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PLURACTIONALITY IN CHECHEN*

Pluractionality (PLR) is the morphological category that generally signifies multiple actions. This paper, based on original fieldwork, provides the first investigation of PLR in Chechen, a Nakh language spoken in the eastern central part of the North Caucasus. The data reflects the standard dialect of Chechen spoken in and near the cities of Murus-Martan and Grozny. Chechen PLR, which is marked by stem vowel alternations, prototypically signifies the repetition of an event (e.g., *saca/sieca* 'to stop once/many times'; *laaca/liica* 'to catch once/many times'). The plurality of the nominative argument can affect the interpretation of some verbs (e.g., *ghitta* 'to wake up'; *hitta* 'to assume a standing position'), rendering the reading distributive. More interestingly, a durative reading, signaling the prolongation of an event, is available for some verbs (e.g., *xouzha/xiizha* 'to ache momentarily/for a while', *zouza/ziiza* 'to itch momentarily/for a while') but not others. Following Ojeda (1998) and Lasersohn (1995), PLR is accounted for in terms of the pluralization of the event argument of a predicate. The various semantic effects are the results of interactions between the aspectual properties of individual verbs and event pluralization.

1. INTRODUCTION

Number marking on noun phrases is commonplace in the world's languages. However, as pointed out by Cusic (1981), the morphological marking of verbal plurality, that is, the morphological operation that signifies multiple actions (not plural agreement in verbs), has received little attention in the literature, even though such category is found in numerous languages: e.g., Native American languages (cf. Mithun 1988), Austronesian languages (cf. Durie 1986), Afroasiatic (cf. Newman 1990), and Indo-European (Dressler 1968).

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One of the prototypical functions of verbal plurality is to signify repeated or repetitive actions. Thus, in Karok, a language of northern California, the suffix *-va* functions mainly as an action multiplier.

- (1) Karok (Bright 1957, p. 92, taken from Mithun 1988)
- | | |
|------------|------------------------------|
| taknah | ‘to hop’ |
| takná-h-va | ‘to play hopscotch’ |
| vík-paθ | ‘to weave around (once)’ |
| vikpá-θ-va | ‘to weave around and around’ |

However, verbal plurality also regularly carries other secondary functions. For example, the *-va* suffix in Karok may indicate a plural subject in intransitive verbs ((2a)) and a plural patient in transitive verbs ((2b)). These interpretations can be understood as the actions multiplied by the *-va* suffix being distributed over multiple agents or multiple patients.

- (2) a. θivrú-htih ‘(one object) to be floating’
 θivru'hti-h-va ‘(several objects) to be floating’
 ikyí-m-kurih ‘(one) to fall in’
 ikyimku'rih-va ‘(several) to fall in’
- b. pasnáp-iš(rih) ‘to glue down (one)’
 pasnapi'šri-h-va ‘to glue down (several)’
 itráa-mnihtih ‘to be looking into (one object)’
 itramni'hti-h-va ‘to be looking into (several objects)’
 (Bright 1957, pp. 92–93)

While much energy has been devoted in the past to modeling the different facets of nominal plurality in formal terms, little is known about the formal properties of verbal plurality (henceforth VPL). Cusic (1981) proposed that there are three ontologies of eventualities – phrases, events, and occasions – and that VPL could be understood in terms of the four parameters listed in (3).

- (3) a. The phase/event/occasion (or event ratio) parameter
 b. The relative measure parameter
 c. The connectedness parameter
 d. The distributive parameter

The event ratio parameter is used to set the eventuality as denoted by pluractional verbs. The relative measure parameter is concerned with the relative size of the repetitions (i.e., the degree of effort and/or the efficacy of results). The setting of this parameter helps obtain readings such as the diminutive, conative, incassative, or intensive. The connectedness parameter

fixes the degree of continuity between the repeated actions, or the relative prominence or importance ascribed to the bounds of the individual repetitions. This parameter allows for readings ranging from fully continuous to thoroughly separate actions. The final parameter, the distributive parameter, determines whether the multiple actions are separated in time or some other way (e.g., actor from actor).

While these parameters are useful for descriptive purposes, the motivations behind their existence remain a mystery. Through a close examination of the semantics of pluractional verbs in Chechen, we reveal the mechanisms underlying why verbal pluralization behaves the way it does and offer a theory of pluractionality to account for the Chechen data. In the course of the discussion, we will also examine briefly what verbal plurality reveals about the aspectual system of Chechen.

We begin by outlining the basic verbal morphology of Chechen in section 2. A general discussion of pluractionality in Chechen ensues in section 3. Section 4 presents a theory of Chechen verbal pluralization and re-examination of the different semantic effects of verbal pluralization. A discussion and the conclusion follow in section 5 and section 6 respectively.

2. CHECHEN: BACKGROUND INFORMATION

All Chechen data presented in this paper are based on the standard dialect of Chechen that is spoken in the cities of Urus-Martan and Grozny and areas in their vicinity. Chechen, with Ingush and Batsbi, forms the Nakh subgroup of the larger Nakh-Daghestanian family. The data presented in this study are based on original fieldwork done between 1999 and 2001. Chechen is extremely underdocumented. Except for the brief sketches in Nichols (1994) and Matsiev (1995), the inner workings of verbal pluralization in Chechen are largely unknown. The examples given in this paper are cited in the orthographic convention developed for the Berkeley Chechen-English Dictionary Project directed by Prof. Johanna Nichols, since the discussion does not hinge on the exact phonetic realization of the examples.

3. VERBAL PLURALIZATION IN CHECHEN

3.1. *The Phonology of Verbal Pluralization*

As noted by many Nakh-Daghestanian grammarians (e.g., Holisky 1984; Nichols 1994; Schulze 1997), verbs in these languages often come in pairs, differentiated semantically only in terms of what we refer to here

as *pluractionality* (following Newman 1990).¹ In Chechen, about 20% of the verbal lexicon is marked for pluractionality by way of ablaut. Phonologically, the theme (stem) vowel of a pluractional verb is generally the high, front counterpart of the theme vowel in a non-pluractional verb. The three types of theme vowel alternation are illustrated in (4). The theme vowel of the non-pluralized stem is to the left of the ‘~’, whereas the theme vowel of the pluralized stem is to its right.

(4)	<i>Vowel alternation</i>	<i>Examples</i>
	a, aa ~ ie	saga ‘to shine’ ~ siega ‘to shine continuously’ d.aat’a ‘to rip’ ~ iet’a ‘to rip repeatedly’
	ow ~ ii	hxowza ‘to rotate’ ~ hxiiza ‘to rotate repeatedly’
	a, aa ~ i	tatta ‘to push’ ~ titta ‘to push repeatedly’ marakhdaala ‘to get one’s comeuppance’ ~ marakhdiila ‘to get one’s comeuppance repeatedly’

However, it should be noted that phonology *per se* cannot be used as a predictor of pluractionality. Non-pluractional verbs with {ie, ii, i} theme vowels are numerous (e.g., *d.ieka* ‘to make sound’, *iegha* ‘to quarrel’, *q’iila* ‘to become impoverished’, *tiizha* ‘to lament’).²

¹ Terminology for this pairing differs greatly between researchers. Holisky simply refers to them as perfective and imperfective roots, while Schulze prefers durative vs. non-durative. In this paper the terms ‘verbal pluralization’ and ‘pluractionality’ are used since we believe that these terms best capture the distinction between the two root forms. We should also note that some verbs, in addition to the pluralized version, have a third form, which sub-categorizes for a plural absolutive argument.

