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Smits, H.J.; Smits H.J.

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Author: Smits, H.J.

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13. Pluractionals

Pluractional verbs share a grammatical function: they denote, in one way or another, event plurality. In Lumun, all non-Pluractional verbs have one or more Pluractional counterparts. There is not one single morpheme, nor one single process that derives Pluractional verbs from non-Pluractionals. Instead, non-Pluractionals and Pluractionals relate to each other in different ways. These relationships, however, display patterns, and the far majority of Pluractionals share one or more formal features that are typically (but not exclusively) found in Pluractionals.

I will call those verbs Pluractionals that are in a paradigmatic relationship to a non-Pluractional counterpart and express event plurality as part of their lexical meaning. Semantically, I distinguish between non-habitual pluractionality and habitual pluractionality. I use the label Pluractional for both, since there are no clear morphological divisions between the two semantic types.

Non-habitual Pluractionals are a restricted set. Habitual Pluractionals on the other hand, can in principle be productively (and creatively) be made on the basis of a non-Pluractional or a non-habitual Pluractional. Also habitual Pluractionals themselves often serve as a basis for a further habitual Pluractional, particularly along the lines of certain patterns that will be exemplified in this chapter.

In the first part below, I explore the formal characteristics of Pluractionals, in the second part I address their meaning and use.

13.1. Form

In virtually all cases, the same root appears in the non-Pluractional and the Pluractional stems. Pluractional stems have certain formal characteristics. The far majority contain one or more of the following features:

- a geminated consonant (CC)
- a nasal-consonant sequence (NC)
- a (underlyingly) long initial vowel and a L-tone pattern
- a reduplicated part
- a final or last vowel ϵ .

The table below gives an overview of formal relations between non-Pluractional and Pluractional stems. The table presents patterns of generation of CC and NC sequences and of partial reduplication. Length of the initial vowel (relationship 12) is in most cases not audible in the isolated stem, but comes to the surface when the initial vowel receives a H-tone, because the H-tone is realized as falling. Some relationships between non-Pluractionals and Pluractionals seem more frequent than others: partial reduplication and gemination (6) and final or last vowel ϵ (13). The latter however, is rare as the only feature distinguishing between non-Pluractional and Pluractional. Attested combinations are listed in the last column.

Table 92 Form features of Pluractionals

<i>characteristic form features of Pluractionals</i>		<i>relationship Pluractional/non-Pluractional</i>	<i>combines with¹:</i>
CC	1	Gemination of t , k , a nasal or a rhotic	12, 13
	2	insertion of ll between vowels	13
	3	insertion of $(\text{V})\text{tt}$ before the final or last vowel	13
	4	insertion of ukk(w) before the final or last vowel	12
	5	addition of $\text{c}\epsilon\epsilon$ after the final or last vowel	
reduplicated part and CC	6	partial reduplication and gemination: $\text{VC} \Rightarrow \text{VC-VCC}$, or $\text{VNC} \Rightarrow \text{VNC-VCC}$	

¹ Still further combinations are attested, but verbs with such combinations are labelled 'further Pluractionals': Pluractionals based on already Pluractional stems (see 13.1.1).

NC	7	insertion of a homorganic obstruent (p, t, c) after a nasal (m, n, ŋ)	12, 13
	8	insertion of a homorganic nasal (ŋ) before k	12
	9	insertion of ŋc between vowels	13
	10	addition of ent before final or last vowel ɛ	12
reduplicated part	11	partial reduplication: VC ⇒ VC-VC, or VCC ⇒ VCC-VCC	
initial VV (or V at surface) + all-low tones	12	lengthening of the initial vowel and application of an all-low tone pattern	1, 4, 7, 8, 10, 13
final or last vowel ɛ	13	final or last vowel ɛ where counterpart has final or last ɔ	1, 2, 3, 7, 9, 12

Non-habitual and habitual meanings are distributed across the patterns, though for a few minor patterns, and one larger pattern (pattern 12) only the one or the other is attested.

Examples of the different formal relationships follow here. Habitual Pluractionals are translated with ‘habitually x’, the others are non-habitual. I have used the term ‘plural’ (‘pl.’) in translations of non-habitual Pluractionals (‘pl. subject participants’ and ‘pl. object participants’), but in several of these cases ‘plural’ refers to ‘many’ rather than to ‘more than one’, moreover distributive semantics may be involved as well. Some non-Pluractional verbs have several Pluractional counterparts that are formed through different procedures, as can be seen in the list below. Examples are ‘say’ (relationship types 2 and 6 from the table above), ‘be’ (2 and 6), ‘steal’ (6 and 11) and ‘descend’ (9 and 11). In the case of ‘say’ the different Pluractionals have different meanings.

Relationship type 1. Gemination of **t, k**, a nasal or a rhotic.

Gemination of [**r**] between vowels can give **rr** but also **tt**. The first is the case if **r** is the phoneme /**r**/, the latter if **r** is the intervocalic

allophone of /t/. Occasionally **r** geminates as **ll**. In such cases, it is likely that **r** has formerly been **ɾ**. Geminated **ɾɾ** is not attested: gemination of **ɾ** results most often in **ll**, but sometimes in **rr**.

ɔtəkət cɪk ‘swell’	ɔttəkət cɪk ‘swell (pl. subject participants)’ (also 12)
ɔkâ ‘be’	ɔkka ‘habitually be’ (also 12)
ɔmákɔt ‘follow’	ɔmmakɔt ‘habitually follow’ (also 12)
ɔnâ ‘bring’	ɔnnâ ‘habitually bring’
ɔrâ ‘cultivate’	ɔrra ‘habitually cultivate’ (also 12)
ɔkéro ‘trade’	ɔkétte ‘trade (pl. object participants)’ (also 13)
ɔɲóro ‘eat (a paste substance)’	ɔɲólle ‘habitually eat (a paste substance)’ (also 13)
arɔ cɪk ‘sleep, spend night’	alle cɪk ‘habitually sleep, spend night’ (also 13)
ɔtətta ‘be eaten’	ɔrrətta ‘be eaten (pl. subject participants)’

I mention here also a case in which there is a change from **ɾ** to **r**, though the Pluractional verb does not contain a geminate. Note also that the initial vowels differ.

