Event structure of complex predicates with the light verb *lart* 'seat, put' in Poshkart Chuvash

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Abstract. This article addresses the semantic properties and selective restrictions of the grammaticalized verb lart 'seat, put' in the Poshkart dialect of Chuvash. I show that the light verb can combine with lexical verbs with external arguments to form telic complex predicates signaling significant scalar change of state of one of the arguments. A description of the different behavior the light verb lart demonstrates with verbs that already have a scale of change and those that lack it is proposed. Further, I offer a formal analysis of the event structure of complex predicates with lart undertaken in the first phase syntax framework. The light verb lart has an impoverished event structure of its own that consists of three eventual heads (*init, proc*, and *res*) with Initiator, Undergoer, and Resultee as their specifiers. As the paper shows, this analvsis predicts both the selective restrictions of the light verb and the resulting semantics of the complex predicates. In particular, the suggested analysis predicts the distribution of the two basic (the gradative and the accumulative) meanings of the light verb *lart*. I claim that these meanings can be reduced to a single meaning of a scalar change of the state affecting the Undergoer of the event. The gradative meaning arises in contexts where the Undergoer is non-coreferential to the Initiator and the accumulative meaning, in contexts where the Initiator is coreferential to the Undergoer. The data were collected by elicitation during my field trip to the Chuvash village of Poshkart (Maloye Karachkino).

Keywords: complex predicates, serialization, grammaticalization, Chuvash, actionality, event structure, accumulative, gradative.

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Структура события сложных глаголов с легким глаголом *lart* 'посадить, поставить' в малокарачкинском диалекте чувашского языка

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Аннотация. Статья посвящена семантическим особенностям и селективным ограничениям грамматикализованного глагола *lart* 'посадить, поставить' в малокарачкинском говоре чувашского языка. В статье показывается, что этот легкий глагол сочетается с лексическими глаголами с внешним аргументом и образует предельные сложные предикаты со значением заметного изменения состояния одного из участников события по некоторой шкале. Кроме этого, предлагается предварительный анализ структуры события сложных глаголов с *lart* в рамках синтаксиса первой фазы, объясняющий селективные ограничения сложного глагола и дистрибуцию двух основных его значений: собственно градативного и аккумулятивного.

Ключевые слова: сложные глаголы, сериализация, грамматикализация, чувашский язык, акциональность, аспект, структура события, аккумулятив, градатив.

1. Introduction

Chuvash features **complex predicates** that represent constructions consisting of two verbal forms denoting a single event (1):

(1) vac∂ cur-za lart-r^j-∂
 V. sleep-CV_SIM seat-PST-3SG
 'Vasya slept enough'.

The meaning of (1) differs from what could be expected: the verb $lart^1$ 'seat, put' does not describe a situation of seating or putting. It is used in this sentence as a so-called **light verb** that, rather than describing a separate situation, modifies the event structure of the verb used in the converbal form, also labeled a **lexical verb**.

Complex predicates are widespread in Turkic languages (see, e.g., [Grashchenkov 2015]), including in Chuvash. The semantics of and selective restrictions on light verbs in Chuvash have been a focus of many studies ([Ashmarin 1923; Yegorov 1957; Lebedev 2016, etc.]). A notable work is [Shluinskiy 2006], describing the meaning of the light verb *il* 'take' in combination with lexical verbs of different actional classes. Most light verbs, however, still lack a detailed description or theoretical understanding: only some general facts about their meaning and distribution are known, and no minimal pairs are provided to corroborate these generalizations.

This paper describes the selection restrictions and the actional semantics of **the light verb** *lart* 'seat, **put**', proposing a formal analysis to systemize and explain its behavior. I argue that the light verb *lart* is a telicizing operator which forms punctive complex predicates denoting a significant change of a state associated with some scale. My analysis of the light verb *lart* in consistence with the first phase syntax theory will show that the light verb *lart* has its own impoverished event structure defining its selectional restrictions and actional semantics.

The paper is structured as follows. After an introduction in Section 1, Section 2 provides an overview of the existing literature on the light verb lart. Section 3 lays out the methodology of the research. The data are presented in Section 4 with three subsections where Subsection 4.1 describes the general properties of complex predicates with lart, Subsection 4.2 looks into the light verb's relations with incremental lexical verbs, and Subsection 4.3 discusses the behavior of the light verb with non-incremental lexical verbs. Section 5 proposes a final analysis, and Section 6 draws conclusions and presents perspectives for future research.

¹ Henceforth, I use the bare stem of a Chuvash verb as its lemma.

2. Literature review

One of the first mentions of the light verb *lart* 'seat' seems to belong to Ashmarin [1923]. He describes this light verb together with its intransitive variant *lar* 'sit down' as denoting "seat, sitting $\langle ... \rangle$ or fixed position, $\langle ... \rangle$ entering a hopeless, miserable, inert, or disastrous state"².

In his dissertation on aspectual light verbs in Chuvash, E. Lebedev [2016] also addresses the light verb *lart*. In his study, Lebedev describes the various actionality meanings of light verbs and their interaction with verbs of different lexical classes. According to Lebedev, light verbs *lart* 'seat' and *lar* 'sit down, sit' represent a single element *lar(t)* encoding "an actional meaning of the end of an action"³, especially in its causative variant. These light verbs combine with two classes of lexical predicates: inactive atelic and active telic verbs. The examples provided show the former to only combine with *lar* 'sit down', and the latter, to also combine with *lart* 'seat'. Finally, Lebedev claims that "the actional meaning of this element is supplemented with the meaning of effectiveness of action"⁴.

Overall, the existing works on the light verb *lart* demonstrate its general actional nature: it is grammaticalized into a telicizing operator which preferably combines with agentive lexical verbs (while patientive lexical verbs prefer its intransitive counterpart, the light verb *lar* 'sit down'). This description is, however, too holistic and lacks reliable proof: we do not see, for instance, any inverse examples where this light verb would occur in atelic contexts or combine with patientive light verbs. In addition, the exact meaning of this light verb is not specified, so that it is not clear if: it a) differs from the other telicizing light verbs, b) its meaning is always the same, c) it depends on some properties of a lexical verb, or d) there are any other restrictions on the contexts where the light verb *lart* can occur.

 $^{^{2} \}ll [C]$ идение, сидячее (...) или неподвижное положение; (...) попадание в безысходное, жалкое, инертное или бедственное положение» [Ashmarin 1923: 48].

³ «[А]кционсартовое значение окончания действия» [Lebedev 2016: 86].

⁴ «Акционсартовое значение данной формы дополнено смыслом результативности совершения действия» [Lebedev 2016: 86].

In a bid for an answer to all these questions, this paper proposes a detailed description of the general actional behavior of the light verb *lart*, its selectional restrictions, and its different meanings arising in combination with various classes of lexical verbs, as well as a formal analysis predicting the results observed.