² Certain verbs in Chechen could be four different instantiations of the same root:

(i)	‘to chase’	<i>Non-pluractional</i>	<i>Pluractional</i>
	SG ABX	lalla (a)	lialla (b)
	PL ABS	lakhka (c)	liakhka (d)
a.	as xyyrana	jiatt dxa- liallira	
	I in the morning	cow DX.chase.WP	
		‘I chased a cow in the morning.’	
b.	as hoora xyyrana	jiatt dxa- lwellura	
	I every morning	cow DX.chase.PLR.WP	
		‘I chased a cow every morning.’	
c.	as xyyrana	bezhnash dxa- liakhkira	
	I in the morning	cattle.PL DX-chase.WP	
		‘I chased cows in the morning.’	

In the next section, we begin discussion of the different semantic effects of Chechen verbal pluralization.

3.2. *Semantics of Pluractional Verbs in Chechen*

There are three possible semantic interpretations associated with the theme vowel alternation: (a) frequentative/habitual, (b) distributive, and (c) durative. In the following, we will examine each of these categories and attempt to understand how verbal pluralization gives rise to these different readings.

3.2.1. *Frequentative/Habitual Reading*

The prototypical semantic effect of the theme vowel alternation is the multiplication of the event denoted by the non-pluractional verb (for ease of reference, non-pluractional verbs will be referred to as simple verbs from here on), as exemplified by the verb pairs shown below.³

(5)	d.uttu	'to pour'	d.yttu	'to pour repeatedly'
	molu	'to drink'	myylu	'to drink repeatedly'
	loosu	'to sift'	lyysu	'to sift repeatedly'
	q'oiq'a	'to thunder'	q'ieq'a	'to thunder repeatedly'
	tosu	'to throw or spit'	tyysu	'to throw or spit repeatedly'
	teba	'to sneak up'	tieba	'to sneak up repeatedly'
	loocu	'to capture'	loecu	'to capture repeatedly'
	loqu	'to play/to sing'	loequ	'to play/to sing repeatedly'

d. as hoora xyyrana bezhnash dxa-likhkira
 I every morning cattle.PL DX.chase.PLR.WP
 'I chased cows every morning.'

The main verbs in (ib) and (id) are both the pluractional versions of the verb 'to chase'. (ia) and (ic) are their non-pluractional counterparts, respectively. The difference between (ia) and (ic) and between (ib) and (id) is that both verbs in (ic) and (id) require their respective absolutive argument to be plural, while (ia) and (ib) have no such restriction. The process of argument pluralization is largely orthogonal to VPL, thus we will have nothing more to say about this.

³ Frequentative and habitual readings are collapsed into one category here since it is unclear that these two readings are distinct. As far as can be discerned from the data, the choice between a frequentative and a habitual reading depends on the context.

socu	‘to stop’	soecu	‘to halt repeatedly’
khu’u	‘to sit down’	khyyshu	‘to sit down repeatedly’
costu	‘to incise’	coesto	‘to incise repeatedly’
tottu	‘to push’	tyttu	‘to push repeatedly’
khoattu	‘to ask’	khoettu	‘to ask repeatedly’
qousa	‘to pump/to blow’	qiisa	‘to blow repeatedly’
d.oolu	‘to pass or climb over’	dyylu	‘to pass, to climb over repeatedly’

To illustrate this more clearly, let us examine some examples in detail. In (6b), the act of shooting at the crows is being repeated. The event that recurs is the act of shooting.

- (6) a. as q’iigashna **twop-qwessira**
 1SG crow.PL.DAT **gun-throw.WP**
 ‘I shot crows.’
- b. as q’iigashna **twop-qissira**
 1SG crow.PL.DAT **gun-throw.PLR.WP⁴**
 ‘I shot crows many times.’

Consider next the examples in (7).

- (7) a. adama takhan duqqa ‘a chai **melira**
 Adam.ERG today many tea **drink.WP**
 ‘Adam drank a lot of tea today.’
- b. adama takhan duqqa ‘a chai **milira**
 Adam.ERG today many tea **drink.PLR.WP**
 ‘Adam drank a lot of tea over and over again today.’

Analogously, (7b) indicates that, on many occasions, Adam drank a lot of tea. Thus, the event that recurs is the tea-drinking event. This effect of event multiplication is what we refer to as verbal pluralization or pluractionality.

Thus far, we have only seen examples of verbal pluralization that multiplies occurrences of an event as denoted by the verbal predicate. In the next few sections, we will see some of the other possible semantic consequences that are associated with this process.

⁴ The presence of ‘PLR’ in the interlinearized gloss signifies a pluractional verb. Its absence, naturally, indicates a non-pluractional (semelfactive) verb.

3.2.2. *Distributive Reading*

It is commonplace for languages to use verbal pluralization to also indicate the plurality of an absolutive argument. Thus, when the verb is transitive, it can indicate a plural patient. When the verb is intransitive, it marks the plurality of the subject. For example, recall our examples from Karok: the suffix *-va* indicates a plural subject with intransitive and a plural patient with transitive verbs, as shown in (8).

- (8) Karok (Mithum 1988; Bright 1957, pp. 92–93)
- | | |
|--------------------------|--|
| pasnapiš(rih) | ‘to glue down (one)’ |
| pasnapi’š’h- va | ‘to glue down (several)’ |
| itraa’mnihtih | ‘to be looking into (one object)’ |
| itramni’hti’h- va | ‘to be looking into (several objects)’ |

A similar phenomenon is found in Chechen. For certain simple-pluractional verb pairs, when the absolutive argument is plural, the pluractional verb must be used.

- (9)
- | | |
|------------|--|
| ghoattu | ‘to get out of bed’ |
| ghyttu | ‘to get out of bed (several subjects)’ |
| loocu | ‘to catch’ |
| loecu | ‘to catch (several subjects)’ |
| loqu | ‘to sing’ |
| loequ | ‘to sing (several subjects)’ |
| xoakhku | ‘to lie’ |
| xoekhku | ‘to lie (several subjects)’ |
| d.uuzhu | ‘to fall’ |
| oegu | ‘to fall (several subjects)’ |
| mar’iaqqa | ‘to embrace’ |
| marlialkha | ‘to embrace (several subjects)’ |
| lowzu | ‘to step’ |
| lyyzu | ‘to walk around (several subjects)’ |
| huttu | ‘to stand’ |
| hyttu | ‘to stand (several subjects)’ |

Consider the example in (10) below. Although the verbs are pluractional, the sentences in (10) do not have the expected repeated-event reading. (10a) means that all of the family members woke up more or less around the same time very early in the morning. It does not have the expected reading of the family members waking up over and over during the course of the early part of the day. Instead, the pluralization is realized by the waking up of each of the family members. Thus, in Cusic’s terms, the repeated

action as signaled by the pluractionality of the verb is distributed over the participants, instead of repeated through time.

- (10) a. ceera~ duezalsh takhana duqa hxaalkhie
 their members of family today very early
 ghittira
 wake up.PLR.WP
 ‘Their family members work up very early.’
- b. diizhina **xoekhku** tkho
 D.lie.PP **lie.PLR.PRES** 1PL.EX
 ‘We are lying down.’
- c. ysh niaxar ullie **hittira**
 they door by **stand.PLR.WP**
 ‘They assumed a standing position by the door.’
- d. beerash suuna **marlilkhira**
 child.PL 1SG.DAT **hug.PLR.WP**
 ‘The children embraced me.’

The fact that the event characterized by each of these verbs is distributed over multiple subjects does not mean that the repeated-event interpretation is unavailable. When the subject is singular, the repeated-action interpretation is observed, as illustrated in (11).

