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PLURACTIONAL CONCEPTUAL SPACE: THREE CASE STUDIES AND THEIR TYPOLOGICAL RELEVANCE¹

1. Introduction

The main aim of this paper is to examine how pluractional constructions work in three different languages. Specifically, I will focus on the functions that the pluractional markers of three languages (namely, Akawaio — Cariban, Venezuelan; Beja — Afro-Asiatic, Cushitic; and Maa — Nilotic, Eastern Nilotic) can express by adopting the pluractional conceptual space proposed in Mattiola [2017a] (and based on a large cross-linguistic comparison) as an explanatory tool.

Newman [1980: 13] coined the term *pluractionality* to refer to what was previously known as *intensive* in Hausa. He also provided the first definition of pluractional verbs:

The essential semantic characteristics of such verbs is almost always plurality or multiplicity of the verb's action [Newman 1990: 53].

For example, when the verb stem is reduplicated in Squamish (Salishan, Central Salish), we have a pluractional situation, i.e., the occasion is composed of several repeated actions.

SQUAMISH (Salishan, Central Salish)

(1a) *Chen kwelesh-t ta sxwi7shn*
 1SBJ.SG shoot-TR DET deer
 'I shot a deer.'

(1b) *Chen kwel-kwelesh-t ta sxwi7shn*
 1SBJ.SG RED-shoot-TR DET deer
 'I shot a deer several times/continuously.' [Bar-el 2008: 34]

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However, in following literature (cf. for example [Xrakovskij 1997; Wood 2007; Mattiola 2017b] among others), an additional piece of information was added to Newman's [1990] definition: the locus of marking of such meanings. Pluractional markers are generally thought of as those markers that modify the form of the verb morphologically. This aspect is mandatory in a cross-linguistic perspective because it allows us to distinguish pluractionality from the phenomenon of *verbal number*. This distinction is pointed out by Cabredo-Hofherr, Laca [2012]:

We consider under the term EVENT PLURALITY [i.e. verbal number] any linguistic means of expressing a multiplicity of events, be they verbal markers (*re-read*), adverbials (*twice, often, always, again*), or adnominal markers (*John lived in different countries, each boy built a canoe, John repaired several bicycles*). We use the term VERBAL PLURALITY more narrowly for event plurality marked on the verb. Following the usage in the literature we refer to markers of verbal plurality as PLURACTIONAL MARKERS [Cabredo-Hofherr, Laca 2012: 1].

Consequently, we can say that pluractionality consists in a specific marking strategy to express verbal number.

I will briefly present the main approaches to pluractionality and its multifunctionality from a typological perspective, in Section 2 below, focusing on the proposal made by Mattiola [2017b]. In Section 3, I will investigate the pluractional systems of the three languages in order to propose the language-specific semantic maps. Finally, in Section 4, I will discuss the typological and theoretical consequences of such analysis.

2. Typological approaches to pluractionality

2.1. State of the art

Pluractionality has been an understudied phenomenon for a long time, at least from a typological perspective. However, we can still find some relevant works that have addressed this phenomenon (more or less directly). The most relevant theoretical surveys on pluractionality are: Dressler [1968], Cusic [1981], and Mattiola [2017b]². In what follows, I will briefly present the most important findings of these studies.

²For reasons of space, I cannot here focus on several other contributions that also tackled pluractionality. However, some of these deserve mention: Xrakovskij [1997], Wood [2007], Součková [2011].

The first study directly dedicated to the analysis of pluractionality is that of Dressler [1968]. Here, the author emphasized the existence of this phenomenon by analyzing a (relatively) limited number of ancient languages. Dressler's [1968] primary contribution consists in having recognized the broad range of functions that pluractional markers can perform. He classified pluractional functions in four *Aktionsarten*, namely, Iterative *Aktionsart*, Distributive *Aktionsart*, Continuative *Aktionsart*, and Intensive *Aktionsart*. Each of these is then sub-divided into several sub-functions.

Cusic's [1981] doctoral dissertation investigated the semantic relationship between verbal aspect and verbal plurality. The most relevant outcome of this work is in its proposal of four parameters of analysis, that is, phase/event/occasion, relative measure, connectedness, distributive parameters. Specifically, the phase/event/occasion parameter is the most influential one because it allows us to distinguish between event-internal or event-external plurality. While the first identifies a plurality that is detectable within the event (plurality of the internal phases; in Cusic's [1981: 78] words 'repetitive actions'), the second identifies a plurality that is external to the event ('repeated actions' [Cusic 1981: 78]). Finally, Mattiola [2017b] offers the first large-scale typological investigation of pluractionality (where more than 200 languages are considered). The study's findings are grounded starting from Cusic [1981], but then it develops a new approach to pluractionality, both on functional and cross-linguistic/theoretical levels. It describes the broad range of pluractional functions through semantic maps, drawing up a conceptual space that allows us to better understand the relationships that exist between the functions. In addition, the study explains the complexity of this phenomenon through the adoption of the Radical Constructions Grammar approach [cf. Croft 2001]. Since this paper adopts the same approach, in the next sections I will briefly present how the last study mentioned describes and analyzes pluractionality.

2.2. *Pluractional functional domain*

Mattiola [2017b] defines pluractionality as follows:

Pluractionality is a phenomenon that marks the plurality or multiplicity of the situations (i.e. states and events) encoded by the verb through any morphological mean that modifies the form of the verb itself [Mattiola 2017b: 5].

In Mattiola [2017a: 121] two groups of functions that pluractional markers express in the languages of the world are recognized: core functions and additional functions.

Core functions correspond to the core of pluractional meaning, that is, these functions directly fall under the definition of pluractionality. We can identify three different values: (i) pluractionals ‘*stricto sensu*’, when the plurality of situations is distributed over time and we have two sub-values depending on the extension of the relative time frame (cf. (2) and (3)); (ii) spatial distributivity, when plurality the of situations is distributed over space (cf. (4)); and (iii) participant plurality, when the plurality of situations is distributed over different participants (the participant involved is the most affected one) (cf. (5)).

ITERATIVITY: “when the repetition occurs in a single situation” [Mattiola 2017a: 123]

KONSO (Afro-Asiatic, Cushitic)

- (2a) *ʔifa-ʔ* *ʔinanta-siʔ* *ʔi=tuɕʕuur-ay*
 3SGM.PRO-NOM girl-DEF.F/M 3=push[SG]-PFV[3M]
 ‘He pushed the girl.’

- (2b) *ʔifa-ʔ* *ʔinanta-siʔ* *ʔi=tu-tuɕʕuur-ay*
 3SGM.PRO-NOM girl-DEF.F/M 3=PL-push[SG]-PFV[3M]
 ‘He pushed the girl more than once.’ [Ongaye 2013: 263]

FREQUENTATIVITY: “when the repetition takes place over several occasions (usually a longer time frame)” [Mattiola 2017a: 123]

KHWE (Khoisan, Central Khoisan)

- (3) *tí* *à* *bè-è-xú-t-a-tè!*
 1SG OBJ be.too.heavy-II-COMP-FREQ-I-PRS
 ‘It is often too heavy for me!’ [Kilian-Hatz 2008: 146]

SPATIAL DISTRIBUTIVITY: “the plurality of situations occurs in more than one place” [Mattiola 2017a: 123]

BARASANO (Tucanoan, Eastern Tucanoan)

- (4) *gahe-rĩbĩr* *bota-ri* *kea-kudi-ka-bā* *idā*
 other-day post-PL chop-ITER-FAR^PST-3PL 3PL
 ‘The next day they went from place to place chopping down posts
 (for the new house).’ [Jones, Jones 1991: 101]

PARTICIPANT PLURALITY: “the plural situation can involve both single and plural participants. In the latter case, we will have the so called *participant plurality*” [Mattiola 2017a: 124]

HUICHOL (Uto-Aztecan, Southern Uto-Aztecan)

- (5a) *Nee waakana ne-mec-umi?ii-ri eeki*
 1SG chicken.SG 1SG.SBJ-2SG.OBJ-kill.SG-BEN 2.SG
 ‘I killed the chicken for you.’
- (5b) *Nee waakana-ari ne-mec-uqi?ii-ri eeki*
 1SG chicken-PL 1SG.SBJ-3PL.OBJ-kill.PL-BEN 2.SG
 ‘I killed the chickens for you.’ [Comrie 1982:113]

Additional functions are those functions that do not fall under the definition of pluractionality and thus are not necessary in defining a specific marker as pluractional, but they are recurrently encoded by pluractional markers in the languages of the world. These functions can be grouped in different semantic clusters depending on the type of relationship they have with the notion of plurality [Mattiola 2017a: 124–128]. These clusters are: (i) non-prototypical plurality, (ii) degree, and (iii) reciprocity. Non-prototypical plurality gathers functions that express plurality, but not in a typical way, i.e., they do not only indicate a distinction between single and multiple situations, but express some additional traits that go beyond this dichotomy³.

HABITUALITY: “situations repeated on different occasions, but the occasions occur in a time frame (which may or may not be directly specified), the situations are seen as typical of that time frame” [Mattiola 2017a: 126].

