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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 (V) tt before the final or last vowel	13
	4	insertion of ukk(w) before the final or last vowel	12
	5	addition of $\text{cc}\epsilon$ 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, ɲ)	12, 13
	8	insertion of a homorganic nasal (ŋ) before k	12
	9	insertion of ɲc between vowels	13
	10	addition of ɛnt 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 **t̪, 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**.

ɹtəkāt cɪk ‘swell’	ɹttəkāt cɪk ‘swell (pl. subject participants)’ (also 12)
əkā ‘be’	ɹkka ‘habitually be’ (also 12)
ɹmákɔt ‘follow’	ɹmmakɔt ‘habitually follow’ (also 12)
ɹnā ‘bring’	ɹnnā ‘habitually bring’
ɹrā ‘cultivate’	ɹrra ‘habitually cultivate’ (also 12)
əkérɔ ‘trade’	ɹkétte ‘trade (pl. object participants)’ (also 13)
ɹpúɹɔ ‘eat (a paste substance)’	ɹpúlle ‘habitually eat (a paste substance)’ (also 13)
arɔ cɪk ‘sleep, spend night’	alle cɪk ‘habitually sleep, spend night’ (also 13)
ɹtətta ‘be eaten’	ɹrrətta ‘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.

ɹɛ ‘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 **ɹkk(w)** before final or last vowel (4).

ɹɔ ‘die’	ɹlle ‘die (pl. subject participants)’ (also 13)
ɹtɹɔt ‘send’	ɹtɹllet ‘send (pl. object participants)’ (also 13)
ɹɹáɛɔ̃ ‘urinate’	ɹɹállɛ ‘urinate (pl. subject participants), urinate repeatedly’ (also 13)
arɹwɔt ‘guard’	arɹottet ‘habitually guard’ (also 13)
arɹwɔ̃ ‘sing’	arɹútte ‘habitually sing’ (also 13)
ɹkákɔ ‘grind’	ɹkákətte ‘habitually grind’ (also 13)
ɹkkɔt ‘do, make’	ɹkkəttet ‘habitually do, make’ (also 13)
ɹkkɔ̃ ‘pass, reach’	ɹkkótte ‘habitually pass, reach’ (also 13)
arɹpɔ̃ ‘pass, appear’	arɹpətte ‘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’	ɔkɛɔkk(w)ɔ ‘habitually be shaved’ (also 12)

In **ɔkɛɔkk(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.

ɔkə́tɔ ‘look’	ɔkə́taccɛ ‘watch’
ɔɔ ‘cry’	ɔɔccɛ ‘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’	ɪtattɔ ‘habitually cook’
ɪɪkɔ ‘enter’	ɪɪkɪkkɔ ‘enter (pl. subject participants)’
ɪɪkɔ ‘tie’	ɪɪkɪkkɔ ‘tie with several windings, tie (pl. object participants)’
ɔkəɾɔ ‘bite’	ɔkəɾellɔ ‘bite repeatedly, eat (hard foods), bite (pl. subject participants)’
ɔɾɪkɪɛ ‘make not see’	ɔɾɪllɪkɪɛ ‘make not see (pl. (causee) object participants)’
ɪɾɛ ‘say (one utterance)’	ɪɾille ‘habitually say (one utterance)’
ɔkwáɾɪkɔt ‘recall instantly’	ɔkwáɾəttɪkɔt ‘remember, think’
ɔrékɔ ‘work’	ɔɾəttekɔ ‘habitually work’

In **ɪt̪at̪ta** the vowel **ɪ** corresponds to **a** in the reduplicated part. In **ɔk̪ɔɾɛllɔ** 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)’

untut̪ta ‘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)’

itt̪at̪ ‘become fat’

itt̪tt̪at̪ ‘become fat (pl. subject participants)’

itt̪ɛ ‘escort’

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

ɔcc̪ɔk̪ɔt̪ ‘catch’

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

akk̪arɔ ‘call’

akk̪ɔkk̪arɔ ‘call repeatedly, read’

ɔcc̪ɪkk̪arɔ ‘plant’

ɔcc̪ɪkk̪ɪkk̪arɔ ‘habitually plant’

ɪmma ‘see’

ɪmm̪ɪmma ‘habitually see’

