*-CAUS letters	'send the letters (all at once)'	action not individualized

Together with three more sentences with the verb denoting 'follow,' either with or without -*ṭ*-, the data presented should suffice to paint a picture of the complex situation surrounding -*ṭ*-. The first sentence is an unsurprisingly simple transitive clause with an unmarked verb.

(45)   *pɨ́↓nɨ́*   *á-làlâ*   *àkàŋ*
       3SG   3P:PRF-follow   3SG:RESP
       'he/she followed him (here: an unknown person)'

In the next example, the patient has been promoted into subject position. The verb is then not only marked by *-ṯ-*, but also by the causative marker, comparable to example (44), i. e. the construction has a passive reading.

(46)   *àkàŋ*   *à-lál-ṯ-ɘ̀k*
       3SG:RESP   3P:PRF-follow-ṯ-CAUS
       'somebody was followed'

The last example is a one-word sentence that consists of the verb in its pluractional form (achieved through changing the vowel quality and lengthening it). In addition, the verb is marked by *-ṯ-* and the antipassive. All this gives a reciprocal meaning to the construction.

(47)   *à-lɛ́ɛ́l-ṯ-àk*
       3P:PRF-follow.PLUR-ṯ-AP
       'they followed each other'

Not being able to explain the role of *-ṯ-*, we leave this last section on how to convey pluractionality marking in Tima with quite an unsatisfactory feeling.

3 Which slot is used for pluractionality marking?

As was outlined in the introduction to this paper, Tima derivational markers can be assigned to four different slots. The first one was reserved for the transitive marker. If the verb is marked for transitivity, mentioning the object is obligatory (with the exceptions described). However, looking at the examples in Sections 2.1–2.5, transitive marking and pluractional marking never occur together (which does not mean that verbs marked for pluractionality are per se intransitive: on the contrary, pluractional verbs may occur in paradigmatic opposition to verbs marked for transitivity, i. e. they may be followed by an object, but may – if further derived for the antipassive – also be used without mentioning the object). Also, in our examples where pluractional marking occurs, we come across instances of verbs marked by one of the pluractional devices that are further marked by the ventive marker (example (8)), or the antipassive (plus the instrumental) marker (example (13)), or the causative marker (example (16)) (with the

pluractional devices always preceding the other derivation markers). Also taking into account those examples that contain the ominous -*ṯ*- (Section 2.6), we again find the morpheme (whatever function it may have synchronically) in the slot immediately after the root (with the special case of a verb already derived for pluractionality suffixed by- *ṯ*-) and preceding any of the above-mentioned verbal derivation markers. Many more examples in the data base that have not been included in this paper confirm this sequence of markers. Taking together the (mutually exclusive) occurrences and co-occurrences, it looks as if pluractional marking (even if – or especially if – not being able to be separated from the root) has its position before the other derivation markers in their expected slots. Pluractional markers, various as they are, are hence good candidates for slot one, albeit only if ignoring the fact that they can hardly be assigned to a slot, because they are not affixes, with the exception of -*ṯ*-. Considering its 'amorphous' form, pluractionality marking cannot easily be integrated into Table 4 above. Instead, it seems appropriate to modify the table (see Table 15) and by doing so to point out the difference between the possible combinations of root and pluractional marking on the one hand and root plus transitive marking on the other hand, preceding those derivation markers that occur in slots 2–4. Whereas root plus pluractional is melded together (i. e. root plus slot 1 cannot easily be divided into its component parts), root plus transitive marker can be separated neatly.

Table 15: Sequence of derivation markers.

root + slot 1	Slot 2	Slot 3	Slot 4
root.pluractional root-transitive	antipassive middle causative	ventive	instrumental

Following Hopper and Thompson (1980), it is clear that transitivity is closely connected with the boundedness of an action and the high degree of affectedness of the patient. The Tima data support this idea. In particular, verbs that are marked by the transitive marker refer to a telic situation (e. g. 'climb onto a donkey' in example (1)). However, an event may be bounded in Tima, even if the verb is not marked by the transitive suffix, as is the case, for instance, with those verbs that are differentiated from the pluractional verbs only by tonal change. By contrast, verbs that are marked for pluractionality generally do refer to an unbounded, ongoing event (an action that continues for a long time or habitually/regularly/repeatedly), which, in no case, means that a nominal object may not be involved.

4 Pluractionality beyond pluractional marking on the verb

After having presented those various ways of forming pluractional marking on the verb, the impression might have arisen that we encounter pluractionality marking in Tima frequently and everywhere. However, this is not the case. Instead, all these marking devices are rather marginal and not productive. For example, all in all, only ten reduplicated verbs are attested and there are seven verbs that achieve pluractionality through lengthening the vowel. Similar numbers can be given for the other devices. -*ṯ*- is the only form that occurs more often (with roughly 30 verbs), but, as has been explained above, its meaning is often not transparently associated with pluractionality.