SANDAWE (Khoisan, Hatsa-Sandawe)

- (6a) Frequentative reading of the morpheme *-wǎ* ‘PL2’.
nì-ŋ hík’-wǎ-ŋ phàkhé-ŋ /’èé-ì
 CNJ-CL go:SG-PL2-L inspect-L look_at.3-NR
 ‘And he will often go, inspect and have a look at it’
 [Steehan 2012: 242]

³ In the following examples, the first sentence exemplifies the pluractional core functions and the second the additional function.

- (6b) Habitual reading of the morpheme *-wǎ* ‘PL2’.
mindà-tà-nà=sǐ hík’ǐ-wà
 field-in-to=1SG go:SG-PL2
 ‘I go to the field.’ (every day) [Steeman 2012: 188]

EVENT-INTERNAL PLURALITY: “a singular situation that is internally complex, i.e., it is composed of several repetitive phases that make the situation externally singular, but internally plural” [Mattiola 2017a: 125].

SANDAWE (Khoisan, Hatsa-Sandawe)

- (7a) Iterative or frequentative reading of the Iterative morpheme *-ìmé*
gélé-áá /-ìmé
 Gele-SFOC (SV.)come:SG-ITER
 ‘Gele came repeatedly.’ [Steeman 2012: 143]

- (7b) Event internal plural reading of the Iterative morpheme *-ìmé*
tsháá=sà xàd-ìmé-é
 pot=3F.SG scrape_out-ITER-3OBJ
 ‘She scraped out a pot.’ [Steeman 2012: 141]

CONTINUATIVITY: “singular situations that are extended during time” [Mattiola 2017a: 124].

CHECHEN (Nakh-Daghestanian, Nakh)

- (8a) Unmarked form of the verb.
So tykana vedira
 1SG.ABS store.DAT V.run.WP
 ‘I ran to the store.’ [Wood 2007: 224]

- (8b) Frequentative reading of the pluractional verb.
Hoora wyrana so tykana ydu
 every morning 1SG.ABS store.DAT run.PLAC.PRS
 ‘Every morning I run to the store repeatedly (more than once per day).’ [Wood 2007: 225]

- (8c) Continuative reading of the pluractional verb.
So cwana sahwtiahw idira
 1SG.ABS one.OBL hour.LOC run.PLAC.WP
 ‘I ran (went running) for one hour.’ [Wood 2007: 224]

GENERIC IMPERFECTIVITY: “it encodes a situation that occurs always; for example, it can be a property or a quality of an entity

or a gnomic truth (that is, it is part of the encyclopedic knowledge)” [Mattiola 2017a: 125].

MEITHEI (Sino-Tibetan, Naga)

- (9a) Frequentative/Habitual reading of the morpheme *-kən* ‘REPEAT’
nók-kən-pə
 laugh-REPEAT-NOM
 ‘someone who laughs all the time whether or not there is a joke,
 as a habit’
- (9b) Generic imperfective reading of the morpheme *-kən* ‘REPEAT’.
əy-ti yám-nə pí-kən-pə mí-ni
 I-DLMT lot-ADV give-REPEAT-NOM man-COP
 ‘I am a very generous man.’ (lit. I am a man who always gives a lot)
 [Chelliah 1997: 216]

The cluster ‘degree’ gathers functions that express a modification in the development of the situation.

INTENSITY: “a degree modification of the normal development of the situation” [Mattiola 2017a: 126].

YIMAS (Lower Sepik-Ramu, Lower Sepik)

- (10a) Iterative/Frequentative (depending on the context) reading of verb reduplication.
ya-n-arkark-wampaki-pra-k
 V.PL.OBJ-3SG.A-break(RED: *ark-*)-throw-TOWARD-IRR
 ‘He repeatedly broke them and threw them as he came.’
- (10b) Intensive reading of verb reduplication.
ya-mpu-nanaŋ-tacay-ckam-tuk-mpun
 V.PL.OBJ-3PL.A-DUR-see(RED: *tay-*)-show-RM.PAST-3PL.D
 ‘They were showing those to them very well (and they stared at those).’ [Foley 1991: 319]

COMPLETENESS: “a situation that is performed in its entirety, completely” [Mattiola 2017a: 127].

TURKANA (Nilotic, Eastern Nilotic)

- (11a) Pluractional reading of verb reduplication.
-poc ‘pinch’ → *a-poc-o-poc* ‘pinch repeatedly’
-ilug ‘twist’ → *a-k-ilug-u-lug* ‘twist repeatedly’

- (11b) ‘Complete’ reading of verb reduplication.

-ɲrl ‘crumble’ → *a-ɲrl-r-ɲrl* ‘crumble completely’
-ikic ‘bone out’ → *a-k-ikic-i-kic* ‘bone out completely’
[Dimmendaal 1983: 106]

EMPHASIS: “a situation performed with emphasis or affectedness”
[Mattiola 2017a: 127].

BATAK KARO (Austronesian, Malayo-Polynesian)

- (12a) Iterative/frequentative (depending on the context) reading of verb reduplication.

Sapu-sapuna *kucing é.*
(PASS.)stroke-stroke.she cat that
‘She stroked the cat again and again.’

- (12b) Emphatic reading of verb reduplication.

Peturah-turah sitik ukurndu
CAUS.grow-grow SOF mind.your
‘Grow up a bit! (i.e. Act like an adult!)’ [Woollams 1996: 98]

The last cluster is represented by a single function, i.e. reciprocity.

JÓOLA KARON (Atlantic, Bak)

- (13a) Iterative reading of pluractional marker *-ool* ‘PLAC/ RECP’.

Lopeel a-muus-ool-a
Robert 3SG-pass-PLAC-ACC
‘Robert went and came back.’

(adapted from [Sambou 2014: 150])

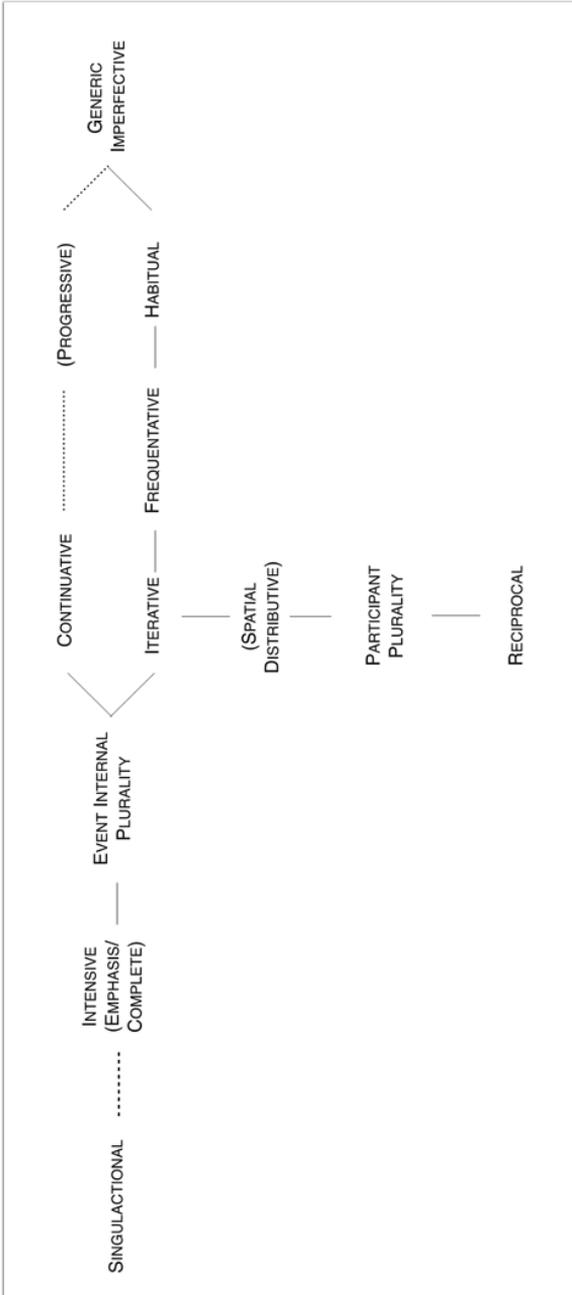
- (13b) Reciprocal reading of pluractional marker *-ool* ‘PLAC/ RECP’.

Sana ni Faatu ka-cuk-ool-a
Sana and Fatou 3PL-see-RECP-ACC
‘Sana and Fatou saw each other.’ [Sambou 2014: 149]

2.3. The pluractional conceptual space

What comes out of the previous section is that cross-linguistically pluractional markers are particularly multifunctional. In order to better understand the pluractional functional domain; Mattiola [2017a: 129] proposes a conceptual space [cf. Croft 2001, Haspelmath 2003].

Figure 1. The pluractional conceptual space [Mattiola 2017a: 129]



The map in Figure 1 raises some interesting considerations.