3. Methodology

The examples used in this paper were collected by elicitation during my fieldwork in the Chuvash village of Poshkart (Maloye Karachkino) in August 2019 and in March 2020. My consultants were native speakers of the local Poshkart Chuvash dialect differing from the Standard Chuvash in many respects. Thus, all my generalizations are only based⁵ on Poshkart Chuvash.

Two methods of elicitation were employed: I asked my consultants to translate a Russian sentence into Chuvash, or asked them to rate the acceptability of a Chuvash sentence (and translate it, if the sentence was interpretable). The examples obtained sometimes differ in their acceptability for different speakers, as reflected in the specific notes in the text below in some cases.

Examples, collected from and approved by at least three different consultants, are taken as grammatically felicitous and provided below without any acceptability indications. Examples collected from less than three consultants, are marked in the text as preliminary to mean that their acceptability rate may change based on other native speakers' judgement.

If an obtained example shows inconsistent evaluation, it is prefixed by [%] where the numbers of positive and negative judgements are split evenly, or by ^{??} where most estimations were negative. All examples consistently estimated as negative are marked by * or [#], depending on their grammatical or pragmatic infelicity, respectively.

⁵ Notably, all my consultants also speak Standard Chuvash, so that there could be minor inclusions of particular Standard Chuvash words in some examples.

Finally, some examples, evaluated as acceptable but not entirely natural, are marked by [?]. These are viewed as tentatively grammatically felicitous with a view to possible accommodation difficulties. Notably, the nature of the constructions addressed here makes it difficult to expect a general consensus with respect to their felicity/infelicity among native speakers.

4. The data

This section consists of three parts. The first part considers the general properties of the complex predicates with *lart*: their general actional meanings, semantics, and selection restrictions. The following two parts look into the behavior of *lart* with incremental and non-incremental lexical verbs, respectively.

Many tests used in this section were developed for an analysis of the Hill Mari light verb *šöndäš* 'seat, put' [Kashkin 2018a, 2018b; Golosov 2019], since *lart* turnes out to have a lot in common with its Hill Mari counterpart. I will briefly comment on this similarity in the concluding remarks.

4.1. The general properties of complex predicates with lart

The lexical meaning of the verb *lart* is 'seat, put' (2):

(2)	vacə	vaz-in-e	sëdel	сi-n-e	lart-r ^j -ə
	V.	vase-P_3-OBJ	table	surface-P_3-OBJ	seat-pst-3sg
	'Vasy	a put the vase	on the	table'.	

As a light verb, it has been grammaticalized into a telicizing operator that forms punctual complex predicates:

(3) a. vac∂ pilëk minut-ra ci-ze lart-rⁱ-∂
 V. 5 minute-LOC eat-CV_SIM seat-PST-3SG
 'Vasya ate enough in five minutes'.

- b. *vac∂ pilëk minut ci-ze lart-r^j-∂
 V. 5 minute eat-cv_SIM seat-PST-3SG
 Int.: 'Vasya satisfied his hunger by eating for five minutes'.
- c. *vac∂ ci-ze lard-at*V. eat-CV_SIM seat-NPST.3SG
 'Vasya will satisfy his hunger/*is satisfying his hunger'.

In (3), I demonstrate that the complex predicates with *lart* are punctives⁶ in the sense of [Tatevosov 2016], i.e. they belong to the actional class <ES, ->, always denoting a culmination point. This is illustrated by the traditional adverbial and progressive interpretation tests: a complex predicate *eize lart* in the past tense (3a–b) can combine with timespan adverbials but cannot combine with durative ones. In the non-past tense (3c), it does not have a progressive interpretation.

The general semantic property of complex predicates with *lart* is that they denote a scalar change of the undergoer's state (4):

(4) *vacə şu əzət-sa lart-rⁱ-ə* V. water heat-CV_SIM seat-PST-3SG 'Vasya heated the water'.

In (4), the water changes its properties along a temperature scale or, to be precise, the water's temperature grows to some contextually relevant degree.

The degree of change must be contextually high and significant. This is illustrated by asymmetric compatibility with adverbials of different degree. Namely, complex predicates with *lart*, quite felicitous with adverbials of high degree, are less so with those of low degree:

(5)	a. <i>vəl</i>	nomaj	ëc-se	lart-r ^j -ə			
	3sg	many	drink-cv_sim	seat-pst-3sg			
'He drank a lot'.							

⁶ Note that "punctive" in this use does not mean "momentary". A punctive predicate can denote only a culmination point of an event, but this does not entail that the event itself is momentary: complex predicates with *lart* can combine with term-span adverbials as in (3a).

- b. *[#]vəl sagal ëc-se lart-ri-ə* h3sg little drink-cv_sım seat-pst-3sg Int.: 'He drank little'.
- (6) a. ebë nomaj xot cët-se lart-r-om
 lsg many paper tear-cv_SIM seat-PST-lsg
 'I tore a lot of paper'.
 - b. [%]*ep*⁷ sagal xot *cët-se* lart-r-*om* lsg little paper tear-cv_SIM seat-PST-lsg Int.: 'I tore a little paper'.
- (7) a. səmalⁱot pin kilometr vëe-se lart-sa plane 1000 kilometer fly-cv_SIM seat-cv_SIM
 'A plane flew one thousand kilometers'.
 - b. #somaliot igë kilometr vëc-se lart-ri-o
 plane 2 kilometer fly-cv_SIM seat-PST-3SG
 Int.: 'A plane flew two kilometers'.

Thus, it is possible to mark a high grade of saturation as in (5a), a large volume of the accumulated object as in (6a), or a contextually long path covered as in (7a), while examples denoting a low degree of saturation, a smaller volume of the accumulated object, or a contextually short path covered are infelicitous. For instance, my consultants find (7b) pragmatically strange: our experience tells us that two kilometers is too insignificant a path for any plane. Such restrictions do not seem to apply to isolated lexical verbs.

The light verb *lart* shows restrictions on the argument structure of lexical verb. Namely, it can combine with transitive, agentive, or stative lexical verbs, i.e. verbs that have an external argument in terms of, for instance, [Ramchand 2008a], while it cannot combine with patientive verbs, i.e. verbs denoting an uncontrolled change of state:

(8) a. vacə oj soxala-za lart-r^j-ə
 V. field plow-cv_SIM seat-PST-3sG
 'Vasya plowed the field'.

⁷ The pronunciation of the first singular personal pronoun is variative.

b. vacə nomaj sek-se lart-rj-a jump-CV SIM seat-PST-3SG V. manv 'Vasya jumped enough'. lart-rj-a c. vaea eur-za sleep-cv sim seat-pst-3sg V. 'Vasya slept enough'. d. *këhe lart-r^j-a tip-se dry-cv sim shirt seat-pst-3sg Int.: 'A shirt dried up'.