The question then arises of how Tima speakers convey that an action or event is repeated. Not unexpectedly, we find an adverb that helps to express a habitual notion. Since habitual and progressive in Tima are not differentiated, *tɔ̀ttɔ̀k* 'always' may modify the verb to achieve the notion of habituality.

(48) *cèŋʊ̀dànáá-dʌ̀   tɔ̀ttɔ̀k*
 1SG:IPFV:cry:INS-1SG always
 'I'm always crying'

The absence or presence of the demonstrative clitic -*na* on the noun may also serve as indicator as to whether an action occurs once or more often.

(49) *ŋ́-kɔ́máh-áá-ná   ìṯúk   cè-hí-y-íí-↓dʌ́*
 P-eat-INS-1SG:ERG porridge 1SG:IPFV-vomit-EP-APP-1SG
 '(always) when I eat porridge, I vomit'

(50) *ŋ́-kɔ́máh-áá-ná   ìṯúk-nǎ   cè-hí-y-íí-↓dʌ́*
 P-eat-INS-1SG:ERG porridge-DEM.PROX 1SG:IPFV-vomit-EP-APP-1SG
 'if/when I eat the porridge (now), I vomit'

Three more examples from texts illustrate the diversity of pluractional marking and reveal some further details. In example (51), the verb is partly reduplicated (evoking the picture of an iterative event) and displays an additional feature of the Tima language, i. e. the depictive character of sounds involved. When hearing *kùdùndù-lúl* 'shaping (bigger) balls' or *kʊ̀dɔ̀ndɔ̀lʊ́l* 'shaping (smaller) balls',[15] the association of rounded vowels (rounded lips) with shaping round items is suggested.

---

[15] The two semantically related verbs mentioned here fit into what Dingemanse calls 'relative iconicity', referring to "related forms mapping onto related meanings" (Dingemanse 2011: 49).

(51) à-ŋáák-àṭàŋ   à-kùdúndùl-àṭàŋ   ídʌ́ŋ   tĩntὲʔέŋ tĩntὲʔέŋ
    2SG-do-COMPL 2SG-rolling-COMPL   mud one.small one.small
    'you roll (do rolling) the mud small and small (i. e. you make small mudballs)'
                    [04.03.10_04_granary (45)]

The repetition of *tĩntὲʔέŋ* 'small (adv)' indicates a reference to multiple objects (iconicity through repetition). We also observe here an act of sound symbolism, i. e. "a systematic relationship between sound and meaning" (Ohala 1997: 1): words denoting smallness tend to contain vowels with high acoustic frequencies. (For more data on sound symbolism in Tima see Schneider-Blum (2012: 518 f.) and Dimmendaal and Schneider-Blum (in preparation).)

    In the following example, the woman telling us how pots are made simply repeats the inflected verb (the examples above only showed (partly) reduplicated roots, but not the inflected verb) to make it clear that giving the mud the right consistency is a long process with different stages. Durative and iterative meaning cannot be kept apart.

(52) ì-tɔ́kɔ̀w-àṭàŋ   màk ì-tɔ́kɔ̀w-àṭàŋ   màk-dὲ   ì-ṭúyùk-àṭáŋ …
    1PL-mix-COMPL and 1PL-mix-COMPL and-PART 1PL-beat-COMPL
    'we mix and mix and beat it'   [Nafisa_bowl (3)]

Taking *ìtɔ́kɔ̀wàṭàŋ* 'we mix' as a keyword, some other peculiarity of the Tima language should be pointed out: verbs are sometimes very accurate and specific with regard to their meaning. The verb *kʊ̀tɔ́kɔ̀wʊ́l* (occurring in an inflected form in the previous example), for instance, refers to 'mixing (with hands), kneading (with hands)' and the ingredients have to be solid, not liquid. In comparison, we find another verb, i. e. *kʊ̀lɔ̀hʊ́l* that refers to 'mixing of liquids' (and in a figurative meaning to 'people who are all talking at the same time').

    With other verbs, their specific meaning may relate to the number or amount of affected participants. In the following sentence, for instance, we find the verb *-pǝr-* 'take (solid things; all of it)'. Hence, the multiplicity of the object is contained in the lexical meaning of the verb.

(53) ɪ-pǝr-ɪ   mak ɪmbɪlɪŋ i-hum-yaŋ
    1PL-take-TR and PL:pot   1PL-put:PLUR-3P:LOC
    i-hum-yaŋ   *i-hum-yaŋ-dɛ*
    1PL-put:PLUR-3P:LOC 1PL-put:PLUR-3P:LOC-PART
    'then we take (all of) the pots and put them there, put them there, put them there'   [Nafisa_bowl (7)]

To further illustrate the point about narrow meanings, the verbs that can be translated as 'take' in English are listed in Table 16. With some words, lexical meaning and transitive or pluractional marking go hand in hand.