Core functions are placed in the center of the space, while additional functions are placed in the peripheral zones. In addition, the space also reveals some linguistic correlations: (i) moving from left to right, there is an increasing generalization of the functions' semantics, from very specific values (such as intensity or event-internal plurality) to values that are maximally generic (e.g. generic imperfectivity); (ii) cross-linguistically, functions on the left are usually marked through more lexical strategies (e.g. actionality), whereas functions placed on the right more often tend to be marked through grammatical aspect; (iii) this, in turn, leads to another typological tendency, the functions on the left are usually less grammaticalized than the ones on the right (for further discussion see [Mattiola 2017b: 79–82; Mattiola 2017a]).

3. Pluractional systems of specific languages: three case studies

In this section, I will present three case studies based on corpora analyses. The languages I will focus my attention on are: Akawaio (Cariban, Venezuelan), Beja (Afroasiatic, Cushitic), and Maa (Nilotic, Eastern Nilotic)⁴.

In what follows, it is important to note that I will describe the occurrences found in the texts through labels that sometimes merge two (or more) of the functions exemplified in Section 2. This is due to the fact that the data used were not collected for the purposes of this paper and, thus, several functional differences that are pivotal here were not investigated by who collected and glossed the texts. To help resolve this issue, I have also analyzed the co-text and the context, however it was not always possible to determine the function of a specific occurrence with certainty.

⁴ The choice of these three languages is not completely arbitrary. Akawaio, Beja, and Maa are analyzed because all of them are spoken in geographical areas in which languages usually show a complex pluractional system (namely, South America and Eastern Africa), but also because I had the opportunity to have an extensive amount of glossed texts in these languages at my disposal to analyze (cf. ff. 9, 11, and 12).

3.1. Akawaio⁵

Akawaio is a variety of the Cariban language Kapóng spoken by the Guyanese Ameridian tribe Akawaio. Genetically, Akawaio belongs to the Cariban family's Pemón group, which is generally considered part of the Venezuelan branch [cf. Gildea 2012].

In Akawaio, the morpheme *-pödi* (and its allomorphs) can express several functions that are semantically comparable to both the core and additional functions identified cross-linguistically by Mattiola [2017b]. For example, the sentence below in (14) illustrates an iterative reading of this morpheme.

- AKAWAIO (Cariban, Venezuelan)
- (14) *naigaza kuru pöröu ennogï-bödi zerö*
 how EMPH arrow shoot-ITER this
ta-'pi i-ya ji mörö
 say-PST 3-ERG EMPH AI?
 “‘How, really, will we shoot the arrow more than one time?’” he said.’
 (RA Piyai'ma Story 033 <106.543>)

In the texts analyzed, I found 220 occurrences of *-pödi* and its allomorphs. From a semantic point of view, they can be gathered in different functional sets whose frequency is reported in Table 1.

⁵ The (unpublished) texts analyzed in this section were provided to me by Spike Gildea and were collected, transcribed and glossed by Desrey Caesar-Fox (and Spike Gildea) for her PhD thesis on some sociolinguistic and anthropological aspects of Akawaio [cf. Caesar-Fox 2003].

Table 1. Functional sets of pluractional occurrences in Akawaio

Set(s)	Function(s)	Occurrence(s)
Frequentativity/habituality/ generic imperfectivity	<i>frequentative/habitual</i> ⁶	101 (45.9 %)
	<i>frequentative</i>	18 (8.2 %)
	<i>generic imperfective</i>	12 (5.5 %)
	<i>frequentative/habitual/ generic imperfective</i>	15 (6.8 %)
	Total occurrences	146 (66.4 %)
Iterativity	<i>iterative/frequentative</i>	30 (13.6 %)
	<i>iterative</i>	13 (5.9 %)
	<i>event-internal plurality/iterative</i>	10 (4.6 %)
	Total occurrences	53 (24.1 %)
Participant plurality	<i>Participant plurality</i>	8 (3.6 %)
	<i>Participant plurality/iterative</i>	2 (0.9 %)
	Total occurrences	10 (4.5 %)
Continuativity	<i>continuative/iterative</i>	4 (1.8 %)
	<i>event-internal plurality/continuative/ iterative</i>	2 (0.9 %)
	Total occurrences	6 (2.7 %)
	Other minimal functions	5 (2.3 %)
	Total occurrences	220 (100 %)

Observing Table 1, it is evident that there is a clear imbalance in the distribution of the occurrences over the functions. The vast majority of occurrences hold a frequentative-like reading, specifically, 146 out of 220 (66.4 %). This set is exemplified in (15).

- AKAWAIO (Cariban, Venezuelan): Frequentativity/habituality
- (15) *mör-yau tok eji mörö ta-pödi-'pi i-ya*
 that-LOC 3PL be FUT say-ITER-PST 3-ERG

⁶ More than one function is given when the occurrence could have both readings due to double interpretation possibilities or a difficulty in understanding the correct interpretation because of context ambiguity. This is also valid for the other two languages analyzed.

turonnö-gong anö-'pī i-ya ganang
 another-PL eat.meat-PST 3-ERG already
 'Then he would always say "they are all there", but he had eaten
 the others already'⁷ (RA Piyai'ma Story 017 <45.856>)

The second most frequent set of functions is the iterative-like reading, with 53 occurrences (24.1 %) (cf. (16)).

AKAWAIO (Cariban, Venezuelan): Iterativity
 (16) *im mörö wenai kuru u-tö-bödi mörö*
 um that because EMPH 1-go-ITER AI?
 'That is really why I keep going up and down'
 (RA Personal Narrative 156 <546.078>)

It is noteworthy here that the function with the highest number of occurrences within the iterative set is the iterative/frequentative function. This means that in this set as well there is a strong frequentativity influence, i.e., of the most frequent set of functions.

All remaining sets are marginal compared to the two presented above and thus can be considered as marginal or context-specific occurrences.

The data shown in Table 1 allow us to draw the semantic map of the Akawaio pluractional marker *-pödi* in Figure 2.

Figure 2 does not reflect the relative weight of the single functional sets, however. In other words, if we look at the single frequencies of the functional sets, we can see that there is a relevant difference as already noted. For this reason, I also propose Figure 3 that better highlights the actual weight of the functions (with respect to frequency in texts) of the Akawaio pluractional marker.

⁷ This tale speaks of the so-called 'idodo-killers', i.e., Amerindian killers.