In (8a), the light verb *lart* combines with the transitive verb *soxala* 'plow'; in (8b), with the verb *sek* 'jump' denoting an agentive process; and in (8c), with the state verb *cur* 'sleep'. It cannot combine, however, with lexical verbs denoting a change of state of the patient, such as *tip* 'dry' in (8d) where the synonymous light verb *lar* 'sit down' is used instead:

- (9) lar-te-əe a. man GVG tip-se 1sg.gen hair dry-cv sim sit.down-pst-3pl 'My hair dried'. lar-tc-ə b. *su* əzən-za sit.down-pst-3sg heat-cv sim water
 - 'The water heated'.

The exact set of distribution rules or the way it aligns with the other unaccusativity diagnostics remains, however, unclear. This problem needs further research. Nevertheless, I will preliminarily identify patientive intransitives with unaccusatives and agentive intransitives with unergatives.

The light verb *lart* combines with different lexical verbs with varying semantic impact on the meaning, partially depending on whether they already have a scalar argument. Below, I will first consider the verbs that already have a kind of a scalar argument, i.e. incremental verbs, and then discuss the way the light verb interacts with non-incremental lexical verbs.

4.2. The light verb lart and incremental lexical verbs

Before a description of the data obtained, a brief theoretical introduction for incremental verbs will be in order here. The notion of incrementality was first introduced in [Krifka 1989, 1992]. Krifka defines incrementality as a one-to-one relation between an event and its argument (10):

(10) John ate an apple.

The sentence in (10) describes an event of eating, where the object, an apple, undergoes a change (disappears) in the course of the event. The relation between the event and the object is incremental, since each part of the event corresponds to some unique part of the object, and vice versa. A verb with an argument incremental with respect to the event is labeled an incremental verb.

There are three types of incremental arguments: an incremental theme, an incremental property, and an incremental path; see, for instance, [Tatevosov 2015]. An incremental theme is an argument whose parts are involved in the incremental relation to the event. Thus, (10) shows a one-toone relation between the event of eating and the parts of the apple. Another example of a verb with an incremental theme is (11):

(11) The house burnt.

Here, the house is also an incremental theme object: there is a oneto-one relation between the process of burning and the parts of the house.

Another type of incremental argument is an incremental property:

(12) John cooled the water.

In contrast to (10) and (11), the internal argument is not an incremental theme here, since the progress of the event does not involve an increase in the amount of the water affected. At the same time, the changing property of the water, its temperature, is incremental with respect to the event, since a one-to-one relation does evolve between the event components and points on the water temperature scale. Verbs with a scale argument in their event structure are labeled degree achievements.

The last type of an incremental argument is an incremental path. Consider the example below:

(13) John ran to the station.

In (13), there is an incremental relation between the event and the path (the route of John's running): the more John runs, the greater portion of the path is involved.

The light verb *lart* behaves inconsistently with verbs with different incremental arguments. The group of the incremental verbs which combine with the light verb *lart* with the least semantic impact is that of degree achievements, or verbs with an incremental property in their event structure. Namely, the light verb *lart* specifies the telic interpretation, and the complex predicate denotes a change of state of the object to some contextually relevant high degree:

- (14) a. *vacə at-in-e tazat-sa lart-r^j-ə* V. boot-P_3-OBJ clean-CV_SIM seat-PST-3SG 'Vasya cleaned his boots'.
 - b. *vacə teaşk-a şu-ba tol-dar-za lart-rⁱ-ə* V. cup-OBJ water-INS fill-CAUS-CV_SIM seat-PST-3SG 'Vasya filled the cup with water'.
 - c. $vac\partial su = \partial z\partial t sa = lart r^j \partial$ V. water heat-CV_SIM seat-PST-3SG 'Vasya heated the water'.
 - d. *vacə can-in-e mədək-la-t-sa lart-ri-ə* V. sleeve-p_3-obj short-vbz-CAUS-CV_SIM seat-pst-3sg 'Vasya shortened his sleeves'.

In combination with verbs with an incremental theme, the light verb *lart* behaves differently depending on whether the object comes into existence during the event, disappears after it, or just changes its state or even remains the same. I distinguish four classes of verbs based on this parameter: verbs of creation, verbs of destruction⁸, verbs of impact on the object, and verbs with a non-patient incremental theme, respectively.

In combination with verbs of creation, the light verb *lart* simply forms complex predicates denoting accumulation of the created object:

(15)	а. <i>vacə</i>	cavraşka	yger-ze	lart-r ^j -ə
	V.	circle	draw-CV_SIM	seat-PST-3SG
	'Vasy	a drew a cir	rcle'.	

b. *papi* sarf cik-sa lart-r^j-ə grandma scarf tie-cv_SIM seat-PST-3SG 'Grandma knitted a scarf'.

If a creation verb is not incremental, it combines with the light verb *lart*, but preferably, with a plural object:

(15)	c. [?] an ^j ə A.	ul son	<i>corat-s</i> give.birt	а h-cv_siм	<i>lart-r^j-ə</i> seat-pst-) 3sg
	'Anya	a gave bi	rth to h	er son'.		
	d. <i>an^jə</i> A.	<i>nomaj</i> many	<i>atca</i> child	<i>corat-sa</i> give.birth	-CV_SIM	<i>lart-r^j-ə</i> seat-pst-3sg

'Anya gave birth to many children'.

In combination with incremental verbs of destruction, the light verb *lart* behaves inconsistently. I have only three verbs of destruction in my sample with an incremental theme in their event structure: *condar* 'burn', *erëlder* 'melt', and *kajdar* 'erase'. Admittedly, all the three verbs form complex predicates with different semantic output.

In combination with *lart*, the lexical verb *condar* 'burn' forms complex predicates as in (16):

(16)	а. <i>vacə</i>	kastr ^j ul ^j -a	con-dar-za	lart-r ^j -ə			
	V.	saucepan-OBJ	burn-caus-cv_sim	seat-pst-3sg			
'Vasya burnt the saucepan'.							

⁸ I use the terms "creation" and "destruction" in a "referential" sense: creation is a kind of event where a new object is to come into existence, while destruction is a kind of event where the object is to disappear.

b. [%]*vacə* pørd-e con-dar-za lart-ri-ə V. house-OBJ burn-CAUS-CV_SIM seat-PST-3SG 'Vasya burnt the house to some extent/*completely'.

In (16a), there is no incremental theme interpretation: it is not true that the pan gradually becomes smaller in size through the process of burning. Instead, the complex predicate *condarza lart* denotes some change of the incremental property similar to degree achievement: indeed, the pan gets increasingly stronger effect of burning during the process. The same is true of (16b), though it is pragmatically less natural and is thus rejected by some consultants.

In contrast, the other verb *erëlder* 'melt' in combination with *lart* denotes reaching the endpoint of the melting, i.e. the moment when the ice completely turns into water:

(17) vacə pər erël-der-ze lart-ri-ə
V. ice melt-CAUS-CV_SIM seat-PST-3SG
'Vasya melted the ice (completely)'.