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

ɪkk̪ɔ ‘drink’

ɪk̪ɪkk̪ɔ ‘habitually drink’

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

ɔt̪ɔ ‘pull’

ɔt̪ɔt̪ɔ ‘pull repeatedly’

ɔk̪ɛ ‘shave’

ɔk̪ɔk̪ɛ ‘habitually shave’

ɔm̪ɔɲɛ ‘steal’

ɔm̪ɔɲɔɲɛ ‘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 (**ɲ**) before **k** (8); Insertion of **ɲc** between vowels (9); insertion of **ɛnt** before a final

or last vowel *ɛ* (10). The latter case could also be interpreted as addition of *nte* after a final or last vowel *ɛ*.

Pluractional *ɔŋwɔ̃* ‘kill (pl. object participants)’, which relates to non-Pluractional *ɔkkwɔ̃t* ‘kill’, may be a case of insertion of *ŋ* before *kk* and subsequent deletion of *kk*. The pair is a rare example of presence versus absence of final *t*. Generally, final *t* is either present or absent in both.

<i>ɔmɔ̃ne</i> ‘miss’	<i>ɔmpɔ̃ne</i> ‘habitually miss’ (also 12)
<i>ɔno</i> ‘pour’	<i>ɔnte</i> ‘pour repeatedly’ (also 13)
<i>ɔŋáno</i> ‘say a name’	<i>ɔŋánte</i> ‘enumerate, count’ (also 12)
<i>ɔno</i> ‘build’	<i>ɔnte</i> ‘habitually build’ (also 13)
<i>ɔkíno</i> ‘defecate’	<i>ɔkínɛ</i> ‘habitually defecate’ (also 13)
<i>ɔkɛ́ɾɔt</i> ‘squeeze’	<i>ɔŋkɛ́ɾɔt</i> ‘squeeze repeatedly’ (also 12)
<i>ɔkɔ̃ne</i> ‘show’	<i>ɔŋkɔ̃ne</i> ‘show (pl. object participants), teach’ (also 12)
<i>ɔkkwɔ̃t</i> ‘kill’	<i>ɔŋwɔ̃</i> ‘kill (pl. object participants)’
<i>ɾɔt</i> ‘find’	<i>ɾɛɛt</i> ‘find (pl. object participants)’ (also 13)
<i>ɔɾɔ</i> ‘throw (a stone) at’	<i>ɔɾɔɛɔ</i> ‘throw (plural stones) at’
<i>ɛɔ̃</i> ‘go’	<i>ɔ́ɾɛɛ</i> ‘habitually go’ (also 13)
<i>ɔ́ɾne</i> ‘go to’	<i>ɔ́ɾɛɛne</i> ‘habitually go to’
<i>ɔɔ̃</i> ‘descend’	<i>ɔ́ɾɛɛ</i> ‘habitually descend’ (also 13)
<i>ɾme</i> ‘wash’	<i>ɾmente</i> ‘habitually wash’
<i>ɔmê</i> ‘tell, say’	<i>ɔmente</i> ‘habitually tell, say’ (also 12)

In the case of *ɛɔ̃* ‘go’/ *ɔ́ɾɛɛ* ‘always go’ (insertion of *ɾɛ* 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).

ua 'rise'	uua 'habitually rise every'
uɔ 'descend'	uɔɔ 'habitually descend'
ɔmɔɲɛ 'steal'	ɔmɔɲɛ 'habitually steal'
ɔkâ 'be'	ɔka 'habitually be'

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

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

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

ɛɛ 'stab, blow'	ɔkɔntɔ 'blow repeatedly'
ɔkɔ 'cut'	ɔkɛccɛ 'cut repeatedly'
ɔppɔ 'take an amount'	ɔppɔɲɛ 'take an amount repeatedly'
ɛtɛt 'give'	ɪkkɛt 'give (pl. object participants)'
ɔmmɔ 'take, pick up'	ɔcɔmmɔ 'take, pick up (pl. object participants)'
ɪpɔ 'dig, collect'	ɪtte 'habitually dig, habitually collect'