ɪɛ ‘say’	ere ‘say, speak (a longer stretch of speech)’
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Relationship types 2-4. Insertion of **ll** between vowels (2); insertion of (V)**tt** before final or last vowel (3); insertion of **ukk(w)** before final or last vowel (4).

ɪɔ ‘die’	ille ‘die (pl. subject participants)’ (also 13)
ɔtɪɔt ‘send’	ɔtɪllet ‘send (pl. object participants)’ (also 13)
ɔɲáeɔ̃ ‘urinate’	ɔɲállle ‘urinate (pl. subject participants), urinate repeatedly’ (also 13)
anɯwɔt ‘guard’	anɯttet ‘habitually guard’ (also 13)
ɔɲwɔ̃ ‘sing’	ɔɲótte ‘habitually sing’ (also 13)
ɔkákɔ ‘grind’	ɔkákətte ‘habitually grind’ (also 13)
ɔkkɔt ‘do, make’	ɔkkəttet ‘habitually do, make’ (also 13)
ɔkkɔ̃ ‘pass, reach’	ɔkkótte ‘habitually pass, reach’ (also 13)
ɔppɔ̃ ‘pass, appear’	ɔppətte ‘habitually pass, appear’ (also 13)

apɔ ‘fall’	apɔkk(w)ɔ ‘fall with several bumps’
aɔ ‘come’	aɔkk(w)ɔ ‘come (pl. subject participants)’
ɔkékɔ ‘be shaved’	ɔk<u>ɛ</u>kk(w)ɔ ‘habitually be shaved’ (also 12)

In **ɔkɛkk(w)ɔ** ‘habitually be shaved’ (last example above) **ɔkk(w)** replaces the second **k** of **ɔkékɔ** which is part of the Passive marker -**kɔ** (**ɔkê** ‘shave’/**ɔkékɔ** ‘be shaved’)

Relationship type 5. Addition of **ccɛ** after final or last vowel.

ɔkátɔ ‘look’	ɔkát<u>accɛ</u> ‘watch’
ɔɔ ‘cry’	ɔɔ<u>ccɛ</u> ‘habitually cry’

Relationship types 6 and 11. Partial reduplication and gemination: VC ⇒ VC-VCC, VNC ⇒ VNC-VCC (6); Partial reduplication VC ⇒ VC-VC, VCC ⇒ VVC-VCC (11). Partial reduplication of VC without gemination (VC ⇒ VC-VC) is a relatively rare process.

In the reduplicated part the high vowels (**i**, **ɪ**, **u**, **ʊ**) are often copied, but not in all cases. The vowel **ə** is mostly copied, but can also be **ɛ** in reduplication. **ɛ** and **a** can be copied, but can also appear as **ə**. The vowel **ɔ** is never copied. Instead, one often finds **ə** in the reduplicated part, but other vowels also appear.

VC ⇒ VC-VCC

ɪtɔ ‘cook’	ɪt<u>att</u>ɔ ‘habitually cook’
ɪɪkɔ ‘enter’	ɪɪk<u>ikk</u>ɔ ‘enter (pl. subject participants)’
ɪɪkɔ ‘tie’	ɪɪk<u>ikk</u>ɔ ‘tie with several windings, tie (pl. object participants)’
ɔkətɔ ‘bite’	ɔkət<u>ell</u>ɔ ‘bite repeatedly, eat (hard foods), bite (pl. subject participants)’
ɔɪkɪɛ ‘make not see’	ɔɪk<u>ill</u>ɪɛ ‘make not see (pl. (causee) object participants)’
ɪɛ ‘say (one utterance)’	ɪɪ<u>ll</u>ɛ ‘habitually say (one utterance)’
ɔkwárikɔt ‘recall instantly’	ɔkwá<u>rətt</u>ikɔt ‘remember, think’
ɔrəkɔ ‘work’	ɔr<u>ətt</u>ekɔ ‘habitually work’

In **ɪt̪at̪ta** the vowel **ɪ** corresponds to **a** in the reduplicated part. In **ɔk̪ɔ̌ɾɛllɔ** the H-tone occurs one mora to the left as compared to its non-Pluractional counterpart.

VNC ⇒ VNC-VCC

unta ‘fall and spread out (for example of water)’

untutta ‘fall and spread out (pl. subj. participants, scattering)’

ɔnt̪ɔma ‘become dry’ **ɔnt̪ɔtt̪ɔma** ‘habitually become dry’

VCC ⇒ VVC-VCC

ɔpp̪at̪ ‘become full’

ɔpp̪ɔpp̪at̪ ‘become full (pl. subject participants)’

ittat̪ ‘become fat’

ittttat̪ ‘become fat (pl. subject participants)’

ittɛ ‘escort’

ittttɛ ‘escort, help walk (requiring repeated effort)’

ɔccɔ̌kɔt̪ ‘catch’

ɔccɔ̌ccɔ̌kɔt̪ ‘catch (pl. object participants, typically thrown one by one and then caught one by one)’

akkarɔ ‘call’

akk̪akk̪arɔ ‘call repeatedly, read’

ɔccɪkkarɔ ‘plant’

ɔccɪkk̪kk̪arɔ ‘habitually plant’

mma ‘see’

mmmma ‘habitually see’

A case is also attested of reduplication followed by degemination of the root part (assuming that reduplication operates to the right):

ɪkkɔ ‘drink’

ɪkk̪kk̪ɔ ‘habitually drink’

VC ⇒ VC-VC (far less frequent than VC ⇒ VC-VCC).