The third verb, *kajdar* 'erase' can combine with *lart* in only few idiolects where it denotes entering into a state (disappearance of the drawing):

(18) [%]vacə ygertcëg-e kaj-dar-za lart-r^j-ə
 V. drawing-OBJ go-CAUS-CV_SIM seat-PST-3SG
 'Vasya erased a drawing'.

Another verb that can be used in situations of destruction is *synder* 'extinguish'; in combination with *lart*, it forms a complex predicate with a completive meaning:

(19) vacə vod-a syn-der-ze lart-rⁱ-ә
 V. fire-овы go.out-саus-сv_sім seat-pst-3sg
 'Vasya extinguished the fire'.

In this case it is not clear, however, whether the verb's object is indeed an incremental theme or a patient with an incremental property affected.

Overall, the behavior of the light verb *lart* with destruction verbs is inconsistent and needs further investigation. It is possible that a patient

of a destruction verb should have an incremental property for this verb to combine with *lart*.

In combination with most incremental theme verbs denoting other types of change of state, the light verb *lart* also has a completive meaning, i.e. it denotes coverage of an incremental theme:

(20)	a.	vacə V.	<i>oj</i> field	<i>soxala-za</i> plow-cv_siм	<i>lart-r^j-ə</i> seat-pst-3sg
		'Vasya	ı plowe	ed the field'.	
	b.	vacə V.	<i>karda</i> fence	<i>sərla-za</i> paint-cv_sıм	<i>lart-r^j-ə</i> seat-pst-3sg
		'Vasya	a painte	ed the fence'.	
	c.	vacə V.	<i>oraj</i> floor	<i>şəl-za</i> sweep-cv_siм	<i>lart-r^j-ə</i> seat-pst-3sg
		'Vasya	ı swept	the floor'.	

The only observed exclusion from this generalization is the class of consumption verbs, i.e. the verbs ϵi 'eat' and $\ddot{\epsilon}\epsilon$ 'drink'. In contrast to the other verbs of this class, the light verb *lart* forms complex predicates with accumulative meaning, often with saturativity inference:

- (21) a. *vacə* (*şørbe*) *ci-ze lart-r^j-ə* V. soup eat-cv_SIM seat-PST-3sG 'Vasya ate enough (soup)'.
 - b. *vəl nomaj ëc-se lart-r^j-ə* 3sg many drink-cv_SIM seat-PST-3sg 'He drank a lot'.

In (21a) and (21b), the culmination point of the denoted event is the contextually relevant moment of the agent's saturation with consumption. In contexts where the exhaustification of the object is specified, the light verb *lart* is prohibited:

(22) *vacə pëdëm cørbe ci-ze lart-r^j-ə
 V. totally soup eat-CV_SIM seat-PST-3SG
 Int.: 'Vasya ate all the soup'.

The same saturative meaning of complex predicates with *lart* arises in combination with verbs with an incremental object that does not change its state during the event:

(23) *vacə kino-zam pək-sa lart-r^j-ə* V. film-PL watch-CV_SIM seat-PST-3SG 'Vasya had his fill of watching films'.

For example, the culmination point in (23) is not the moment when all the films are being watched, but the moment of Vasya's saturation with film watching, when it becomes obvious that he had seen enough movies. In other words, it seems that incremental argument is not used as a scale, on which *lart* operates; rather, the relevant scale is the scale of accumulation associated with the agent.

The last subpart of incremental verbs to consider here are verbs with an incremental path. In combination with verbs of motion, *lart* forms complex predicates that at first glance operate on a path scale:

(24)	a.	vacə	vizë	kilometr	is-se	lart-r ^j -ə
		V.	3	kilometer	swim-cv_sim	seat-pst-3sg
		'Vasya	a swan	n for three	kilometers'.	
	b.	<i>vaсә</i> V.	për 1	<i>kilometr</i> kilometer	<i>teop-sa</i> run-cv_sim	<i>lart-r^j-ə</i> seat-pst-3sg
		'Vasya	a ran fe	or one kilo	meter'.	
	c.	<i>səmc</i> plane	ol ^j ot p	p <i>in kilor</i> 1000 kilon	<i>netr vëc-se</i> neter fly-cv_s	<i>lart-sa</i> siм seat-cv_siм
		'A pla	ne flev	w one thou	sand kilomet	ers'.

It is not clear, however, whether the scale light verb *lart* operates on in these cases is a proper path scale; at least, it is not clear whether it is the only option. Sometimes native speakers translate sentences like (24) into Russian using the cumulative prefix *na*-; for example, the verb from (24c) could be translated as Rus. *naletati* 'log [1000 kilometers]'. However, judging by the preliminary data, the light verb *lart* can be used in contexts where experiential interpretation is problematic: (25) vacə kil-den pocla-za şkol-a cid-e V. home-ABL begin-CV_SIM school-OBJ reach-CV_ATT tsop-sa lart-rⁱ-ə run-CV_SIM seat-PST-3SG 'Vasva ran from home to school'.

Thus, in combination with incremental-path lexical verbs, *lart* can form a complex predicate either with incremental path, or accumulative "experiential" reading; though in any case, the degree of the effort must be contextually significant.

4.3. The light verb lart and non-incremental lexical verbs

Considered next are non-incremental lexical verbs combining with *lart*. The meaning of the resulting complex predicates can differ depending on whether the object undergoes change during the event.

In combination with some non-incremental verbs of a durative change of the state of the object, such complex predicates can denote a telic process of object accumulation:

- (26) a. vacə nomaj xot cët-se lart-ri-ə
 V. many paper tear-cv_SIM sead-PST-3sg
 'Vasya tore a lot of paper'.
 - b. vac∂ nomaj kaj∂k tit-sa lart-r^j-∂
 V. many bird catch-CV_SIM seat-PST-SG
 'Vasya caught a lot of birds'.
 - c. vac∂ vod∂ cor-za lart-rⁱ-∂
 V. wood chop-cv_SIM seat-PST-3sG
 'Vasya chopped a lot of wood'.

Thus, (26a) describes a culmination point where the accumulation of paper reaches a contextually relevant high degree, while the degree of destruction of the paper is irrelevant. In fact, there is an evident similarity between such examples and the complex predicates formed from creation verbs: in both cases, an entity is created during the action. There are some restrictions on the formation of such cumulative complex predicates, discussed below in the analysis.

If the lexical verb denotes a durative event without a patientive object, the complex predicate has a cumulative interpretation, often with a saturativity inference. Thus, in combination with transitives with non-incremental theme objects (27a), as well as with activities (27b) or states (27c), the light verb *lart* forms complex predicates denoting that the agent has performed the action up to the satisfaction point:

(27) a. vacə teedzek şərşla-za lart-r^j-ə
V. flower smell-cv_SIM seat-PST-3SG
'Vasya had his fill of smelling the flower'.