Note that the Pluractional ɔcɔmmɔ 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>
ṁppéppat ‘become full (pl. subj. participants)’	ṁppéppéppat (11), also: ṁppéppat (12) / ṁppéppéppat (11, 12)
ṁppóre ‘take an amount repeatedly’	ṁppéppore (11)
ṁkótte ‘trade several items’	ṁkóttétte (11)
ṁkákétte ‘habitually grind’	ṁkákéttétte (11)
itte ‘habitually dig, habitually collect’	ittítte (11)
ṁkwárəttíkət ‘remember, think’	ṁkwárəttəttíkət (11), also: ṁkwarəttíkət (12) / ṁkwarəttəttíkət (11, 12)
ṁṁottet ‘habitually guard’	ṁṁottottet (11)
ṁṁállə ‘urinate (pl. subj. participants)’	ṁṁálləlle (11), also: ṁṁalle (12) / ṁṁalləlle (11, 12)
ṁṁíllət ‘send (pl. obj. participants)’	ṁṁíllíllət (11), also: ṁṁíllət (12) / ṁṁíllíllət (11, 12)

apukk(w)ɔ ‘fall with several bumps’	apukkukk(w)ɔ (11)
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In **apukkukk(w)ɔ** ‘habitually fall with several bumps’ **kkw** is delabialized before **ʊ**: **apukk-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)
ɔkɛtaccɛ ‘watch’	ɔkɛtaccɛccɛ (partial redup)
	also: ɔkɛtaccɛ (12) and ɔkɛtaccɛccɛ (partial redup, 12)
ɔkɛccɛ ‘cut repeatedly’	ɔkɛccɛccɛ (partial redup)
	also: ɔkɛccɛ (12), and ɔkɛccɛccɛ (partial redup, 12)

Partial reduplication VC ⇒ VC-VC

ɔtɔtɔ ‘pull repeatedly’	ɔtɔtɔtɔ (11)
	also: ɔtɔtɔ (12) and ɔtɔtɔtɔ (11, 12)
ɔkɛkɛ ‘habitually shave’	ɔkɛkɛkɛ (11)
	also: ɔkɛkɛ (12) and ɔkɛkɛkɛ (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
ɔkkwɛ ‘beat, hit repeatedly’	ɔkɔkkwɛ

The same type of relationship was seen between **ɪkkɔ** ‘drink’ and **ɪkɪkkɔ** ‘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).

ႁႃႃႃႃႃ 'habitually miss'	ႁႃႃႃႃႃႃႃ (6)
ႁႃႃႃႃႃ 'enumerate, count'	ႁႃႃႃႃႃႃႃႃ (6)
ႃႃႃႃႃ 'habitually speak'	ႃႃႃႃႃႃႃႃ (6)
ႃႃႃႃႃ 'habitually build'	ႃႃႃႃႃႃႃ (6)
ႃႃႃႃႃ 'find (pl. object participants)'	ႃႃႃႃႃႃႃႃ (6)
ႃႃႃႃႃ 'throw (plural stones) at'	ႃႃႃႃႃႃႃႃႃ (6)
ႃႃႃႃႃ 'show (pl. obj. participants), teach'	ႃႃႃႃႃႃႃႃ (6)

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

ႃႃႃႃႃႃႃ 'make not see (pl. object (causee) participants)' ႃႃႃႃႃႃႃႃႃႃ
(6)

also: ႃႃႃႃႃႃႃ (12) / ႃႃႃႃႃႃႃႃႃႃ (6, 12)

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

ႃႃႃႃႃႃႃ 'habitually steal'	ႃႃႃႃႃႃႃႃ (12)
ႃႃႃႃႃႃ 'defecate (pl. subject participants)'	ႃႃႃႃႃႃႃ (12)
	also: ႃႃႃႃႃႃႃႃႃႃ (6) and ႃႃႃႃႃႃႃႃႃႃ (6, 12)
ႃႃႃႃႃႃႃ 'send (pl. object participants)'	ႃႃႃႃႃႃႃႃ (12)
	also: ႃႃႃႃႃႃႃႃႃႃ (11) and ႃႃႃႃႃႃႃႃႃႃ (11, 12)
ႃႃႃႃႃ 'habitually bring'	ႃႃႃႃႃႃႃႃ (11, 12)
ႃႃႃႃႃႃႃ 'bite repeatedly, eat (hard foods), bite (pl. subject participants)'	ႃႃႃႃႃႃႃႃ (12)
	also: ႃႃႃႃႃႃႃႃႃႃ (3) and ႃႃႃႃႃႃႃႃႃႃ (3, 12)