Figure 2. Semantic map of the pluractional suffix *-pödti* in Akawaio

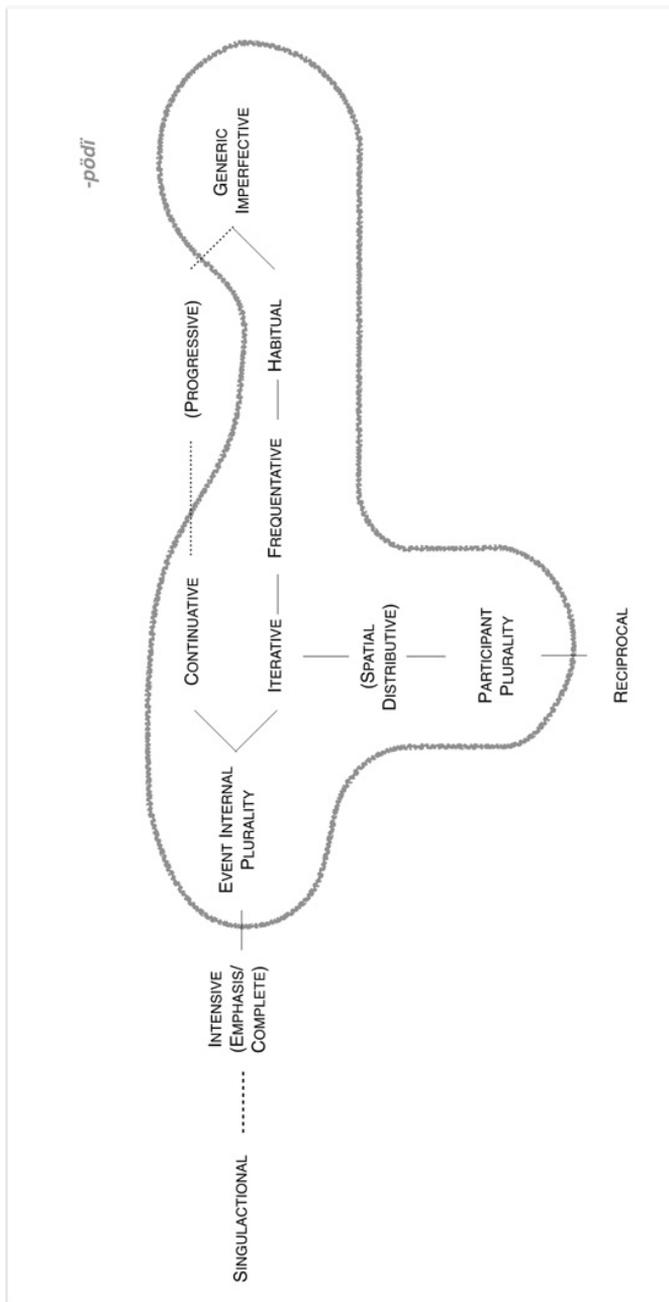
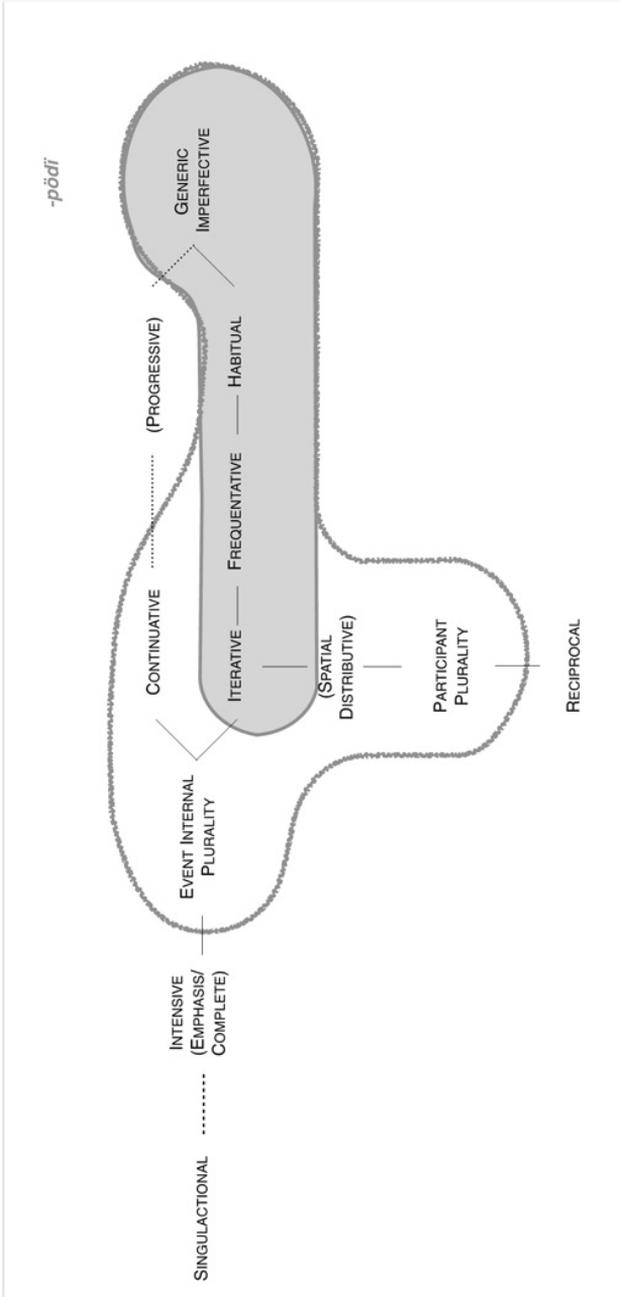


Figure 3. The frequency-semantic map of the pluractional suffix *-pōdī* in Akawaio



The picture is now different. What comes out of these two maps is relatively straightforward: in Akawaio, the pluractional suffix covers a functional area that can be understood as clearly pluractional, that is, it represents one of the most prototypical pluractional systems because *-pödi* can predominantly express two core functions (iterative and, especially, frequentative).

In addition, the limited frequency (or the absence) of some functions, in particular of the other core functions, cannot be underestimated and must be discussed. Specifically, the low frequency of participant plurality is noteworthy, since it is very common in the languages of world (cf. for example Corbett's [2000] distinction between *event number* and *participant number*). There is at least one possible explanation for this phenomenon. We can find the suffix *-gong* in Akawaio that expresses collectivity (cf. (17)).

AKAWAIO (Cariban, Venezuelan): Collectivity

- (17) *a-ma'ta-gong tawong eda-'pi tok ya*
 2-die-PL saying hear-PST 3PL ERG
 ‘‘You will all die!’’ they heard.’

(RA Piyai'ma Story 083 <272.332>)

It is evident how this marker can be found in a pluractional context (when a plurality of situations is involved). However, *-gong* applies both to verbs and nouns (cf. (18)) and, thus, is better understood as a nominal number marker, though it is not a prototypical marker.

AKAWAIO (Cariban, Venezuelan): Collectivity

- (18) *t-eadong-gong nö ebingga-ning-nang be*
 3.RFL-enemy-PL EMPH abandon-NMLZR-PL like
tok eji-bödi-'pi
 3PL be-hab-PST
 ‘They used to abandon those that were their enemies.’

(TL Birdman Story 056 <178.893>)

The presence of this marker can explain why *-pödi* does not convey participant plurality: *-gong* more or less covers the functional area of plural participants involved in a plural situation and, thus, it renders the use of *-pödi* for the same meaning less necessary.

From a grammatical point of view, the pluractional suffix *-pödi* in Akawaio shows the functional and semantic peculiarities that are

usually associated to verbal aspect cross-linguistically [cf. Comrie 1976; Bybee et al. 1994]. The semantic map of *-pödi* comprises functions placed on the right side that represent the area of the conceptual space generally associated with aspectual and more grammaticalized functions. In particular, the pluractional suffix encodes functions mainly pertaining to the imperfective functional domain (iterative, frequentative, habitual, generic imperfective):

The functions located on the left part [of the conceptual space] tend to belong to the lexical aspect / Aktionsart system of a language (e.g. semelfactive, repetitive, etc.) and the values on the right tend to be more often functions encoded by markers of verbal aspect (more grammaticalized) [Mattiola 2017b: 80].

However, there is a strong evidence against the assignment of *-pödi* to the aspectual system of Akawaio. In this language, an actual aspectual marker exists, the suffix *-(no)bök*, that marks progressive situation (cf. (19)).

- AKAWAIO (Cariban, Venezuelan): Progressivity
 (19) *kajiri engji-bök tok eji-'pi-ng-ng*
 manioc.beer drink-PROG 3PL be-PST-STYLE-STYLE
 ‘They were drinking kajiri.’ (EW Kanaimö 134)

I found cases in these texts where the pluractional marker co-exists with this aspectual marker, as the example in (20) clearly shows:

- AKAWAIO (Cariban, Venezuelan)
 (20) *ewaik abine pöröu damo'ka-bödi-nöbök*
 yes wait arrow fall-ITER-PROG
mang kaji-be tok ya ingu'tö
 3.be.PRES lie-ATTR 3PL ERG fool
 ‘“Okay/yes, wait the arrows keep falling down” they said to fool her.’
 (RA Piyai'ma Story 044 <145.790>)

This co-presence and the fact that though rarely *-pödi* can also express functions that usually do not belong to the aspectual system (e.g. participant plurality and spatial distributivity, as already noted by Corbett [2000]), make this marker hardly identifiable as an actual aspectual morpheme. Thus, in conclusion, we can say is that *-pödi* is an aspect-like morpheme that cannot be described as fully aspectual. The difficulties found in classifying this suffix are due to the fact that it

expresses quite a large range of functions that can be cross-linguistically traced back to different linguistic categories. I will return to this issue in Section 4.

3.2. *Beja*⁸

Beja is an Afroasiatic language belonging to the Cushitic sub-family. It is spoken in the north-eastern part of Africa, mainly in Sudan, Eritrea, and Egypt [cf. Vanhove 2014, 2017].

Beja has two pluractional derivations: Intensive and Pluractional. The Intensive form is marked through the ablaut of the verb stem.

BEJA (Afroasiatic, Cushitic): Intensive

- (21a) *ʔawi=b* *jhak-s-an=t*
stone=INDF.M.ACC get_up-CAUS-PFV.1SG=COORD
a-gid
1SG-throw\PFV
'I took a stone and threw it.' (BEJ_MV_NARR_05_eritrea_389)

- (21b) *ge:d-e:ti* *ho:so:*
throw\INT-CVB.CSL 3SG.ABL
ti:-simh=je:b=ka
3SG.F-get_rid_of\AOR=REL.M=DISTR
'Each time she throws stones at it to get rid of it.'
(BEJ_MV_NARR_05_eritrea_147)

I found 182 occurrences of the Intensive in the texts and the functions that it can mark are listed in Table 2 below.

⁸ The texts analyzed in this section were collected, transcribed, glossed and provided by Martine Vanhove. Some of them are freely accessible on the CorpAfroAs website (<http://dx.doi.org/10.1075/scl.68.website>).