ɔt̪ɔ̌ ‘pull’

ɔt̪ɔ̌t̪ɔ̌ ‘pull repeatedly’

ɔk̪ɛ̌ ‘shave’

ɔk̪ɛ̌k̪ɛ̌ ‘habitually shave’

ɔm̪ɔ̌ɲɛ̌ ‘steal’

ɔm̪ɔ̌ɲɔ̌ɲɛ̌ ‘habitually steal’

Relationship types 7-10. Insertion of a homorganic obstruent (**p**, **t**, **c**) after nasal (**m**, **n**, **ɲ**) (7); insertion of a homorganic nasal (**ŋ**) before **k** (8); Insertion of **ɲc** between vowels (9); insertion of **ent** before a final

or last vowel ϵ (10). The latter case could also be interpreted as addition of $n\epsilon$ after a final or last vowel ϵ .

Pluractional $\mathfrak{a}\eta\mathfrak{w}\mathfrak{d}$ ‘kill (pl. object participants)’, which relates to non-Pluractional $\mathfrak{a}k\mathfrak{k}\mathfrak{w}\mathfrak{d}\mathfrak{t}$ ‘kill’, may be a case of insertion of η before $k\mathfrak{k}$ and subsequent deletion of $k\mathfrak{k}$. The pair is a rare example of presence versus absence of final \mathfrak{t} . Generally, final \mathfrak{t} is either present or absent in both.

$\mathfrak{a}\mathfrak{m}\mathfrak{d}\mathfrak{n}\mathfrak{e}$ ‘miss’	$\mathfrak{a}\mathfrak{m}\mathfrak{p}\mathfrak{d}\mathfrak{n}\mathfrak{e}$ ‘habitually miss’ (also 12)
$\mathfrak{u}\mathfrak{n}\mathfrak{a}$ ‘pour’	$\mathfrak{u}\mathfrak{n}\mathfrak{t}\mathfrak{e}$ ‘pour repeatedly’ (also 13)
$\mathfrak{a}\eta\mathfrak{a}\mathfrak{n}\mathfrak{a}$ ‘say a name’	$\mathfrak{a}\eta\mathfrak{a}\mathfrak{n}\mathfrak{t}\mathfrak{e}$ ‘enumerate, count’ (also 12)
$\mathfrak{u}\mathfrak{n}\mathfrak{a}$ ‘build’	$\mathfrak{u}\mathfrak{n}\mathfrak{t}\mathfrak{e}$ ‘habitually build’ (also 13)
$\mathfrak{a}k\mathfrak{i}\mathfrak{n}\mathfrak{a}$ ‘defecate’	$\mathfrak{a}k\mathfrak{i}\mathfrak{n}\mathfrak{t}\mathfrak{e}$ ‘habitually defecate’ (also 13)
$\mathfrak{a}k\mathfrak{a}\mathfrak{r}\mathfrak{a}\mathfrak{t}$ ‘squeeze’	$\mathfrak{a}\eta\mathfrak{k}\mathfrak{a}\mathfrak{r}\mathfrak{a}\mathfrak{t}$ ‘squeeze repeatedly’ (also 12)
$\mathfrak{a}k\mathfrak{a}\mathfrak{n}\mathfrak{e}$ ‘show’	$\mathfrak{a}\eta\mathfrak{k}\mathfrak{a}\mathfrak{n}\mathfrak{e}$ ‘show (pl. object participants), teach’ (also 12)
$\mathfrak{a}k\mathfrak{k}\mathfrak{w}\mathfrak{d}\mathfrak{t}$ ‘kill’	$\mathfrak{a}\eta\mathfrak{w}\mathfrak{d}$ ‘kill (pl. object participants)’
$\mathfrak{a}\mathfrak{t}$ ‘find’	$\mathfrak{a}\eta\mathfrak{c}\mathfrak{e}\mathfrak{t}$ ‘find (pl. object participants)’ (also 13)
$\mathfrak{a}\mathfrak{r}\mathfrak{a}$ ‘throw (a stone) at’	$\mathfrak{a}\mathfrak{r}\mathfrak{u}\mathfrak{n}\mathfrak{c}\mathfrak{a}$ ‘throw (plural stones) at’
$\mathfrak{e}\mathfrak{d}$ ‘go’	$\mathfrak{a}\mathfrak{i}\mathfrak{n}\mathfrak{c}\mathfrak{e}$ ‘habitually go’ (also 13)
$\mathfrak{a}\mathfrak{i}\mathfrak{n}\mathfrak{e}$ ‘go to’	$\mathfrak{a}\mathfrak{i}\mathfrak{n}\mathfrak{c}\mathfrak{i}\mathfrak{n}\mathfrak{e}$ ‘habitually go to’
$\mathfrak{u}\mathfrak{a}$ ‘descend’	$\mathfrak{u}\mathfrak{n}\mathfrak{c}\mathfrak{e}$ ‘habitually descend’ (also 13)
$\mathfrak{a}\mathfrak{m}\mathfrak{e}$ ‘wash’	$\mathfrak{a}\mathfrak{m}\mathfrak{e}\mathfrak{n}\mathfrak{t}\mathfrak{e}$ ‘habitually wash’
$\mathfrak{a}\mathfrak{m}\mathfrak{e}$ ‘tell, say’	$\mathfrak{a}\mathfrak{m}\mathfrak{e}\mathfrak{n}\mathfrak{t}\mathfrak{e}$ ‘habitually tell, say’ (also 12)

In the case of $\mathfrak{e}\mathfrak{d}$ ‘go’/ $\mathfrak{a}\mathfrak{i}\mathfrak{n}\mathfrak{c}\mathfrak{e}$ ‘always go’ (insertion of $\mathfrak{n}\mathfrak{c}$ between vowels) the initial vowels differ.