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

ႃႃႃႃႃ 'kill (pl. object participants)'	ႃႃႃႃႃႃႃ (3, 13)
	also: ႃႃႃႃႃႃႃႃႃႃ (3, 13, 11)

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

ႃႃႃ 'habitually be'	ႃႃႃႃႃ (1)
	also: ႃႃႃႃႃႃႃ (6) (VC \Rightarrow VC-VCC)

Relationship type 10: addition of **nte** after a final or last vowel **ε**.

ερε ‘speak (a longer stretch of speech)’ **ερεnte** (10)
also: **ερεntette** (10, 6)

The following case is a case of suppletion. It is reminiscent of relationship 10 since it ends in **nte**, but instead of coming after a final or last vowel **ε** the element **nte** replaces part of the stem:

εεόμε ‘take, pick up (pl. object participants)’ **εεόντε** (suppletion)
also: **εεόνtette** (6, VNC ⇒ VNC-VCC)

13.2. Meaning

Lumun Pluractionals can be divided into non-habitual and habitual Pluractionals. The non-habitual ones express plurality within the (bounded) context of an event. The habitual ones express (unbounded) habitual events or repeatedly reoccurring events.

Further Pluractionals (Pluractionals based on an already Pluractional stem) have habitual meaning, regardless of whether the Pluractional base verb has habitual or non-habitual meaning.

Non-habitual Pluractionals can express different types of plurality. They typically denote that an action or event consists of many sub-actions or sub-events, rather than just two or three. This is a tentative list of types of semantics of non-habitual Pluractionals:

1. Verbs that express repetition within one activity. They can be intransitive, or transitive with action upon a single object participant;
2. Verbs that inherently take some time due to continued effort, particularly sensory or mental processes;
3. Verbs that express action upon (distributed) plural object participants;

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.

ṛṛṛkṵ ‘tie’	ṛṛṛṛṛṛṛkṵ ‘tie sth. while winding the rope several times’ (1), also: ‘tie several things’ (3)
ṵṛṛkwṵ ‘hit’	ṵṛṛkwṵ ‘beat, hit repeatedly’ (1)
ṵṛṛṵ ‘pull’	ṵṛṛṵṛṵ ‘pull repeatedly’ (1)
ṛṛṵ ‘stab, blow’	ṵṛṛṵṛṵ ‘stab repeatedly, blow repeatedly’ (1)
ṵṛṵ ‘pour’	ṵṛṵṛṵ ‘pour repeatedly’ (1) (for example water or tea, often locational distribution)
akkarṵ ‘call’	akkarṵṛṛṵ ‘call repeatedly’ (1), also: ‘read’ (2)
ṵṛṛṵṛṵ ‘bite’	ṵṛṛṵṛṵṛṵ ‘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.

ṵṛṛṵṛṵ ‘look’	ṵṛṛṵṛṵṛṵ ‘watch’ (2)
ṵṛṛṵṛṵṛṵ ‘recall instantly’	ṵṛṛṵṛṵṛṵṛṵ ‘remember, think’ (2)
ṛṛṵ ‘say (one utterance)’	ṛṛṵṛṵ ‘speak (a longer stretch of speech)’ (2)

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

ṛṛṵṛṵ ‘say a name’	ṛṛṵṛṵṛṵ ‘enumerate, count’ (3)
ṵṛṵṛṵ ‘show’	ṵṛṵṛṵṛṵ ‘show (pl. object participants), teach’ (3)

ᄒᄒ ‘throw at (typically in order to chase away)’	
	ᄒᄒᄒᄒᄒ ‘throw at (pl. object participants, typically stones, one by one)’ (3)
ᄒᄒᄒᄒ ‘kill’	ᄒᄒᄒᄒ ‘kill (pl. object participants)’ (3)
ᄒᄒᄒᄒ ‘send’	ᄒᄒᄒᄒᄒ ‘send (pl. object participants: one by one or group by group)’ (3)
ᄒᄒᄒᄒ ‘trade’	ᄒᄒᄒᄒᄒ ‘trade (pl. object participants: one by one or group by group, involving several transactions)’ (3)

4. Verbs that express action carried out or undergone by (distributed) plural subject participants. These verbs are intransitive. They include some (inchoative) state verbs and verbs that refer to processes concerning the body, but also others. Use of the Pluractional verb in case of a plural participant is not strictly obligatory in these cases (this will be explained further below).