- (11) a. iza ocu myriahx duqa hxaalkhie **ghittira** (cf. (10a))
 he that period very early **wake up.PLR.WP**
 ‘He often got up very early during that period of time.’
- b. beeruo bai t’e kuogash **lyyzu** (cf. (10b))
 child.ERG grass on foot.PL **step.PLR.WP**
 ‘A child stepped on the grass often.’
- c. i sialkhana niaxar ullie **hittira** (cf. (10c))
 3SG yesterday door by **stand.PLR.WP**
 ‘He stood by the door often yesterday.’
- d. beer suuna **marlilkhira** (cf. (10d))
 child 1SG.DAT **hug.PLR.WP**
 ‘The child hugged me over and over again.’

There is more evidence suggesting the existence of the distributive reading in Chechen. Consider the two pairs of sentences in (12). According to my consultants, there is no substantial difference between (12a) and (12b) or between (12c) and (12d). In fact, (12b) and (12d) are preferred over (12a) and (12c), respectively, because simple verbs generally occur with singular subjects.

- (12) a. ysh niaxar ullie **hwettira**
 they door by **stand.WP**
 ‘They assumed a standing position by the door (single occasion).’
- b. ysh niaxar ullie **hittira**
 they door by **stand.PLR.WP**
 ‘They assumed a standing position by the door (single occasion).’
- c. beerash suuna **mar’iaqqira**
 child.PL 1SG.DAT **hug.WP**
 ‘The children embraced me.’
- d. beerash suuna **marlilkhira**
 child.PL 1SG.DAT **hug.PLR.WP**
 ‘The children embraced me.’

The distributive reading is not restricted to intransitive verbs. Examples of transitive distributive pluractional verbs are given below. In these cases, it is the plurality of the object argument that affects the selection of the pluractional verb. That is, when the object is plural, the verb must be pluractional too, as shown by the second highlighted verb phrase of each of the examples in (13). For example, in (13a), the multiple singing of songs occurs within a single occasion. A simple verb, crucially, cannot appear with a plural object here.

- (13) a. eekha swohxtiahx maliikas **jish leqira/ eesharsh**
 half hour.LOC Maliika.ERG **song sing.WP/ song.PL**
liiqira
sing.PLR.WP
 ‘Malika sang a song/songs for half an hour.’
- b. takhana as duqqa’a **ch’aar leecira/ ch’eerii**
 today 1s.ERG many=& **fish catch.WP/ fish.PL**
liicira
catch.PLR.WP
 ‘I caught a fish/a lot of fish today.’

A pluractional verb might appear with a singular object, but the reading of the event is necessarily frequentative.

- (14) As kestkesta hara **jish liiqira**
 1s.ERG often this **song sing.PLR.WP**
 ‘I sang this song often.’

Additional evidence for the existence of the distributive reading with pluractional verbs comes from the behavior of the repetitive adverbial *jukh-jukha’a* ‘again and again’. *A priori*, one would expect the repetitive adverbial to be able to freely combine with any predicate. However, as it turns out, for strictly frequentative pluractional verbs, *jukh-jukha’a* is never compatible with their simple counterparts, as shown in (15).

- (15) jurtahx naanas jukh-jukha dama
 village.LOC mother.ERG again and again flour
liisira /*leesira
sift.PLR.WP /*sift.WP
 ‘In the village, mother used to sift flour over and over again.’

However, consider the examples in (16).

- (16) a. jukh-jukha’a xaazh oahxa **buuzhu**
 again and again apple down **B.fall.PRES**
 ‘The apple falls down again and again.’
 b. jukh-jukha’a xeezhash oahxa **oegu**
 again and again apple.PL down **fall.PLR.PRES**
 ‘The apples fall down again and again.’

The fact that the adverbial *jukh-jukha’a* ‘again and again’ can be used here with the simple verb to signify repeated actions and that the present tense, which generally indicates habituality, can be used here shows that the pluractional verb *oegu* ‘fall.PLR.PRES’ does not inherently contribute the repeated action reading, unlike what is observed in the frequentative pluractional verbs. Rather, pluractional verbs like *oegu* are acting as if they were agreeing in plurality with the patient.⁵ A pluractional verb is used generally with a plural absolutive argument, whereas a semelfactive verb, complementarily, occurs with a singular absolutive argument.

⁵ We do not imply here that this is really a case of agreement, since a distributive pluractional verb can be used with a singular absolutive argument, as illustrated in (16).

3.2.3. *Durative Reading*

While the distributive effect of verbal pluralization is commonplace in the world's languages, there is one possible effect of verbal pluralization in Chechen that appears to be quite rare crosslinguistically. This is the effect of durativity. Of the seven languages with specialized grammatical means to express pluractionality surveyed in Xrakovskij's (1997b) edited volume on the typology of iterative constructions, only one language, Nivkh, a Paleoasiatic language, has durativity as a possible effect of verbal pluralization. Let us examine how durativity is manifested through pluractionality.

For certain verbs in Chechen, when the verb is pluralized, the event is considered to be prolonged instead of repeated, as shown in (17).

(17)	ghurtu	'to attempt'	ghiarta	'to attempt for a while'
	xowzhu	'to ache'	xiizha	'to ache for a while'
	q'eega	'to shine, sparkle'	q'iega	'to shine continuously'
	khwarzhu	'to choose'	khwerzhu	'to choose for a while'
	d.odu	'to run'	ydu	'to run for a while'
	zowzu	'to cramp'	ziiza	'to cramp for a while'
	loqu	'to play/ to sing'	loequ	'to play/to sing for a while/repeatedly'
	teqa	'to crawl'	tieqa	'to crawl for a while'
	lakha	'to look for'	liekha	'to look for a while'
	q'aekhka	'to avoid'	q'iakhka	'to avoid for a while'

To illustrate this, let us first consider example (18). The intended reading of (18) is 'Ahmed ran for six hours nonstop'. This durative reading is only possible with the pluractional verb, never with the non-pluractional verb.⁶ The simple verb is used when the running occurs only once and no specific duration is specified for it.

(18)	Ahxmed	jaalx	swohxtiahx	idira	/*vedira
	Ahxmed	six	hour.LOC	run.PLR.WP	/*V.run.WP
	'Ahxmed ran for six hours (nonstop).'				

⁶ The consultants dislike most co-occurrences of a temporal adverbial and a simple verb. However, if the temporal adverbial denotes a very short time (e.g., 'for one second'), then a simple verb might be considered compatible. This suggests that it is the semantics of an extended temporal duration that is incompatible with simple verbs, not the presence of the adverbial phrase *per se*. The precise nature of what counts as an extended temporal duration remains unclear for now. The point here is mainly to illustrate the durative character of pluractional verbs under this circumstance.

Consider now the examples in (19). (19a) means that the wound only hurt momentarily, whereas (19b), instead of meaning that the wound hurt repeatedly or habitually, means that the wound hurt for a long time.

- (19) a. *cyna~* *chow* **xoizhira**
 3SG.POSS wound **hurt.WP**
 ‘His wound ached (momentarily).’
- b. *cyna~* *chow* **xiizhira**
 3SG.POSS wound **hurt.PLR.WP**
 ‘His wound ached (for a long time).’

The examples in (20), once again, illustrate the durative reading of VPL. (20a) means that the leg tingled momentarily, whereas (20b) means that the tingling lasted for a while.

- (20) a. *sielkhana* *sa~* *kwog* **zoizira**
 yesterday 1SG.POSS leg **tingle.WP**
 ‘My leg tingled (momentarily) yesterday.’
- b. *sielkhana* *sa~* *kwog* **ziizira**
 yesterday 1SG.POSS leg **tingle.PLR.WP**
 ‘My leg tingled for a while yesterday.’

3.2.4. *Summary*

In this section, we have illustrated the three types of semantic effects of verbal pluralization in Chechen, namely, frequency, distributivity, and durativity. In what follows, we will attempt to understand the formal properties of Chechen verbal pluralization.