Relationship type 11. See above, under *Relationship types 6 and 11*

Relationship type 12. (Underlying) length of the initial vowel and application of an all-low tone pattern.

Length of the initial vowel is not always audible. It is usually audible when it is the only feature distinguishing between the non-Pluractional and the Pluractional stem. In other cases, length of the vowel may only be recognized when it receives a H-tone: this H-tone is realized as a falling tone, reflecting the vowel's bimoraicity. I write a long vowel when it is the only distinguishing feature between a non-Pluractional and a Pluractional (or between a Pluractional and a further Pluractional).

ɔa 'rise'	ɔɔa 'habitually rise every'
ɔɔ 'descend'	ɔɔɔ 'habitually descend'
ɔmɔɔɛ 'steal'	ɔmɔɔɛ 'habitually steal'
ɔkâ 'be'	ɔka 'habitually be'

ɔmɔɔɛ 'steal' also has a Pluractional with partial reduplication (relationship 11, see 6 and 11).

Relationship type 13. Final or last vowel ϵ where the counterpart has final or last α . Only one case is attested for which this is the only difference:

ɔkkwâ 'hit'	ɔkkwê 'beat, hit repeatedly'
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Some further, occasional relationships are attested between Pluractionals and non-Pluractionals; several of these are suppletive.

ɛê 'stab, blow'	ɔkɔntɔ 'blow repeatedly'
ɔkɔ 'cut'	ɔkɛccɛ 'cut repeatedly'
ɔppâ 'take an amount'	ɔppɔɔɛ 'take an amount repeatedly'
ɛt̥t̥ 'give'	ɪkkɛt 'give (pl. object participants)'
ɔmmɔ 'take, pick up'	ɔcɔmɔ 'take, pick up (pl. object participants)'
ɪpɔ 'dig, collect'	ɪtte 'habitually dig, habitually collect'

Note that the Pluractional ɔcɔmɔ does not have any of the formal features that are typically found in Pluractionals.

13.1.1. Further Pluractionals: Pluractionals based on Pluractional stems

In many cases, one or more further Pluractionals can be formed on the basis of an already Pluractional verb, in particular along the lines of partial reduplication $VCC \Rightarrow VCC-VCC$ (11) (sometimes $VC \Rightarrow VC-VC$), and partial reduplication and gemination $VNC \Rightarrow VNC-VCC$ (6). Another process that often applies is (underlying) lengthening of the initial vowel and change from a L.H.L* tone pattern to an all-low tone (12). Relationship types 11 and 12 can occur together. Still more relationships are occasionally attested. Relationships between Pluractionals and further Pluractionals are exemplified below. The most common relationships (the reduplicating patterns 11 and 6, depending on the shape of the Pluractional base verb, and pattern 12 (lengthening of the initial vowel and application of a L-tone pattern) are presented first.

Relationship type 11: Partial reduplication $VCC \Rightarrow VCC-VCC$

Table 93 Pluractionals and Further Pluractionals

<i>Pluractionals (non-habitual and habitual meaning)</i>	<i>Further Pluractionals (habitual meaning)</i>
ɔppəppat ‘become full (pl. subj. participants)’	ɔppəppəppat (11), also: ɔppəppat (12) / ɔppəppəppat (11, 12)
ɔppɔre ‘take an amount repeatedly’	ɔppəppɔre (11)
ɔkətte ‘trade several items’	ɔkəttətte (11)
ɔkəkətte ‘habitually grind’	ɔkəkəttətte (11)
itte ‘habitually dig, habitually collect’	ittitte (11)
ɔkwárəttikət ‘remember, think’	ɔkwárəttəttikət (11), also: ɔkwarəttikət (12) / ɔkwarəttəttikət (11, 12)
aɲottet ‘habitually guard’	aɲottottet (11)
ɔɲállɛ ‘urinate (pl. subj. participants)’	ɔɲálləllɛ (11), also: ɔɲalle (12) / ɔɲalləllɛ (11, 12)
ɔtɪllet ‘send (pl. obj. participants)’	ɔtɪllillet (11), also: ɔtɪllet (12) / ɔtɪllillet (11, 12)

apokk(w)ɔ ‘fall with several bumps’	apokkukk(w)ɔ (11)
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In **apokkukk(w)ɔ** ‘habitually fall with several bumps’ **kkw** is delabialized before **u**: **apokk-ukk(w)-ɔ**.²

In the following cases it is the pluractional ending **ccɛ** that is reduplicated. The case of **ɔkɛccɛ** ‘cut repeatedly’ and **ɔkɛccɛccɛ**, **ɔkɛccɛccɛ** ‘habitually cut’ could also be interpreted as involving reduplication of **ɛcc**.

ɔccɛ ‘habitually cry’	ɔccɛccɛ (partial redup)
ɔkɔ̄taccɛ ‘watch’	ɔkɔ̄taccɛccɛ (partial redup)
	also: ɔkɔ̄taccɛ (12) and ɔkɔ̄taccɛccɛ (partial redup, 12)
ɔkɛccɛ ‘cut repeatedly’	ɔkɛccɛccɛ (partial redup)
	also: ɔkɛccɛ (12), and ɔkɛccɛccɛ (partial redup, 12)

Partial reduplication VC ⇒ VC-VC

ɔt̄ɔ̄t̄ɔ̄ ‘pull repeatedly’	ɔt̄ɔ̄t̄ɔ̄t̄ɔ̄ (11)
	also: ɔt̄ɔ̄t̄ɔ̄ (12) and ɔt̄ɔ̄t̄ɔ̄t̄ɔ̄ (11, 12)
ɔkɔ̄kɛ ‘habitually shave’	ɔkɔ̄kɔ̄kɛ (11)
	also: ɔkɔ̄kɛ (12) and ɔkɔ̄kɔ̄kɛ (11, 12)

Though there is no restriction on sequences of the type VCC-VCC, there is degemination of the first part in some cases: VCC ⇒ VC-VCC:

ɪkkɛt ‘give (pl. object participants)’	ɪkɪkkɛt
ɔkkwɛ̂ ‘beat, hit repeatedly’	ɔkɔ̄kkwɛ̂

The same type of relationship was seen between **ɪkkɔ̄** ‘drink’ and **ɪkɪkkɔ̄** ‘habitually drink’.