ᄒᄒᄒᄒ ‘become fat’	ᄒᄒᄒᄒᄒᄒ ‘become fat (pl. subj. participants)’ (4)
ᄒᄒᄒᄒ ‘become full’	ᄒᄒᄒᄒᄒᄒ ‘become full (pl. subj. participants)’ (4)
ᄒᄒᄒᄒ ‘get pregnant’	ᄒᄒᄒᄒᄒᄒ ‘get pregnant (pl. subj. participants)’ (4)
ᄒᄒ ‘die’	ᄒᄒᄒ ‘die (pl. subj. participants)’ (4)
ᄒᄒᄒᄒ ‘urinate’	ᄒᄒᄒᄒᄒ ‘urinate once (pl. subj. participants)’ (4), also: ‘urinate repeatedly’ (1)
ᄒᄒ ‘come’	ᄒᄒᄒᄒ, ᄒᄒᄒᄒᄒ ‘come (pl. subj. participants: one by one or group by group)’ (4)

The different uses of non-habitual Pluractionals can be illustrated by means of the verb ‘bite’. The non-habitual Pluractional of ‘bite’, **ᄒᄒᄒᄒᄒᄒ**, expresses plural (sub-) events of biting. It is used for eating hard and dry food which requires repeated (audible) biting, as does the very hard *cupu*-fruit:

m-p-ᄒᄒᄒᄒᄒᄒ.t **cúpô**
 1-C-bite.PLUR:COMPL fruit(k.o.)

I have eaten a *cupu*-fruit (requiring many bites, since the fruit is extremely hard)

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

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

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

əkəʔellɔ̃ 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.

ʔək	ʔ-əkəʔ.t	ókul
dog	C-bite:COMPL	child

the dog has bitten the child (one bite)

lək	l-əkəʔ.t	ókul
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)

ʔək	ʔ-əkəʔéllɔ̃.t	ɲókul
dog	C-bite.PLUR:COMPL	children

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

ʔək	w-əkəʔéllɔ̃.r-ín
ants(sp.)	C-bite.PLUR:COMPL-O1

the *ʔək*-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 (**ikket**) or the non-Pluractional (**eṭeṭ**) 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.

ikket-ɔk aɾəpɔ en-n-ərik áppík
 give.PLUR:IMP-O3 things DEM-C-NEARSP all
 give him all those things (one by one)

eṭ-ɔk aɾəpɔ en-n-ərik áppík
 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-ɔ̣ṭilléṭ.é ɲókúl kéccôk
 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-ɔ̣ṭɔ̣ṭ.é ɲókúl kéccôk
 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 cík a-kín unte m̄l
 and.that PERS-3A C-be:COMPL VREF CONJ.PERS-3A pour.PLUR:DEPINCOMP sorghum
n.ti i-aɾók ...
 from in-bags

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

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

ḡucul ḡ-ṣppəppat.ε i-ləntərō
 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.

ṣ-kín appik ṭ-ṣppəppét.ε / ṣ-kín appik ṭ-ṣppét.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

ṣ-kín ṭ-ṣḡallê.t / ṣ-kín ṭ-ṣḡæṣ.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)’.

pul **p-ɪ.áɣe**
 person C-die:PST
 the person died

ul **w-ɪlle.káɣe**
 people C-die.PLUR:PST
 the people died

m-p-ɔkwɔt.é **tɪk** **nɔ-lɔra-lɔra** **ana** **l-ɪlle.káɣe**
 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 **t-ɔkkwɔt.é** **ɪmɪt**
 PERS-3A C-kill:COMPL goat
 they have killed the goat

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

m-p-ɔɣwɔ.t **ɔɣek** **n-tɪk**
 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 **ɔkéccɛ** (for example onions, or somebody’s hair).