4. EXPLAINING VERBAL PLURALIZATION IN CHECHEN

As shown in the previous sections, the stem vowel alternation which marks pluractionality has many semantic and aspectual consequences. Let us briefly summarize the different semantic effects associated with VPL in Chechen.

The most prototypical reading of this alternation is the multiplication of events, as illustrated in section 3.2.1. However, there are also examples where the repetition meaning is not possible. For example, in section 3.2.2, we have encountered cases where a pluractional verb, when used with a plural absolutive argument, yields a distributive reading, rather than the

expected repeated-action reading. We have also seen examples of how verbal pluralization yields an event prolongation reading, instead of the otherwise expected repetition reading, in section 3.2.3.

- (21) Summary of the functions of verbal pluralization in Chechen
- Frequentative/habitual
 - Distributive
 - Durative

Given this state of affairs, many questions naturally arise regarding the formal properties of verbal pluractionality in Chechen. Unfortunately, due to limited access to data and the desire to keep this study manageable, the present investigation will be limited in scope. Thus, for example, the question of why this pluralization process is only available for certain verbs in Chechen, albeit interesting, is outside of the scope of the present study. For the remainder of this paper, we will focus solely on the issue of what triggers different semantic readings for different verbs. To answer this question, we must consider the aspectual properties of the simple-pluractional verb pairs. However, before doing so, we must first lay out some basic assumptions.

4.1. *Pluractionality as Event Pluralization*

Pluractionality has often been argued to be the pluralization of the event argument of a predicate (e.g., Ojeda 1998; Lasersohn 1995; Landman 1996, and many others). That is, in model-theoretic terms, verbal predicates are treated as denoting a mereology with atoms, and events constitute these atoms, following Davidson (1967) and Parsons (1990).

- (22) Verbal roots (Ojeda 1998, p. 267)
- If a verbal root denotes a mereology with atoms, then these atoms are events.

Given this understanding of verbal predicates, the canonical case of verbal pluralization is viewed as the introduction of a pluralizing operator to the semantics of a verbal predicate. This plural operator is pluralizing the event argument of the verb. Let us call this the *Pluralized Event Theory (PET)*. The basic tenets of PET are summarized below:

- (23) *Pluralized Event Theory (PET)*
- If a verbal root denotes a mereology with atoms, then these atoms are events (cf. (22)).

- Verbal pluralization is the pluralization of the event argument of a predicate.
- Pluralization of the event argument of a predicate is accomplished by introducing a plural operator.

While the idea of event pluralization is helpful in understanding many basic cases of verbal pluractionality (e.g., Lasersohn 1995, Klamath; Ojeda 1998, Papago), a principled account for the fact that a single verbal pluralization process may yield a multitude of semantic interpretations, as exemplified by the Chechen data, remains elusive.⁷ It is obvious that some elaboration of PET is imminently needed. One aspect of underdevelopment is the exact nature of the plural operator that affords the plural interpretation. The definition of this operator differs from author to author. For example, Lasersohn proposes that “a pluractional verb will hold true of a group of events if and only if its corresponding ‘singular’ verb holds true of each individual event in the group” (Lasersohn 1995, p. 241). This is represented in (24), which can be understood as saying, for a given verb V , that $V-PA$ is interpreted as the combination of V with a pluractional marker PA , where X ranges over a set of events.

$$(24) \quad V-PA(X) \Leftrightarrow \forall e \in X[V(e)]$$

Lasersohn notices that the set of events X cannot be empty or a singleton. He fixes this by stipulating that X must be of cardinality two or greater; cf. (25).

$$(25) \quad V-PA(X) \Leftrightarrow \forall e \in X[V(e)] \ \& \ \mathbf{card}(X) \geq n$$

Ojeda, on the other hand, adopts the following definition of plurals:

$$(26) \quad \textit{Plurals}$$

Every plural form denotes the set of sums of non-identical atoms in the denotation of its roots. (Ojeda 1998, p. 253)

Given the definition of plurals in (26), and since events are taken to be the atoms of mereologies, the plurality of events can be viewed as the set of sums of non-identical events.

⁷ It might be noteworthy to point out that both Lasersohn and Ojeda were mostly concerned with accounting for the distributive variant of verbal pluralization. Thus, it might not be entirely surprising that their approach to VPL is not equipped to deal with cases like Chechen. The theory advanced in the present work attempts to deal with precisely those cases where one single verbal pluralization process provides a multitude of semantic readings. Distributive and collectivizing markers, if they are pluractional makers at all in the strict sense, might in fact require their own, separate analysis. We leave this question open in this paper.

With this in mind, in what follows we argue that, in order to account for the different effects of VPL, one must appeal to a more restricted notion of plurality. Namely, the plural operator does not just map a singular entity into another garden-variety plural entity, it specifically maps a singular entity into a mass. Evidence of this interpretation of the plural operator comes from some quantification behaviors of pluractional predicates.

4.1.1. *The Cumulativity of Pluralized Events*

In the pluractional verb examples we have seen so far, one might have noticed, the number of event iterations is always left unspecified. This, as it turns out, is not accidental. Chechen prohibits the use of a pluractional verb when the exact number of repetitions is specified, as illustrated by the ungrammaticality of (27b) and (27d).

- (27) a. adama takhan **yttaza** chai **melira**
 Adam.ERG today **ten times** tea **drink.WP**
 ‘Adam drank tea ten times today.’
- b.*adama takhan **yttaza** chai **miillira**
 Adam.ERG today **ten times** tea **drink.PLR.WP**
 ‘Adam drank tea ten times today.’
- c. xadama sialkhana cynga **yttaza** cxahuma
 Adam.ERG yesterday 3SG.ALLA **ten times** onequestion
khiattira
ask.WP
 ‘Adam asked him the same question ten times yesterday.’
- d.*xadama sialkhana cynga **yttaza** cxahuma
 Adam.ERG yesterday 3SG.ALLA **ten times** onequestion
khittira
ask.PLR.WP
 ‘Adam asked him the same question ten times yesterday.’

A priori, there is no reason to think that pluractional verbs, which supposedly signify repeated actions, should be incompatible with the explicit mention of the number of iterations, as long the number of iterations is more than one. However, as noted by Xrakovskij (1997b), this incompatibility is observed crosslinguistically. For example, in English, when a count noun is modified by a numeral determiner, the head noun must be expressed

with the plural morpheme *-s*. However, when a situation is “frequentivized”, the presence of a quantizing adverbial is prohibited, as illustrated in (28).

- (28) a. John used to go fishing with his father (*four times).
 b. The light flashed (*ten times) until dawn.
 c. Kevin ate apples (*four times) until dawn.

Xrakovskij explains this by appealing to the idea that pluractional verbs “denote pluralities of situations which are uncountable or indefinite in principle” (p. 60). Although we sympathize with Xrakovskij’s intuition, it does not explain *why* plurality of situation should be uncountable or indefinite.

We propose that pluralization in Chechen at least, if not in general, must yield a mass interpretation (29).⁸

- (29) *Key property of verbal pluralization*
 Event pluralization must yield a mass interpretation.

Thus just as a mass noun is not compatible with numerical determiners, a mass event cannot be quantified by a numerical adverbial: it is impossible to make reference to the individual events that are crucial for the purpose of counting within this mass.

It should be noted that there is an interesting parallel between the behavior of plural noun phrases and plural events in Chechen. Just as a plural event cannot be quantified in terms of the number of iterations, a plural noun phrase in Chechen cannot take the plural marker when it is quantified by a numeral determiner. This restriction is confirmed by the ungrammaticality of (30b), where the noun ‘gun’ is marked with the plural suffix *-ash* when modified by *three*.