- b. vac∂ nomaj sek-se lart-r^j-∂
 V. many jump-CV_SIM seat-PST-3SG
 'Vasya jumped enough'.
- c. *vacə cur-za lart-r^j-ə* V. sleep-cv_SIM seat-PST-3sG 'Vasya slept enough'.

In such cases, the accumulator of effect is not the object, but rather the subject: in (27a), it is the person who has satisfied his wish for smelling the flower; in (27b), it is the person who has achieved some effect (saturation or fatigue) as a result of his jumping; and in (27c), it is the person who has slept enough for some contextually relevant scale (most probably, a scale of wakefulness).

Finally, *lart* generally does not combine with verbs denoting a momentary change of state on a binary scale:

(28)а. **vacə* sarik sek-ter-ze lart-r^j-ə V. balloon burst-caus-cv sim seat-pst-3sg Int.: 'Vasya burst the balloon'. b. **vacə* cëlëg-e top-sa lart-r^j-ə V. hat-obj find-cv sim seat-pst-3s Int.: 'Vasya found the hat'.

So, in (28a), the object entered the ungradable state of bursting (it is impossible to be more or less burst. The same holds for (28b).

Note that, in contrast to creatives, such verbs cannot combine with the light verb *lart* even with a plural object:

(28) c. *vacə nomaj şarik sek-ter-ze lart-r^j-ə
 V. many balloon burst-CAUS-CV_SIM seat-PST-3SG
 Int.: 'Vasya burst a lot of balloons'.

However, I found some examples where the light verb *lart* does combine with verbs denoting momentary events. Some of them are provided below:

(29)	а. <i>vacə</i>	pet ^j -a	bulavkə-ba	ter-ze	lart-r ^j -ə
	V.	Ровј	pin-INS	poke-cv_sim	seat-pst-3sg
	'Vasya	a pricke	d Petya with	a pin'.	

b.	vacə	jŧd-a	tap-sa	lart-r ^j -ə
	V.	dog-obj	kick-cv_sim	seat-pst-3sg
	'Vasya	a kicked t	he dog'.	

c. *vacə kosti-a cap-sa lart-ri-ə* V. K.-OBJ hit-CV_SIM seat-PST-3SG 'Vasya hit Kostya'.

It is not clear whether one should consider such cases together with the other instances of the usage of *lart*, since there is no meaning of incremental change of a property arising in all the other examples. However, what these examples have in common with the rest is that they denote events with some effect produced on one of the arguments; and, furthermore, this effect is possibly gradable, because a bite, a kick, or a hit can be stronger or weaker. Thus, some scale may be activated in such sentences, with the only difference that it is not incremental to the process subevent. However, the presence of the scale should be proved in this case to avoid an *ad hoc* stipulation. In addition, it is not clear why the meaning (or implicature) of an accident arises in at least some of the consultants' translations. This case certainly needs further investigation.

Overall, the verb *lart* 'seat' is grammaticalized into a telicizing operator which can combine with (scalar!) non-ergative or transitive lexical verbs. It usually forms incremental predicates from verbs denoting durative events, but in the specific case of momentary events, it can presumably⁹ operate on a scale of the effect on the object, where possible. In addition, it requires a high enough grade on a scale. My analysis of this light verb is proposed in the next section.

The distribution of different meanings of the light verb *lart* with different classes of lexical verbs is summarized in *Table 1* (p. 425) (recall that the light verb does not combine with unaccusatives or some of momentary event verbs).

Before moving on to the analysis, I need to admit that it is not completely clear whether the accumulative meaning of complex predicates with the light verb *lart* can emerge with any verbs that basically form complex predicates denoting a change of state of the object. However, even if this meaning is possible in some cases, it has not been detected during the elicitation: my consultants consistently translate complex predicates with the change-of-state interpretation, but never with accumulative meaning. Thus, my analysis addresses the basic, most natural interpretations of complex predicates with the light verb *lart*, while a more precise analysis of the distribution of the two meanings is certainly needed. Below, I will also comment on how the possible expansion of the accumulative meaning of *lart* may affect my analysis.

5. Analysis

To summarize, the core properties of the light verb *lart* mentioned above, are as follows. First, *lart* can form punctive complex predicates and thus function as a telicizing operator. Second, it can only combine with verbs with an external argument. Third, complex predicates with *lart* describe a kind of a (significant!) scalar change of the state of one of the arguments.

⁹ It is not still clear whether the light verb *lart* in such cases has the same structure. It can be the case that there is "another" light verb *lart* in this context. This problem needs further investigation.

Cla	ss of the lexic	al verb	The meaning of the complex predicate with <i>lart</i>	
	Verbs with in property	ncremental	A change of state of the object to some contextually relevant high degree	
	Verbs with in	ncremental path	Accumulation of the object (large path covered)	
		Verbs of creation	Accumulation of the created object	
Incremental		Verbs of destruction		
verbs	Verbs with incremental theme	Verbs of impact on the object	Completeness of the action	
		Verbs with a non- patientive incremental theme	Contextual saturation of the agent	
		Ingestives		
N	Durativa	Verbs without patientive object		
Non- incremental verbs	Durative	Verbs with patientive object	Accumulation of the object	
	Non-durativ	e	Suddenness of the action (could be another meaning)	

Table 1. Distribution of the meanings of lart with different classes of lexical verbs

The most interesting property of complex predicates with *lart* is that the choice of the scale depends on the thematic properties of the lexical verb. Namely, the light verb chooses a scale associated with the object if the lexical verb denotes a scalar change of state of the object (unless this verb is ingestive or creative). In all other cases, viz. in those of ingestives, creatives, non-incremental durative verbs, or with verbs with non-patientive objects and unergatives, the light verb *lart* operates on the scale of accumulativity, associated with the agent. The key issue here is to identify the factor behind such a distribution of meanings.

Primitive syntactic and semantic factors cannot predict this distribution. It is not true that the light verb *lart* chooses the scale of the lexical verbs already containing it and introduces its own accumulative scale otherwise, because incremental verbs are split into two different groups. It is also false that the key factor is transitivity: transitive verbs behave with *lart* inconsistently. Finally, it is not completely true that the choice of scale depends on whether the lexical verb has a patient: for example, though the verbs *tazat* 'clean' and *ci* 'eat' both contain a patientive object in their argument structure, they belong to different groups in terms of the choice of the scale. In addition, it is not clear why the "default" scale is a scale of accumulation.

The first phase syntax theory can explain the distribution of the meanings of complex predicates with lart. This formal theory of event decomposition was first proposed in [Ramchand 2003] and later developed in [Lyutikova et al. 2006; Ramchand 2008a, 2009b; Lyutikova, Tatevosov 2014]. It claims that the event and argument structure of a predicate is represented in syntax by a combination of three heads (*init*, *proc*, and res) introducing the subevents of an event. Namely, init usually introduces a causing subevent, proc denotes a process subevent, and res introduces a resultant subevent or a resultant state. Each of the heads has specifiers and complements of its own. The specifier of an eventual head is an obligatory participant of this subevent. The eventual head init projects a specifier called Initiator (the participant-source of the causing subevent), proc introduces the Undergoer (the participant, physically involved in the process), and res introduces the Resultee (the holder of the resultant state). The complements of the subeventual heads are filled with other entities that specify the descriptive properties of the corresponding subevent. Such complements could be other eventual phrases, causally dependent on the subevent, or nominal or scalar arguments specifying some properties of the subevent. Such non-eventual arguments are called Rhemes.