m-p-a.ɪk **p-a.kéccɛ** **t̪ɪn**
 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 **ɔkéccɛ** 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** **m̪ɪl**
 1-C-be:PR C-cut:INCOMPL sorghum

I am cutting the sorghum

m-p-a.ɪk **p-a.kéccɛ** **m̪ɪl** **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:

ᵛᵛᵛᵛ	‘press oil’ (done with a repeated movement) (long initial vowel)	
ᵛllá cɪk	‘sweep’	(gemination)
ʊɾullɔ	‘cough’	(partial reduplication and gemination)
anɾɛɾɾɛ	‘roll sth.’	(partial reduplication and gemination)
ɔɾɾɔɾɾa	‘swim’	(partial reduplication)
ɔkákɔ	‘grind’	(partial reduplication)
acce	‘lick’	(ending in cce)

Habitual Pluractionals

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

<i>non-Pluractional</i>	<i>Pluractional</i>
ɔ́íne ‘go to’	ɔ́ípcine ‘habitually go’
ɪɾe ‘say (one utterance)’	ɪɾille ‘habitually say (one utterance)’
ɪpɔ ‘dig, collect’	ɪtte ‘habitually dig, collect’
ɔkkɔ́t ‘do, make’	ɔkkɔ́ttet ‘habitually do, make’
ɔmê ‘tell’	ɔmente ‘habitually tell’
ɔɔ ‘cry’	ɔccce ‘habitually cry’
ɔmúɲe ‘steal’	ɔmuɲe ‘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:

apokkwɔ ‘fall with several bumps’ apokkukkwɔ ‘habitually fall’

Some examples with Pluractionals with habitual meaning follow here. Habitual Pluractionals can easily be combined with the adverb **eppineppin** ‘always’, but **eppineppin** 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 **óípcme** **ı-ııpâ**
 CONJ.PERS-3A go_to.PLUR:DEPINCOMPL in-marriage

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

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

and they always went to her for marriage

***a-kín** **óípcme** **ı-ııpâ** **mâmân**
 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-aı** **p-a.kkóttet** **ıúcul** **ı-ı-ın-ıa**
 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)

caıı **c-əıek** **c-əká.t** **cık** **a-ıúkul** **ı-ı-kəmən** **k-ı-nɔ-cəruk**
 day C-some C-be:COMPL VREF CONJ-children C-of-houses C-of-on-opening

ı-əká.t **cık** **a-ı-ımııe** **áıəpu** **w-ı-ıua**
 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 **εppıneppın** ‘always’ does not always lead to the use of a Pluractional verb, as in the following example:

ɔ-lóttı **p-ákkaró-k** **εppın-εppın**
 PERS-Lóttı C-call:INCOMPL-O3 always-REDUP

Lóttı 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 **ᵛkəʃello**:

ᵛ-kín ᵛ-á.ík ᵛ-á.kəʃello áppəntína
 PERS-3A C-be:PR C-bite.PLUR:INCOMPL groundnuts

they are eating groundnuts

with habitual **ᵛkəʃello** or **ᵛkəʃellotto**:

ᵛ-kín ᵛ-á.ík ᵛ-â.kəʃello / ᵛ-â.kəʃellotto áppəntína
 PERS-3A C-be:PR C-bite.PLUR:INCOMPL / C-bite.PLUR:INCOMPL groundnuts

they are always eating groundnuts

with non-habitual **ᵛɣwɔ̃**:

ᵛ-kukkú p-ᵛɣwɔ̃.t lɛ́sók
 PERS-Kukku C-kill.PLUR:COMPL goats

Kukku has killed the goats

with habitual **ᵛɣotto** or **ᵛɣottotto**:

ᵛ-kukkú p-ᵛɣòtte.t / p-ᵛɣòttotte.t lɛ́sók
 PERS-Kukku C-kill.PLUR:COMPL / C-kill.PLUR:COMPL goats

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

with non-habitual **ᵛppəppet**:

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

they are pregnant

with habitual **ᵛppəppet**:

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.

ɣattəttápe **ɣ-ikkó.t** **cɪk** **a-ítittite** **aŋn**
 bird(sp.) C-sit:COMPL VREF CONJ-(PRO-)collect.PLUR:DEPINCOMPL bees

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