Relationship type 6: partial reduplication and gemination on the basis of a stem with NC combination (VNC ⇒ VNC-VCC)

² That is, in the speech of JS, possibly not in the speech of NaA (see 2.1.2).

᠔ᠮᠵ᠋ᠢᠨᠢᠭᠦ ‘habitually miss’	᠔ᠮᠵ᠋ᠢᠨᠢᠭᠦᠨᠢ (6)
᠔ᠬᠠᠨᠲᠦ ‘enumerate, count’	᠔ᠬᠠᠨᠲᠦᠲᠦ (6)
ᠶᠡᠷᠡᠨᠲᠦ ‘habitually speak’	ᠶᠡᠷᠡᠨᠲᠦᠲᠦ (6)
ᠤᠨᠲᠦ ‘habitually build’	ᠤᠨᠲᠦᠲᠦ (6)
ᠶᠢᠨᠴᠡᠲ ‘find (pl. object participants)’	ᠶᠢᠨᠴᠡᠴᠡᠲ (6)
᠔ᠷᠤᠵᠤᠨᠴᠠᠭ ‘throw (plural stones) at’	᠔ᠷᠤᠵᠤᠨᠴᠠᠭᠴᠠᠭ (6)
᠔ᠬᠠᠨᠢᠭᠦ ‘show (pl. obj. participants), teach’	᠔ᠬᠠᠨᠢᠭᠦᠨᠢᠭᠦ (6)

In the following case relationship 6 is applied as VC ⇒ VC-VCC:

᠔ᠷᠢᠯᠢᠯᠢᠬᠢᠶᠡ ‘make not see (pl. object (causee) participants)’ ᠔ᠷᠢᠯᠢᠯᠢᠯᠢᠬᠢᠶᠡᠨᠢᠭᠦ (6)

also: ᠔ᠷᠢᠯᠢᠯᠢᠬᠢᠶᠡ (12) / ᠔ᠷᠢᠯᠢᠯᠢᠯᠢᠬᠢᠶᠡᠨᠢᠭᠦ (6, 12)

Relationship type 12: lengthening of the initial vowel and all-low tone pattern. Further examples are found under relationship 11 and 6.

᠔ᠮᠤᠵᠤᠨᠢᠭᠦ ‘habitually steal’ ᠔ᠮᠤᠵᠤᠨᠢᠭᠦᠨᠢᠭᠦ (12)

᠔ᠬᠢᠨᠴᠡ ‘defecate (pl. subject participants)

᠔ᠬᠢᠨᠴᠡ (12)

also: ᠔ᠬᠢᠨᠴᠡᠴᠡᠴᠡ (6) and ᠔ᠬᠢᠨᠴᠡᠴᠡᠴᠡ (6, 12)

᠔ᠲᠢᠯᠢᠯᠡᠲ ‘send (pl. object participants)’

᠔ᠲᠢᠯᠢᠯᠡᠲ (12)

also: ᠔ᠲᠢᠯᠢᠯᠢᠯᠢᠯᠡᠲ (11) and ᠔ᠲᠢᠯᠢᠯᠢᠯᠢᠯᠡᠲ (11, 12)

᠔ᠨᠨᠠ ‘habitually bring’ ᠔ᠨᠨᠠᠨᠨᠠ (11, 12)

᠔ᠬᠠᠷᠡᠯᠢᠯᠠ ‘bite repeatedly, eat (hard foods), bite (pl. subject participants)’

᠔ᠬᠠᠷᠡᠯᠢᠯᠠ (12)

also: ᠔ᠬᠠᠷᠡᠯᠢᠯᠠᠲᠠ (3) and ᠔ᠬᠠᠷᠡᠯᠢᠯᠠᠲᠠ (3, 12)

Relationship type 3 (insertion of Vtt before final or last vowel) must be combined with 13 (final or last ε) in the following case:

᠔ᠬᠠᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤ ‘kill (pl. object participants)’ ᠔ᠬᠠᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤ (3, 13)

also: ᠔ᠬᠠᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤᠮᠤ (3, 13, 11)

Relationship type 1: gemination of ᠲ, k, a nasal or rhotic:

᠔ᠬᠠ ‘habitually be’ ᠔ᠬᠠᠬᠠ (1)

also: ᠔ᠬᠠᠬᠠᠬᠠ (6) (VC ⇒ VC-VCC)

4. Verbs that express action carried out or undergone by (distributed) plural subject participants.

Examples follow here. Some verbs can, in the right context, express more than one sub-type of non-habitual plurality. The type numbers are mentioned between parentheses.

1. Verbs that express repetition within one activity. When transitive, they express repetitive action, typically upon a single object participant. Both the subject and object participants can have singular reference.