Table 16: How to 'take' in Tima.

Tima imperative singular	English gloss
pə̀rí (TR)	'take (solid things; all of it)'
tɛ́ɛ̀r	'take (solid uncountables like grain, sand, etc.; part of it)'
kʊ̀tí (TR)	'take it (one thing, offered from a tray or table or the ground), lift it'
kʊ́tà (PLUR)	'take (from a tray or table or the ground, several times), lift'
kʊ̀dʊ́	'take (offered by hands), receive'
níìh (= kʊ̀dʊ́)	'take (from one's hand; only singular imperative possible)'
mìnɛ́ (TR)	'take it (a part of a whole piece, once)'
mʊ́nà (PLUR)	'take it (a part of a whole piece, repeatedly)'

One function of such specific verbs is to lexically classify the kind of object, as is also the case with the translational possibilities of English 'pour', as shown in Table 17:

Table 17: How to 'pour' in Tima.

Tima imperative singular	English gloss
tɔ̀ɔ̀ɽ	'pour (small but solid things; once or shortly)'
túk	'pour (small but solid things; repeatedly or long)'
ʌ́hùk	'pour (liquid) (once or shortly)'
húùɽ	'pour (liquid) (repeatedly or long)'

Furthermore, in example (53), the speaker not only uses the (correct) pluractional verb -hum- 'put repeatedly', but, in addition, repeats the inflected verb three times to convey the meaning of recurring events with belt and braces, according to the motto 'Two are better than one' (and three are best).

Spontaneous repetition may also be the source of reduplication of roots, and by conventionalizing expanding the lexemes sharing the same root, e. g. t̪ìbɨ́rì 'take it apart' vs. t̪íbìr 'take apart' vs. t̪ìbɨ́rbìr 'take apart'. The analogy concerning the tone and meaning of t̪ìbɨ́rì and t̪íbìr to the verbs described in 2.3 is obvious: the former refers to a single action, the latter refers to repeated actions. It seems, however, that for some reason, the latter form has been worn out so that a new device, here reduplication, was called upon to stress the iterative event. Another example of this kind is kʊ́ɽɔ̀m 'cut (general term)', kʊ̀ɽɔ́mì 'cut it' kʊ̀ɽɔ́mɽɔ̀m 'cut (repeatedly)' (when neglecting the vowel change, which is due to a different interpretation of the first syllable as a prefix or part of the root; see section on

haplology and back formation in Dimmendaal and Schneider-Blum (in preparation)).

5 Final thoughts

In Tima, pluractional marking on verbs indicates only *repeated action* or *duration*, unless certain constructions (i. e. verbs marked for antipassive) force the speaker to use the pluractional form as default form, e. g. with verbal nouns or with sentences where the patient is not mentioned. The focus is then on the action itself. The number of the subject or object does not interfere with verbal pluractional marking. Although it sometimes looks as if the multiplicity of the affected object triggers pluractionality marking in Tima, it in fact applies only to repeated or long-lasting actions.

Whether a verb marked for pluractionality may convey a notion of an indefinite period of time, i. e. duration, depends on the lexical aspect of the verb. Only potentially durative verbs marked for pluractionality may signal the prolonged duration of an action. The reading of a pluractional verb may be ambiguous between duration and repetition if not disambiguated by the context. If we are dealing with a punctual verb, pluractional marking exclusively signals repeated action. If pluractionality is marked by reduplication, smallish actions follow each other rapidly. A durative reading is excluded with these verbs.

Transitive marking and pluractional marking are mutually exclusive. This is not surprising, since transitivity is associated with the boundedness of an action. If an action is repeated several times, this criterion cannot be applied; instead, the event tends to be unbounded.

In this paper, pluractional marking in Tima was focused upon, thereby suggesting that it is dominant in the verbal system. However, although we have described several different ways of marking verbal pluractional, the phenomenon is marginal in Tima. But, if two forms exist, one denoting a single action and the other one referring to repeated or durative actions, the speakers consequently apply these forms appropriately, as the database reveals.

Apart from pluractional marking on the verb, we have shown additional ways of making a repeated action obvious, either by using an adverb or by repeating the inflected verb. Also, definiteness of the object may signal a single event, while leaving the noun unmarked for definiteness gives rise to the assumption that the action is unbounded.