- | | |
|--|--|
| (30) a. qwo twop
three gun
‘three guns’ | b. * qwo tuepash
three gun.PL
‘three guns’ |
| c. massuo tuepash
all gun.PL
‘all guns (the entire collection of guns)’ | d. * massuo twop
all gun
‘all guns’ |

⁸ The proposal that pluralization should yield a mass interpretation is not without support. As will be demonstrated later, the result of this mass interpretation of pluralized events is an atelic construal of the pluractional event. The parallelism between the telic vs. atelic distinction and the count vs. mass distinction in the nominal domain has long been noticed in the literature (e.g., Jackendoff 1991 and the references therein).

One the other hand, the plural marker is obligatory when the noun phrase is modified by a universal quantifier, as shown by the examples in (30c, d). Thus, the fact that a numeral is not compatible with the plural marker even in the nominal domain suggests that the Chechen language might have a general ban on the collocation of numerical quantification and pluralized elements (i.e., nouns and events). However, more crosslinguistic research is needed still before a conclusive link between the pluralization of the nominal and verbal domains can be established. The point here is that the Chechen evidence is at least suggestive: the mass interpretation of pluralization might not be restricted to pluractionality.

4.1.2. *Summary*

Let us now briefly summarize. In this section, we have extracted a set of commonalities that underlie past treatments of VPL. We refer to these commonalities collectively as the Pluralized Event Theory (PET) of pluractionality. However, after reviewing some facts regarding the behavior of pluractional verbs with quantification adverbials in Chechen, we conclude that a more restricted notion of pluralization is required. That is, verbal pluralization yields a mass interpretation of plurality, rather than a general notion of plurality as proposed in previous research. Let us incorporate this new proposal into the existing theory and call this the *Extended Pluralized Event Theory (E-PET)*. Its basic tenets are reiterated below:

(31) *Extended Pluralized Event Theory (E-PET)*

- If a verbal root denotes a mereology with atoms, then these atoms are events.
- Verbal pluralization is the pluralization of the event argument of a predicate.
- Pluralization of the event argument of a predicate is accomplished by introducing a plural operator.
- The product of pluralization must have a mass interpretation.

Now that we have laid out the theory of pluractionality in which we are operating, in the next section we revisit the facts regarding the different semantic effects of VPL in Chechen. Through the examination of additional data, we illustrate how the multitude of semantic readings of pluractional verbs falls out naturally from E-PET.

4.2. *Classifying Pluractional Verbs*

We begin by classifying a sample of Chechen pluractional verbs in terms of what semantic reading(s) they allow when pluralized. This is summarized in table form in (32).

(32)	<i>Verb</i>	<i>Frequentative</i>	<i>Distributive</i>	<i>Durative</i>
a.	TO RUN			X
b.	TO SHOW			X
c.	TO ACHE			X
d.	TO CRAWL			X
e.	TO CHOOSE			X
f.	TO LOOK FOR			X
g.	TO AVOID			X
h.	TO RESPECT			X
i.	TO LISTEN	X		X
j.	TO FROWN	X		X
k.	TO DRIVE	X		X
l.	TO LAUGH	X		X
m.	TO SIT.PL.SUBJ	X		
n.	TO POUR	X		
o.	TO CHASE	X		
p.	TO DRINK	X		
q.	TO SQUINT	X		
r.	TO CATCH	X		
s.	TO SIFT	X		
t.	TO STOP	X		
u.	TO SING	X	X	X
v.	TO HUG	X	X	
w.	TO STAND	X	X	
x.	TO FALL		X	
y.	TO LIE		X	

This classification, not surprisingly, arrives at three major groups of pluractional verbs: pure frequentative pluractional verbs ((32m–t)); pure distributive pluractional verbs ((32x–y)); and pure durative pluractional verbs ((32a–h)). There are also three mixed patterns: pluractional verbs with frequentative and durative readings ((32i–l)); pluractional verbs with frequentative and distributive readings ((32v–w)); and one verb, ‘to sing’, that has all three possible semantic readings. We will discuss all of these patterns in due course. In the meantime, let us first consider the group of

verbs that have the prototypical function of pluractionality – frequentative/habitual verbs.

4.3. *Frequentatives Revisited*

The non-pluractional counterparts of frequentative pluractional verbs are of the *achievement*, *accomplishment*, or *semelfactive* event types. Thus, as typical of achievement verbs, the verb *saca* ‘to come to stop’ is not compatible with the Chechen equivalent of the English *for*-adverbial; cf. (33).

- (33) * aftobas akha swohxtiahx **secira**
 bus half hour.LOC **stop.WP**

INTENDED: ‘The bus stopped for half an hour.’

When an accomplishment verb, such as *d.uttu* ‘to pour’, is modified by a durative adverbial, a coerced durative reading is observed, as in (34).

- (34) as itt minutiahx khi **dwettira**
 1s.ERG 10 minute.LOC water **pour.WP**

‘I pour water for ten minutes (into the same cup).’

When a semelfactive verb, such as *lousu* ‘to sift’, is modified by a durative adverbial, a repetitive reading is possible, as in (35). This activity reading is necessary because durative adverbials are incompatible with the temporal schema of a semelfactive.

- (35) xyyrana naanas swohxtiahx dama **leesira**
 morning.ADV mother.ERG hour.LOC flour **sift.WP**

‘Mother sifted flour for an hour in the morning (and finished).’

However, when these verbs are pluractionalized, they uniformly yield an activity interpretation. Thus, when an achievement verb is pluractionalized, the reading is that of an activity; cf. (36).⁹

- (36) aftobas nouq’ahx **siicira**
 bus road.ADV **stop.PLR.WP**

‘The bus stopped along the road repeatedly.’

⁹ While the pluractional verb is classified as an activity here, it nonetheless cannot take a *for*-adverbial. The consultants explain that the incompatibility of the pluractional verb with a *for*-adverbial is due to the fact that one cannot ‘come to stop’ for a duration of time. If the reading of stopping for some duration of time is needed, then the stative verb *latta* ‘to stay/stand’ must be used.

When an accomplishment verb is pluractionalized, the result is also an activity situation type, as in (37). It should be noted that the activity of pouring has to be into different cups. As illustrated in (34), the simple verb for pouring is compatible with a durative adverbial. The effect of pluractionality, thus, involves the repeating of the pouring of water into a cup, rather than yielding a prolonged event reading.

- (37) as itt minutiahx khi **dittira**
 1s.ERG 10 minute.LOC water **pour.PLR.WP**
 ‘I poured water for ten minutes (different cups).’

The same activity reading is realized when a semelfactive verb is pluractionalized:

- (38) xyyrana naanas swohxtiahx dama **liisira**
 morning.ADV mother.ERG hour.LOC flour **sift.PLR.WP**
 ‘Mother sifted flour for an hour in the morning.’

Recall, however, that when a durative adverbial appears with a semelfactive verb, the reading is also that of an activity (see (35) above). While the distinction between a semelfactive and its pluractionalized counterpart might be blurred in the context of a durative adverbial, the semelfactive vs. repetitive contrast is nonetheless a real one. Evidence for this comes from the fact that the repetitious adverbial *jukh-jukha’a* ‘again and again’ is only compatible with the pluractional verb, never with a semelfactive verb, as illustrated below:

- (39) jurtahx naanas jukh-jukha dama
 village.LOC mother.ERG again and again flour
liisira /***leesira**
sift.PLR.WP /***sift.WP**
 ‘The mother in the village used to sift flour over and over again.’