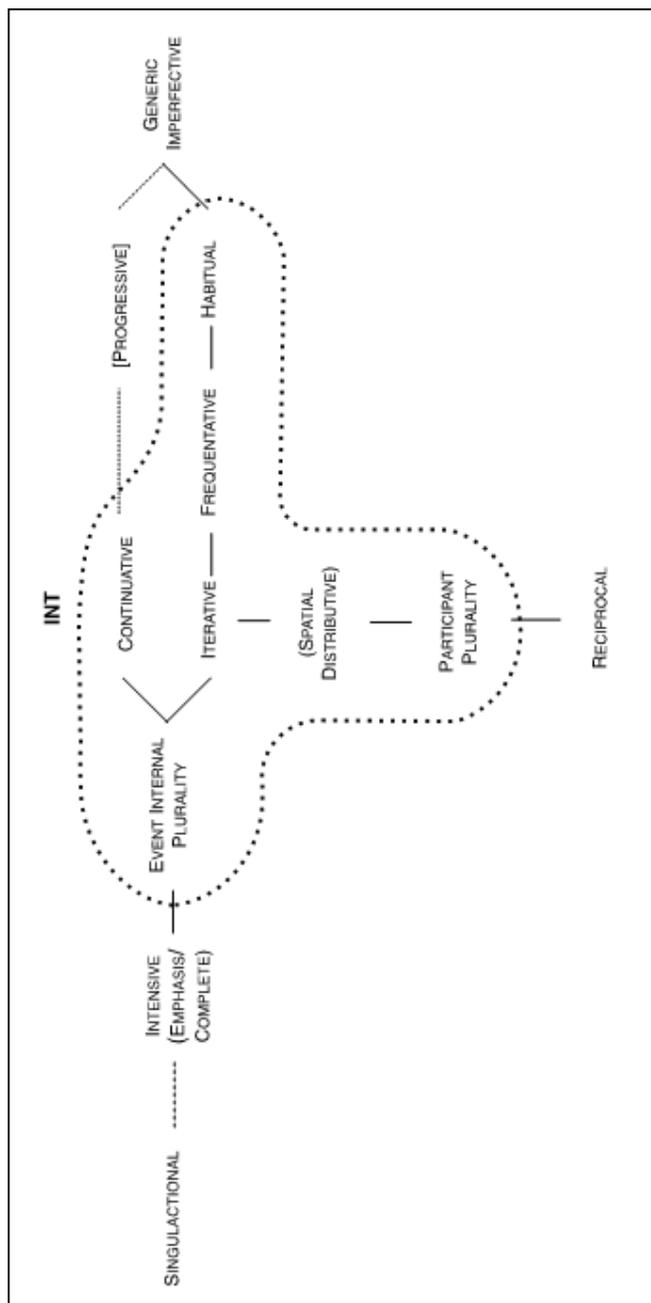
Table 2. Functional sets of Intensive occurrences in Beja

Function(s)	N° of occurrences	Percentage
Iterative	95	52.2 %
Iterative/ Participant plurality	20	11.0 %
Iterative/Frequentative	15	8.2 %
Iterative/ Event internal plurality	5	2.7 %
Iterative/Continuative	5	2.7 %
Iterative/ Spatial distributive	1	0.6 %
Spatial distributive	1	0.6 %
Participant plurality/ Spatial distributive	1	0.6 %
Participant Plurality	9	4.9 %
Frequentative/Habitual	14	7.7 %
Successive events ⁹	2	1.1 %
Dubious cases	14	7.7 %
Total	182	100 %

Observing the table, we can also see that there is one function that is more frequent in this case, namely, iterativity. The semantic map of the Intensive is represented in Figure 4.

⁹ There are functions that are not displayed on the map, but that some pluractional markers do encode (in this case, successive events). The reason why these functions are not on the map is because they are not as frequent as those appearing in the space, rather, they are quite rare and idiomatic in single languages.

Figure 4. The semantic map of Intensive in Beja



On the other hand, the second verbal derivation, the Pluractional form, is marked through reduplication.

BEJA (Afroasiatic, Cushitic): Reduplication of the verb stem (Pluractional)

- (22a) *to:t* *ti=takat*
 PROX.SG.F.ACC DEF.F=woman
ti=waw-ti=t *rh-i=ho:b*
 DEF.F=cry-AOR.3SG.F=INDF.F see-AOR.3SG.M=when
 ‘when he saw this woman who was crying’
 (BEJ_MV_NARR_14_sijadok_155)

- (22b) *tu:=ndi* *ʔakir-a:=t*
 DEF.SG.F.NOM=mother be_strong-CVB.MNR=INDF.F
wa:w~wa:w-e:ti:t
 PLAC~cry-CVB.ANT
 ‘the mother having wept a lot’
 (BEJ_MV_NARR_13_grave_076)

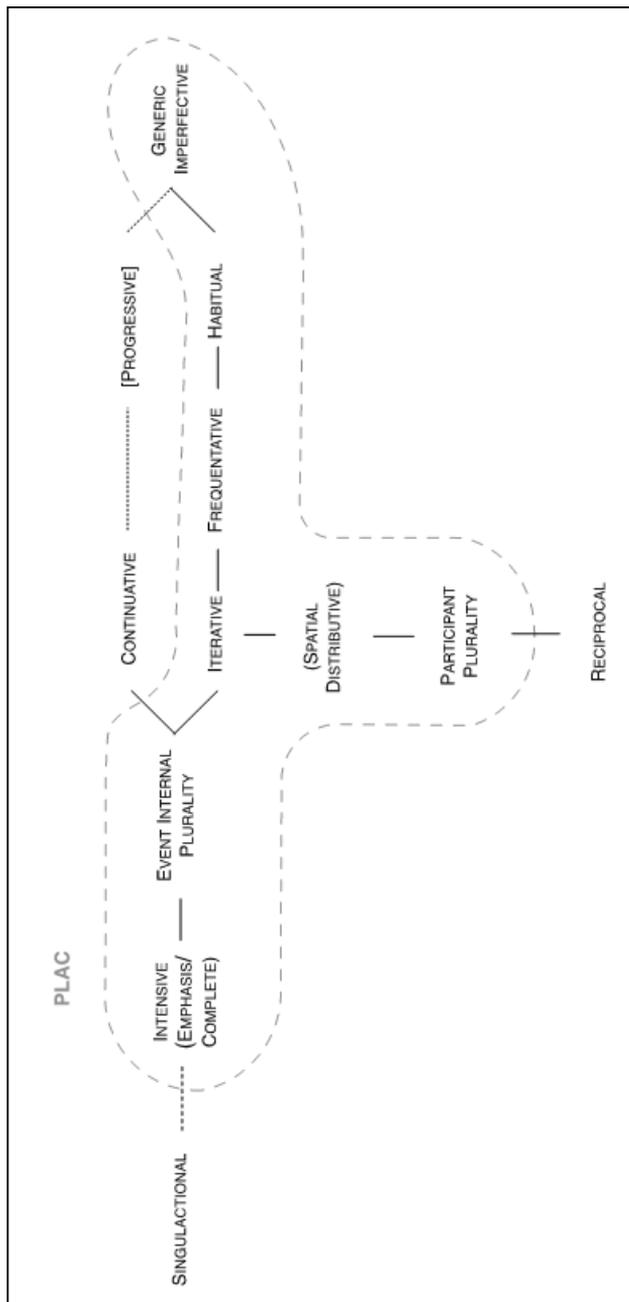
The functions conveyed by the 77 occurrences of Pluractional forms found are similar to those of the Intensive.

Table 3. Functional sets of Pluractional occurrences in Beja

Function(s)	N° of occurrences	Percentage
Iterative	41	53.2 %
Iterative/Frequentative	7	9.1 %
Iterative/Spatial distributive	5	6.5 %
Iterative/Event internal plurality	1	1.3 %
Participant plurality	7	9.1 %
Frequentative/Habitual	1	1.3 %
Generic imperfectivity	1	1.3 %
Intensive	2	2.6 %
Dubious cases	12	15.6 %
Total	77	100 %

The semantic map of Pluractional reduplication is shown in Figure 5.

Figure 5. The semantic map of the Pluractional in Beja



The linguistic situation of Beja is different from that of Akawaio. The functional domain of both Beja markers is more ‘centered’ in the core-functions area. This is revealed by the frequency of the single functions. The most frequent function is iterativity, and the other functions with a significant distribution (though less than iterative) are all functions placed around iterativity in the conceptual space. This means that both the Intensive and Pluractional comprise the core of pluractional meanings among their functions, as well as additional functions that are semantically closer to this core.

These characteristics allow us to hypothesize that pluractional markers in Beja constitute an independent grammatical category, and, more specifically, they represent two verbal derivations (cf. also [Vanhove 2017]). This also seems to be suggested by the frequent co-occurrence of pluractional morphemes with other types of markers with which they should theoretically be in competition. For example: aspectual markers (Imperfective) and other verbal derivations (Middle and Causative) (cf. (23)).

- BEJA (Afroasiatic, Cushitic)
- (23) *mali-a* *o:n* *o:=dʒina*
 two-ORD PROX.SG.M.ACC DEF.SG.M.ACC=baby
wi=si-ra:kʷo:-m-i:ni=b
 REL.M=CAUS-be_afraid\INT-MID-IPFV.3SG.M=INDF.M.ACC
 ‘Then the baby who has nightmares...’
 (BEJ_MV_NARR_33_MEAT_09)

3.3. *Maa*¹⁰

Maa (or *Maasai*) is a Nilotic language spoken in Kenya and Tanzania belonging to the Eastern Nilotic sub-group.

There are two marking strategies to express pluractional functions in *Maa*: (i) lexical alternation¹¹ (cf. (24)), and (ii) reduplication (cf. (25)).