To sum up this excursion into verbal pluractionality in Tima, the following quote hits the nail right on the head: "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, plur-actionality tends to affect the object." (Dimmendaal 2014: 57) At least for Tima, I want to argue that these tendencies are pragmatically determined. If a verb in an intransitive construction is marked for pluractionality, it more often happens that several subjects each perform an action, than that one subject repeats the action (unless the verb is potentially durative, as in example (16)). Also, in the transitive clause, many of the examples in our database exhibit multiple objects going along with pluractional verbs (but see here example (14) with singular subject and singular object, and example (1) where we find a plural subject but single object together with the verb marked for transitivity). The decisive hint for not attributing pluractionality to the number of objects is given by those examples with a non-pluractional verb that have a plural object (example (9)) and a pluractional verb with a singular object (example (18)).

Photo 3: Photo corresponding to example (8) (repeated as ex. (27)).

References

Alamin, Suzan. 2012. *The nominal and verbal morphology of Tima – a Niger-Congo language spoken in the Nuba Mountains*. Köln: Rüdiger Köppe.

Alamin, Suzan, Gertrud Schneider-Blum & Gerrit J. Dimmendaal. 2012. Finding your way in Tima. In Angelika Mietzner & Ulrike Claudi (eds.), *Directionality in grammar and discourse: Case studies from Africa*, 9–33. Köln: Rüdiger Köppe.

Bashir, Abeer. 2010. Phonetic and phonological study of the Tima language. Khartoum, unpublished PhD-thesis.

Blench, Roger. to appear. Mwaghavul pluractional verbs. http://www.rogerblench.info/ Language/Afroasiatic/Chadic/West/Mwaghavul/Mwaghavul%20plural%20verbs.pdf (accessed 13.03.2014).

Corbett, Greville. 2000. *Number*. Cambridge: Cambridge University Press.

Dimmendaal, Gerrit J. 2009. Tima. In Gerrit J. Dimmendaal (ed.), *Coding participant marking*, 331–353. Amsterdam/Philadelphia: John Benjamins.

Dimmendaal, Gerrit, J. 2010. Ditransitive constructions in Tima. In Bernard Comrie, Martin Haspelmath & Andrej Melchikov (eds.), *Studies in ditransitive constructions: A comparative handbook*, 204–220. Berlin: Mouton de Gruyter.

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*, 58–75. Amsterdam/ Philadelphia: John Benjamins.

Dimmendaal, Gerrit J. & Gertrud Schneider-Blum. In preparation. A grammar of Tima (working title).

Dingemanse, Mark. 2011. The meaning and use of ideophones in Siwu. http://thesis.ideo phone.org/files/dingemanse-2011-thesis.pdf (downloaded 03.11.2011).

Haspelmath, Martin. 1990. The grammaticalization of passive morphology. *Studies in Language* 14. 25–72.

Hopper, Paul, J. & Sandra A. Thompson. 1980. Transitivity in grammar and discourse. *Language* 56(2). 251–299.

Meerpohl, Meike. 2012. *The Tima of the Nuba Mountains (Sudan). A social anthropological study*. Köln: Rüdiger Köppe.

Mithun, Marianne. 1988. Lexical categories and the evolution of number marking. In Michael Hammond & Michael Noonan (eds.), *Theoretical morphology*, 211–234. New York: Academic Press.

Mugaddam, Abdelrahim Hamid & Ashraf Kamal Abdelhay. 2012. The sociolinguistic profile of Tima. In Thilo C. Schadeberg & Roger M. Blench (eds.), *Nuba Mountain language studies*, 297–324. Köln: Rüdiger Köppe.

Ohala, John J. 1997. Sound symbolism. *Proceedings of the 4th Seoul International Conference on Linguistics* [SICOL] 11–15 Aug 1997. http://linguistics.berkeley.edu/~ohala/papers/ SEOUL4-symbolism.pdf.

Schneider-Blum, Gertrud. 2012. Don't waste words – perspectives on the Tima lexicon. In Matthias Brenzinger & Anne-Maria Fehn (eds.), *Proceedings of the 6th World Congress of African Linguistics, Cologne, 17–21 August 2009*, 529–536. Köln: Rüdiger Köppe.

Schneider-Blum, Gertrud. 2013. *A Tima-English dictionary*. Köln: Rüdiger Köppe.

Schneider-Blum, Gertrud & Gerrit J. Dimmendaal. 2013. Excite your senses: Glances into the field of perception and cognition in Tima. In Alexandra Y. Aikhenvald & Anne Storch (eds.), *Perception and cognition*, 217–249. Leiden: Brill.

Storch, Anne & Gerrit J. Dimmendaal. 2014. One size fits all? – On the grammar and semantics of singularity and plurality. In Anne Storch & Gerrit J. Dimmendaal (eds.), *Number – constructions and semantics. Case studies from Africa, Amazonia, India and Oceania*, 1–32. Amsterdam/Philadelphia: John Benjamins.