This suggests that the repetitive interpretation of the semelfactive when modified by a durative adverbial might actually be epiphenomenal. One Chechen consultant suggests that sentences (35) and (39) differ crucially in term of whether the event in question has an endpoint (i.e., semelfactive (35)) or is a process that does not (i.e., pluractional (39)). The latter, processual interpretation is typical of activities, since the endpoint of an activity is arbitrary. While the semelfactive modified by a durative adverbial and the pluractional semelfactive yield similar activity interpretations, the pluractional version lacks the ability to support a completive inter-

pretation that is available to the semelfactive modified by a durative adverbial. This distinction is consistent with our mass interpretation of pluractionality.

To briefly summarize, so far we have shown that the frequentative pluractional verbs are of event types semelfactive, accomplishment, and achievement in their non-pluractionalized instantiations. The result of the pluractionalization of these event types yields an activity interpretation. We propose that the commonality between these three types of events is the presence of a clear endpoint. This notion of having an endpoint is related to the notion of boundedness and telicity in the aspect literature.¹⁰ In fact, the essential property of a telic event is that it has a natural endpoint. An activity, on the other hand, is often characterized as having an arbitrary final point, as in (40).

(40) Temporal schema of activity

I F_{Arb}

Following the notation introduced in Smith (1991), I and F in (40) indicate initial and final points of an event, respectively. The dots indicate internal stages. The fact that an activity does not possess a natural endpoint marks the atelic quality of such an event type. The fact that pluractionality should yield an atelic quality, we argue, is actually predicted by E-PET. More specifically, the newly adopted interpretation of pluralization is crucial here. A mass, by definition, is amorphous, without natural boundary. Thus, a mass interpretation of events naturally yields a boundless outcome, hence atelicity. To underscore the importance of this prediction and to facilitate the ensuing discussion, let us make this corollary of E-PET more explicit and posit the following:

(41) *Atelicity Requirement*

The product of verbal pluractionality must be atelic; that is, verbal pluralization transforms a telic event (e.g., semelfactive, achievement, accomplishment) into an atelic event (e.g., activity).

Given the evidence for this Atelicity Requirement from frequentative verbs, we expect that all pluractional readings satisfy it. The task is to determine how that is manifested. With this in mind, let us diverge from the order

¹⁰ The relation of boundedness to pluractionality was first brought to my attention by Tess Wood.

of presentation so far and first reexamine the durative pluractional verbs, before dealing with the distributive pluractional ones.

4.4. *Durativity as a Subcase of Frequentative*

The verbs in (32a–h) above are examples of durative pluractional verbs. Their non-pluractional counterparts are of the *inceptive*, *inchoative*, *activity*, and *stative* situation types, as stated in (42).

(42) *Aspectual class of simple verbs*

d.odu	‘to start to run’	Inceptive
q’eega	‘to start shining’	Inceptive
xouzhu	‘to hurt’	Inchoative
zouzu	‘to tingle/itch’	Inchoative
teqa	‘to crawl’	Activity
khoarzhu	‘to choose/elect’	Activity
lokhu	‘to look for’	Activity
q’aekhka	‘to avoid, to be afraid of’	Stative
looru	‘to respect’	Stative
laduughu	‘to listen’	Activity
gooma hxozhu	‘to frown’	Activity
khoakhku	‘to drive’	Activity
d.ielado	‘to laugh/smile’	Activity

It is perhaps not surprising that the pluralization of a stative event should yield a prolonged situation since a state has no inherent initial or final state, as schematized in (43). The initial and final endpoints are parenthesized to indicate that they are not part of the event itself. The dash indicates an uninterrupted state.

(43) Temporal schema of state

(I)—(F)

Consider now the inceptive and inchoative verbs. They differ from the semelfactive and accomplishment verbs in that they are generally incompatible with durative adverbials. Thus, while a durative adverbial categorically cannot appear with an inceptive/inchoative verb, it is possible with a pluractional one, as in (44).¹¹

¹¹ While two consultants agree that *xoizhira* is not compatible with a durative adverbial, at least for one speaker such an example is possible if the durative adverbial denotes an extremely short time. For example, *Cyna~ chow cxana sikund-iahx xoizhira*, ‘His wound hurt for one second’, is at least marginally possible.

- (44) a. Cyna~ chow k'irnahx **xiizhira** /***xoizhira**
 3.SG.POSS wound week.LOC **hurt.PLR.WP /hurt.WP**
 'His wound ached for one week.'
- b. sialkhana swokhtiahx sa~ kwog
 yesterday hour.LOC 1SG.POSS leg
ziizira /***zoizira**
tingle.PLR.WP /tingle.WP
 'My leg tingled for an hour yesterday.'

We argue that the pluralization of an inceptive/inchoative event differs little from the pluralization of semelfactive, accomplishment and achievement events. The real difference between inceptive and semelfactive/accomplishment verbs rests on the fact that durative pluralization "targets" the end state of an inceptive event. To understand this, let us first represent an inceptive event in terms of a temporal schema.

- (45) Temporal schema of inceptive
 I—(F)

The final endpoint is parenthesized to indicate that it is not part of the event itself. The initial point is a change into a state; the state itself is indicated by the line. Given this understanding of an Inceptive situation, the fact that the final state of an inceptive event is prolonged can be ascribed to the fact that an inceptive event does not have a final endpoint built into the event structure. To understand this better, let us consider the temporal schema of the pluralization of an Inceptive event.

- (46) Temporal schema of pluralized inceptive
 I—I—I—I—F

Without a final endpoint, the recurrence of an event will not be naturally possible. That is, since the inception of an inceptive event is a change of state and since there is no endpoint of the previous state, at each point of recurrence, the original state is equal to the resulting state; the end result is a string of events that pertain to the same state, hence the prolongation. In this sense, the pluralization of an inceptive event is similar to the creation of a stative event. The main difference between a genuine stative event and one derived from a pluralized inceptive is that a pluralized inceptive event involves an initial change of state, whereas a natural stative event does not require there to be one at all.

Let us now turn to the simple verbs that are of the activity situation

type. Perhaps not surprisingly, a frequentative adverbial is compatible with both simple and durative pluractional verbs, as illustrated in (47). This is in sharp contrast with the simple/frequentative pluractional verb pairs, where frequentative adverbials are never compatible with the simple form (see (39)).

- (47) a. Kestkesta Maliikas shiena tyknahx
 often Maliika.ERG 3s.REFL.DAT store.LOC
 kwoch **khoerzhura**
 dress.ABS **choose.PLR.IMP**
- b. Kestkesta Maliikas shiena tyknahx
 often Maliika.ERG 3s.REFL.DAT store.LOC
 kwoch **khworzhura**
 dress.ABS **choose.IMP**

‘Malika used to look for a dress at the store often.’

Given this state of affairs, we are now confronted with a puzzle. Recall that the simple verb in (47a) is classified as an activity verb. If the result of verbal pluralization is an activity situation type, then how is a simple activity verb different from a pluractional activity verb? The divergence lies in whether the activity leads to an eventual completion or not. That is, for example, in (47b), one expects the event of dress-choosing to lead to the selection of a dress at the end of the event. (47a), on the other hand, implies that no such decision is made, despite the prolonged selection process.

The fact that a durative pluractional verb should require the non-culmination of the event is predicted by E-PET – once again, it is the result of the mass interpretation of pluralization. The remaining question is how to represent the internal structure of the activity event required by the simple non-durative verbs. Let us revisit the general temporal schema of an activity, given in (48).

- (48) Temporal schema of activity
 I F_{arb}

As before, I and F indicate initial and final points of an event, respectively. The dots indicate internal stages. A canonical activity event is said to have an arbitrary endpoint. However, as we have seen, the simple activity verb in Chechen implies the definite cessation of the activity. Thus, we propose to represent the simple activity verb in Chechen as having a definite endpoint, shown in (49).