¹⁰ The *Maa* texts analyzed for this section were provided by Doris L. Payne who collected, transcribed, and glossed them for a research project partially supported by NSF grants SBR-9616482 (18987–1999) and SBR-9809387 (1998–2004) and by U.S. Fulbright Foundation fellowships (1993–1994 and 2009–2010).

¹¹ In this case, by *lexical alternation* I mean a couple of verbs that, although they are not inflectionally correlated (i.e., they do not belong to the same paradigm and thus they are two separated lexical items), share the same

In the following examples both these strategies express participant plurality.

- MAA (Nilotic, Eastern Nilotic)
 (24a) *tɛ-n[HL]-ɛ-lo(t)* *kuliê* *áñítie*
 OBL-CN1-3-go.SG others.ACC houses.ACC
 ‘when **he goes** to other homes’ (elengon2.010b)
- (24b) *n-ɛ-po(n)-í* *áa-ya-ú(n)*
 CN1-3-go.PL-PL INF.PL-take-TOWARD
ílɔ̃ *rinká*
 that.MSG.ACC club.ACC
 ‘**They went** to bring that club...’ (arinkoi.041a)
- MAA (Nilotic, Eastern Nilotic)
 (25) *n[HL]-kí-duj-i-duj*
 CN1-1PL-cut-EP-cut
 ‘We shall **cut it into pieces.**’ (arinkoi.011b)

In my corpus, I found 396 occurrences of lexical alternation (238 singular verbs and 158 plural) and 52 occurrences of reduplicated verbs.

From a functional point of view, it is noteworthy that lexical alternation expresses one single function, that of participant plurality, as example (24) exemplifies. This is not surprising because one of the few form-function matches that can be typologically identified deals with the common correspondence between lexical alternation and participant plurality [cf. Mattiola 2017b: 99–109]. Another important consideration concerning this strategy in Maa is that it only applies to a single verb, that is, the verb *lo(t)/po(n)* ‘go (SG/PL)’.

Table 4 shows the functions conveyed by reduplication.

semantics; but, while one of these lexemes expresses a single situation (singular verb), the second one expresses a plurality of situations (plural verb). Often, this marking strategy conveys participant plurality [Mattiola 2017b: 99–109]. In the literature, the same phenomenon is usually called *stem alternation* or *suppletion*. However, both terms are not completely satisfactory because both refer to two different forms of the same lexeme.

Table 4. Occurrences of reduplicated forms in Maa

Functions		N° of occurrences	Percentage
Pluractional	Iterative	9	17.3 %
	Participant plurality	10	19.2 %
	Iterative/Participant plurality	1	1.9 %
	Frequentative	2	3.9 %
	Habitual	1	1.9 %
	Total	23	44.2 %
Lexicalized		25	48.1 %
Repetition (Textual reduplication ¹²)		4	7.7 %
Total		52	100 %

Table 4 raises some interesting issues. In Maa, less than 50% of reduplication occurrences expresses a pluractional function. The majority of these are lexicalized forms, that is, forms that do not display an underived counterpart. However, these forms seem to retain a sort of pluractional reading. This is because they tend to encode situations that are inherently plural ('repetitive actions') rather than 'repeated actions' (pluractionality) [cf. Cusic 1981: 78]¹³. This is the case of the verb 'boil' in the example below.

MAA (Nilotic, Eastern Nilotic)

(26) [L]-ε-*itəkɪtək*

TEMP-3-boil

'When it was still boiling...'

(arinkoi.019b)

This is not completely unexpected since a situation that is inherently plural tends to always appear in pluractional contexts and, thus, we can suppose that ideally the underived form should have a low frequency. This in turn probably makes the reduplicated form understood as the actual underived form due to its frequency.

The semantic map of Maa is presented in Figure 6 below.

¹² Here, with *repetition* or *textual reduplication*, I mean a repetition of a word (often in its entirety) that is not grammaticalized and thus it is not considered a morphological repetition (as with reduplication), but rather a syntactic repetition. Often, this kind of repetition has textual/pragmatic purposes rather than grammatical ones.

¹³ The terminology used by Cusic [1981] is different from mine. However, his concept of *repetitive action* basically corresponds to my *event-internal plurality*, and his *repeated actions* corresponds to my *iterativity*.

Figure 6. The semantic map of pluractional markers in Maa

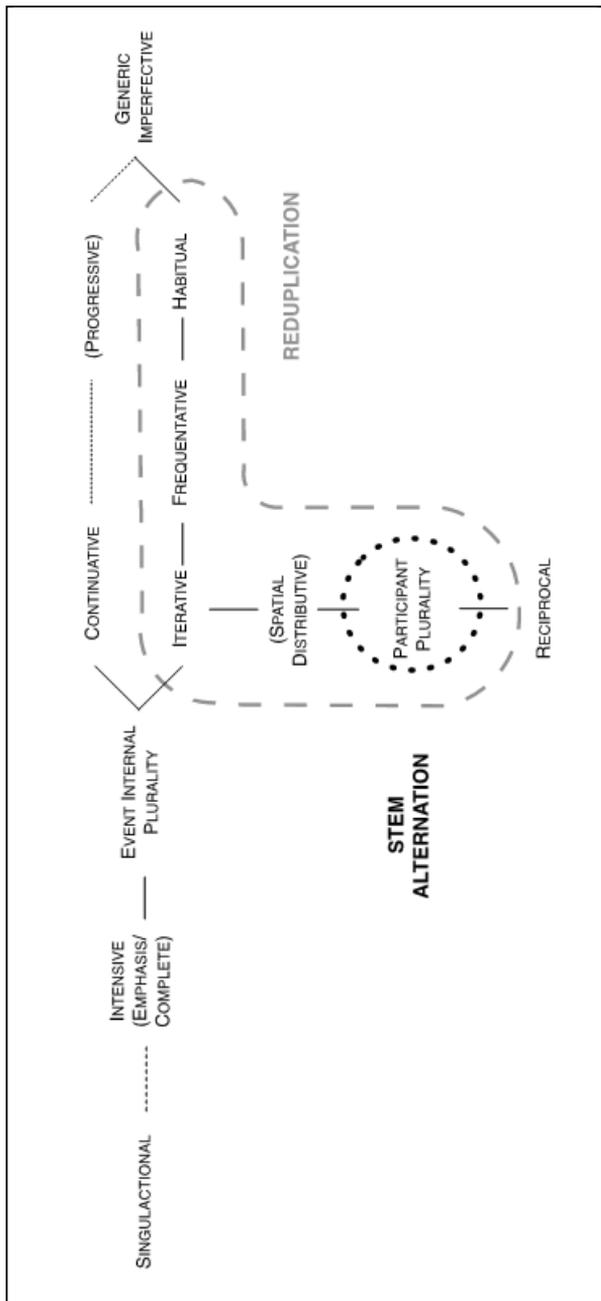


Table 4 and Figure 6 seem to point in the same direction: in Maa, quite possibly pluractionality is no longer a very widespread phenomenon. Further evidence supports this statement. Firstly, the frequency of both types of pluractional marking strategies, as stated above. The occurrences of real pluractional reduplicated forms are limited to 23 out of 52 (less than 50%), though this strategy seems to be productive (it applies to several verbs, Doris Payne, p. c.). On the other hand, lexical alternation shows a more frequent presence in the texts, but this is due to the high frequency of the single verb that it involves ('go'). In addition, lexical alternation only affects a single lexeme and it is not widespread in the lexicon. Consequently, it cannot be considered a fully productive device. Secondly, the functions covered by pluractional markers in Maa are only core functions (participant plurality, spatial distributivity, iterativity, frequentativity, and additional habitual reading). This is a very uncommon behavior cross-linguistically speaking. Pluractional markers usually encode a wide range of functions and are considered multifunctional, as the situations of Akawaio and Beja discussed in Sections 3.1 and 3.2 show. All of these factors help us suppose that pluractionality may well be a marginal phenomenon in Maa. However, it seems that at the same time a potential new pluractional marker is rising: the andative marker *-áa* AWAY [cf. Payne 2013].

There are two directional markers in Maa: the andative AWAY *-áa* and the venitive TOWARD *-ú*.

- | | |
|-------------------------------------|-------------------|
| MAA (Nilotic, Eastern Nilotic) | [Payne 2013: 260] |
| (27a) <i>a-súj</i> | |
| INF.SG-follow | |
| 'to follow' | |
| (27b) <i>a-súj-aá</i> ¹⁴ | |
| INF.SG-follow-AWAY | |
| 'to follow away' | |
| (27c) <i>a-súj-ú</i> | |
| INF.SG-follow-TOWARD | |
| 'to follow hither' | |

¹⁴ Maa is a language with a quite pervasive tonal system. For this reason, the directional morpheme can change depending on the context.

In my texts, I found 95 occurrences of *-áa*. In the majority of the cases, *-áa* conveys a true directional function. Nevertheless, in some cases it can express a plurality of situations (cf. (28)).