The maximal projection of an event structure of the first phase syntax looks as follows:



Fig. 1. A first phase syntax (copied from [Ramchand 2008a: 46])

This approach can differentiate a diversity of various event structures. The two crucial parameters are the set of the subevents and the reference relation between the specifiers. For example, unaccusatives differ from unergatives and transitives in that they lack *initP* (and hence cause the subevent and the Initiator), and unergatives differ from transitives in that the Initiator of unergatives is coreferential ¹⁰ to the Undergoer, while the Initiator of transitives is not coreferential to their Undergoer.

Leaving aside many interesting formal details of the first phase syntax concerning various event structure issues, I will only touch on some key points of this framework, crucial for my analysis of the complex predicates. As shown above, despite their agentive nature, unergatives do have an Undergoer in their event structure, with this Undergoer usually coreferential to the Initiator. This structure logically follows from that of the first phase syntax: activities should contain *proc*, because this head is the source of dynamic inference, but at the same time, they should have *init*

¹⁰ Note that in the first phase syntax, there is no restriction on how many theta-roles a DP could get: a single DP could, for example, get all the three roles (Initiator-Undergoer-Resultee) as with some agentive verbs of motion, such as *arrive*.

to contain an external argument (the Initiator). Ramchand, however, proposes independent arguments for this analysis. For example, some contexts may allow transitivity with usually unergative verbs of motion, as illustrated in (30) (cited from [Ramchand 2008a: 128]):

(30) a. Karena walked the dog.

b. Michael jumped the horse.

Moreover, Ramchand also analyzes some transitives as verbs with coreferential Initiators and Undergoers — despite the existence of a direct object. Namely, she analyses both creation verbs and ingestives as verbs where the subject is simultaneously the Initiator and the Undergoer, while the object is in the complement of *proc* (it is also called Path); see examples below (cited from [Ramchand 2008a: 20]:

(31) a. John painted a picture.

b. John painted a wall.

- (32) a. John painted me a picture.
 - b. ²²John painted me a wall.

These examples illustrate the syntactic difference between the two usages of the verb *paint* (as a creation verb and as a verb denoting change of state), namely the inability of *paint* in the latter meaning to take a beneficiary argument. Ramchand argues that this contrast comes from the difference in the event structure: in its creative usage, *paint* takes the object as a Path, while the position of Undergoer is reserved for the future possessor of the creative entity: by default, it is Initiator itself, but it is possible to fill this position with another DP. In contrast, *paint* as a change-ofstate verb lacks such an ability: its Undergoer is obligatorily a DP denoting the changed entity, i.e. the object of painting.

On the other hand, only *paint* in its change-of-state usage can get a resultative secondary predication, since creation verbs do not project resP (the place of the complement of *proc*, where resP could merge, is already filled with the Path argument); the examples are cited from [Ramchand 2008a: 77]:

(33) a. John painted a wall red.

b. *John painted a picture red.

This specific behavior of ingestives and creatives is crucial for my research, since it explains why such verbs cluster with unergatives: they also have a coreferential Initiator and Undergoer.

The first phase syntax makes it possible to analyze derivations on the borderline between syntax and morphology, such as causatives and actional preverbs [Ramchand 2008a]. Particularly, this framework is well developed to adequately describe the structure of aspectual complex predicates in Indo-Arian languages [Ramchand 2008a, 2008b; Ozarkar, Ramchand 2018]. The authors analyze light verbs as verbs that have lost their lexical content, i.e. a capacity to denote their own situation, but preserved to some extent their event structure, i.e. the set of eventual heads and some argument structure restrictions.

Combining the ideas from [Ramchand 2008b; Ozarkar, Ramchand 2018], I argue that similar analysis is preliminarily applicable to light verbs in Chuvash, at least to the light verb *lart* 'seat' that can also form telic complex predicates.

The light verb *lart* (at least, in one of its meanings) forms complex predicates with the meaning of significant scalar change of state of thearguments of verbs with different event structure; thus, it is plausible that the event structure of such complex predicates is defined by *lart* rather than by the lexical verb.

Thus, if a light verb has its own event structure, this structure should be evident from its selective restrictions and actional properties. The fact that the light verb *lart* combines with only unergatives and transitives implies that it has an *init* head, as well as an Initiator corresponding to the external argument, or, informally speaking, an agent/causer of the event. Further, since complex predicates with *lart* denote a kind of change of state with one of the arguments, there should be a *proc* head in its event structure, as well as an Undergoer, i.e. the patient of the event. Since the light verb *lart* forms telic complex predicates denoting entering a gradable state, the light verb *lart* should also project a Resultee and an eventual head *res*, responsible for the resultant state and requiring the resultant subevent to be gradable and denote a significant degree of a state. Finally, since the light verb *lart* can combine with both transitives and unergatives, the Initiator and the Undergoer can (not) be coreferential. As is standard in the first phase syntax, the Resultee is coreferential to the Undergoer, except for some very specific cases [Ramchand 2008a: 136–137]. Thus, the event structure of complex predicates with *lart* is as follows:



Fig. 2. The event structure of complex predicates with the light verb lart 'seat'

The structure of complex predicates with *lart* functions as follows. The light verb *lart* has an impoverished event structure without a lexical component, and it needs a lexical verb to fulfill the idiosyncratic component of its meaning. I tentatively¹¹ argue that the light verb *lart* takes a converbal phrase in the complement of *res* (a similar analysis was proposed in [Ozarkar, Ramchand 2018] for Marathi telic predicates), and here events are identified via a formal semantic operation called generalized

¹¹ The position of the lexical verb phrase certainly needs a special proof. My analysis just mirrors the simple idea that the light verb takes a lexical verb phrase as its complement before it builds an event structure of its own.

event identification [Tatevosov, Kiseleva 2019]. To avoid an explanation of the formal details of this operation, its essence is that the merged events intersect their truth conditions. A simplified informal explanation may be as follows. Consider the complex predicate in (34), equivalent to (4):

(34) *vacə şu əzət-sa lart-r^j-ə* V. water heat-cv_SIM seat-PST-3SG 'Vasya heated the water'.

The verb *azat* 'heat' lexicalizes the event of heating, while the light verb *lart* has a bare event template and roughly means 'Initiator significantly changes a scalar state of the Undergoer-Resultee'. The light verb requires the semantics of the lexical verb to fulfill its event template, and the resultant complex predicate means 'Vasya as Initiator causes the water as Undergoer to enter the state of being significantly hotter as Resultee'.