(49) Temporal schema of activity verb in Chechen

I F_{def}

The fact that verbal pluralization produces an event that is prolonged instead of repeated, with or without interruption, can be understood as the byproduct of the event structure of the activity situation type. An activity has internal stages. The transition from one stage to another might be interrupted. Likewise, the transition from the endpoint of one activity to the beginning of the following one can be conceptualized as going from one stage to another. Whether an interruption is present between these two stages is trivial. This is why the output of pluralization of an activity event results in a durative one. Now, the remaining question is how the pluralization of this type of telic activity event gives rise to something atelic. As mentioned before, the product of pluralization requires a mass interpretation. Such interpretation entails that no information about the exact number of iterations can be deduced. Thus, the endpoint of this pluralized activity event is undecided, hence arbitrary. An activity that has an arbitrary endpoint is naturally atelic. With this last piece of the puzzle falling into place, we have now arrived at an account on the origin of durative pluractional verbs.

Let us return to the Chechen data. So far, in this section, we have only dealt with pluractional verbs that allow solely the durative reading. However, there are some pluractional verbs, such as those in (50), that can have either a durative or a repeated-action reading, given the appropriate context.

- | | | |
|------|---------------|-----------------------------------|
| (50) | loqu | ‘to play/to sing’ |
| | loequ | ‘to sing repeatedly/continuously’ |
| | gooma hxozhu | ‘to frown’ |
| | gooma hxoezhu | ‘to frown often/continuously.’ |
| | khoakhku | ‘to drive’ |
| | khoekhku | ‘to drive often/continuously.’ |

Consider the sentence in (51). The use of the non-pluractional verb is not possible here because of the durative time adverbial, suggesting that the pluractional verb contributes the durative reading.

- | | | | | | |
|------|---|---------|---------------------|---------|------------|
| (51) | as | takhana | khaza | mashian | swohxtiahx |
| | 1SG.ERG | today | beautiful | car.ABS | hour.LOC |
| | khikhkira | | /*khiakhkira | | |
| | drive.PLR.WP | | /*drive.WP | | |
| | ‘I drove in a beautiful car for an hour today.’ | | | | |

Yet, when a frequentative adverbial is used in place of the durative adverbial, the semelfactive verb still cannot be used. This scenario mirrors what we have seen in the previous section, where achievement verbs could not be used with a durative adverbial. This suggests that pluractional verbs like ‘to drive’ in (52) can also have the general repeated-action reading.

- (52) as kestkesta khaza mashian
1s.ERG often beautiful car.ABS

khikhkira /*khiakhkira
drive.PLR.WP /*drive.WP

‘I drove the beautiful car often.’

More interestingly, when the event is negated, the durative and frequentative readings persist. (53a), with the pluractional verb, has two possible readings: the repeated-action reading (53aA) and the durative reading (53aB). Sentence (53b), with the non-pluractional verb, on the other hand, has only one possible reading.

- (53) a. as takhana hara mashian ca **khikhkira**
1s.ERG today this car.ABS NEG **drive.PLR.WP**

A. ‘I didn’t drive this car many times today.’

B. ‘I didn’t drive this car for a long time today.’

- b. as takhana hara mashian ca **khiakhkira**
1s.ERG today this car.ABS NEG **drive.WP**

‘I didn’t drive this car today, not even once.’

The fact that certain durative pluractional verbs also have a frequentative reading is not at all odd. After all, the unmarked function of pluralization is merely the pluralization of an event. And as we have observed before, the crucial difference between a durative pluractional verb and a frequentative pluractional verb depends on the event structure of the non-pluractional counterparts. It is not at all uncommon for verbs to behave differently in different contexts. It is, therefore, entirely appropriate that when an endpoint can be established, either because a natural endpoint can be posited or because an endpoint can be provided through context, then all else being equal, an inherently durative pluractional verb might yield a frequentative reading instead. For example, the non-pluralized event of driving is compatible with either a telic or an atelic reading, depending on whether a destination of the driving event has been established. Thus, when a driving event with a destination, that is, an accomplishment event,

is pluralized, it naturally yields a frequentative situation type. However, if a destination is not specified, no endpoint is supplied. When such an event is pluralized, the resulting situation is analogous to the pluralization of activity verbs and yields a durative reading.

In the next section, we will provide further illustrations on how the internal structure of an event may affect the interpretation of a pluractional predicate.

4.5. *Cumulativity and Quantization in Chechen: The Distributive Reading Revisited*

As we have seen above, the atelicity requirement of verbal pluralization is satisfied through the repetition of an event. However, as presented early in the paper, there are certain verbs in Chechen which, when pluralized, yield a distributive reading and not always a frequentative one (see (32u–y)). If a frequentative interpretation is not possible, some other mechanism must be present in order for such pluractional verbs to satisfy the Atelicity Requirement.

Many researchers (e.g., Smith 1991; Tenny 1994; Krifka 1998) have pointed out that the difference between a telic and an atelic event is often a matter of cumulativity and quantization. The effect of the countability of the absolutive argument clearly illustrates this point. That is, there seems to be a requirement for the absolutive argument of a telic event to be a countable noun, whereas such argument must be uncountable for an atelic event. Thus, for example:

- (54) a. Malik sang folk songs. Activity: Atelic
 b. Malik sang two folk songs. Accomplishment: Telic

The difference in number (i.e., a bare plural in (54a) vs. a count noun in (54b)) of the object noun phrase affects the telicity of the event. As we will argue in the following section, atelicity is also derived from the uncountability of the absolutive argument in distributive pluractional verbs in Chechen.

But before we dive into that discussion, it should be noted that, unlike the previous categories, these distributive pluractional verbs do not seem to fall within any class of aktionsart. Thus, we are forced to assume that the ability of these pluractional verbs to yield a distributive reading must be part of their lexical entry. As noted by Lasersohn, pluractional markers are often derivational rather than inflectional, as is the case in Chechen; thus it is not uncharacteristic of derivational markers to have certain idiosyncratic functions that might not be derivable synchronically. Yet, even though

we are unable to predict the aktionsart of these distributive pluractional verbs, their behavior is nonetheless predicted by the E-PET theory, as will be illustrated here.

4.5.1. *Pluractional Verb Meets Countable Nouns*

We have noted that there is a preference to use pluractional verbs when the absolutive argument is plural. Let us revisit this by considering the pair of sentences in (55).

- (55) a. ceera~ duezalsh takhana duqa hxaalkhie **ghaettira**
 their families today very early **wake up.WP**
 ‘Their family members woke up early.’
- b. ceera~ duezalsh takhana duqa hxaalkhie **ghittira**
 their families today very early **wake up.PLR.WP**
 ‘Their family members woke up early.’

From the glosses of these two sentences, it seems that they bear the same meaning. In fact, the consultants generally have a hard time differentiating the two sentences. However, when pressed, one consultant explains that the difference rests on how the act of waking up is interpreted. That is, for (55a), whose main verb is semelfactive, the attention is on the occasion of the family members waking up. It does not matter whether they each wake up separately or together. (55b), by contrast, emphasizes the individual waking of each of the family members. They might have been awakened at different times in the early morning, or they could have been awakened at the same time. It does not matter. What matters, however, is that (55a), with the non-pluractional verb, delineates just one single event, or occasion, whereas (55b), with the pluractional verb, delineates many different events of awakening. This suggests that the plurality of events is satisfied by distributing the multiple events over participants and not through time. However, consider the example in (56).

- (56) xyyrana johanna’a elita’a so’a niaxar ullie
 morning.ADV Johanna=&Elita=& 1SG=& door next to
 dxa-**hwettira** /*dxa-**hittira**
 DX-**stand.WP** /*DX-**stand.PLR.WP**
 ‘Johanna, Elita, and I stood by the door in the morning.’