- MAA (Nilotic, Eastern Nilotic)
- (28) *n[HL]-è-puo(n)* *adé* *il=márrân*
 CN1-3-go.PL later M.PL=warriors.NOM
ll-ɔɔ *il=áíkípa*
 M.PSD-PSR.PL.ACC M.PL=Laikipia.people.NOM
áa₁-puo(n) *áa-inɔs-áa*
 INF.PL-go.PL INF.PL-tell-AWAY
 ‘the Laikipia warriors went to report (tell out/tell repeatedly)’
 (emutata.036b)

This kind of situation is not very frequent; it represents 8.4 % of the situations examined (eight out of 95 occurrences). However, there are also situations in which the andative marker expresses both a directional and a pluractional function. For example, this is the case with the verb ‘surround/encircle’ that, when derived with *-áa*, means ‘to keep moving around’.

- MAA (Nilotic, Eastern Nilotic)
- (29) *n[HL]-è-man-áa* *taá* *te* *ɔl=cháni*
 CN1-3-surround-AWAY FOC.EXCL OBL M.SG=tree.NOM
 ‘He [the warrior advising the hero] kept moving (from one end to the other addressing the audience) in the meeting.’
 (arinkoi.056a)

I found seven out of 95 occurrences with similar situations (7.4%).

Consequently, approximately 16% of andative occurrences express a pluractional function (or a pluractional function in addition to a directional one). This gives evidence of a possible extension of the functional domain of andative marker *-áa* towards a multiplicity of situations. More evidence is given by the type of verbs to which this marker can be applied. The marker mainly operates on verbs of movement, both for the actual directional and the pluractional functions, as expected, but, as (28) has shown, it seems that the pluractional reading is also conveyed by other types of verbs for which a directional reading is not coherent.

4. Typological consequences: the non-universality of grammatical categories

In previous sections, I analyzed how some pluractional markers work in specific languages. One of the most relevant outcomes is that pluractionality can display quite different peculiarities from language to language. The only element that probably shows less variation is the functional domain, though in this case as well we found broad multifunctionality and some interlinguistic differences (cf. for example the functional domain in Akawaio on the one hand and in Beja and Maa on the other). This evident heterogeneity, though a quite common characteristic in cross-linguistic investigations, has raised some problems in the typological literature on the grammatical classification of such kind of markers. We can find several proposals for conceiving pluractionality from a theoretical point of view. In the literature, different scholars propose considering these markers as belonging to different grammatical categories: some scholars describe pluractionality as actionality [cf. Dressler 1968; Cusic 1981; Xrakovskij 1997], others as a case of verbal aspect [cf. Comrie 1976; Bybee et al. 1994; Corbett 2000], still others as an independent or mixed phenomenon [cf. again Corbett 2000]. It is evident that the situation is not straightforward and that these proposals cannot all be considered as valid at the same time.

Nevertheless, all of them capture some relevant nuances that do characterize the pluractional markers of some specific languages. This means that all of these proposals are simultaneously correct and incorrect. How can we account for this apparent contradiction? In a cross-linguistic perspective, grammatical phenomena cannot be explained in reference to certain pre-established categories that are usually defined following the description of grammatical structures of the classical Indo-European languages (mainly, ancient Greek and Latin). They can be better explained when we consider them as only language- and construction-specific instances. This means that grammatical categories and relations of specific languages cannot be thought of as universally valid and, thus, every language must be described and analyzed according to its own structures. Usually, grammatical categories are defined as “a class of elements that display at least partially overlapping grammatical properties” [Cristofaro 2009: 441]. The elements comprising categories undeniably share common properties, characteristics and grammatical behaviors. Nevertheless, they also show several differences

as we have seen, for example, in the pluractional constructions of the three languages analyzed in this paper. Haspelmath [2007] notes that:

“it is important to realize that similarities do not imply identity: It is very hard to find categories that have fully identical properties in two languages, unless these languages are very closely related. (...) [O]ne has to start with the awareness that each language may have totally new categories” [Haspelmath 2007: 126].

Often, linguists tend to focus more on similarities giving less importance to differences, even if the latter are often more pervasive than the former. Obviously, “this does not mean (...) that grammatical relations [and categories] will be entirely incommensurable across languages” [Cristofaro 2009: 469], but we have to keep in mind that in practicing typology, the terms we use should be conceived only as classificatory labels that help in grouping sets of different constructions that share a specific semantic or pragmatic value. Again, Haspelmath [2007] notes that

“[t]he most important consequence of the non-existence of pre-established categories for language typology is that cross-linguistic comparison cannot be category-based, but must be substance-based, because substance (unlike categories) is universal” [Haspelmath 2007: 124].

Thus, in cross-linguistic studies, we must base our investigation on what in the literature is called ‘a comparative concept’, that is, a concept defined by typologists for comparative purposes [cf. Haspelmath 2010] rather than a presumedly valid cross-linguistic category. This is because grammatical categories and relations do not exist outside of the language they are used for, and cross-linguistically they are better understood as language- and construction-specific. These comparative concepts are the result of linguists’ analyses and they do not necessarily have an actual correspondence within a specific language’s grammar (i.e., they are different from language specific descriptive categories).

Naturally, this also applies to pluractional markers. In previous sections, I analyzed pluractional markers in three different languages. Though functionally they are similar, from a formal and morphological point of view they have different properties. In Akawaio, the pluractional marker *-pödi* resembles actual aspectual markers, but at the same time it can co-occur with some of them, and more specifically, with the progressive marker. Beja adopts two different marking

strategies to express a plurality of situations, and they both seem to be stable independent verbal derivations (Vanhove [2017] proposes a dedicated section within her grammatical description of the language). Finally, Maa has two pluractional strategies that do not seem to be very productive or limited to a very small portion of the lexicon, and this makes them less pivotal in Maa grammar. This is also supported by another piece of evidence, that is, the probable evolution of a new pluractional marker.

This situation that I have illustrated for these three languages becomes even more evident if we broaden our analysis to a typological sample of languages [cf. Mattioli 2017b]. What clearly emerges is that cross-linguistically pluractionality does not represent a consistent category (even though it can exist in specific languages, cf. Beja). It is better explained as a classificatory label (in the sense of a comparative concept) used to refer to a set of different constructions in different languages that share the same functional/semantic property of encoding a plurality of situations.

5. Conclusion

In this paper, I have analyzed the functional domain of pluractional markers in three languages in order to investigate the grammatical status that they have within their relative grammars. In addition, it also allowed me to answer the highly debated question on the conceptualization of this kind of phenomenon from a cross-linguistic perspective. Specifically, I analyzed the pluractional systems of Akawaio (Cariban, Venezuelan), Beja (Afroasiatic, Cushitic), and Maa (Nilotic, Eastern Nilotic). In these languages, pluractional markers present several differences. In Akawaio, the morpheme *-pödi* seems to be an aspect-like marker, but at the same time some properties it shows make this classification incorrect. In Beja on the other hand, the two pluractional marking strategies seem to constitute an independent phenomenon. In Maa this phenomenon is not as frequent as in the other two languages, but it seems that a new incoming pluractional marker is emerging. This marker (the andative *-áa*) is strictly related to motion and, specifically, to directionality. The investigation of these markers in three different languages raises the question of how we can grammatically classify pluractionality in a cross-linguistic perspective. The response that I propose here consists in considering pluractionality

as language- and constructions-specific, following the proposals of certain scholars [cf. Dryer 1997; Croft 2001; Haspelmath 2007, 2010; Cristofaro 2009]. This new conceptualization leads us to consider pluractionality as a non-universally valid category, and as a comparative concept useful for comparing the markers and phenomena of different languages.

Abbreviations

1 — 1st person; 2 — 2nd person; 3 — 3rd person; I — Active for non-past; II — Active for past; + — Affirmative polarity series; A — Subject of transitive verb; ABL — Ablative case; ABS — Absolutive case; ACC — Accusative case; ADV — Adverb; AI — Addressee involvement; ANT — Anteriority; AOR — Aorist; ATTR — attribute; AWAY — Andative; BEN — Benefactive; CAUS — Causative; CL — Coordinating linker; CN1 — Connective 1; CNJ — Coordinating conjunction; COMP — Completive; COORD — Coordinator; COP — Copula; CSL — Causal; CVB — Converb; D — Dative of ditransitive verb; DAT — Dative case; DEF — Definite; DEF.F/M — Definite Feminine/Masculine (gender); DET — Determiner; DISTR — Distributive; DLMT — Delimitative; DUR — Durative; EMPH — Emphasis; EP — Epenthetic; ERG — Ergative case; EXCL — Exclusive; F — Feminine; FOC — Focus; FREQ — Frequentative; FUT — Future; INDF — Indefinite; INF — infinite; INT — Intensive; IPFV — Imperfective; IRR — Irrealis; ITER — Iterative; L — Linker (Enumeration); LOC — Locative case; M — Masculine; MID — Middle; MNR — Manner; NOM — Nominative case; NR — Non-realis (subject-modality clitic); OBL — Oblique case form; OBJ — Object; ORD — Ordinal; PASS — Passive; PFV — Perfective; PL(2) — Plural(2) (for both nominal and verbal number depending on the reference); PLAC — Pluractional; PRO — Pronoun; PROG — Progressive; PROX — Proximal; PRS — Present; PSD — Possessed; PSR — Possessor; (FAR[^]/RM.)PST — (Far/Remote) Past; RECP — Reciprocal; RED — Reduplication; REL — Relative; REPEAT — V repeatedly; SBJ — Subject; SFOC — Subject focus; SG — Singular; SOF — Softener; ST — Stative series; STYLE — stylistic; (sv.) — Subject-verb relation (downstep not audible); TEMP — Temporal mode; TOWARD — Venitive; TR — Transitive; V — Gender agreement marker (gender class; marker is /v/); V — Verb; WP — Witnessed past tense.