ἵῤῥῖκῶ ‘tie’	ἵῤῥῖκῖκῶ ‘tie sth. while winding the rope several times’ (1), also: ‘tie several things’ (3)
ᾠκκῶ ‘hit’	ᾠκκῶ ‘beat, hit repeatedly’ (1)
ᾠῤῥῖ ‘pull’	ᾠῤῥῖ ‘pull repeatedly’ (1)
ἔῤ ‘stab, blow’	ᾠκῶντο ‘stab repeatedly, blow repeatedly’ (1)
ᾠῶ ‘pour’	ᾠντε ‘pour repeatedly’ (1) (for example water or tea, often locational distribution)
ᾠκκῶ ‘call’	ᾠκκᾠκκῶ ‘call repeatedly’ (1), also: ‘read’ (2)
ᾠκῶ ‘bite’	ᾠκῶ ‘bite repeatedly in a hard or crisp item’ (1), also: ‘bite on several small, hard or crisp items’ (3), also: ‘bite in a hard or crisp item (pl. subject participants)’ (4)

2. Verbs that inherently take some time due to continued effort, particularly sensory or mental processes.

ᾠκῶ ‘look’	ᾠκῶ ‘watch’ (2)
ᾠκῶ ‘recall instantly’	ᾠκῶ ‘remember, think’ (2)
ᾠρε ‘say (one utterance)’	ᾠρε ‘speak (a longer stretch of speech)’ (2)

3. Verbs that express action upon (distributed) plural object participants.

ᾠᾠᾠ ‘say a name’	ᾠᾠᾠ ‘enumerate, count’ (3)
ᾠκῶ ‘show’	ᾠκῶ ‘show (pl. object participants), teach’ (3)

Having pain is expressed as the involved body part repeatedly biting its owner:

wək **w-a.ɪk** **w-a.kəʀellɔ̃-n**
 leg C-be:PR C-bite.PLUR:INCOMPL-O1

my foot hurts (lit.: my foot is biting me repeatedly or continuously)

əkəʀellɔ̃ is also used when a singular subject bites in plural object participants and when plural subject participants bite in one object. In the latter case (verb with plural subject and a singular object) the Pluractional verb is not used because of plurality of the subject, but because of the plurality of the event as undergone by the object. For comparison, two examples with non-Pluractional verbs are given first. The examples show that use of the Pluractional verb is not a matter of (semantic) number agreement with the subject or the object, but expresses plurality of the bites.

tək **t-əkəʀɔ̃.t** **úkɔl**
 dog C-bite:COMPL child

the dog has bitten the child (one bite)

lɔk **l-əkəʀɔ̃.t** **úkɔl**
 dogs C-bite:COMPL child

the dogs have bitten the child (the non-Pluractional implies that the child got bitten once. The dogs were in a group when it happened and it is unclear which dog did it)

tək **t-əkəʀéllɔ̃.t** **nókɔl**
 dog C-bite.PLUR:COMPL children

the dog has bitten the children (several children got bitten)

ɔʀək **w-əkəʀéllɔ̃.r-ín**
 ants(sp.) C-bite.PLUR:COMPL-O1

the *ɔʀək*-ants have bitten me (several ants biting once)

The use of a non-habitual Pluractional relating to plural participants depends on how the event or situation is conceptualized. Non-habitual Pluractionals with semantics of type 3 and 4 can present the plural subject or object participants as consisting of individuals or

subgroups performing or undergoing the action in a distributed way: individually or as separate subgroups. For example, in the case of ‘give’, use of the Pluractional (**ikkēt**) or the non-Pluractional (**ētēt**) presents a different picture of the scene. The Pluractional expresses that the plural objects are handed over one by one, or group by group while the non-Pluractional is not concerned with the (semantic) plurality of the object, nor with distributional aspects, but treats it as a group.

ikkēt-ək **aṛəpʊ** **en-n-ərik** **áppik**
 give.PLUR:IMP-O3 things DEM-C-NEARSP all
 give him all those things (one by one)

ēt-ək **aṛəpʊ** **en-n-ərik** **áppik**
 give:IMP-O3 things DEM-C-NEARSP all
 give him all those things (not concerned with how the items are handed over)

A similar situation is found in the following phrases with ‘send’:

ɔ-kakká **p-ɔṭillét.é** **ɲókól** **kéccòk**
 PERS-Kakka C-send.PLUR:COMPL children market

Kakka has sent the children to the market (as separate groups or individuals, each with his own task)

ɔ-kakká **p-ɔṭjɔṭ.é** **ɲókól** **kéccòk**
 PERS-Kakka C-send:COMPL children market

Kakka has sent the children to the market (as a group, with a shared task)

Explicit distribution over different locations can induce the use of a Pluractional. In the example below Pluractional **unte** ‘pour’ must be used because the situation involves several actions of pouring due to locational distribution of the object (the sorghum):

anákká **ɔ-kín** **ṭ-ɔká.t** **cik** **a-kín** **unte** **míl**
 and.that PERS-3A C-be:COMPL VREF CONJ.PERS-3A pour.PLUR:DEPINCOMP sorghum
n.ti **i-aṛók ...**
 from in-bags

and when they were pouring the sorghum out of the bags ...

The subject in the sentence below is the mass noun **ησουλ** ‘sauce’. Its distribution over several calabashes is expressed with a Pluractional verb (**αppάppat** ‘become full’).

ησουλ η-αppάppat.ε ι-λontərō
 sauce C-become_full.PLUR:COMPL in-calabashes

the calabashes were full with sauce (lit.: the sauce was full in the calabashes)

In the examples below, both the non-Pluractional and the Pluractional can be used. When the non-Pluractional is used, the subjects are conceptualized as a group.