While this analysis needs further development, my intention here is to give a general view on the possible formalization of complex predicate formation and show how the first phase syntax approach can explain some properties of such complex predicates.

Another important advantage of the analysis is that it also predicts the distribution of different meanings of the light verb *lart*, i.e. the choice of the scale and the argument changing its state during the event. Namely, it predicts that complex predicates with *lart* will denote a scalar change of state of the Undergoer of an event.

To be more precise, the analysis correctly predicts the distribution of "degree achievement" and accumulative meanings. If the Undergoer of the lexical verb is not coreferential to the Initiator, the complex predicate will have a meaning of a scalar change of the Undergoer (35):

(35) a. $vac \partial su \partial z \partial t sa lart-r^{j} \partial v$. water heat- cv_{SIM} seat-pst-3sg 'Vasya heated the water'.

b. *vacə can-in-e mədək-la-t-sa lart-r^j-ə* V. sleeve-P_3-OBJ short-VBZ-CAUS-CV_SIM seat-PST-3SG 'Vasya shortened his sleeves'. The impact of the light verb *lart* is invisible in this case, except for telicizing: since the light verb is already a degree achievement, it just maps its own event structure onto the structure of the lexical verb: the "empty" scale of *lart* is identified with the lexical scale of a degree achievement.

If the lexical verb has a non-coreferential Initiator and Undergoer, but it is not a degree achievement, then the possibility of complex predicate formation depends on whether it is possible to accommodate a kind of a scale. It is indeed possible if the Undergoer is itself an incremental argument, and *lart* works with incremental theme predicates as with degree achievements containing a mereological scale¹²:

(36)	a.	vacə	pər	erël-der-ze	lart-r ^j -ə
		V.	ice	melt-CAUS-CV_SIM	seat-pst-3sg
		'Vasy	a melt	ted ice'.	

b. vacə oj soxala-za lart-r^j-ə
V. field plow-cv_SIM seat-PST-3sG
'Vasya plowed the field'.

It is possible that there are other cases where the scale is accommodated, but I have not come across them yet.

If a change of state is lexically specified and non-scalar, it is difficult to accommodate an appropriate scale, and the light verb *lart* is forbidden with such verbs (37):

(37)	a.	* <i>vacə</i> V.	<i>şarik</i> balloon	<i>sek-ter-ze</i> burst-caus-cv sim	<i>lart-r^j-ə</i> seat-pst-3sg
		Int.: 'V	asya burs	st the balloon'.	

b.	*vacə	cëlëg-e	top-sa	lart-r ^j -ə
	V.	hat-OBJ	find-cv_sim	seat-pst-3sg
	Int.: 'Va			

¹² The only observed exclusions are complex predicates from the verbs *condar* 'burn' (which has a trickier resulting meaning) and *kajdar* 'erase', which has the corresponding meaning in combination with *lart* but is incompatible with the light verb in some idiolects for some reason. Note, however, that complex predicates with *condar* still follow the general trend, since they denote events with an incremental change of the state of the object.

If the Initiator and the Undergoer of the lexical verb are coreferential, the light verb *lart* forms complex predicates with accumulative interpretation. The more precise type of accumulation is contextually dependent: it could be accumulation of nutrients (38a), of information (38b), or of experience (38c):

(38)	a. <i>vae</i> V.	<i>30 £i-2</i> eat-	ze cv sim	<i>lart-r^j-ə</i> seat-pst-3	SG			
	'Vasya ate enough'.							
	b. <i>vae</i> V.	sə kin film	<i>0-zam</i> I-PL	<i>pək-sa</i> watch-cv	_SIM	<i>lart-r</i> seat-ps	<i>i−ə</i> st-3sg	
	'Vasya watched films enough'.							
	c. <i>sən</i> plar	nol ^j ot ne	<i>pin</i> 1000	<i>kilometr</i> kilometer	<i>vë€-</i> fly-c	S€ V_SIM	<i>lart-sa</i> seat-cv_s	IM
	'A ı	plane fl	ew on	e thousand	l kilo	meters	,	

Presumably, an accumulative inference can be explained here by the fact that the light verb *lart* tries to scalarize the event where the Undergoer is coreferential to the Initiator. In fact, what we call the accumulative scale is a scale of any contextually possible impact made on the external argument during the event¹³. If this line is correct, then the analysis can predict accumulative meaning with such verbs without any additional assumptions.

Note that the first phase syntax correctly predicts cases where the accumulative meaning should arise: the common trait of all unergatives, transitive verbs of perceptive interaction with a theme object¹⁴, verbs

¹³ This idea goes in line with a similar suggestion in the analysis of the incrementalization phenomenon in Tuba [Tatevosov 2009].

¹⁴ The analysis of perception verbs such as *pək* 'watch' and *şirşla* 'smell' as containing coreferential Initiator and Undergoer comes from [Ramchand 2008a], where she discusses the behavior of causatives in Hindi / Urdu. Namely, she distinguishes a special class of 'ingestive' verbs which differ from the other transitives and behave similarly to unergatives in that they obligatorily decrease their valency after causativization; for more detail, see [Ibid.: 165–211]. Thus, Ramchand includes perception verbs

of creation and ingestives is that the Initiator is coreferential with the Undergoer in their event structure, while the object, if present, is located in the Path position.

This analysis also explains the following contrast between verbs of creation and verbs of destruction:

- (39) a. ${}^{?}an^{i}\partial$ ul corat-sa $lart-r^{i}-\partial$ A. son give.birth-cv_SIM seat-PST-3SG 'Anya gave birth to a son'.
 - b. *vacə şarik sek-ter-ze lart-r^j-ə
 V. balloon burst-CAUS-CV_SIM seat-PST-3SG
 Int.: 'Vasya burst the balloon'.
 - c. $an^{j}\partial$ nomaj atea corat-sa lart- r^{j} - ∂ A. many child give.birth-cv_SIM seat-PST-3sG 'Anya gave birth to many children'.
 - d. **vacə nomaj şarik sek-ter-ze lart-r-i*ə V. many balloon burst-CAUS-CV_SIM seat-PST-3sG 'Vasya burst many balloons'.

The difference between the two verbs in (39) is in the NP corresponding to the Undergoer. In the structure of *sekter* 'burst', the Undergoer is the object of bursting. Thus *lart*, operating on the destruction scale, fails to accommodate it because of its binary nature: while an object either can or cannot not be dead, a situation where it is, for instance, half-dead, is impossible. Therefore, (39b) is ungrammatical.

In contrast, the Undergoer of *corat* 'give birth to' is not an object; it is rather a subject of birthing according to the analysis provided in [Ramchand 2008a] for verbs of creation. The object of creation is a complement of *proc*, i.e. it is a Path argument. In this case, the contextually relevant

in the extended set of the already mentioned ingestives such as *drink* or *eat*. Note that the proposed "intransitive" event structure also logically follows from the definition of Undergoer: in cases of watching and smelling, it is rather the subject than the object that changes its state.

scale is a scale of possession associated with the mother, and this scale is not binary: you can have a single child, two children, or more. That is why (39c) is grammatical.