Bibliography

- Bar-el 2008 — L. Bar-el. Verbal Number and Aspect in Skwkwú7mush // *Recherches Linguistiques de Vincennes* 37, 2008. P. 31–54.
- Bybee 1985 — J. Bybee. *Morphology: A Study of the Between Meaning and Form*. Amsterdam: John Benjamins, 1985.

- Bybee et al. 1994 — J. Bybee, R. Perkins, W. Pagliuca. *The evolution of grammar: tense, aspect, and modality in the languages of the world*. Chicago, IL: The University of Chicago Press, 1994.
- Cabredo-Hofherr, Laca 2012 — P. Cabredo-Hofherr, B. Laca. Introduction — event plurality, verbal plurality and distributivity // P. Cabredo Hofherr, B. Laca (eds.). *Verbal Plurality and Distributivity*. Berlin: Mouton de Gruyter, 2012. P. 1–24.
- Caesar-Fox 2003 — D. C. Caesar-Fox. *Zauro'nödok Agawayo Yau: variants of Akawaio spoken at Waramadong*. Doctoral dissertation, Rice University, Houston, TX, 2003.
- Chelliah 1997 — Sh. Chelliah. *A Grammar of Meithei* (Mouton Grammar Library, 17). Berlin: Mouton de Gruyter, 1997.
- Comrie 1976 — B. Comrie. *Aspect*. Cambridge: Cambridge University Press, 1976.
- Comrie 1982 — B. Comrie. *Grammatical Relations in Huichol* // P. J. Hopper, S. A. Thompson (eds.). *Studies in Transitivity*. New York, NY: Academic Press, 1982. P. 95–115.
- Corbett 2000 — G. Corbett. *Number*. Cambridge: Cambridge University Press, 2000.
- Cristofaro 2009 — S. Cristofaro. *Grammatical categories and relations: universality vs. language specificity and construction-specificity* // *Language & Linguistics Compass* 3(1), 2009. P. 441–479.
- Croft 2001 — W. Croft. *Radical Construction Grammar: syntactic theory in typological perspective*. Oxford: Oxford University Press, 2001.
- Cusic 1981 — D. Cusic. *Verbal plurality and aspect*. Doctoral dissertation, University of Stanford, Stanford, CA, 1981.
- Dahl 1985 — Ö. Dahl. *Tense and aspect systems*. Oxford: Blackwell, 1985.
- De Feu 1996 — V. De Feu. *Rapanui* (Descriptive Grammars Series). London: Routledge, 1996.
- Dimmendaal 1983 — G. Dimmendaal. *The Turkana Language*. Dordrecht: Foris Publications, 1983.
- Dressler 1968 — W. Dressler. *Studien sur verbalen Pluralität: Iterativum, Distributivum, Durativum, Intensivum in der allgemeinen Grammatik, in Lateinischen und Hethitischen*. Wien: Hermann Böhlau Nachf., 1968.
- Dryer 1997 — M. Dryer. *Are grammatical relations universal?* // J. Bybee, J. Haiman, S. A. Thompson (eds.). *Essays in language function and language type*. Amsterdam: John Benjamins, 1997. P. 115–143.
- Durie 1986 — M. Durie. *The Grammaticization of Number as a Verbal Category* // V. Nikiforidou, M. VanClay, M. Niepokuj, D. Feder (eds.). *Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistics Society: February 15–17, 1986, Berkeley*. Berkeley, CA: Berkeley Linguistics Society, University of California, 1986. P. 355–370.
- Foley 1991 — W. Foley. *The Yimas Language of New Guinea*. Stanford, CA: Stanford University Press, 1991.

- Frajzyngier 1985 — Z. Frajzyngier. Ergativity, number, and agreement // M. Niepokuj, M. Van Clay, V. Nikiforidou, D. Feder (eds.). *Proceedings of the Eleventh Annual Meeting of the Berkeley Linguistics Society*, February 16–18. Berkeley, CA: Berkeley Linguistics Society, University of California, 1985. P. 96–106.
- Gildea 2012 — S. Gildea. Linguistic studies in the Cariban family // L. Campbell, V. Grondona (eds.). *The Indigenous Languages of South America: A Comprehensive Guide*. Berlin: Mouton de Gruyter, 2012. P. 441–494.
- Haspelmath 2003 — M. Haspelmath. The geometry of grammatical meaning: Semantic maps and cross-linguistic comparison // M. Tomasello (ed.). *The new psychology of language*. Vol. 2. Mahwah, NJ: Erlbaum, 2003. P. 217–242.
- Haspelmath 2007 — M. Haspelmath. Pre-established categories don't exist: consequences for language description and typology // *Linguistic Typology* 11(1), 2007. P. 119–132.
- Haspelmath 2010 — M. Haspelmath. Comparative concepts and descriptive categories in crosslinguistic studies // *Language* 86, 2010. P. 663–687.
- Jones, Jones 1991 — W. Jones, P. Jones. *Barasano Syntax*. Dallas, TX: SIL & University of Texas at Arlington, 1991.
- Kilian-Hatz 2008 — Ch. Kilian-Hatz. *A Grammar of Modern Khwe (Central Khoisan)*. Köln: Rüdiger Köppe, 2008.
- Mattiola 2017a — S. Mattiola. The conceptual space of pluractional constructions // *Lingue e linguaggio* 16(1), 2017. P. 119–146.
- Mattiola 2017b — S. Mattiola. *Typology of pluractional constructions in the languages of the world*. Doctoral dissertation, Università degli Studi di Bergamo/Università degli Studi di Pavia, Bergamo — Pavia, 2017.
- Mithun 1988 — M. Mithun. Lexical Category and the Evolution of Number Marking // M. Hammond, M. Noonan (eds.). *Theoretical Morphology: Approaches in Modern Linguistics*. San Diego, CA: Academic Press, 1988. P. 211–234.
- Newman 1980 — P. Newman. *The Classification of Chadic within Afroasiatic*. Leiden: Universitaire Pers., 1980.
- Newman 1990 — P. Newman. *Nominal and Verbal Plurality in Chadic*. Berlin: Mouton de Gruyter, 1990.
- Ongaye 2013 — O. O. Ongaye. The Category of Number in Konso // A. Mengozzi, M. Tosco (eds.). *Sounds and Words through the Ages: Afroasiatic Studies from Turin*. Alessandria: Edizioni dell'Orso, 2013. P. 253–266.
- Paperno 2014 — D. Paperno. Grammatical sketch of Beng // *Mandenkan* 51, 2014. P. 1–130.
- Payne 2013 — D. L. Payne. The challenge of Maa 'Away' // T. Thornes, E. Andvik, H. Gwendolyn, J. Jansen (eds.). *Functional-Historical Approaches*

- to Explanation: In Honor of Scott DeLancey. Amsterdam: John Benjamins, 2013. P. 260–282.
- Sambou 2014 — P. Sambou. Relations entre les rôles syntaxiques et les rôles sémantiques dans les langues jóola. Doctoral dissertation, Université Cheikh Anta Diop de Dakar, Dakar, 2014.
- Steehan 2012 — S. Steehan. A grammar of Sandawe: a Khoisan language of Tanzania. Doctoral dissertation, Universiteit Leiden, Leiden, 2012.
- Vanhove 2014 — M. Vanhove. Beja Grammatical Sketch // A. Mettouchi, Ch. Chanard (eds.). *The CorpAfroAs Corpus of Spoken AfroAsiatic Languages*, 2014. <http://dx.doi.org/10.1075/scl.68.website>. Accessed on 15/12/2016.
- Vanhove 2017. — M. Vanhove. *Le Bedja*. Leuven: Peeters, 2017.
- Wood 2007 — E. Wood. The semantic typology of pluractionality. Doctoral dissertation, University of California, Berkeley, CA, 2007.
- Woollams 1996 — G. Woollams. *A Grammar of Karo Batak, Sumatra*. Canberra: Research School of Pacific and Asian Studies, Australian National University, 1996.
- Xrakovskij 1997 — V. Xrakovskij. Semantic types of the plurality of situations and their natural classification // V. Xrakovskij (ed.). *Typology of Iterative Constructions*, 3–64. München: LINCOM, 1997. P. 3–64.