α-kín appik t-αppάppét.ε / α-kín appik t-αppét.ε
 PERS-3A all C-get_pregnant.PLUR:COMPL / PERS-3A all C-get_pregnant:COMPL

they are all pregnant (each of them is pregnant) / they are all pregnant

α-kín t-αηallê.t / α-kín t-αηαεδ.t
 PERS-3A C-urinate.PLUR:COMPL / PERS-3A C-urinate:COMPL

they have urinated (each of them) / they have urinated

For the verbs ‘die’ and ‘kill’ the undergoer-event of dying is central. These verbs do not present the possibility to choose between a non-Pluractional and a Pluractional in case of multiple events of dying. Here pluractionality relates to plurality of the subject in the case of ‘die’ and to plurality of the object in the case of ‘kill’: several persons dying is a plural event of dying and one or more persons killing several persons is also a plural event of dying. However, several persons killing one person is a single event of dying. This goes for any creature that dies, and even when relatively indistinguishable creatures such as ants die as a group the Pluractional must be used. However, according to my consultant (JS), when two or perhaps three persons die, it is not entirely impossible to use the non-Pluractional. I do not think that the near-obligatory use of the Pluractionals of ‘kill’ and ‘die’ makes these verbs essentially different from other Pluractionals that (can) express event-plurality due to

participant plurality. Rather, for some verbs, more than for others, use of the Pluractional is conventionalized more strongly.

The verbs in the example below are **ɪ** ‘die’ and **ɪlle** ‘die (PLUR)’, and **ɔkkwɔt** ‘kill’ and **ɔɣwɔ** ‘kill (PLUR)’.

pɔl **p-ɪ.áɥɛ**
 person C-die:PST
 the person died

ɔl **w-ɪlle.káɥɛ**
 people C-die.PLUR:PST
 the people died

m-p-ɔkwɔɥ.é **ɥɪk** **nɔ-lɔra-lóra** **ana** **l-ɪlle.káɥɛ**
 1-C-ignite:COMPL fire on-insects(sp.)-REDUP and PRO.C-die.PLUR:PST

I set fire to the insects (an ant species?) and they died (dry grass is put on the insects and set fire to)

ɔ-kín **ɥ-ɔkkwɔɥ.é** **ɪmɪt**
 PERS-3A C-kill:COMPL goat
 they have killed the goat

ɔ-kín **ɥ-ɔɣwɔ.t** **ɪɥɔk**
 PERS-3A C-kill.PLUR:COMPL goats
 they have killed the goats

m-p-ɔɣwɔ.t **ɔɥɛk** **n-ɥɪk**
 1-C-kill.PLUR:COMPL ants with-fire
 I have killed the ants with fire

Pluractionality and Reciprocal verbs

Reciprocal verbs are verbs that involve at least two actions (an action from X upon Y and from Y upon X, with the subject referring to both X and Y). Some Reciprocals are based on a Pluractional verb (see also section 14.5 about Reciprocals). Two examples:

ikkettət ‘give each other’ < **ikket** ‘give (several items)’
ɪncettət ‘find each other, meet each other’ < **ɪncet** ‘find (several persons or items)’

(Non)-use of Pluractionals in certain collocations

The choice of a non-Pluractional or a Pluractional verb may (partly) depend on fixed collocations. For example, cutting in one movement takes the non-Pluractional verb **ɔkɪɔ**, whereas cutting with several cutting movements takes the Pluractional verb **ɔkɛccɛ** (for example onions, or somebody’s hair).

m-p-a.ɪk **p-a.kɛccɛ** **ʈún**
 1-C-be:PR C-cut.PLUR:INCOMPL onion

I am cutting the onions

However, cutting sorghum is expressed with the non-Pluractional **ɔkɪɔ**, even though the event involves more actions of cutting since it is normally not just one sorghum stock that is cut. The Pluractional **ɔkɛccɛ** can be used in combination with sorghum, but then it expresses ‘cutting sorghum during several days’. The first example below states what the speaker is doing at the moment of speech, the second, with the Pluractional verb, could be an answer to the question: ‘what are you doing these days?’

m-p-a.ɪk **p-á.kɪɔ** **mɪl**
 1-C-be:PR C-cut:INCOMPL sorghum

I am cutting the sorghum

m-p-a.ɪk **p-a.kɛccɛ** **mɪl** **tɔ.pôn**
 1-C-be:PR C-cut.PLUR:INCOMPL sorghum at_farming_field

I am cutting sorghum in the field (implication: the cutting takes several days, it needs repeated going there)

Verbs with formal characteristics and semantics of Pluractionals, but without non-Pluractional counterpart

There are also verbs that inherently (or usually) express repeated actions or events and have one or more of the typical formal characteristics of Pluractionals, but lack a counterpart that expresses one (sub) action or (sub-) event. Some examples:

ᄃᄃᄃ	‘press oil’ (done with a repeated movement) (long initial vowel)	
ᄃᄃᄃ	‘sweep’	(gemination)
ᄃᄃᄃᄃ	‘cough’	(partial reduplication and gemination)
ᄃᄃᄃᄃᄃᄃ	‘roll sth.’	(partial reduplication and gemination)
ᄃᄃᄃᄃᄃᄃ	‘swim’	(partial reduplication)
ᄃᄃᄃᄃ	‘grind’	(partial reduplication)
ᄃᄃᄃ	‘lick’	(ending in <i>ccɛ</i>)

Habitual Pluractionals

Habitual Pluractionals express habitual actions or repeatedly reoccurring events. Examples:

<i>non-Pluractional</i>	<i>Pluractional</i>		
ᄃᄃᄃᄃ	‘go to’	ᄃᄃᄃᄃᄃᄃ	‘habitually go’
ᄃᄃᄃ	‘say (one utterance)’	ᄃᄃᄃᄃᄃᄃ	‘habitually say (one utterance)’
ᄃᄃᄃ	‘dig, collect’	ᄃᄃᄃᄃᄃᄃ	‘habitually dig, collect’
ᄃᄃᄃᄃᄃᄃ	‘do, make’	ᄃᄃᄃᄃᄃᄃᄃᄃᄃ	‘habitually do, make’
ᄃᄃᄃᄃ	‘tell’	ᄃᄃᄃᄃᄃᄃᄃᄃ	‘habitually tell’
ᄃᄃ	‘cry’	ᄃᄃᄃᄃᄃᄃᄃ	‘habitually cry’
ᄃᄃᄃᄃᄃᄃ	‘steal’	ᄃᄃᄃᄃᄃᄃᄃᄃᄃ	‘habitually steal’