Why is (39a) problematic then? I argue that it is infelicitous, because it describes the minimal possible grade of possession: a single child is the minimum you can get from birthing. Hence, the restriction on the significant degree is violated. Note that (39a) is a more natural sentence than (39b)¹⁵.

But why is (39d) ungrammatical? One could argue that here the analysis is incorrect, because *sekter* forms a scale of the quantity of the burst balloons, and it is non-binary. I think the problem is that *lart* requires here the incremental property of the whole Undergoer, and the scale of quantity does not fulfill this requirement. It is not true, that you *burst balloons more* if you burst more balloons. This is my explanation of (39d)'s infelicity.

An interesting and at first glance problematic case arises in contexts where *lart* combines with non-incremental verbs with a patientive object (40):

(40)	а. <i>vacə</i>	сiр	cët-se	lart-r ^j -ə
	V.	thread	tear-cv_sim	sead-pst-3sg
	'Vasy	va tore so	ome threads'.	
	b. <i>vacə</i>	vodə	cor-za	lart-r ^j -ə
	V.	wood	chop-CV_SIM	seat-pst-3sg
	'Vasy	a chopp	ed some woo	ď.

It is not clear which DP takes the Undergoer position here — the accumulator or the accumulated entity? In a way, both participants experience a change of state: the accumulator changes its state of wealth, while the accumulated entity changes its physical state. Moreover, these verbs, *cët* 'tear' and *cor* 'chop', are destruction verbs in their "prototypical" usages,

¹⁵ In fact, some native speakers partially accept (39a) if Anya gives birth to her first son. Maybe it is an attempt to represent the birth of a single child as a significant possession, marking the opposition with a lack of any children.

and it is not clear how something other than the object of destruction can be the Undergoer.

A possible solution to this problem is that these verbs are used here as creation verbs, and complex predicates denote a change of the accumulator's state of wealth, the same as postulated for creatives, ingestives, unergatives, and transitives without a patientive object. Note that the complex predicates in (41) do not describe a significant effect on the object as degree achievements usually do: the degree of the destruction is not important here. The only important value is the amount of the destructed resource accumulated — and this accumulation is a change of the agent's state.

Why not all destruction verbs can behave like that? For instance, why cannot sekter 'burst' or vëler 'kill' occur in such contexts, be these even forced accumulative contexts? I do not have a good answer for this, but a possible explanation is that verbs like *cët* 'tear' or *cor* 'chop' differ from verbs like sekter 'burst' or vëler 'kill' in that they describe events that are more pragmatically compatible with the idea of accumulativity. One of the other possible explanations is that verbs like *cët* 'tear' or *cor* 'chop' have a lexical specification of their processual and resultant subevents¹⁶, while verbs like vëler 'kill' idiosyncratically specify only the resultant state. Thus, the verbs from the first group are more "friendly" to the accumulative interpretation: they can at least save the processual part of their idiosyncratic constant, while the idiosyncratic component of result verbs is in complementary distribution with the possessive scale. However, it is still not clear whether sekter 'burst' is a verb of manner or result. As mentioned in Section 4. no strict distribution of the accumulative meaning is established, and some verbs with usually non-coreferential Initiator and Undergoer can form accumulative complex predicates in combination with lart. If it is the case, they must behave the same way as verbs like cor 'chop' or tip 'tear', reinterpreted as verbs of creation.

Finally, the analysis is preliminarily applicable to cases where *lart* combines with verbs of momentary effect, though with a reservation: the

¹⁶ See [Lyutikova et al. 2006] for similar suggestions for corresponding Karachay-Balkar verbs.

scale provided by such a lexical verb is not incremental, it just characterizes the event in terms of the effect it had on the object, while this effect is still non-binary. However, further research is needed. Maybe the restriction the light verb *lart* applies to resultant state is not connected with scalarity directly: it could be that complex predicates with *lart* denote entering some pragmatically important state. Maybe the light verb *lart* has several meanings, only one of these relating to scalarity. Again, this is rather a topic for further research.

Overall, my analysis, made in the first phase syntax framework, can shed some light on why the light verb *lart* works the way it does: it still has some verbal properties defining its distribution and semantics, such as the presence of an external argument and the requirement of a scalar resultant state. The crucial thing this analysis predicts is the distribution of two meanings of the light verb and their semantic invariance. However, it is not completely clear how this event structure relates to its lexical meaning, and this topic needs further investigation.

6. Conclusions and future perspectives

A summary of the findings above could be presented as follows. The verb *lart* has grammaticalized into an actional operator forming punctive complex predicates. It can combine with lexical verbs with an external argument (transitives and unergatives) and form complex predicates with the meaning of reaching a significantly high degree of effect on the Undergoer of the event. According to my analysis, all these properties can be explained by the fact that the light verb *lart* has an event structure of its own containing eventual heads *init*, *proc*, and *res*, as well as Initiator, Undergoer, and Resultee, with the first two unspecified in terms of coreference. In addition, it specifies the resultant state that should be scalar, non-binary.

Admittedly, this analysis may have certain weak points. It is not clear, for example, how to explain the compatibility of *lart* with verbs like *cap* 'hit' that are not obviously scalar. Nevertheless, the first phase syntax analysis helps to explain some important properties of the light verb, such as its

interaction with the event and argument structure of lexical verbs. It is especially useful in that it explains the distribution of degree achievement and accumulative meanings as different instances of the scalar change of state of the Undergoer. However, more detailed analysis is needed.

Speaking of a typological perspective for this research, grammaticalization of verbs with the meaning SEAT found in Chuvash is not unique. This phenomenon takes place in many other Turkic languages; see [Grashchenkov 2015] for a general overview, or a description of the Tuba light verbs *qoj* 'stand' and *sal* 'put' in [Shluinskiy 2009]. Most such verbs form telic complex predicates, but as far as I know, the accumulative interpretation is rarely observed. The only known exception is the Hill Mari light verb *šöndäš* 'seat, put' which looks very similar to *lart*: it is also grammaticalized into a telicizing operator denoting a scalar change of the Undergoer and also has accumulative and saturative interpretations [Kashkin 2018a, 2018b; Golosov 2019]. Since Hill Mari is areally close to Chuvash and, especially, to its Poshkart dialect, this similarity may be an areal feature, which evidently calls for a detailed typological survey.

Abbreviations

1, 2, 3 — 1st, 2nd, 3rd person; ABL — ablative case; CAUS — causative; Cv_SIM — neutral converb (also used as a past tense verb form); INS — instrumental case; LOC — locative case; NPST — non-past tense; OBJ — objective case; P_3 — possessive of the third person; PL — plural number; PST — past tense; SG — singular number; VBZ — verbalizer.

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