The subject NP is syntactically plural, since there is more than one participant. Yet, the pluractional verb *hyttu* ‘to stand.PLR’ is banned while

the non-pluractional one is available. This seems rather puzzling given the fact that plurality of the absolutive argument is present and, as we have seen before, the pluractional verb is clearly preferred over the non-pluractional one when the absolutive argument is plural; cf. (57).

- (57) ysh niaxar ullie **hittira** /?hwettira
 they door by **stand.PLR.WP/?stand.WP**
 ‘They assumed a standing position by the door.’

This state of affairs is not restricted to intransitive verbs. Transitive distributive pluractional verbs display the same asymmetry, as shown in (58).

- (58) takhana as c’ii-ch’aara’a jai-ch’aara’a miaq-ch’aara’a
 today 1s.ERG sturgeon=& bullhead=& catfish=&
leecira /*liicira
catch.WP /*catch.PLR.WP
 ‘Today I caught a sturgeon, a bullhead, and a catfish.’

This data suggests that just because the absolutive argument is syntactically plural it does not license the use of the pluractional verb. The absolutive argument must also be “uncountable”. This can be illustrated by the fact that when one of the conjuncts in the conjoined NP is morphological plural, the pluractional verb is clearly preferred.

- (59) xyyrana beerash’a elita’a so ’a niaxar ullie
 morning.ADV child.PL=&Elita=& 1SG=& door next to
 dxa-**hittira** /*dxa-**hwettira**
DX-stand.PLR.WP /*DX-stand.WP
 ‘The children, Elita, and I stood by the door in the morning.’

This distribution of pluractional verbs is in fact not surprising in light of the theory that verbal pluralization requires the pluractional verb to denote an atelic event of some sort. Recall that in (54b), in English, the event is telic even though the absolutive argument is morphologically plural (i.e., *Malik sang two folk songs*). An atelic reading is not possible there because the absolutive argument is quantified by a numerical determiner. The logic behind this, we argued, also applies to the distributive data presented here. A conjunction of singular noun phrases yields a conjoined NP of countable quantity. Thus, just as a numerically quantized plural count noun is not compatible with an atelic event reading in English, a conjoined NP of singular noun phrases is also not compatible with an atelic event. For this reason, a distributive pluractional verb is not selected in such a sentence.

On the other hand, when a bare plural noun phrase is part of the conjoined structure, the resulting conjoined NP is no longer countable, just as a bare plural is uncountable in Chechen in general. Consequently, such a conjoined NP is compatible with a pluractional verb.

In this section, we have seen that the cumulativeness and quantization (or simply put, countability) of the absolutive argument can have an indirect effect on the telicity of an event structure. In the next section, we will briefly discuss how pluractionality interacts with the broader aspectual system in Chechen.

5. ONE REMAINING ISSUE: PERFECTIVITY

Verbal pluralization concerns the change in aspectual properties of verbs in Chechen. This change forces a telic event to turn into an atelic one. An atelic event is said to be an event without a definite endpoint. However, an imperfective event has also often been characterized as having no endpoints, whereas a perfective event includes both endpoints of a situation (cf. Smith 1991). Thus, one might be tempted to suggest that a pluractional event is incompatible with perfectivity. Yet the majority of the Chechen examples cited in this paper appear in the witnessed past tense, which arguably denotes perfectivity in Chechen. While this seeming contradiction could potentially be damaging to our analysis of pluractionality, we maintain that this objection is in fact misguided. However, before we demonstrate this, let us first consider the facts regarding perfectivity in Chechen.

Little research has been done on the nature of perfectivity in Chechen. However, we know at least that the pluractional verbs generally can appear with both the perfective and imperfective tenses. The examples in (60) illustrate how the perfective and imperfective markings interact with verbal pluralization.

(60) a. *Non-pluractional + WP*

maliikas khaza jish **leqira** tkhuuna
 Malika.ERG beautiful song **sing.WP** us.DAT
 ‘Malika sang a beautiful song to us (and finished).’

b. *Non-pluractional + IMP*

maliikas khaza jish **loqura** tkhuuna
 Malika.ERG beautiful song **sing.IMP** us.DAT
 ‘Malika sang a beautiful song to us (and might still be doing that).’

c. *Pluractional + WP*

maliikas khaza eesharsh **liiqira** tkhuuna
 Malika.ERG beautiful song.PL **sing.PLR.WP** us.DAT

‘Malika sang beautiful songs to us repeatedly (and finished).’

d. *Pluractional + IMP*

maliikas khaza eesharsh **luequra** tkhuuna
 Malika.ERG beautiful song.PL **sing.PLR.IMP** us.DAT

‘Malika sang beautiful songs to us (and might still be doing so).’

In (60a), Malika’s singing of a beautiful song has finished. (60b), however, means that the singing might not have finished yet. (60c) means that Malika’s singing, which took place many times, is now over. By contrast, (60d) means that Malika’s multiple singing might still be going on. The crucial point illustrated by these examples is that perfectivity is independent of verbal pluralization in Chechen. This is not surprising, given a two-component theory of aspectual information. Smith (1991), for example, suggests that situation aspect and viewpoint aspect, while obviously able to interact, should be treated independently. Thus, while it is true that the defining trait of the perfective marking is the presence of the temporal endpoint(s) of a viewpoint, as illustrated by the completion of Malika’s singing in (60a) and (60c), it does not imply an endpoint of the event *per se*. Following Smith’s notation, we can represent a perfective ((61a)) and an imperfective ((61b)) activity event in terms of the activity temporal schema (seen earlier in (40)) and the viewpoint temporal schema. The viewpoint schema is represented by the slashes underneath the activity temporal schema.

(61) a. I F_{arb}
 ////////////////

b. I F_{arb}
 ////////////

As represented by the schemas, the perfective activity includes both endpoints, while the imperfective includes neither. According to Smith, “the part focused by a viewpoint is *visible* to semantic interpretation” (p. 95). For the imperfective activity pluractional verb, “the receiver knows the nature of a final point although the final point is not presented and may not have occurred” (p. 96).

Given this two-component theory of aspectual information, the potential contradiction presented by the lack of an endpoint requirement of pluractionality is resolved.

6. CONCLUSION

The contribution of this work is threefold. It provides the first in-depth look at pluractionality in Chechen, a language that is extremely poorly documented and researched. It deals with a topic that has received, until recently, little attention in the field of aspect and semantics. Finally, it advances a new theory of pluractionality, accounting for facts that were missed by earlier treatments.

The Chechen verbal pluralization process generates three main semantic interpretations: frequentative, distributive, and durative. The most prototypical function of the pluralization alternation is to denote the repetition of an event (yielding a frequentative, or habitual, interpretation). However, there are also examples where the repetition meaning is not possible. In some cases, a pluractional verb is required when an absolutive argument is present, giving a distributive reading. In other cases, verbal pluralization yields an event prolongation (durative) reading, instead of the otherwise expected repetition action reading.

We have been able to account for these seemingly disparate effects uniformly by postulating a process that turns a telic event into an atelic one. Following Ojeda and Lasersohn, verbal pluralization is modeled here as the pluralization of the event argument of a verbal predicate. In the course of the discussion, we have also proposed that pluralization of events in Chechen should be viewed as generating a mass interpretation instead of a count plural one. Finally, the different aspectual interpretations of verbal pluralization are argued to be the result of the interaction between the pluralization process and the intrinsic aspectual properties of the verb root and its associated arguments.

While our Extended Pluralized Event Theory (E-PET) provides an explanation for language-particular facts about Chechen pluractionality, the crosslinguistic validity of this theory remains to be tested. Because of the poverty of information regarding facts about pluractionality across languages, we believe that this area of research is a fruitful one. We hope that this study will stimulate interest in semanticists and aspectualogists and make fieldworker aware of the intricacy of this phenomenon.

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