Further Pluractionals that are based on Pluractionals with non-habitual meaning do not necessarily retain the pluractional meaning of their counterpart, for example:

ᄃᄃᄃᄃᄃᄃ ‘fall with several bumps’ **ᄃᄃᄃᄃᄃᄃᄃᄃᄃ** ‘habitually fall’

Some examples with Pluractionals with habitual meaning follow here. Habitual Pluractionals can easily be combined with the adverb **ᄃᄃᄃᄃᄃᄃᄃ** ‘always’, but **ᄃᄃᄃᄃᄃᄃᄃᄃᄃ** does not need to be present in order to get the reading ‘always do x’. Habitual Pluractionals cannot

be combined with adverbs that express a specific, bounded time frame, such as **mamân** ‘this morning’.

a-kín **óíncine** **ı-tıpâ**
 CONJ.PERS-3A go_to.PLUR:DEPINCOMPL in-marriage

and they always went to her for marriage (fr. written story)

a-kín **óíncine** **ı-tıpâ** **εppın-εppın**
 CONJ.PERS-3A go_to.PLUR:DEPINCOMPL in-marriage always-REDUP

and they always went to her for marriage

***a-kín** **óíncine** **ı-tıpâ** **mámân**
 CONJ.PERS-3A go_to.PLUR:DEPINCOMPL in-marriage this_morning

*and they always went to her for marriage this morning

Some more examples:

ɔ-parı **p-aŋ** **p-a.kkóttet** **ŋúcul** **ŋ-ó-ín-ta**
 PERS-wife C-POSS2 C-do.PLUR:INCOMPL sauce C-of-what-QW

what does your wife always make the sauce of? (App. IV, 12)

caɽı **c-əɽek** **c-ɔká.t** **cık** **a-ŋúkul** **ŋ-ɔ-kəmən** **k-ó-nɔ-cəruk**
 day C-some C-be:COMPL VREF CONJ-children C-of-houses C-of-on-opening

ŋ-ɔká.t **cık** **a-ŋ-ómuje** **áɽəpu** **w-ɔ-rua**
 C-be:COMPL VREF CONJ-PRO-steal.PLUR:DEPINCOMPL things C-of-hair

there was a time that there were youngsters from the neighbourhood who were stealing cattle time and again (fr. written story)

Notably, presence of **εppınεppın** ‘always’ does not always lead to the use of a Pluractional verb, as in the following example:

ɔ-lótti **p-ákkaró-k** **εppın-εppın**
 PERS-Lótti C-call:INCOMPL-O3 always-REDUP

Lótti always calls him

As mentioned earlier, non-habitual Pluractionals can serve as a basis for further Pluractionals with habitual meaning. The examples below contrast related non-habitual and habitual Pluractionals.

with non-habitual **ᵛkəɽello**:

ᵛ-kín **ᵛ-á.ík** **ᵛ-á.kəɽello** **áppentína**
PERS-3A C-be:PR C-bite.PLUR:INCOMPL groundnuts

they are eating groundnuts

with habitual **ᵛkəɽello** or **ᵛkəɽellottə**:

ᵛ-kín **ᵛ-á.ík** **ᵛ-â.kəɽello** / **ᵛ-â.kəɽellottə** **áppentína**
PERS-3A C-be:PR C-bite.PLUR:INCOMPL / C-bite.PLUR:INCOMPL groundnuts

they are always eating groundnuts

with non-habitual **ᵛɣwə**:

ᵛ-kukkú **p-ᵛɣwə.t** **lɨ́sók**
PERS-Kokku C-kill.PLUR:COMPL goats

Kokku has killed the goats

with habitual **ᵛɣuttə** or **ᵛɣuttuttə**:

ᵛ-kukkú **p-ᵛɣúttə.t** / **p-ᵛɣúttuttə.t** **lɨ́sók**
PERS-Kokku C-kill.PLUR:COMPL / C-kill.PLUR:COMPL goats

Kokku used to kill the goats (but now he has stopped doing this)

with non-habitual **ᵛppəppət**:

ᵛ-kín **ᵛ-ᵛppəppét.ɛ**
PERS-3A C-get_pregnant.PLUR:COMPL

they are pregnant

with habitual **ᵛppəppət**:

ᵛ-kakká **p-ᵛppəppét.ɛ**
PERS-Kakka C-get_pregnant.PLUR:COMPL

Kakka used to get pregnant (but this has stopped)

Expressivity

Pluractionals in general have a certain expressivity, but further Pluractionals based on a habitual Pluractional stem are particularly expressive.

The following line is from the opening of the story ‘Tortoise and bird’. The activity of the bird is contrasted with the inertia of the tortoise. The verb **ittitte** ‘habitually dig, habitually collect’ is based on **itte** ‘habitually dig; habitually collect’, which again relates to **ipɔ** ‘dig, collect’ (NB: there is no verb which refers to one single digging movement). The use of the Pluractional reflects the very busy nature of the bird.

ηαττῆττῆάρε η-ικκό.τ cɪk a-ítittite aón
 bird(sp.) C-sit:COMPL VREF CONJ-(PRO-)collect.PLUR:DEPINCOMPL bees

the **ηαττῆττῆάρε**-bird was always collecting honey (App. IV, 2)

